DOES LOW-INCOME HOMEOWNERSHIP WORK? THE EFFECTS OF TITLING AMONG BENEFICIARIES IN CAPE TOWN AND LUSAKA.

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Declaration

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Dedication

This thesis is dedicated to my son Christian R.S. Muyeba III and to my late mother Doreen Chishimba Malawa

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Abbreviations

CAPS	Cape Area Panel Study
CBU	Copperbelt University (Zambia)
CSO	Central Statistics Office (Zambia)
DFID	UK Department for International Development
FAO	United Nations Food and Agriculture Organisation
FNB	First National Bank (South Africa)
GDP	Gross Domestic Product
GRZ	Government of the Republic of Zambia
HSS	Housing Subsidy System (South Africa)
IMF	International Monetary Fund
JICA	Japan International Cooperation Agency
LCC	Lusaka City Council
MMD	Movement for Multi-party Democracy (Zambia)
OECD	Organisation for Economic Cooperation and Development
OLS	Ordinary Least Squares regression
PGWC	Provincial Government of the Western Cape
RCT	Randomised Controlled Trial/Randomised Experiment
RDP	Reconstruction and Development Programme
RSA	Republic of South Africa
SANCO	South African National Civic Organisation
SAP	Structural Adjustment Programme
StatsSA	Statistics South Africa
UNCHS	United Nations Centre for Human Settlements (UN-Habitat)
UNDESA	United Nations Department of Economic and Social Affairs

UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UN-Habitat	Please see UNCHS
UNIP	United National Independence Party (Zambia)
UNZA	University of Zambia
USAID	United States Agency for International Development
USD	United States Dollar
ZAR	South African Rand (*Currency*)
ZMK	Zambian Kwacha (*Currency, not rebased*)

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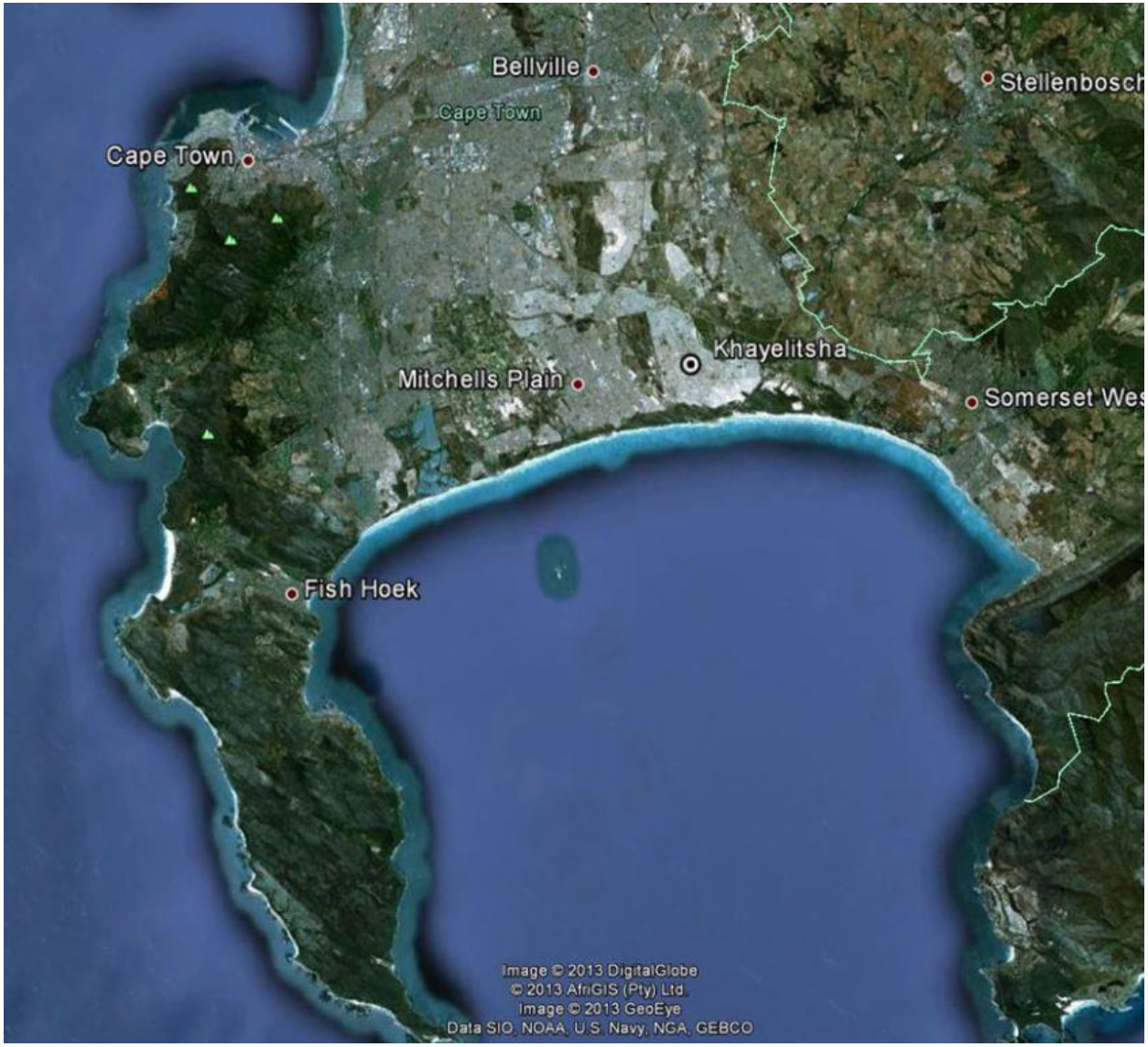
Abstract

The provision of real property rights through titling and informal settlements upgrading is widely imagined to have considerable direct and indirect effects on urban poverty. The evidence for such effects is, however, scarce, partial rather than holistic, and subject to methodological difficulties. This thesis investigates the effects of real property rights through two case-studies: the subsidized construction of privately-titled housing for poor people in Khayelitsha, Cape Town, and the private titling of public rental housing in Matero, Lusaka. It examines nine hypotheses drawn from theories about the effects of property rights but goes beyond to strengthen this literature by drawing on another ten hypotheses from theories of homeownership and a categorisation of all hypotheses into economic, human and social capital effects using the asset-based approach. The research design uses both quantitative and qualitative approaches and non-experimental methods of estimation. In Khayelitsha, quantitative analysis reveals that the housing subsidy is associated with better physical health and (counter-intuitively) a higher occurrence of teenage pregnancy. The qualitative analysis suggests that beneficiaries experienced improvements with respect to ownership of consumer durables, housing, children's education and attainment of a higher social status. Apart from status attainment, these improvements can more appropriately be attributed to a better housing environment rather than to stronger tenure rights. In Matero, survey results revealed that titling was associated with significantly higher property values, per capita income and ownership of consumer durables, political awareness and neighbourhood satisfaction. Qualitative analysis shows that beneficiaries experienced higher status, but also a worsening of their tenure security because of the long term costs of titling. In neither case was titling associated with improvements in most of my measures of poverty reduction, supporting the argument that the benefits of titling may be exaggerated through a focus on selected variables rather than a broader set of measures. By most measures, titling had no effect in either of my cases. Substantively, it is likely that poverty in Cape Town and Lusaka is driven so strongly by factors such as unemployment that real property rights make little overall difference to poverty. Methodologically, these findings indicate the importance of using a diverse set of measures when testing whether (and revealing how) real property rights reduce poverty. Scholars need to go beyond the orthodox titling theory and take into consideration hypotheses drawn from theories of homeownership because consideration of a wider range of effects leads to different assessments and conclusions as shown in this thesis.

Map 1: Location of Khayelitsha in Cape Town, Western Cape

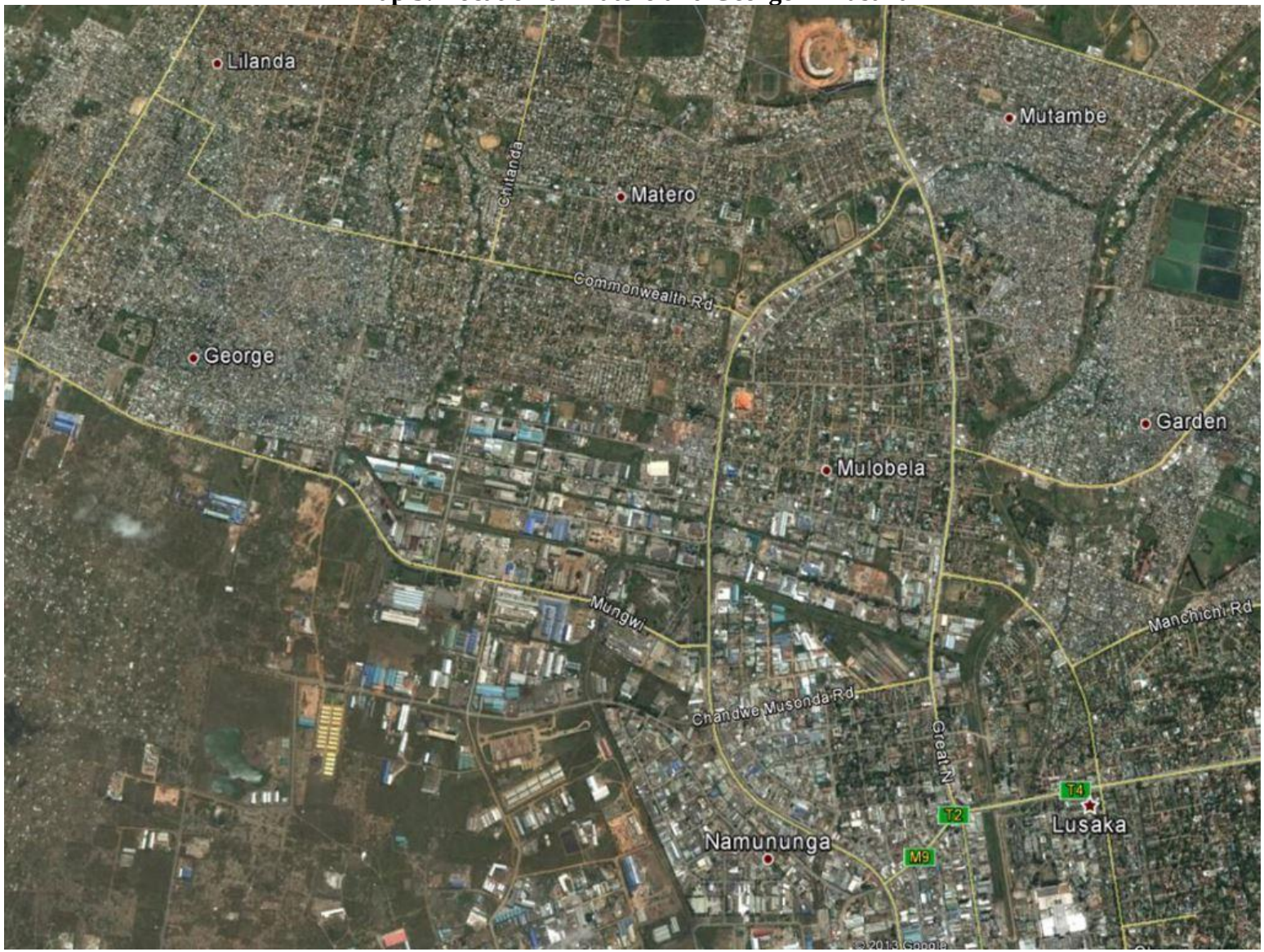


Source: Google Earth satellite image

Map 2: Map of Khayelitsha

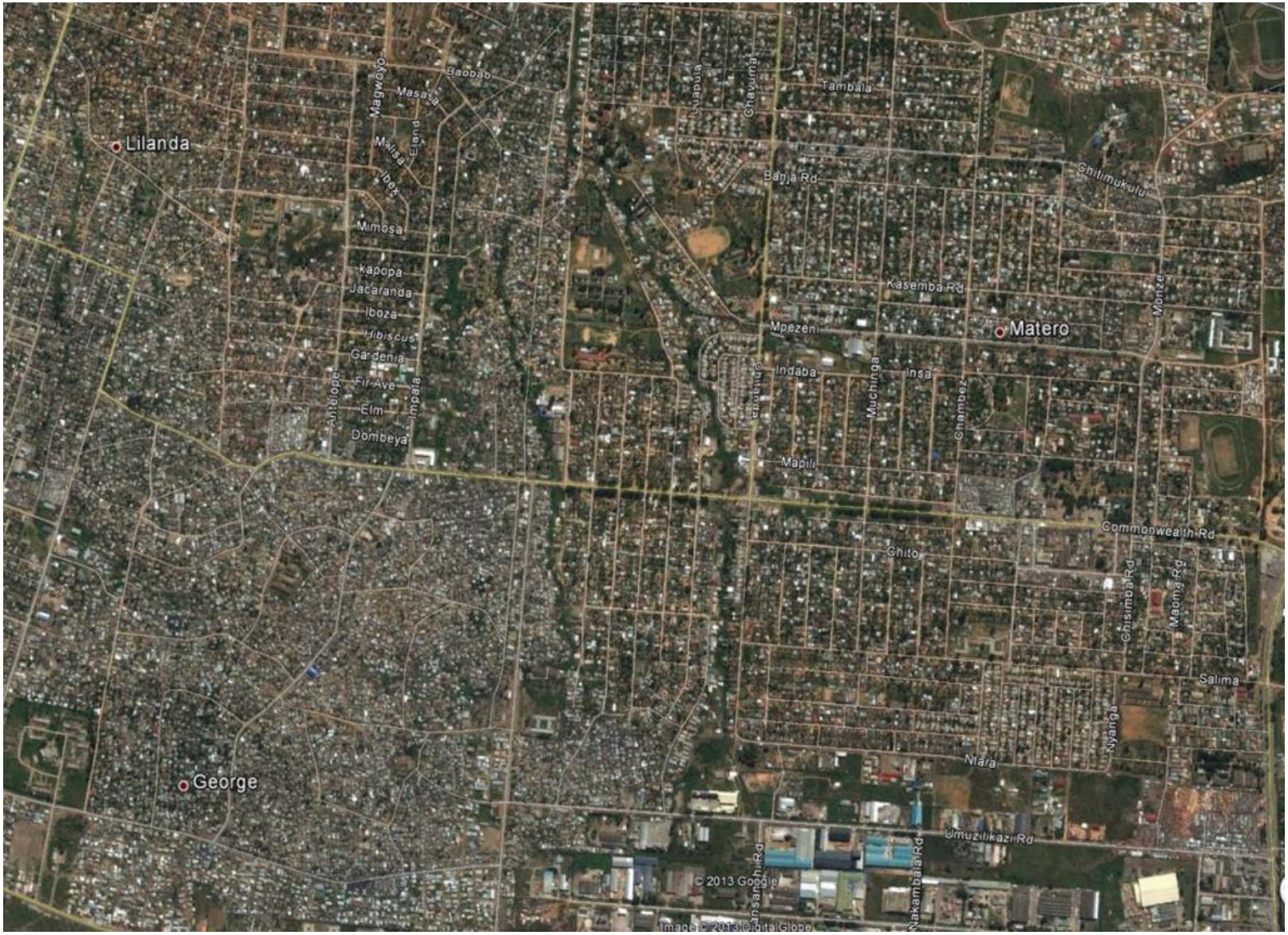
Source: Google Earth satellite image

Map 3: Location of Matero and George in Lusaka



Source: Google Earth satellite image

Map 4: Map of Matero and George



Source: Google Earth satellite image

PART I

CHAPTER 1

INTRODUCTION: The 'myth of homeownership', the 'mystery of capital' and poverty reduction

1.1 Introduction

As I commenced my PhD journey, the first two books I read pointed to the need for systematic knowledge on the effects of property rights. Jim Kemeny's *The myth of homeownership* (1981) and Hernando De Soto's *The mystery of capital: Why capitalism triumphs in the West and fails everywhere else* (2000) discussed claims about the effects of private ownership rights with Kemeny attempting to dispel and De Soto championing the benefits of property rights. Other scholarly work on property rights in developing countries uses titles that speak of unsolved mysteries and myths (for example Kingwill et al., 2006; Gilbert, 2002). Such titles reflect, in part, the scarcity of knowledge in this field. This thesis is a contribution to clarifying some of the myths and mysteries about the effects of property rights in developing contexts, through case-studies from two Southern African cities.

1.2 Urban Poverty and Slums: The Facts

While overall global poverty has declined, poverty remains widespread in Africa. The latest poverty statistics indicate that in 2010 there were about 1.2 billion people living in extreme poverty globally (below the readjusted international poverty line of US $1.25 per person per day) (Chen & Ravallion, 2010:6). This is 500 million people less than in 1990 (UNDP, 2010:6). In Sub-Saharan Africa, however, 51 per cent of the population (388 million people) live in extreme poverty. This is a higher proportion than in South Asia (40 per cent), East Asia and the Pacific (16.8 per cent) and other regions (at 8 percent or below) (Chen & Ravallion, 2010:26).

The majority of the world's poor now live in urban slums of developing countries. The urban poor live in slums, usually on the peripheries of cities, because they can only access housing cheaply and quickly through informal tenure arrangements (Durand-Lasserve & Selod, 2009:101). Of the total global urban population of 3.5 billion people, approximately 1 billion or one-third (33 per cent) are slum dwellers (UN-Habitat, 2011: xii). The urban population is

rising and the population of the urban poor living in slums is also rising (UNDP, 2010). The global urban population is projected to increase at an annual rate of 1 percent per year between 2009 and 2025 (UNDESA, 2009). Asia will reach its urban tipping point, which is the point at which 50 percent or more of its population will become predominantly urban, in 2023. Africa will reach its tipping point slightly later in 2030 (UN-Habitat, 2011). By 2050, both continents are projected to have 62 percent of their total populations living in urban areas. The population of slum-dwellers will reach approximately 1.4 billion by 2020. In developing countries, an estimated 657 million people lived in slums in 1990, compared to 762 million in 2000 and 828 million in 2010 (UNDP, 2010:62).

In developing countries, urban slums are therefore an increasingly important challenge (Davis, 2006:37; UN-Habitat, 2003a; UN-Habitat, 2011). Across regions, Sub-Saharan Africa currently has the highest proportion of its urban population living in slums with 62 per cent (200 million). For example, although South Africa and Zambia (historically) are far from being the poorest countries in Africa having had distinctive histories of urbanisation as well as industrialisation, urban poverty and slums have been on the rise. In South Africa, where rapid urbanisation has taken place from the late eighties into the 2000s (Wilkinson, 2000), the data show that the extremely poor are likely to live in informal settlements – the term used interchangeably with slums in this context (Statistics South Africa, 2011). About 13.4 percent of 50 million people were living in slums in 2009. Despite building nearly 2.8 million formal houses and providing 855,000 serviced sites that may have benefitted about 13.5 million people from 1994 to 2013 (Republic of South Africa, 2013), the rate of urbanisation continues to be higher than the rate of housing production. In Cape Town, 20 percent of the city's dwellings are informal. Out of the city's population of 3.5 million people, 16 percent (about 600,000) live in informal dwellings (Statistics South Africa, 2011). In Zambia, persistent urban poverty and slum settlements show similar statistics. Extreme poverty is at 42.3 percent (compared to 58 percent in 1991) Extreme poverty in urban areas is at 13 percent (living below US $1.25 per person per day). Lusaka's population of the urban poor stands at 11 percent out of 1 million (UNDP, 2013:16). However the proportion of slum-dwellers is higher at 70 percent in 2007 (UN-Habitat, 2007). Lusaka alone has about 35 informal settlements (UN-Habitat, 2007:18). In addition to lacking tenure security, the poor in slums lack assets and live in conditions of squalor in these countries (Abrams, 1966; Durand-Lasserve & Selod, 2009; FAO(Food and Agriculture Organisation), 2002; UN-

Habitat, 2003a; Moser, 2006; Moser & Felton, 2007; Moser, 2008; Rakodi, 1999; Rakodi & Lloyd-Jones, 2002; Turner, 1967; Turner & Fichter, 1972).

1.3 Advancement of Titling and Homeownership as Ideal Tenure of Choice and Solution to Urban Poverty

Titling has been advanced as the solution to urban poverty concentrated in slums (Buckley & Kalarickal, 2006; World Bank, 1993). Titling may be defined as the process of integrating informal tenure into a system recognized by public authorities through the delivery of real property rights authenticated and guaranteed by the state through freehold and leasehold title deeds (Durand-Lasserve & Selod, 2009:106). 'Real property rights' is a legal term and concept in land law that refers to immovable property (land) and permanent developments on and under it, falling under a standardized set of rights usually freehold (rights to land held in perpetuity) or leasehold (tenancy rights held for long periods of time, usually 99 years) (Burns & Cartwright, 2011:5-6; Durand-Lasserve & Selod, 2009:106). Titling has been favoured over the administrative recognition of occupancy, i.e. the state's or local authority's delivery of temporary personal rights to occupy land, typically with restrictions to land-use and conditional on buildings complying with standards set by authorities. From the 1970s, provision of real property rights through titling has been promoted and homeownership schemes aimed at increasing tenure security and reducing poverty have been implemented across the developing world (Buckley & Kalarickal, 2006; De Soto, 2000; Galster & Santiago, 2008; Keare & Parris, 1982; OECD, 2003; Payne, Durand-Lasserve, & Rakodi, 2009:444; UNESCO, 2002; World Bank, 1993; World Bank, 2002). In general, it is claimed that homeownership should lead to increase in income which should in turn contribute to economic growth.

Current development discourse on housing tenure promotes freehold and leasehold homeownership, despite the fact that renting is the most common form of tenure in formal as well as in informal settlements globally (Gilbert, 1987; Gilbert, Varley, & Ward, 1991). There are five different identifiable models or schools of thought that have tried to explain why there has been increasing emphasis on homeownership as the ideal tenure of choice. I briefly discuss these schools of thought below.

The first school of thought suggests that the emphasis on a particular type of tenure in a society is a reflection of the prevailing ideology and hegemony of the elites over the masses in that society (Gurney, 1999a; Gurney, 1999b; Kemeny, 1981; Kemeny, 1992). In this

discourse, homeownership is promoted as a natural preference, the norm, and a symbol of status attainment (for example the attainment of the American dream). This school holds that the discourse in societies associates homeownership with satisfaction with life, less stress and happiness in life. The elites claim that ownership is cheaper in the long run compared to other types of tenure. This discourse disapproves of renting and other forms of tenure as undesirable. Homeowners are claimed to be better citizens as they participate in more associations and have stronger social attachment in their neighbourhoods than renters or other tenure types. This discourse is set by the political elite to promote homeownership because it serves their interests (Gurney, 1999b).

This discourse is not supported by empirical evidence. Kemeny (1981; 1992) investigated whether there were differences among particular types of tenure – social housing, owner occupation and renting – in terms of cost to the occupant, and why there were different emphases on specific types of tenure in different industrialised countries. To explain the differences in emphasis among industrialised countries, he used case studies of owner occupation in the United States and Australia, social housing in Sweden and social housing and owner occupation in Great Britain. He demonstrated that there was no significant difference in costs incurred to individuals for pursuing a specific tenure system. He explained that for renters, the cost is spread out over time while for buyers, the cost is concentrated at a single point in time yet the aggregate cost is more or less the same. In light of his findings, he argued that the relationship between ideology and social structure, mediated by the exercise of state powers through political dominance, is vital for understanding why societies develop characteristic social structures and come to emphasise particular tenure types. He defines a dominant ideology as an ideology which has succeeded in becoming widely accepted in a society, to the extent that the social, economic and political agenda-setting is structured by the parameters of that ideology's own mode of discourse (Kemeny, 1992:96). An ideology becomes dominant when a competing interest group dominates the state. The strategic alliance that has attained hegemony in civil society will hold political power to the exclusion of other interests in society, reflecting classical political dominance (Kemeny, 1992:99). This results in political support for policies that encourage owner occupation (Kemeny, 1992:48)

Using the four case studies, he demonstrated that the claims of the effects of homeownership are based on the values of the politically dominant and the prevailing ideology. The ideology of the politically dominant interests in the United States, called the American dream within

which individualism is central, emphasises individual ownership as a critical stage in the attainment of the American dream. This is similar to Australia which emphasises individualism and therefore individual ownership. In contrast, in Sweden the social democratic ideology which is in political dominance emphasises the provision of housing for all under the welfare state, even though Swedes have increasingly been buying individual holiday homes. He concludes that industrialised countries are emphasising homeownership as the tenure of choice because there is a convergence in housing tenure systems among these countries based on the convergence of ideology of the politically dominant elites who exercise hegemony over the masses in these countries.

This theory has not been empirically evaluated within developing countries but the theme of dominance and hegemony is central in the explanation of homeownership in developing countries as shown in the next school of thought discussed.

The second school of thought is that of neo-Marxist, neo-dependence and critical social theorists who suggest that freehold homeownership is part of the wider trends in the growth of the influence of neo-liberal economic policies aimed at commodifying houses and integrating them into capitalism for the benefit of wealthy local and international elites (Glynn, 2009:38-67). These have continued a long held view by Marxist scholars (Engels, 1958) who argued that once a person became a homeowner, he or she is no longer a proletariat. Others in this school come much later (Burgess, 1985:281; Moreno Toscano, 1979:166). In this newer form of the argument, it is held that industrialised countries use international financial institutions such as the World Bank and IMF to promote policies that support private ownership of property. Examples of these policies include property titling and privatisation. Local elites and multinational corporations create common cause to buy out land and exploit the housing market of developing countries in the interest of making a profit (Aldrich & Sandhu, 1995:24). The populations of developing countries become dependent on property owned by elites and multinational corporations for their shelter and business operations by paying rent. Because local elites and multinational corporations export their profits to more lucrative investments in industrialised countries, nothing is left in poor countries for building more property that can accommodate the poor (Aldrich & Sandhu, 1995:24).

Specifically, the privatisation of public housing in developing countries has come under criticism from this school. Policies of privatisation in most countries of Africa, Asia, South

America and Eastern Europe were part of the broader World Bank and International Monetary Fund (IMF)-advocated Structural Adjustment Policies (SAP). The SAP, which entailed market liberalisation and privaitisation, were interpreted by this school as policies further integrating developing countries into exploitative economic relationships (Glynn, 2009). Privatisation has been explained as the accumulation of the capitalist classes by dispossession of the poor (an imitation of Marx's term 'primitive accumulation' which he used to describe the expropriation of the peasants from the land) (Glynn, 2009:45). The scholars point out that the majority of people who have been affected by privatisation of housing are poor working class people who do not have the resources to buy the houses. They end up being dispossessed by capitalist classes. Property ends up among the already well to do who can afford to buy it. As Glynn (2009:86) argues, those who are unable to afford are then marginalised and are absent from the public discourse, evidently forgotten. In sum, this view perceives homeownership as a further development of the international capitalist system and continued exploitation of the non-capitalist populations under the guise of neo-liberalism.

A third view suggests that homeownership is a natural human instinct and economic phenomenon which reflects utility placed on homeownership as a commodity. This view is highly influential in international development and is dominated by economists and market fundamentalists. In this view, homeownership is based on people's possessive instincts (Saunders, 1990:70), is more economically attractive than renting in the long term, and provides a feeling of autonomy, security and personal identity. It views the augmentation of Gross Domestic Product (GDP) as a natural economic progression of which homeownership is an essential part because a house is an economic asset. This view argues that because of the possession of legal title, homeownership confers upon the owner property rights that enable him/her to engage with the capitalist market and accumulate wealth and income (De Soto, 2000). It claims that homeownership incentivizes owners to get credit, make investments on their house and increase savings relative to renters and to build assets. De Soto (2000) argued that the poor in developing countries lack title to their assets and hence they cannot use them to benefit from the market. Particularly for housing, De Soto holds the view that the poor have 'dead capital' because the assets cannot be recognised on the formal capitalist market. The poor would only be able to use the assets to engage with the capitalist market and move out of poverty because of legal title.

A fourth view is that prevalent among welfare scholars who suggest that the increasing emphasis on homeownership is a result of the restructuring of welfare states. Welfare states

are developing property-based welfare systems as a result of their interaction with a global free market in which the state's role is diminishing. In this new system, individuals accept greater responsibility for their own welfare needs by investing in financial products and property. Assets augment in value over time thereby providing a livelihood. This is more desirable rather than for individuals to rely on state-managed social transfers to counter the risks of poverty (Doling & Ronald, 2010:1). As Doling and Ronald (2010:1) show, the potential wealth tied up in owner-occupied housing has been considered to be a solution to the fiscal difficulties involved in the maintenance of welfare commitments on the part of the state. This has occurred because of financial pressure put on the state by ageing national populations and their expected impact on pensions and public welfare systems. Like the market fundamentalists, this view assumes that homeowners will be incentivized to leverage their houses and make investments that will enable them to have a stable livelihood.

The final explanation is that offered by Flint and Rowlands (2003) based on French Sociologist Bourdieu's (1986) concepts of the habitus, field and forms of capital. This view explains types of tenure as legitimised tastes in housing consumption. Homeownership is held as the highest form of housing consumption and a marker of high status. How does this come about? Flint & Rowlands, (2003:217) hold that within the housing field, symbolic capital accrues to tenures, in which housing consumption confers an identity and status upon individuals, comprising both aesthetic (good taste) and moral (responsible conduct) judgments. For example, social housing in the United Kingdom is constructed as the lowest form of housing consumption while homeownership is constructed as the highest form based on aesthetic and moral judgements.

At the societal level, there are therefore several perspectives that try to explain or justify the increasing emphasis on homeownership as the tenure of choice. Given this backdrop of theories about homeownership at societal level, can we empirically identify specific effects of homeownership at the individual and neighbourhood level? Are claims about titling and freehold and leasehold homeownership justified at the individual and neighbourhood levels such that it can be used as a poverty reduction intervention in developing countries?

1.4 The "mystery"

At the individual and neighbourhood levels, empirical evidence on the effects of freehold and leasehold homeownership is not as obvious as the claims may suggest. Literature on the

effects of titling on individuals, households[1] and communities in developing countries is scarce, the evidence has serious methodological problems, and is typically context-specific, making the findings equivocal (Durand-Lasserve & Selod, 2009:115). Some scholars have concluded that claims about the effects of titling are exaggerated (Reerink & Van Gelder, 2010:84). The effects may not be obvious perhaps because empirical studies are rarely holistic, typically examining a single effect and at most five effects in one case study (Durand-Lasserve & Selod, 2009:115; Galiani & Schargrodsky, 2010). This lack of holism makes comparison across contexts difficult and impossible with regard to some measures, which in turn limits how much we can conclude and generalize about the effects of titling. In particular, effects of titling on aspects of human and social capital have been under-studied. The attention of most empirical studies is directed towards effects of titling on economic outcomes. In addition, some expected theoretical effects tested in developed countries that are relevant to developing countries are yet to be tested. It is important to test these hypotheses in order to build knowledge on a holistic set of effects of real property rights in the context of developing countries. This is in order to find what effects work and which ones do not, across different contexts.

1.5 The Investigation

This thesis investigates the effects of a subsidized freehold homeownership scheme in Cape Town and leasehold titling of rental housing in Lusaka on household beneficiaries. The thesis demonstrates a holistic set of effects (on aspects of economic, human and social capital) of real property rights relative to occupancy rights, and explains similarities and differences in the effects of homeownership between the two contexts. In order to examine the effects, the Cape Town study compares groups of beneficiaries and non-beneficiaries of housing subsidies within Khayelitsha. The case study in Lusaka compares two adjacent neighbourhoods[2]; Matero and George that had very similar characteristics. The residents of Matero are my treatment group, and those in George are my control group. In this way, the

[1] In this study, a household is defined as people who live permanently (more than 6 months) together in the same dwelling, eat commonly prepared food and acknowledge a common household head. This is by no means the most accurate as it may under-estimate the actual household size particularly in Matero in the survey. There are different implications for any definition chosen (see Beaman & Dillon, 2012 for a discussion). Definitions of households are problematic in Africa particularly when applied to low income households because individuals tend to have high mobility between two or more domestic units (Spiegel, Watson & Wilkinson, 1996:8).

[2] The concept of neighbourhood in the social sciences is hard to define precisely with some employing an ecological perspective in which it is defined as a place with physical boundaries and others employing a social perspective and defining it as a limited territory within a city where people inhabit dwellings and interact socially (Galster, 2001:2111). In this study, neighbourhood will be understood to include both definitions.

thesis adds to the scarce empirical literature on effects of property rights in developing countries.

1.6 The Questions

The thesis addresses three general research questions; How are beneficiaries affected (1) by a subsidized freehold homeownership scheme in Cape Town, and (2) by the leasehold titling of rental houses in Lusaka, and (3) what mechanisms explain similarities and differences in the effects of homeownership in the two contexts?

More specifically, the thesis poses the following research questions:

a. What are the effects of titling and freehold homeownership on economic outcomes among beneficiaries in terms of:
    i. property value?
    ii. labour supply?
    iii. access to credit?
    iv. housing improvement?
    v. home-based business investments?
    vi. household per capita income?
    vii. wealth (using consumer durables as a crude measure)?
b. What are the effects of titling and freehold homeownership on 'human capital' in terms of:
    i. physical health?
    ii. teenage pregnancies?
    iii. school dropouts?
    iv. psychological health?
    v. status attainment?
c. What are the effects of titling and freehold homeownership on social capital in terms of:
    vi. membership in associations?
    vii. social attachment?
    viii. political awareness?
    ix. civic engagement?
    x. housing satisfaction?
    xi. satisfaction with life?

d. What explains similarities and differences in effects of home ownership in Khayelitsha and Matero and what general lessons can be drawn from this comparison?

The thesis will demonstrate that despite examining a wide range of effects, titling programmes in Khayelitsha and Matero have yielded some but not all of these possible benefits. In Khayelitsha, quantitative analysis reveals that the housing subsidy is associated with better physical health and counter-intuitively a higher occurrence of teenage pregnancy. The qualitative analysis reveals that beneficiaries have experienced increases in consumer durables, housing improvement, children's education and status attainment. Apart from status attainment, improvements can more appropriately be attributed to a better housing environment rather than to increased rights. In Matero, the survey reveals that titling is associated with significantly higher property values, per capita income and consumer durables, political awareness and neighbourhood satisfaction. Qualitative analysis shows that beneficiaries experienced higher status attainment but also a worsening of their tenure security because of the long term costs of titling. The similarity between the case-studies is that real property rights were found to be associated with higher status attainment relative to administrative recognition of occupancy. Observed effects are contingent upon contextual factors as many of the effects are driven by local factors but some general lessons can be drawn. In neither case was titling associated with improvements in most of my measures of poverty reduction, supporting the argument that the benefits of titling may be exaggerated through a focus on selected variables rather than a broader set of measures.

For purposes of delimitation, the research focused on the effects of real property rights, that is, ownership claims and rights to land and buildings relative to temporary occupancy. Both rental tenure and the implications of ownership for absentee owners are beyond the scope of the research. It also focussed on the effects on individuals and their interaction in their neighbourhood and not the entire society.

1.7 Structure of the Thesis

The thesis is divided into four parts. Part I comprises Chapter 1 which is made up of this introduction, Chapter 2 comprising the literature review, and Chapter 3 made up of the discussion on the method and context. Chapter 2 reviews scholarly theories of the effects of

real property rights and draws on other literature – on homeownership and assets – to strengthen and supplement the orthodox titling literature. In reviewing property rights theory, the chapter identifies nine hypotheses. The chapter argues that property rights theory is insufficient in informing the examination of all the possible effects of property rights and therefore requires strengthening. To examine the effects comprehensively the chapter proposes going beyond the orthodox titling theory by means of supplementing it with two other approaches. The two other approaches are homeownership theory from which ten hypotheses are obtained and the asset-based approach which helps to categorise the effects in terms of economic, human and social capital and allows for a long term understanding of effects. Empirical works from different parts of the developing world are also reviewed. Further, empirical works on homeownership and poverty done in South Africa and Zambia are discussed. The chapter highlights some of the gaps in the existing literature to justify the importance of carrying out this study. Chapter 3 discusses dominant research methods for evaluation of development interventions, introduces the two cases of Khayelitsha and Matero in detail, and argues for the appropriate research design and methods of estimation. In both cases, the employment of quantitative and qualitative approaches and non-experimental methods for estimating the impact of the interventions are argued for.

Part II is made up of Chapters 4 and 5, which present results of the study on Khayelitsha. Chapter 4 presents results of the analysis of existing survey data. It shows that housing subsidies are associated with better physical health and more teenage pregnancies relative to occupancy tenure but no support is found for other hypotheses tested. Chapter 5 presents results of the qualitative part of the study. It demonstrated that apart from status attainment, experiences of beneficiaries of housing subsidies do not differ from those of shack-dwellers on the basis of property rights but rather on the basis of improvements in housing conditions.

Chapters 6 and 7 make up Part III, in which results of the case study on Matero and George are presented. Chapter 6 present results of the survey. The results indicate tentatively that leasehold titling in Matero has led to higher property values, household per capita income, wealth as crudely measured by household consumer durables, political awareness and neighbourhood satisfaction. Furthermore, evidence tentatively indicates no support for the other nine hypotheses tested. Subsequent experiences of leasehold titling are presented in Chapter 7. The results corroborate those in Chapter 6 but go further to reveal that beneficiaries feel that they have experienced attainment of a higher social status as owners but have had reduced tenure security because of the cost of titling.

Part IV is made up of Chapter 8, which is a comparative analysis and discussion chapter, and Chapter 9, the conclusion. Chapter 8 compares findings in the two case studies, draws general lessons from the comparison and discusses main findings within a broader discussion on effects of property rights. It shows that overall, titling is associated with higher status attainment relative to occupancy tenure. The chapter then presents lessons that can potentially explain differences in the effects of tenure between the two cases. Chapter 9 provides a conclusion which summarizes the contribution of the thesis to the body of knowledge; that if we consider a broader range of hypotheses beyond those in the orthodox titling literature, we arrive at different assessments and conclusions about the effects of real property rights. The chapter also synthesizes the empirical findings and highlights the limitations.

CHAPTER 2

WHAT WE KNOW AND DO NOT KNOW ABOUT THE MYTH AND THE MYSTERY: A REVIEW OF EXISTING STUDIES

This chapter reviews the literature on the effects of real property rights that fall under each of three approaches. The first approach is property rights theory – which I call "titling theory" – from which nine testable hypotheses about the effects of property titling are obtained. These hypotheses state that titling has positive effects on tenure security, property value, labour market outcomes, household per capita income, increased access to credit, housing improvements, housing investments, physical health, and empowers vulnerable individuals. As a criticism, the chapter argues that property rights theory is inadequate in examining all possible effects, particularly in cases where titling occurs simultaneously with provision of a house (as the case is in South Africa and Zambia). Examining a limited number of effects will lead one to arrive at different conclusions about titling than if one were to examine a comprehensive list of effects. To examine the effects comprehensively, we need to go beyond orthodox titling theory; supplementing it with homeownership theory and the asset-based approach. Homeownership theory strengthens titling theory by providing ten more testable hypotheses; homeownership positively affects social stability, psychological health, satisfaction with life, social status attainment, socially desirable youth behaviour (in terms of reduced teenage pregnancies and school dropout rates) and neighbourhood outcomes such as civic involvement, political awareness, membership in associations, and social attachment. The asset-based approach strengthens the titling literature by allowing for the categorisation of hypotheses into those that address economic capital, social capital and human capital effects. The chapter further draws lessons from the international empirical research on titling in developing countries in general, and from South Africa and Zambia in particular.

2.1 Some Definitions

2.1.1 Property Rights and Tenure

Property rights are complex to define because they are dynamic, contextual and the definition of rights can be specific to the property for which rights are defined (Macpherson, 1978:2; Porrini & Ramello, 2009). They are dynamic because rights that people have over

themselves, other people and their assets are not constant; they are a function of their own direct efforts at protection from other people's capture attempts and of government protection (Barzel, 1997:2). Thus property rights are dynamic because they can be changed by individual and state actions. They are contextual because different societies possess different systems for access and use of property. With regard to specificity of rights, property is "an enforceable claim of a person to some use or benefit of something" (Macpherson, 1978:3). Macpherson emphasizes that property both in law and in logic means rights to something, that is, they are not confined to a particular property

From this discussion, it is clear that property rights are a recognised interest in land or property vested in an individual or group and can apply separately to land or development on it (Payne, 2001:416). Different rights may cover access, use, development or transfer of land to those of property such as a house. This definition resonates with the seminal works of Alchian (1965) and Demsetz (1967). Alchian (1965) defined property rights as the right to decide how a resource is used and complementarily, the right to exclude someone else from doing so. More comprehensively, it resonates with Demsetz's (1967: 347) understanding that provided the following definition:

> Property rights are an instrument of society and derive their significance from the fact that they help a man form those expectations which he can reasonably hold in his dealings with others. Those expectations find expression in the laws, customs, and mores of a society. An owner of property rights possesses the consent of fellow men to allow him to act in particular ways. An owner expects the community to prevent others from interfering with his actions, provided that these actions are not prohibited in the specifications of his rights.

But in addition to this and more specific to housing tenure, Barzel (1997:2) defined property rights in entirely economic terms focusing on their exercise. He suggests that property rights of individuals over assets are composed of the rights, or the powers to consume these assets, obtain income from them by engaging in exchange through the mutual ceding of rights, and alienating these assets. This means one's rights over property allow one to use that property as an asset.

From the foregoing discussion, rights constitute legal title or the lack thereof, provide security from others who do not have the right rights to consume the property and accord the property the status of an asset.

2.1.2 Tenure

The concepts of property rights and housing tenure are intertwined. Tenure refers to the specific bundle of property rights individuals and communities possess that enable them to exercise power over land and housing (Durand-Lasserve & Selod, 2009; Fischer, 1995; Payne, 2001:4; Payne, 2004:171). Though a common understanding of the definition of the concept of housing tenure is apparent in the literature, there are differences in understanding based on different emphases among scholars. The differences stem from the constitutive elements that make up the concept. One definition is that tenure is a bundle of rights that individuals and communities possess to occupy, use, develop, inherit and transfer land and should be viewed as a social relation that involves a complex set of rules governing the use and ownership of land (Durand-Lasserve & Selod, 2009:102). Another suggests that it is the mode by which land or property is owned or held or the set of relationships among people concerning land or its product (Payne, 2001:416). These definitions emphasise three things; how one comes to have legal access to the land or property; they spell out the rules that govern access; and define the social relationships among people based on their access or lack of access to the property or land. Some scholars like Fischer (1995) rather emphasise the rules and laws governing access to the resource by for example defining tenure as "a complex set of rules, frequently referred to as a 'bundle of rules". As Fischer clarifies, a given resource may have multiple users, each of whom has particular rights to the resource. Some users may have access to the entire 'bundle of rights' with full use and transfer rights. Other users may be limited in their use of the resources (i.e. nature of the use... length of the use, etc.)". The exact nature and content of these rights, the extent to which people have confidence that they will be honoured, and their various degrees of recognition by the public authorities and communities concerned are often contextual and will have a direct impact on how land will be used (Durand-Lasserve & Royston, 2002:7; Fourie, 1999).

2.1.2.1 Types of Tenure Rights

Recently, scholars have demonstrated and argued that in practice, tenure rights do not exist as a *de jure*/*de facto* dichotomy but rather on a continuum from informal to full ownership rights (Payne, 2001; Payne, 2004; Van Gelder, 2007; Van Gelder, 2009). *De facto* tenure occurs

when occupants of usually state-owned land obtain a guarantee of tenure either by living on the land for a long time or buying guarantees from politicians (Davis, 2006:41). Payne (2001; 2004) identifies a 10-point continuum on the basis of his case studies of over ten developing countries: (1) pavement dweller (2) squatter tenant (3) squatter owner – un-regularised settlement (4) tenant in unauthorised subdivision (5) squatter owner – regularised settlement (6) owner – unauthorised subdivision (7) legal owner – unauthorised construction (8) tenant with contract (9) lease-holder (10) freeholder. Each of these tenure types may have all or some property rights included below but not limited to these.

- A right to use the property.
- A right to exclude unauthorized people from using the property.
- A right to control how the property will be used.
- A right to derive income from the property.
- A right to protection from illegal expropriation of the property.
- A right to transmit the rights to the property to one's successors, (that is, a right held by descendants to inherit the land).
- A right to alienate all rights to the property (for example, through sale), or to a portion of the property (for example, by subdividing it).
- A right to alienate only a portion of the rights, for example, through a lease.
- A residuary right to the property, that is, when partially alienated rights lapse (such as when a lease expires), those rights revert to the person who alienated them.
- A right to enjoy the property rights for an indeterminate length of time, that is, rights might not terminate at a specific date but can last in perpetuity.
- A duty not to use the asset in a way that is harmful to other members of society.
- A duty to surrender the rights to the property when they are taken away through a lawful action, (for example, in a case of insolvency where the right is held by the creditors, or in the case of default on tax payments where the right is held by the state).

(FAO, 2002:10)

2.1.3 Security/Insecurity of Tenure

Closely linked to tenure status is tenure security and insecurity. In developing countries, people that live in slums or informal settlements are characterised by tenure insecurity, a concept which I briefly introduced and now discuss in detail. According to the United Nations Centre for Human Settlements (UNCHS), "a person or household can be said to have secure tenure when they are protected from involuntary removal from their land or residence, except in exceptional circumstances, and then only by means of a known and agreed legal procedure, which must itself be objective, equally applicable, contestable and independent" (UN-Habitat, 2003b). In simple terms, tenure insecurity refers to the risk of forced eviction (Durand-Lasserve & Selod, 2009:104; Reerink & Van Gelder, 2010; Van Gelder, 2007; Van Gelder, 2009). The risk of forced eviction refers to the lack of access to the right to protection under national and international law against "the permanent or temporary removal against their will of individuals, families and/or communities from the home and/or the land they occupy" (Durand-Lasserve & Selod, 2007:6). Tenure insecurity is often but not always caused by tenure informality (Durand-Lasserve and Selod, 2007:6).

The concept of tenure security is not a fixed objective one as it is affected by many considerations (Durand-Lasserve & Selod, 2007:7; Strassmann, 1980; Varley, 1987). According to Durand-Lasserve and Selod (2007:7), the level of tenure security is dependent on four interrelated factors; tenure status because the continuum in tenure rights corresponds to different degrees of risk of eviction – for example, the pavement dweller has fewer rights and a higher risk of eviction than the freeholder on the other extreme of the continuum; the primary tenure rights of the land, that is whether the land in question was public, private or common land when it was occupied, because they provide different levels of risk for occupants; the occupancy status of the dwelling, that is whether the occupant is a renter or owner, because renters of slum dwellings have fewer rights and therefore are at higher risk of eviction than owners; the political and legal context, that is the legal framework that protects against evictions, political will of the government to protect against evictions, the regulatory framework and the capacity of the administration to provide tenure security.

Although the above definitions of tenure security focus on the legal sources of tenure, they are not the only sources. For a long time, it was held that de jure tenure rights were the only sources of tenure security. De jure is the readily recognised legal tenure. Without such rights,

people did not have tenure security. However, studies have shown that there are also de facto sources of tenure security. De facto tenure security is one in which dwellers feel that they have been accepted by authorities after the fact. Strassman (1980) showed that the installation of services by the state in informal settlements is taken as a de facto indication of acceptance of the settlement by authorities. Tenure security has more recently been demonstrated to be a state of perception (Doebele, 1978; Reerink & Van Gelder, 2010; Van Gelder, 2007; Van Gelder, 2009; Van Gelder, 2013). Perceived tenure security, which is a state of psychological being, can affect all dwellers as a state of feeling secure or thinking that one cannot be evicted (Van Gelder, 2007; 2009; 2010; 2013). Van Gelder contends that the perception of the risk of eviction is often negatively associated with the length of time that individuals have lived on a piece of land. Those that have lived very long in informal settlements are likely to feel secure and back this tenure security with housing consolidation and improvements.

2.1.4 Homeownership

Since homeownership is a central concept in this thesis, it is important that it be unpacked. The literature makes a distinction between possession and ownership (Bromley, 1991; Bromley, 2006; Bromley, 2008). For Bromley, possession entails an empirical phenomenon involving regular use of the asset but does not always entail that the user is the owner. Ownership on the other hand is a social fact and an idea agreed upon by society. It is the evidence that a particular object or land belongs to a specific individual. Ownership entails possession but possession does not always entail ownership. The tangible empirical evidence that distinguishes the fact of ownership from that of possession is a title. Within a democratic context, title allows the possessor to demand for protection from the state against eviction from other claimants (Bromley, 2008:21). Title provides real property rights (Durand-Lasserve & Selod, 2009:106).

Following Bromley's suggestion, owner occupied housing is defined as a type of tenure in which a person possesses and lives in a home that he or she owns. Homeownership confers upon the owner freehold or leasehold rights, which include all the rights listed above except for holding land in perpetuity which does not apply to 99 year leasehold. It ideally refers to ownership of adequate housing. The United Nations Habitat Agenda defines adequate housing as housing that provides structural stability and durability, ample space, ample ventilation, lighting and heating, adequate physical security, ample privacy, physical accessibility, security of tenure, basic infrastructure such as water and sanitation and waste

management facilities, environmental quality and health-related conditions, and location that is accessible to work and basic facilities, altogether available at an affordable cost (United Nations, 1996). This definition excludes owners of informal housing in slums, but they are also homeowners for two main reasons. They are owners of their shacks but only possessors of the land. In theory, they can provide title to the materials used in building their houses in form of receipts.

2.2 Theories of the Potential Effects of Titling and Homeownership

2.2.1 Nine Theories of the Effects of Titling

It is argued that property title can have a positive effect on tenure security. The origin of this theory can be traced to scholars who argued that the threat of eviction prevents dwellers in illegal settlements from improving their housing conditions (Turner & Fichter, 1972; Abrams, 1966). Legalization or titling removes this fear allowing dwellers to improve their conditions by investing in their housing. There are however several caveats that have been identified by several authors (Angel, 1982; Burgess, 1985; Martin, 1983; Durand-Lasserve and Selod (2007:10-11). They argue that titling or indeed upgrading may not always lead to tenure security. It can be a source of land conflict about which dweller is the right claimant to a parcel of land. This may lead to the eventual eviction of the losing party. They further argue that some dwellers may end up being evicted because they may not be able to provide all the required documentation or be able to pay the required fees to receive title. Also, tenants may end up being evicted because they may not be able to meet the cost of rent, which increases after titling. Sometimes, the primary tenure system may offer more security to dwellers than titling or upgrading. For example in the case of informal settlements built on customary land, private title may not easily accommodate the competing interests such as those from extended relatives and group rights (Durand-Lasserve & Selod, 2009:107-108; Lanjouw & Levy, 2002; Meinzen-Dick & Mwangi, 2009).

Secondly, titling can have several effects through the mechanism of affecting tenure security. Titling can have an effect on tenure security which in turn can affect labour market outcomes. The main idea is that untitled households devote much of their time toward guarding their homes and those of their neighbours in fear of losing their homes if eviction occurs at the time that they are absent (Durand-Lasserve & Selod, 2009:108). This reduces the time available for work. Further, because the effective protection of the home can best be done by adults, tenure insecurity may provide an incentive for child labour outside the home. In this

regard, titling should lead to tenure security because it would free up this labour. In this way, titling may lead to an increase in labour supply and a reduction in the incidence of child labour (Durand-Lasserve & Selod, 2009:108). It may further lead to female employment because women are more likely to stay home while men go to work.

Thirdly, titling and upgrading may result in an increase in tenure security which may result in several housing investments and improvements and property value (Besley, 1995; Durand-Lasserve & Selod, 2009:108). Besley (1995) developed three arguments on the effects of tenure security on household investments. The first he refers to as the security argument (Besley, 1995:908). It states that individuals underinvest if the fruits of their investments will be seized by others. It is adapted from the work of Demsetz (1967) and Alchian and Demsetz (1972). Besley's second argument is the collateral based view. He posits that better rights increase property value and make it easier for owners to use land as collateral. This reduces constraints on accessing credit. This in turn leads to more investments. The third argument is what he calls the gains from trade view. Besley (1995:910) suggests that there are possibilities of increased gains from trade. Improved transfer rights make it easier for individuals to rent or sell all or part of their land (and perhaps to conduct business on their property). This leads to investments. Durand-Lasserve and Selod (2009:108-109) develop on this idea and reiterate Turner & Fichter's (1972) and Abrams' (1966) idea that because of tenure insecurity, occupants in informal settlements have no incentive to invest in their houses. Titling and upgrading may reduce this insecurity and result in various household investments. Investments may entail; investing in their own housing stock in order to increase property value and savings; improvements to the dwelling which in turn would result in an increase in health because of a better living environment and education because of fewer days absent from school and an improved learning environment; exertion of positive externalities on neighbours and investment in community assets (social capital); an increase in the return on investments in home businesses thereby increasing home employment and a substitution of home employment for employment outside the home (Durand-Lasserve and Selod, 2009:108-109).

Fourthly, property titling and upgrading may result in increased access to credit (Durand-Lasserve & Selod, 2009:109; Feder & Nishio, 1998; Besley, 1995). This may happen in three ways (Durand-Lasserve & Selod, 2009:109). Firstly, property titling enables owners to use their property as collateral to obtain credit. Secondly, property titling improves the value of the house of the owner so that it can be used as collateral. Thirdly, property titling enables

owners to use their house as collateral in order to borrow at lower interest rates. However, Durand-Lasserve and Selod point out that these effects are based on three main assumptions that; the investment capacity of untitled households is hindered by credit constraints; holders of title are willing to risk their land and house as collateral in order to finance their business; and the existence of financial institutions that agree to provide credit to households in low-income settlements and accept their low market value houses as collateral.

Fifthly, titling can empower vulnerable individuals (Durand-Lasserve & Selod, 2009:110). Particularly, when granted to women or jointly to couples, it can increase women's bargaining power. The evidence of increased bargaining power can be seen through reduced fertility because of a woman's stronger position in family decision-making. It can also be seen through increased female labour market participation.

From the foregoing discussion on property rights theory, nine testable hypotheses about the effects of property titling can be identified. These include that titling has positive effects on tenure security, property value, labour market outcomes, household per capita income, increased access to credit, housing improvements, housing investments, physical health, and empowers vulnerable individuals.

2.3 Strengthening the Titling Literature by drawing on Homeownership and Asset Literature

My two main concerns with the orthodox property rights literature is that it concentrates on the economic effects of titling and upgrading and less on human and especially social capital and it is insufficient in informing the examination of all possible effects of real property rights. In terms of elaboration on human capital, not much elaboration has been made in the titling literature. For example, psychological wellbeing, social status and satisfaction with life are not elaborated on in the theoretical discussion of the potential effects of titling in developing countries. In terms of elaboration on effects of titling on aspects of social capital, effects on trust/social attachment, citizenship and volunteerism, sense of belonging, political awareness and engagement are important to the improvement of life in low income settlements yet titling theory is deficient of these concerns. Yet effects on human and social capital are potentially there. Because of this limitation, ignoring these potential effects can lead to inadequately informed decisions about the effects of titling and stifle our understanding. Vice versa, an understanding of these effects can lead to different more

informed conclusions and advance our understanding of the effects of titling on human and social capital in developing countries.

Homeownership theory and the asset based approach can strengthen and supplement titling theory by providing hypotheses about effects on human and social capital, allowing for a more comprehensive and efficient categorisation of effects of real property rights. These other potential effects of homeownership on human and social capital have been advanced as effects of homeownership in developed countries but (I argue) can be adapted to test effects of titling in developing countries. I am not the first to make the attempt to strengthen property rights theory in this way on developing country contexts. Pecha and Ruprah (2010) attempted to test whether titling led to better citizenship among beneficiaries in 17 Latin American countries.

Firstly, homeownership is said to have a positive association with physical health. It is thought that homeowners generally maintain their housing conditions better than non-homeowners (renters) (Rohe et al., 2002:8). It is argued that homeownership leads to ontological security which is in turn associated with better physical health (Saunders, 1990). However it is not clear whether it is ownership rights or housing conditions, which is responsible for better physical health (Rohe et al., 2002:9).

Secondly, homeownership is thought to be associated with better psychological health. Scholars suggest that the social status and personal freedom associated with homeownership provides a feeling of self-esteem and perceived control over life (Rohe et al., 2002:4). Rohe and others (2002:5) define self-esteem as "an individual's personal judgement of his or her own worthiness." There are three main ways through which homeownership results in higher self-esteem. Firstly, homeowners are afforded higher social status and are thus likely to internalize it in the form of self-esteem. Secondly, homeowners may take their housing tenure as indicative of doing better than others who are not homeowners. This may result in higher esteem because self-esteem can be affected by a comparison of how one is doing compared to others. Thirdly, having achieved the goal of owning a house may result in greater self-esteem. With regard to control, because homeowners are largely in control of the everyday happenings in their housing units (they control who enters the house, possess freedom to make modifications and are independent of landlords concerning rent or lease renewals), they may have a more general sense of perceived control over life events (Rohe & Stegman, 1994).

Thirdly, homeownership is thought to result in satisfaction with life among individuals. It is also thought to result in satisfaction with one's residence. Thinkers holding this view define satisfaction as a person's level of contentment with all aspects of his or her life while residential satisfaction is one's level of contentment with one's housing unit and the surrounding neighbourhood (Rohe et al., 2002:2). The idea is that owning a home is an important goal many individuals have. Once the goal is attained, it must result in satisfaction (Rohe et al., 2002:2). Moreover, satisfaction may arise from housing maintenance and improvements (Saunders, 1990). Also, customizing housing units to one's taste can result in satisfaction with one's living environment (Rohe et al., 2002:3). Likewise, making financial investments based on the house may result in a better financial position, which in turn can lead to satisfaction (Rohe et al., 2002:3).

Moving on to the effects of homeownership on neighbourhood outcomes, homeownership is thought to lead to social stability, social/civic involvement and socially desirable behaviour among youth and adults and social attachment. Homeownership in industrialised countries is thought to lead to social stability because homeowners move less frequently than renters. This happens through two mechanisms; owners invest more in human capital through age, education and income because they anticipate staying for longer in their neighbourhood. This in turn leads to their stability because human capital investments are long term. Homeowners do not only have use interest in their housing units but also exchange interest which increases their civic engagement. They have a stake in their neighbourhood and so they form organisations to maintain stable property values and social conditions. Secondly, they are thought to be better citizens because they have a stake in their neighbourhood and therefore are more invested in their neighbourhood. To this end, they are more likely to participate in voluntary associations and political organisations because they see their participation as a way to protect their homes (Blum & Kingston, 1984). They are also thought to be more likely to vote in elections. Thirdly, homeownership may impart socially desirable youth behaviour among local youth (Rohe et al., 2002:19). Because homeowners have a financial stake in their homes, they are more likely to be concerned with anti-social behaviour of local children and that of their own children. Further, because homeowners stay longer in the neighbourhood, they become more effective monitors of children and may use collective socialisation and peer influences. Fourthly, homeownership leads to more local social interaction and attachment (Rohe & Stewart, 1996:54-55). Because homeowners stay longer in their neighbourhood, they come to identify strongly with their homes and are more likely

to have collective socio-psychological feelings of pride as homeowners which may foster social attachment and interaction.

From the review of literature on homeownership theory, ten more testable hypotheses can be identified; homeownership positively affects social stability, psychological health, satisfaction with life, social status attainment, socially desirable youth behaviour (in terms of reduced teenage pregnancies and school dropout rates) and neighbourhood outcomes such as civic involvement, political awareness, membership in associations, and social attachment.

The asset based approach views housing as a stock of physical capital which provides the titled owner with flows of income and other benefits. An asset can be defined as a stock of economic, human, social, physical and natural capital that can be acquired, developed, stored, accumulated and exchanged (Ford Foundation., 2004). This stock of capital can be transformed into flows of income or other benefits and transferred across generations (Ford Foundation., 2004; Moser, 1998:1; Moser, 2006:6; Rakodi, 1999:316). In this approach, the poor have low stock of capital and in turn fewer flows. This approach to defining poverty draws on the work of Sen (1981; 1999), Bourdieu (1986); Chambers (1989), Swift (2009), Chambers and Conway (1992), Putnam et al. (1994), Devereux (1993), Rakodi (1995); Narayan (1997), Moser (1996; 1998), and Coleman, (1988; 1994). Low-income housing is thought to be a stock of physical capital that can generate flows which in turn may reduce poverty (Lemanski, 2011). The flows from low-income housing may include income, education and health, and social capital in terms of increased networks.

I draw on the asset-based approach to categories potential effects of real property rights in terms of economic, human and social capital and to provide a long term view of these effects. In this regard, under economic capital flow fall effects of real property rights on property value, access to credit and labour market participation, home-based business investments, household per capita income and wealth (consumer durables). Under human capital flow falls education and health outcomes. Under social capital flow falls membership in voluntary associations, neighbourly attachment, civic participation, volunteerism, political awareness and neighbourhood satisfaction. The approach is useful because of having both a short-term and a long term approach to understanding the effects of capital stock; one can investigate short terms effects by looking at individual hypotheses but understanding long term effects in terms of capitals. An important lesson from over 26 years of longitudinal research on asset poverty by Moser (2006) in Guayaquil, Ecuador, is that the priorities of the poor change over

time. In Moser's case, the first stage of her study followed squatters in bamboo houses. At this stage, social capital was essential. It was essential in fighting political leaders to mobilize social and physical infrastructure. In the second stage, community social capital declined when community infrastructure support and services were acquired. But once housing was established, raising income and developing human capital became priorities. Parents raised income and invested in their children's education and spent on luxury consumer durables. In the third stage, the new generation of better-educated children benefitted from assets accumulated by parents, an improvement in social capital occurred and there was emphasis on income earning. Thus Moser (2006:7) concluded that different assets are important at different times as they demonstrate the pathways through which households make it out of poverty over time. In this way, what effect one sees at a specific point in time may be different at other times. But if viewed through a broader categorisation of capitals over the long term, the picture may be clearer and different.

2.4 'Busting the Myth' and 'Solving The Mystery': The Lessons of Empirical Research

2.4.1 Effects on Tenure Security

The evidence testing Turner (1972) and Abrams (1966) theory that titling results in tenure security is scarce, particularly for urban settings. The available studies show that titling is a source of tenure security, but not the only source. In other words, even though it is equated to tenure security, it is possible for households to have tenure security without title (Durand-Lasserve, Fernandes, Payne, & Rakodi, 2007:22). For example, it is possible to have tenure security based on *de facto* tenure rights (Porio & Crisol, 2004). Porio and Crisol compared how the residents of two poor urban settlements – one formal and the other informal – in Metro Manila in the Philippines understood security of tenure and how this affected their investments on livelihood sources, housing and land development. They conducted two sample surveys of 100 households in each settlement. They also supplemented the survey data with key informant interviews and focus group discussions. They found that those without tenure perceived law and order, basic services and job opportunities in their settlement to be more important elements of their security. They made investments on that basis. Security of tenure was however equated with ownership and formal titles of house plots. Porio & Crisol (2004) demonstrated that tenure status is not the only source of security but that there are many other sources. This means that since the claim is that property title

leads to tenure security which in turn incentivises the poor to improve their wellbeing, other sources of security are just as important.

Measuring tenure security is problematic. Typically, studies measure insecurity by the dwellers' duration of residence in the neighbourhood (Durand-Lasserve & Selod, 2009:117). This is however problematic because it is possible that residents may have stayed long in an informal neighbourhood because they are unable to move as there are few informal and even fewer formal alternatives (Durand-Lasserve & Selod, 2009:117). Other studies use the perception of tenure security by asking whether dwellers feel that it is possible that they will be evicted from the neighbourhood in the next 5 years (Durand-Lasserve & Selod, 2009:117; Reerink & Van Gelder, 2010:455). For example, Van Gelder (2007) examined specifically the relationship between perceived tenure security and housing improvement in an informal neighbourhood of Buenos Aires, Argentina. The neighbourhood was made up of 800 odd families who had invaded private land in 2000. He used a survey with a sample of 135 heads of household (64 males and 71 females). Before carrying out the survey, a group of four surveyors performed a pilot study (N=20). The items in the survey were based on social psychological theory in which participants were asked questions about their perceived tenure security (a variable consisting of thinking – perceived probability of eviction – and feeling – fear of eviction), the possibility of eviction, the relationship between tenure security and investment behaviour, and their expectations regarding legal title. He then used regression analysis. He found that both the feeling and thinking state of perceived tenure security were related with housing improvements in informal settlements. However, the measurement of perception carries a high risk of measurement error as do many subjective measures. Other studies use title as the proxy for tenure security (Field, 2005) especially in investigating the extent of housing improvements that dwellers make to their dwellings as a result of tenure security. It is however not clear in the literature whether one will make more investment to their housing with title than without title (Reerink & Van Gelder, 2010:454).

An attempt was made at integrating measures of legality and perception as sources of tenure security. Van Gelder (2009:132) resolved part of the controversy regarding the use of the concept of tenure security by integrating the legal and psychological feeling and thinking that influences perceived tenure security in the context of a low-income subdivision in Buenos Aires. He used data gathered by means of a survey that included 174 heads of household (74 men and 100 women) as respondents. The respondents had to have lived on their plot for a minimum of 5 and a maximum of 25 years. He restricted his sample to residents who had

gained access to an empty plot and built their dwelling, instead of buying or occupying built or semi-finished houses. He then used regression analysis to determine the causal relationship between housing improvement as the dependent variable and various measures of the types of perspectives of tenure security as independent variables. He found significant differences in housing improvement between the tenure categories thus showing that perceived tenure security is highly correlated with one's tenure status on paper.

Titling in some contexts has been found to actually reduce tenure security (Payne et al., 2009). Payne *et al.* (2009) used a desk review of the literature and two case studies of South Africa and Senegal to review whether land titling programmes have achieved the benefits claimed by their proponents. They used mainly secondary sources, stakeholder analyses, key informant interviews, questionnaire surveys, focus group discussions and local workshops. They argued that titling programmes are often used in informal settlements in countries or cities that already have some degree of de facto tenure security. In some cases such as India and Afghanistan, tenure security has reduced after titling because titles there do not protect one from eviction. They also report market-driven displacements of titled households in Cambodia, Rwanda, Egypt and India. They conclude based on the available evidence that tenure security can be achieved through several means other than titling and that titling may actually lead to an increase in tenure insecurity.

In sum, the findings from past empirical studies on the effects of titling on tenure security lean toward the affirmative but are nevertheless ambiguous and are not short of methodological shortcomings. The measures of tenure security are usually not present in existing surveys and are still far from being fully developed (Durand-Lasserve and Selod, 2007). Context also seems to play an important role in the effects of titling on tenure security because in some countries it leads to security while not in others.

2.4.2 Economic effects

Real property rights are thought to result in an increase in property value. Typically studies use housing prices for untitled and titled households and use the difference as a measure of this effect. This effect is also considered a tenure security premium (Durand-Lasserve & Selod, 2009:118). For example, Lanjouw and Levy (2002) investigated whether property title affects property values and whether formal and informal property rights were substitutable. They used a case study of low-income communities in Guayaquil, Ecuador. They used existing survey datasets and a matching strategy for their analysis. Their finding was that

titling raises property values by up to 23.5 percent on the market. They also however found that informal property rights can substitute effectively for formal property rights. Nevertheless the use of property values to demonstrate tenure security as resultant from titling is problematic in that the difference in prices may not necessarily reflect tenure security (Durand-Lasserve and Selod, 2007:24).

Similarly, a study (Mendez, 2006) investigated the types of self-assessed gains from legal housing titles and their relative importance to beneficiaries in the Costa Rican urban housing market. Mendez used data from a housing survey of 2000 randomly selected households, conducted by the Inter-American Development Bank during 1997. Of the total number of households, 317 who rented their house and 168 who borrowed or shared were excluded from his study. He therefore concentrated on the 1515 that owned the houses in which they lived. He then used hedonic regressions on the value of the house, decomposing perceived household value into variables such as number of bedrooms, bathrooms, living rooms, constructed area, and size of lot, distance to centre, neighbourhood value, and title. He examined specific segments of the population that vary in their economic activities and incentives as related to legal housing titles. He used an instrumental variable technique to control for potential endogeneity. On the basis of observable characteristics at the time of the survey, he selected individual households according to those that were likely to experience "eviction-related", "investment-related" and "transaction-related" gains from legal titles and grouped them together into a "high-value" sub-sample. He found that for the "high-value" sub-sample, the estimated value of the legal title more than doubled that of the rest of the sample approximating 40 percent greater than the estimated value of that of the rest of the population.

Effects of Tenure Security on Housing Investments/Improvements

The evidence from several studies on the effect of titling on housing improvement and investments suggests that titling has a positive and significant effect through the mechanism of increasing tenure security. Besley's (1995) study referred to in the previous section tests the three hypotheses using survey data from two rural regions in Ghana[3]. One region was Wassa, a cocoa growing region and the other was Anloga, a region less dependent on agriculture. In Wassa, Besley had a sample of 217 while in Anloga; he had a sample of 117

[3] I include this study in the review despite the fact that it was carried out in a rural area because it is a seminal work on which other studies carried out in urban areas, such as Field (2005), build on.

households of farmers. His measure of investments was a dummy variable equal to one if the field had been improved and zero otherwise. Besley (1995:919) found ambiguous results. In Wassa, he found that better land rights facilitate investments while in Anloga; he does not find such a relationship, suggesting that land rights could be endogenous with investments.

Building on Besley's work, Field (2005) investigated the effects of tenure security on the rate of residential investments in urban squatter neighbourhoods. To examine these effects, Field examined the impact of the nationwide titling programme in Peru in which 1.2 million titles were provided to urban squatters living on public land (Field, 2005:280). She exploited the programme as a natural experiment to control for endogeneity which typically arises in comparing titled and untitled households (Field, 2005:280). She used panel data on ten categories of housing renovations. To control for potentially confounding time trends, Field calculated difference-in-differences estimates of the effects using two comparison groups of non-participating households (Field, 2005:282). She found a large positive effect of 68 percent increase in the rate of housing renovations within four years of receiving property title (Field, 2005:286). She also demonstrates that this effect does not operate exclusively through greater access to credit (Field, 2005:287). However, the nature of the investments was limited to small renovations and not housing additions (Field, 2005:286).

Among five dependent variables, Galiani and Schargrodsky (2010) investigated whether property title increased household investments in Argentina. They exploited a natural experiment in the allocation of land titles in a poor suburban area of Buenos Aires. They found that the proportion of houses that had good quality walls rose by 40 percent, those with good quality roofs by 47 percent, those with a constructed surface by 12 percent, houses with sidewalks by 16 percent and an overall improvement score of 37 out of 100 in titled neighbourhoods (Galiani & Schargrodsky, 2010). They argue that this is not a wealth effect from households that became wealthier after titling but an incentive to invest as a result of titling.

It has however been shown that households also make improvements and investments to their dwelling in the absence of title (Angel et al., 2006; Calderon, 2004). Where there is considerable de facto tenure security, dwellers do not wait for title to make improvements and investments to their houses (Angel et al., 2006:14; Calderon, 2004:298). Also, income can be a constraint for some households despite having title. Angel and others argue that in Mexico, the lack of improvements is more reflective of a lack in income than in title. Payne

et al. (2009) has pointed out that what we do not know is the extent to which title is the only form of rights that can achieve the objective of increasing housing investments. Payne concludes that although title is one of several means of achieving the objective of housing improvement and investment, it is by no means the only one.

It is in this context that the studies by Van Gelder (2007; 2009; 2013), Reerink and Van Gelder (2010) referred to above have recently demonstrated the main channel through which titling and tenure security affect housing investments and improvements. In these studies, they found a positive relationship between legal, perceived and de facto tenure security and improvements on housing in Argentina and Indonesia. Van Gelder's main contribution has been to refine the idea that a sense of perceived tenure security results in dwellers investing in their habitat and the mechanism by which this occurs is through psychological pathways. These psychological pathways include thinking and feeling which influence how dwellers make decisions about the probability of eviction and determines their level of fear of eviction. In this regard, titling should lead to a lower perceived probability of eviction and to less fear of eviction which in turn should lead to investment in housing.

In addition, some authors have looked at the change in beliefs among titled individuals that drives them to trust the market and make decisions to invest in the first place (Di Tella, Galiani, & Schargrodsky, 2007). A widely cited natural experiment by Di Tella *et al.* (2007) investigated whether titling had an effect on four beliefs that appear fundamental to the workings of a capitalist society, namely individualism, materialism, the role of merit, and trust. In their experiment, about 1800 families occupied a large tract of land in San Francisco Solano, Buenos Aires in 1981 – two decades before their study. In 1984, the state expropriated the land but offered that the squatters surrender their plot in exchange for compensation and for the later transfer of ownership to the squatters. Some squatters surrendered and were later in 1989 given formal title. Others challenged the expropriation in court demanding for better compensation. The issue dragged and had not been resolved by the time of their study. Therefore the group of squatters that obtained property rights became the treatment group while the ones that challenged the state became the control group. They found a significant difference in the beliefs that the squatters with property rights declared to hold relative to those that had no property title. They found that the effect of property rights on beliefs was large: the set of beliefs declared by squatters with title were pro-market while those without title were less pro-market. This means that property title provides an incentive to interact with the formal market.

Although the evidence may suggest that titling results in improvements, these improvements do not usually meet the required standards of adequate housing (Durand-Lasserve and Selod, 2007).

Effect of Titling on Access to Credit

Many empirical works on the effects of titling have focussed much of their attention on the effects of titling on access to credit and have found very weak evidence. Field and Torero (2006) investigated the impact of property titles on access to credit among the urban poor and whether improvements in land rights reduce credit rationing on the market. They did their study in Peru where the world's largest property right formalisation project took place. They investigated whether the distribution of property titles in fact enables lenders to use profitably low-income housing as collateral. To study the effect of titling on credit access, they used survey data containing 2,750 randomly sampled households from the program's target population. To tackle the question of whether improvements in land rights reduced credit rationing, they employed a quasi-experimental set up that ideally mimicked an experimental design with treatment and control groups. The program was phased with the survey being conducted one-third of the way into the program. Their treatment group was composed of 536 households that had already participated in the program while their control group comprised houses that had not yet. They found that access to credit from the private sector lender is unaltered by titling and that credit rationing is still a key feature of the micro-lending environment in urban Peru. Freehold tenure did not matter in accessing credit.

Payne *et al.* (2009) whose study used a desk review of the literature and two case studies of South Africa and Senegal found that titling programmes have generally failed. Access to formal credit has not increased noticeably more than under other tenure regimes and there is no significant evidence of poverty levels being reduced.

In the same vein, Dower and Potamites (2005) investigated the impact of the possession of land title on formal credit access in Indonesia. They used the Micro-finance Access and Services Survey conducted in 2002. The survey provided disaggregated data on household economic activities, assets and loans for 1400 households in 70 villages across 6 provinces. They then used instrumental variable regressions to analyse the data. They found that having a formal title significantly increased a household's probability of having had a formal loan and the size of working capital loans it received (Dower & Potamites, 2005).

In the same vein, another study (Gilbert, 2000) examined the benefits of legalisation using data from legalised self-help settlements in Bogota, Colombia. Gilbert wanted to find out what difference a title deed made to the lives of the poor, specifically examining whether title deeds enabled the poor to borrow money from the formal sector, allowed for capital accumulation as a result of the right of legal transfer from one owner to another or whether the difference was so minimal that the advantages of legalisation would more appropriately be called a sham. He finds that sales of houses are more common when people lack legal title. He also found that informal finance is available from the onset of the formation of an illegal settlement and that there is little formal financing that is forthcoming after legalisation.

Finally, Galiani and Schardrodsky (2010:710) in the same study referred to above investigated the effects of titling on access to different types of credit. They found that titled households were not different from untitled households in accessing credit cards, bank accounts, non-mortgage formal credit from banks, government, labour union or cooperatives. They however found that access to informal credit is higher among titled households than for untitled ones. With regard to mortgage credit, they found that 4 percent of one of the two groups of titled households had received a mortgage loan.

Effects of Tenure Security on Participation in the Labour Market

Evidence on the effects of tenure on participation in the labour market is scarce and the findings are ambiguous. Field (2003b; 2007) examined the labour market effects of increases in tenure security resulting from the COPOFRI programme that issued property titles to 1.2 million urban households in Peru. She used data that had been part of the Peruvian government's programme evaluation. The survey had a random sample of 2,750 households. To study the impacts, she exploited a neighbourhood level variation in the year in which the titling programme began. Her identification strategy made use of a framework analogous to difference-in-differences estimation. She found that households with no legal claim to property spent an average of 13 hours per week guarding their houses just in case an eviction took place while they were away. She also found that household members were 40 percent more likely to work at home. For titled households, she found that the change in household labour supply was 16 hours greater than that of untitled households between 1997 and 2000. These households were also half as likely to work at home compared to untitled households. She concludes that the net effect of property titling is a combination of an increase in the

hours of labour and a reallocation of work hours from inside the home to the outside labour market.

Similarly, a study was conducted on the impact of property rights on labour markets and household income in Brazil (Maura & Bueno, 2009). Maura and Bueno analysed household responses regarding income and supply of labour to an exogenous change in formal ownership status. They particularly assessed the value to a squatter household of increases in tenure security associated with obtaining a property title to their house in terms of hours of labour supply and level of income. In order to isolate the causal role of ownership security, the study took advantage of a natural experiment, comparing two very similar neighbourhoods in the city of Osasco. Residents in one neighbourhood called Jardim Canaa received titles in 2007 while those in the other called Jardim DR were scheduled to receive titles later in 2012. Residents in Jardim Canaa were the treatment group while those in Jardim DR were the control group. They used panel data from a random sample of both neighbourhoods with the first wave of data having been collected before residents of Jardim Canaa received titles and the second wave collected a year and half after titles were issued. In their analysis, they found significant differences in the number of hours worked and in income between those with property title and those without. They concluded that property title increases the number of hours of labour which in turn increases household income. Freehold tenure was positively associated with higher labour supply and household income.

In contrast, Galiani and Schargrodsky (2010) found no effect of title on labour market outcomes 20 years after titling. They found no differences between titled and untitled households in terms of "household head income, total household income, and total household income per capita, total household income per adult, and employment status of the household head. There are also no significant differences in the pension status of the household heads, in female employment, and in child labour."

To add to this mix, Rose (2006) followed similar methods as those of Field (2003b; 2007) in her study of the effects of titling on labour force participation in Quito and Guayaquil, Ecuador and found interesting results. She finds no significant difference in aggregate weekly household labour hours between titled and untitled households. Surprisingly, titled households were 42 percentage points more likely to have at least one adult member work primarily inside the house. However she also found that titled households were 6 percentage points less likely to use child labour to contribute to household income (Rose, 2006).

In the same vein, Payne et al. (2009) in their Senegal part of their study found that the impact of titling on the economy of families is "limited and barely measurable" suggesting that there is barely an effect on labour market outcomes. The reason they give is that some of the families are so poor that their only option is to sell the property.

2.4.3 Effects on Human Capital

Effects of Tenure Security on Health Outcomes

Very few studies have been carried out on titling and health. The few studies conducted find a positive and significant effect but also raise some important concerns. The theory holds that titling has an effect on investments and improvements in housing conditions which may lead to better health outcomes especially for children (Galiani & Schargrodsky, 2004). Galiani and Schargrodsky (2004) examined the impact of titling on child health. They took advantage of a natural experiment in Buenos Aires, Argentina. They used anthropometric measures (weight-for-height and height-for-age z-scores) to measure child nutrition. They found that children from titled households enjoyed better weight-for-height scores but similar weight-for-age scores with those from untitled households. This means that there are fewer occurrences of wasting but stunting remains unaffected. They also found that teenage girls in titled households had lower pregnancy rates compared to those in untitled households.

Following up on Galiani and Schargrodsky's (2004) study, another study (Vogl, 2007) investigated the effects of urban land titling on children's nutritional status in Peru. This was the same case study Field & Torero (2006), Field, (2003a; 2003b; 2005; 2007) and Field & Kremer (2006) analysed as a natural experiment. Vogl analysed data from a survey of 27 communities in Lima that participated in the Peruvian government's land titling programme. To gauge the nutritional effects of titling, he conducted a cross-sectional health survey of 549 households. He took advantage of the community level variation in the timing of the allocation of titles. He used the same anthropometric measures as those of Galiani and Schargrodsky (2004). He then used difference-in-differences estimation. Similar to Galiani and Schargrodsky, Vogl (2007) found suggestive evidence that children in titled households increased in weight but not in height. In addition, he found that titles seemed to raise the risk of children being obese which may mean that the weight gain might not have been indicative of improved nutritional status. A major limitation of this study was that at baseline, there were differences between the treatment and control groups which raised questions about the case study being a natural experiment.

Another study investigated the effect of granting property titles to low-income households on human health (Gandelman, 2010). Gandelman used data from a natural experiment in nine small formal neighbourhoods in Uruguay in which loopholes in housing policies left occupants without formal title. The households were formed by ex-ante homogenous households but formal property rights could only be granted to members of three neighbourhoods for reasons independent of the characteristics of the neighbourhoods living there or those of the other six neighbourhoods. Those in the three neighbourhoods (346 households) became the treatment group and those in one of the other six became the control group (432 households). A survey was conducted in 2007. He performed a treatment of equality of means and was unable to reject the null hypothesis. He categorised the diseases according to the degree to which they were related to housing. He then investigated respiratory and infectious diseases, hypertension and diabetes. Then he constructed a personal health index for each individual in the survey. To analyse, he ran an OLS regression and an instrumental variable regression. According to the general health index, those living on titled plots of land had relatively low rates of chronic disease. However, having property title was not associated with lower rates of housing-related diseases. On the contrary, the statistically significant results for the titled individuals were lower rates of non-housing-related diseases. His conclusion was that their overall health status, as reflected in the general health index, was significantly better because of lower levels of stress among home owners.

Effects of Tenure Security on Education

The dearth of studies on the effects of titling on education also shows a positive effect on education. In their study referred to above, Galiani and Schargrodsky (2004) also examined the effects of titling on children's education. They found that children in titled households experienced less grade repetition than those from untitled households.

Effects of Title on empowerment of vulnerable individuals and fertility

It is also held that titling can empower vulnerable individuals such as women in that they may have a better say in their lives if their name is on the title. There is also a dearth of research in this area. One study by Field (2003a) examined the link between intra-household allocation of ownership rights and fertility in Peru. In her case study, the Peruvian government had as one of their objectives to improve gender inequality of property ownership by including female names on titles during their titling programme. She found that titling is associated with a 21 percent reduction in annual birth rates among beneficiaries in the year preceding

her survey. She attributes this reduction to an increase in female bargaining power as a result of titling.

Likewise, Galiani and Schargrodsky (2010) found that titling has a negative association with household size. They found that titled households have on average 1 household member less than untitled households. They also show that the fewer number of household members seems to emanate from the fact that there are fewer children born to the household head after titling compared to the number born to household heads in untitled households. Further, untitled households seem to have more extended relatives living with them than titled ones.

2.4.4 Effects on Social Capital

Learning from the West: Effects of Homeownership on neighbourhoods

There is a dearth of studies that examine the effects of titling and homeownership on aspects of social capital in urban communities of developing countries[4]. However, one study has been done in Latin America that may provide some useful information for testing the theory in Southern Africa. The study by Pecha & Ruprah (2010) investigated whether homeownership affects a household's membership in community and religious organisations, trust in local entities, good citizenship, civic and political activism, voting behaviour, satisfaction with local services in the neighbourhood and one's political ideological inclination. They investigated 17 Latin American countries using the Latin-Barometer opinion survey. Using simple regression, logit and propensity score-based methods for estimating effects, they found no effect of homeownership on these measures.

There are many fundamental problems with these studies on homeownership that have been identified. An important one is that of the direction of causality. Homeownership may be the result of social attachment, social networks through voluntary organisation or even satisfaction with the neighbourhood. Another methodological problem is the issue of omitted variable biases as a result of many of the studies using existing panel survey data that has been collected for other purposes rather than the measurement of the effects of

[4] Meinzen-Dick and Mwangi (2009) have looked at how titling affects social capital in rural areas of Kenya. They examined the manifestations of the web of interests generated by property rights and the role they play in livelihoods, social relations, and ecological functions, in Kenya. They also discussed the different manifestations of formalization of land tenure and their effects on the web of interests particularly for poor and marginalized groups. In one of their case studies, they found that group ranch land subdivision and formalisation led to a breakdown of shared life patterns and an increase in conflicts over trespass. The study explained that formalisation of property rights created exclusive forms of ownership and therefore cut pre-existing webs of overlapping interests.

homeownership (Pecha & Ruprah, 2010:2). The main problem however remains that the state of knowledge about the effects of real property rights on aspects of social capital is poor as we do not know much about its effects in developing countries. Thus this study will contribute to filling this gap in knowledge.

2.5 What Past Research Tells us about the Effects of Informal Settlements Upgrading and Homeownership in the South African Context

Although there is a rich literature on housing in South Africa, there are few empirical studies enquiring into the effects of property titling and informal settlement upgrading, and these use mainly qualitative approaches. The majority of these studies are quite recent as they are a response to De Soto's (2000) *The Mystery of Capital* and whether his proposed titling and formalisation of assets of the poor can reduce poverty in South Africa in the post-apartheid policy environment (for example Davies et al., 2007).

With regard to the effects of titling on housing improvements, one qualitative study found positive effects (Boudreaux, 2008). Boudreaux (2008) examined the benefits of property titling programs on the poor in her case study of Langa in Cape Town. Langa was one of the areas in which non-whites had long term leasehold and later benefitted from the transfer of the housing from the state to sitting tenants. Boudreaux's study was based on a literature review and a few qualitative interviews with titled residents. Her findings showed that title-holders invested in improving their homes, which raised property values. However, because this study used a qualitative approach, it did not tell us the extent of these improvements in the study population and the percentage increase in property values. In addition, untitled households may also make improvements which the study failed to acknowledge.

In terms of home-based entrepreneurial investments, Boudreaux's (2008) qualitative study suggested that titling had a positive effect while that of Rust (2006) found that these activities did not result in more wealth. Boudreaux (2008) demonstrated that some title-holders used their homes as secure places of business, generating income that residents use to support themselves and their families. She also showed that home improvement projects provided entrepreneurial opportunities for a wide variety of local artisans. On the other hand, Rust (2006:44-52) conducted an analysis of various aspects of housing subsidies and the housing market in 18 South African townships. She used evidence from a study carried out from 2003 to 2004 by the FinMark Trust, Ford Foundation, National Treasury, National Credit Regulator and USAID on the performance of the national housing subsidy programme. The

study involved a contextual review, a cadastral review, a household survey with a sample size of 2004 and an entrepreneurs' survey with a sample size of 400 in 18 Black townships of Johannesburg, Cape Town, Durban and East Rand. From her analysis, Rust concluded that property rights did not create wealth (Rust, 2006:44-52). She suggests that property title was not enough but required a functioning secondary property market, sufficient housing stock, people's ability to afford repayments on housing finance and mortgage lenders willing to move downmarket. From this discussion, titling may lead to increased home-based entrepreneurial activities but these are found not to be meaningful enough to create long term substantive and sustained wealth.

Regarding the effects of titling on labour market outcomes, one study has been carried out which finds positive effects of titling on beneficiaries (Franklin, 2011). Franklin (2011) examined the impact of the South African government's housing subsidy programme by examining the effects of the new housing policy on labour market participation, earnings and household income in neighbourhoods that received housing subsidies in Cape Town. He exploited a natural experiment in the allocation procedure of subsidized low-income housing. He used four waves of the Cape Area Panel Study with analysis that utilised an instrumental variable strategy and robustness check that used a difference in differences estimation among other methods. He found that labour market participation, earnings and household income were higher among beneficiary households. They were particularly higher for female young adults.

In terms of the effects of titling on access to credit, studies find almost no evidence to this effect (Boudreaux, 2008; Kingwill et al., 2006:53-65; Lemanski, 2011; Tomlinson, 2007:17-31). The beneficiaries of housing subsidies are wary of the risk involved in using their property as collateral. Lemanski (2011) used case-study methods to investigate whether homeownership proves to be a financial asset for poor households to move up the ladder out of poverty. She also analysed the subjective meaning and values of homeownership to people. She conducted semi-structured interviews with residents, officials and local NGOs in Westlake Village in Cape Town between 2004 and 2006. She supplemented these interviews with a small survey data of 100 households and data from the Cape Town Deeds Office. Residents had received houses with property titles under the Reconstruction and Development Programme (RDP). Her conclusion was that despite providing a financially tradable asset, low transaction values of RDP houses in Westlake Village mean that they cannot be sold for sufficient value to secure upward property movement. Like Boudreaux

(2008) and Field and Torero (2006), she found that low-income home owners are reluctant to use RDP houses as collateral for credit, thus limiting the financial asset value of state-subsidized houses for low-income households. Boudreaux (2008) in her qualitative interviews found that few title-holders put their newly formalised rights to use as collateral for commercial loans. Tomlinson (2007:17-31) argues that the government's argument that the poor should be able to access credit with the houses is not supported by an increase in beneficiaries accessing credit. The reason is that the banks say they cannot lend to the poor because the poor cannot sustain repayments. The conclusion is that property rights among the poor cannot assist them to access credit. This means that poor freeholders do not have access to the credit that they are assumed to qualify for with a house because a house is not enough. In addition, Lemanski (2011) shows that the houses have too low a value to allow the poor freeholder to access credit. Kingwill *et al.* (2007:53-65) draw on case studies of Joe Slovo Park in Cape Town and Ekuthuleni in KwaZulu-Natal to draw the conclusion that formal title does not increase lending to the poor. Banks do not lend to the poor due to the high risk of non-repayment, low value of houses and high transaction costs.

In addition to the studies that have an obvious focus on the effects of property rights, another empirical study was carried out as a comparative study in Valhalla Park, Cape Town and Matero in Lusaka focusing on the definition of tenure rather than its effects (Butcher & Oldfield, 2009). In this study, Butcher and Oldfield (2009) explore the relationship between homeownership and tenure security. They use qualitative interviews with ten women in Valhalla Park and another ten in Matero. Their finding is that simple binaries of owner and non-owner fail to capture the lived experiences of their interviewees. This is because rights to houses are not embedded in legal title but shaped by shifting economic social and cultural realities.

As the foregoing discussion has shown, there are few empirical studies and there is a deficit of studies examining the effects of titling on education, health and aspects of social capital in South Africa. This study will contribute to filling in this gap.

With regard to social capital and attachment at the neighbourhood level, several studies (all qualitative) have been carried out, which describe neighbourhood relationships in new housing projects. Several studies explore low-income housing and the emerging relationships in low-income neighbourhoods in South Africa (Bray, Gooskens, Moses, Kahn, & Seekings, 2010; Harper & Seekings, 2010; Lemanski, 2006; 2011; Millstein, 2008; Muyeba &

Seekings, 2012; Oldfield, 2000; 2004; Robins, 2002; Ross, 2005a; 2005b; 2010; Saff, 1998; Seekings, 2008b; Seekings et al., 2010). This literature suggests that as a result of obtaining ownership of new low-income housing, residents espouse values of respectability, decency, dignity and belonging as they forge their relationships (Lee, 2005; Ross, 2005a; Ross, 2005b; Ross, 2010). These values are in contrast to the dehumanising experiences that they went through during apartheid.

However, the literature also shows that efforts of subsidy beneficiaries at community-making are undermined by segregation (Oldfield, 2004; 2000; Lemanski, 2006; 2011; Seekings *et al.*, 2010; Millstein, 2007) although there is some tolerance as a result of contact in new mixed neighbourhoods (Muyeba & Seekings, 2011). Other factors that constrain community making include Jealousy and gossip (Ashforth, 1998; Bray et al., 2010:108; Ross, 2010:160-163), social disorganisation (Berg & Scharf, 2004; Breetzke, 2010; Emmett, 2004; Nina, 2000), witchcraft (Ashforth, 1998; Ashforth, 2005) and violent crime and criminality (Centre for the Study of Violence and Reconciliation, 2010; Gastrow & Shaw, 2001; Robertson, 1998; Whyte, 2010). The literature further identifies coping mechanisms such as kinship support in which it has been found not to be as supportive as previously thought because residents are recognising fewer and more conditional obligations toward kin (Harper & Seekings, 2010; Seekings, 2008a), domestic fluidity in the sense of individuals moving between households and being members of multiple households at a time (Seekings, 2008a; Spiegel, Watson, & Wilkinson, 1996) and privacy which constrains community making (Ross, 2005: 633; Muyeba and Seekings, 2012).

None of these studies distinguish between the extent of neighbourly relations or social attachment among titled residents to that of untitled households. Although some studies (Burns, 2009; Jooste, 2005) explore measures of social capital and cohesion, there seems to be no previous systematic quantitative attempt to measure the effects of low-income homeownership on measures of participation in associations and social attachment or cohesion. This study contributes by filling this gap.

2.6 What Past Research tells us about the Effects of Titling and Homeownership in the Zambian Context

There is a paucity of quantitative empirical studies that test the effects of titling in Zambia in general and Lusaka in particular; almost non-existent. Studies on urban housing tenure in Zambia have been concerned with the evaluation of the World Bank-funded squatter

upgrading and site and service project that began from 1974 to 1983 (Chisanga, 1986; Hansen, 1982; 1997; Jere, 1987; Moser, 1996; Moser et al., 1997; Rakodi & Schlyter, 1981; Rakodi, 1988; Sanyal, 1987; Schlyter & Schlyter, 1980; Schlyter, 2011) and the privatisation of publicly-owned housing that was done from 1996 (Adams, 2003; Basila, 2005; Butcher & Oldfield, 2009; Mususa, 2010; Mususa, 2012; Palmer, 2000; Schlyter, 2002; 2003; 2004; 1998; Sharp, 2001). The empirical studies concerned with the privatisation of public housing have been framed within the international political economy in which the sale of publicly-owned housing to sitting tenants has been understood to be part of market liberalisation and SAP designed to stimulate the housing market and increase investments in housing (Schlyter, 1998; 2002; 2003; 2004; Basilla, 2005; Palmer, 2000; Sharp, 2001; Adams, 2003; Butcher and Oldfield, 2009; Mususa, 2010; 2012). A comprehensive evaluation of the 1996 Zambia Housing Policy is offered by Makasa (2010) but does not discuss effects of titling and does not go into detail in evaluating upgrading projects..

In their studies of George, Schlyter and Schlyter (1980), Rakodi and Schlyter (1981) documented the development and upgrading process of George compound, their concern being about urban management, democracy, sexuality and gender inequalities viewed through housing rights as well as living conditions of women, youth and the elderly in George.

Following these studies, an overall project evaluation of the George and Chawama upgrading project shortly after completion was offered by Sanyal (1987) who investigated the problems of cost-recovery and found that the rate of cost-recovery was unsatisfactory because participants did not understand their financial obligation, the collection system for payments by beneficiaries was inefficient, incentives for payment were not well planned and were inefficiently implemented and there was no political support for cost-recovery. Overall, the evaluations show that there was improved access to services and therefore improved conditions of living among residents and improved tenure security.

Shortly after Sanyal's study, Rakodi (1988) conducted a study related to the effects of the administrative recognition of occupancy on tenure security and livelihoods. Rakodi (1988) in her qualitative study of Chawama in Lusaka found no evidence of displacement of beneficiaries by the middle class or increased rents for tenants of beneficiaries. Rakodi (1988) also showed that there were improvements and benefits to residents in Chawama, one of the upgraded settlements, in terms of living conditions. Using the same study site, Moser and Holland (1997) and Moser (1998) contribute to the debate about sustainable local level

poverty reduction strategies in countries experiencing economic crisis and show that over a decade after the project implementation, the poor in Chawama manage their various assets, including housing, as a poverty reduction strategy. The more recent evaluations particularly shown deteriorating conditions of living among women over time (Schlyter, 2011).

The few studies that have been done on housing put little focus on examination of the effects of housing privatisation on beneficiary households. Most are qualitative studies that have focussed on the process rather than the outcomes not only on the economy but also particularly on beneficiaries. The most focussed study on the effects of property rights is a study by Basila (2005). Basila interrogated whether homeownership had helped beneficiaries achieve their housing rights and improved their houses and economic status. Using a qualitative case study of low-cost housing in Mufulira on the Zambian Copperbelt, she found that the main benefit to residents was a slight improvement in economic status. As a result of ownership of an asset, beneficiaries were able to make savings, resale or sublet the house and conduct trading activities from home. She concluded however that the housing did not lead to meaningful economic empowerment and did not provide a sustainable solution to economic insecurity.

Schlyter (1998; 2002; 2003; 2004) has made several qualitative evaluations of life during and after privatisation of low-cost housing in Matero and provides residents' understanding and experiences of the mechanisms of privatisation, with a focus on women. Butcher and Oldfield (2009) conducted a comparative investigation of privatisation in Matero and Valhalla Park in Cape Town, South Africa by interrogating the homeownership model. They show that ownership in the two case studies is gendered and is contested through everyday experiences.

Mususa (2010; 2012) also investigated post-privatisation experiences of housing as part of an ethnographic study. Her sample is drawn from middle class former mine employees in Luanshya on the Copperbelt. She shows that the houses and yards that people gained were used for a wide array of informal economic activities and the resulting experiences show deterioration from the comfortable life provided by the liquidated mines to those of just "getting by".

There is enough knowledge on the impact of upgrading projects carried out in the 1970s to the early 80s, as Makasa (2010:10) has argued, but a dearth of quantitative evaluations of the impact of the 1996 state-transfer of public rental housing on beneficiaries exist. My evaluation follows up on Schlyter's (2004) work on Matero which was too early an

evaluation to measure in quantitative terms the effects of housing privatisation. Schlyter's study was done two years after privatisation. The timing of the evaluation may have been too short after the intervention for effects to have fully materialised. My study also enters into conversation with Butcher and Oldfield (2009) who investigated Matero and Valhalla Park in Cape Town. However, both Schlyter (2004) and Butcher and Oldfield (2009) were selectively focused on women's experiences of privatisation. Their methods are also qualitative. They also do not provide a control as part of their research design. This study is more comprehensive as it draws on a survey of 623 households in Matero and George. Further, my study draws on several in-depth qualitative interviews. In addition, while Schlyter wanted to understand the macro-level effects of privatisation on gender, housing stock, governance and democracy through her interviews, my focus is to understand the individual and neighbourhood-level effects of real property rights on a wide range of aspects of economic, human and social capital among beneficiaries.

2.7 Discussion and Conclusion

The body of knowledge on real property rights in developing countries holds that dwellers in informal settlements and slums are severely limited in their efforts to overcome poverty by the lack of title and tenure security. Titling is a way of conferring property rights on the poor to access and use their property in beneficial ways. Demsetz (1967) and Alchian and Demsetz (1972) demonstrated long ago that individuals under-invest if the risk of others seizing the fruits of their labour is high. Property rights therefore have many positive effects, identified as nine hypotheses in this review. However, property rights theory on the effects of titling is inadequate in examining all possible effects. To comprehensively examine the effects, we need to go beyond the orthodox titling theory; titling theory requires strengthening by means of supplementing it with two other approaches. The two other approaches are homeownership theory from which ten testable hypotheses are obtained and the asset-based approach which helps to categorise the effects in terms of economic, human and social capital and allows for a long term understanding of these effects.

From this review of literature, we learn that that real property rights potentially have a positive effect on tenure security. Tenure security in turn results in housing improvements and investments, increased health, higher educational attainment among children of owners and investment in community assets such as social capital. We also learn that titling improves labour market participation among adults and reduces child labour in beneficiary households

and increases access to credit. Homeownership in particular is held to result in social stability, psychological health, and good citizenship in terms of participation in voluntary associations and voting, socially desirable youth behaviour and satisfaction with the neighbourhood and with life.

However, there is a dearth of empirical studies in the international literature that test these theories. There are fewer studies in South Africa and almost inexistent in Zambia. The evidence for many of the prophesied benefits is scarce, ambiguous and the methods used have many problems. We even know far less than we should on the effects of real property rights on aspects of human and social capital in Southern Africa and in developing countries in general because the majority of the studies concentrate on economic effects.

This study contributes to this field of knowledge by examining a holistic set of effects of titling, more than just those hypothesised in the orthodox literature on titling. This will allow for better informed general lessons and conclusions about the effects of real property rights. As part of a holistic examination, the study also contributes by examining hypotheses on human and social capital effects in addition to economic effects. The study also contributes to the body of knowledge by testing these hypotheses in two contexts; the Zambian context, where there is a deficit of such studies; and in Cape Town where there is still need for more studies of such nature to be undertaken. Thus the case studies introduced in the next chapter will provide a source of empirical evidence which allows this study to contribute to the scarce empirical literature on the effects of property rights in developing countries.

CHAPTER 3

HOW TO 'BUST THE MYTH' AND 'SOLVE THE MYSTERY' IN KHAYELITSHA AND MATERO

3.1 Introduction

The evaluation of development interventions is a difficult task. Development can have complex and multiple sources of causality (Banerjee & Duflo, 2008:2). How do we know for sure that a specific intervention, say a particular property title, is the cause of a particular development? A question of this nature essentially begs us to know the counterfactual; what the conditions of our target group would be in the absence of that particular property title (Duflo & Kremer, 2005). Chapter 2 has shown that the evidence for many of the prophesied benefits of titling is scarce and ambiguous. Part of the reason is that the methods used have many problems that make it difficult for researchers to truly know the counterfactual. In the broader field of development studies, this remains an essential concern. Methods of determining causality have been of great concern following the perceived failure of grand development narratives and SAPs which has resulted in heavy criticism of Western concepts and methodologies of development (Binns & Nel, 1999; Booth, 1985; Schuurman, 1993). This chapter delves deeper into a discussion of the methods of evaluation relevant to titling. It argues for non-experimental approaches as the most appropriate for evaluating the impact of titling in Khayelitsha and Matero.

This chapter presents the overall methodology for the thesis. It argues the case for the comparative analysis of two case studies on a wide range of effects of real property rights to facilitate drawing of potentially general lessons about the effects of real property rights in developing countries. The approaches used in the field are reviewed and discussed. These approaches can be categorised as experimental, quasi-experimental and non-experimental approaches. Moreover, the case for a mixed-methods research design in each context is articulated. The mixed method research design combines the quantitative approach with a qualitative approach. A discussion of the context for the two case studies is presented and the appropriate method for answering the research question is identified. The chapter argues that non-experimental approaches are appropriate in both cases given financial constraints, the

limitations of the available data and the circumstances determining data collection. Specifically, in Khayelitsha a difference-in-differences estimation strategy is most appropriate. In Lusaka, the most appropriate method is a comparison between similar neighbourhoods using survey data and in-depth qualitative interviews to yield exploratory or indicative answers to the research questions. Additionally, the chapter will provide a discussion focussing on why a comparison of the two case studies is important for the broader body of knowledge on the effects of titling.

3.2 Approaches to the Assessment of the Effects of Development Interventions

Ideally, identifying the causal effects of a development intervention would require observing the same individuals in the presence of the intervention and without the intervention simultaneously. This is not possible given the physical limitation of being in a state of existence in two places at a single moment in time. Researchers go around this by comparing the average outcome in a group of beneficiaries with the average outcome in a group of non-beneficiaries; both groups have similar characteristics (Durand-Lasserve & Selod, 2009:115). The researcher is then able to attribute the difference in outcomes to the intervention. However this is only valid under the assumption that the two groups are similar both in terms of observed and unobserved characteristics. If there are differences in observed characteristics, one may be able to control for the differences in a multivariate model with a pooled sample. If there are differences in unobserved characteristics, it is much more difficult to prove that an intervention is responsible for a specific change. Moreover, the validity of the two assumptions can be argued but not proved. Several approaches presented below can be identified in the literature on the effects of titling from which we can learn how researchers go about satisfying these assumptions.

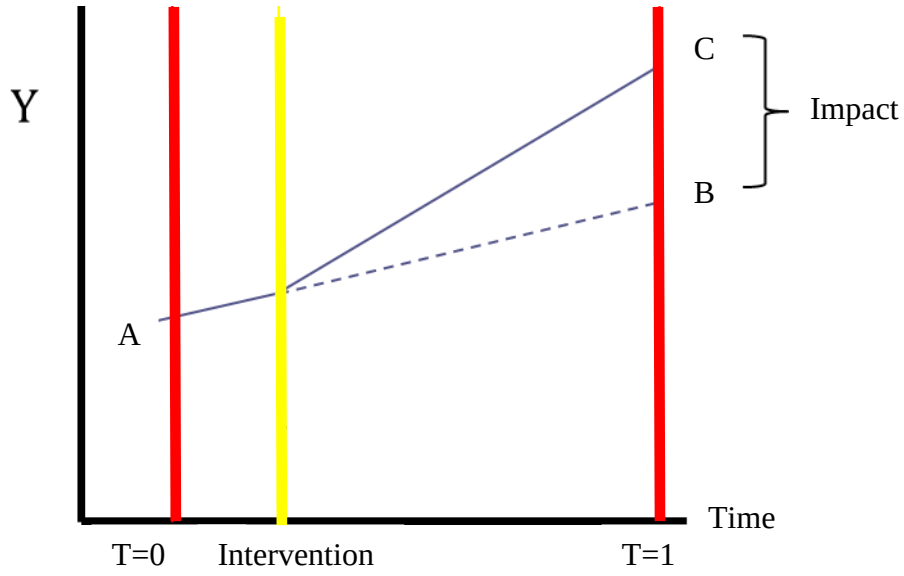
3.2.1 Experimental Approaches

There is consensus in the social sciences on the definition of an experiment. An experiment is defined as the manipulation of an exogenous variable by a researcher while holding other events constant and then observing the effects on a dependent variable (Winston, 1988; Winston & Blais, 1996). Experiments are based on the probabilistic theory of causality. The idea of the probabilistic theory of causality is that if the probability of an outcome is greater with an intervention than without the intervention while controlling for all confounding variables, it is sufficient grounds to claim that the intervention causes the outcome. This means that in a population where ‘all other’ causes of the outcome are held constant, any

resulting difference in probability is attributed to the intervention. Experiments are typically used in clinical trials to test the effectiveness and efficiency of newly-developed drugs.

In development, the Randomized Controlled Trial (RCT) has emerged as what some call the "gold standard" for measuring the impact of interventions. There are three important assumptions in RCTs. Firstly, if all explanations of the outcome that rely on confounding factors are eliminated, then the only remaining explanation that remains is that the intervention causes the outcome (Cartwright, 2007:15; Cartwright, 2009). Secondly, the intervention must be the cause of the outcome in at least some members of the population for the difference in probability to be attributed to it. Thirdly, if the intervention causes the outcome in a sample of a given population, then the intervention causes the outcome in the population because all members of the sample are assumed to be governed by the same causal structure as those in the wider population (Cartwright, 2007:15).

Figure 3.1. Illustration of experimental design as a method of estimation



Ideally, the steps in carrying out an RCT with titling as the intervention would be as follows. I illustrate with the aid of figure 3.1. The first step is to start from some theory or hypothesis about the causal relationship between real property rights and outcome variables for example labour market participation, access to credit, household income, children's health, children's education and citizenship behaviour. Theory is the starting point because we are not only interested in whether a specific intervention works or not but to test whether a specific theory works or not and how it works if it does (Banerjee & Duflo, 2008:22-23; Duflo, 2007; Duflo,

Glennerster, & Kremer, 2007). Then a representative sample is randomly drawn from the wider population. Since probability theory shows that if errors or extraneous influences are distributed randomly, they sum to zero, randomisation ensures that all confounding factors are eliminated (Campbell, Stanley, & Gage, 1963:25; Cox, 1958:79; Webster & Sell, 2007:12). The third stage involves the random allocation of subjects to two groups. Allocation to two groups is redone until both groups have sufficiently similar observable characteristics when a baseline study is carried out. This would be at T=0 in figure 3.1. The groups are divided into the treatment group and the control group. A treatment group, also known as the experimental group, is the group that receives the intervention (Mouton & Babbie, 2007:210). The control group, sometimes known as the comparison group, is the group which does not receive the intervention (Mouton & Babbie, 2007:211). At the time of the intervention in the figure, the treatment group would receive freehold or leasehold title and a house. Following an appropriate time, that is at T=1, when the effects would be expected to manifest, both groups are then measured for differences in outcomes during the post-treatment period. The null-hypothesis is tested by simply comparing means and using a statistical test, usually the t-statistic to test for the significance in the difference between means in the outcome variable Y. Then the difference in the outcome between the treatment group (that is C) and the control group (that is B) is the impact which is attributed to the intervention.

Advocates of RCTs have given several arguments why other methods are not reliable in demonstrating causal relations and why experiments in general and RCTs in particular are the "gold standard". They argue that RCTs provide internally valid estimates of causal effects because they make it possible to vary one factor at a time compared to non-experimental designs which fail to control for multiple and complex channels of causality (Banerjee and Duflo *et al.*, 2008:2). The obvious advantage over non-randomised evaluations is in the simplicity in computing the results which simply involves comparing the mean outcome in the treatment and control groups.

Contrary, a counter-argument has been put forward by Cartwright, (2007; 2009) and Deaton, (2010). They provide equally convincing reasons why RCTs are not the 'gold standard'. Deaton (2010:439) observes that the difference in means between the treated group and the comparison group is an estimate of the average treatment effect among the treated, which is subject to bias if the fraction of the sample of the treatment group for which the effect was higher is small. Secondly, if there is a difference in the variance of the treatment group and

that of the control group, the test of significance will provide an unreliable measure of the differences in the means. He further argues that the RCT is not the gold standard because it does not tell us everything we want to know. For one, it uses the mean effect and does not tell us anything about the median effect. Also, the RCT is still subject to ethical questions which have not been dealt with satisfactorily by its advocates in development economics as well as in medical research where it originated. The main ethical issue is that by providing the intervention to a treatment group, researchers are deliberately prolonging the suffering of the people in the control group. Most importantly, the RCT has come under criticism for the problem of external validity in its findings because of the contextual limits of the RCTs in development research (Cartwright, 2007:19; Deaton, 2010:447; Rodrik, 2009). Deaton (2010:448) suggests that scaling up an RCT that was successful at a small scale may not lead to success at a large scale because certain confounders, such as corruption in development interventions, may only be attractive at a large scale rather than at a small scale. Finally, the issue of replicability has also not been addressed as RCTs have been found not to be replicable.

These criticisms however are not the reasons why the literature on the developmental consequences of titling and homeownership does not document any controlled experiments being used. The reason RCTs have not been used is probably because of the costly nature of homeownership projects for scholars to fund. Unless funded by a government or big corporation, an RCT where houses and titles to land are randomly given to some people while another group does not receive housing and title would be very expensive for scholars because of the cost of building houses for beneficiaries. It would be unethical to exclude people for the sake of an experiment. It would also involve an investment of a long time. Alternatively, scholars take advantage of natural experiments by taking advantage of large scale government interventions to investigate the effects of property rights (as Galiani & Schargrodsky (2004; 2010) did).

3.2.2 Quasi-experimental Approaches

By definition and procedure, the natural experiment is similar to the RCT. Unlike the RCT, it is not controlled: randomisation is not done by the researchers. A natural experiment can be defined as "Naturally occurring circumstances in which subsets of the population have different levels of exposure to a supposed causal factor, in a situation resembling an actual experiment where human subjects would be randomly allocated to groups" (Last, 1995).

Natural experiments do not simply resemble RCTs but actually have some advantages over RCTs and non-experimental designs. The most important advantage over the RCT is that since the manipulation is not chosen by the experimenter, participants are unaware that there is an experiment going on hence there is no danger that their behaviour is affected. This altogether eliminates the Hawthorne effect, to which the RCT is susceptible. Secondly and by extension, the natural experiment is likely to be more realistic than that of any field manipulation such as the RCT because it is not controlled by the researcher. Since the study system, such as a community, is a naturally occurring entity and since it is harder to draw firm conclusions from natural experiments, those conclusions that can be drawn are probably more relevant to natural systems than those of the RCT. In contrast, while RCTs can give very precise tests of specific questions, they do so in small scale systems which are greatly simplified relative to the 'real' world. Such results as shown above may cause problems in scaling up and may lack generalizability (Deaton, 2010; Cartwright, 2007).

Many of the criticisms levelled against the controlled experiment apply to the natural experiment but there are also criticisms unique to the method. The obvious problem is the limited number of natural experiments, let alone those occurring with the same treatment in different contexts. Specifically in the housing sector, such experiments are in supply across different societies but few meet the assumptions of randomisation. Moreover, there may be many uncontrolled variables making it impossible to isolate the effect of a particular independent variable. This is more problematic in a comparative analysis because the uncontrolled variables may be different across contexts thereby complicating comparability. However, if it is possible to isolate and control extraneous variables using methods such as difference-in-differences for example, it is possible to infer cause-effect relationships. Another disadvantage is that the question that can be tested is not necessarily that which the researcher wants to test because events occur independently of any control. This makes it even more difficult in a comparative analysis to find a comparable case. Further, the temporal dimensions of the cases may be asymmetrical making comparability difficult. Residents of one neighbourhood may receive title at inception while the other may have lived in the area for a generation before receiving title. Even more, confounding factors such as natural catastrophes can have profound effects on the course of both controlled and natural experiments. For example, the RCT conducted by Banerjee *et al.* (2008) on the impact of remedial education programs on the quality of education in Gujarat was disrupted by an earthquake, which affected the results for the pilot phase of the evaluation. Finally, in both

RCTs and natural experiments, replication is a problem as often the conditions and events at the time of carrying out the evaluation are often unique to the time. Generalizability is also problematic because many studies are case studies specific to a context.

Examples of studies that use quasi-experimental approaches on titling worldwide are few. These have been discussed in detail in Chapter 2. Galiani and Schardgrodsky (2010; 2004) used a natural experiment to investigate the effects of titling on housing investments, household size, educational achievement, credit access and labour market participation. Maura and Bueno (2009) investigated the impact of property rights on labour markets and income in Brazil. Gandelman (2010) investigated the effect of granting property titles to low income households on human health in Uruguay. Di Tella et al. (2005) used this method to investigate the effect of property rights on the kind of beliefs that appear important to the workings of a capitalist society such as individualism, materialism, the role of merit, and trust. In these cases, although the authors have applied highly rigorous statistical techniques, critics have nevertheless questioned whether randomisation in selection to treatment and control groups truly occurred such that they were successful in eliminating alternative sources of variation and on that account whether they qualify to be called natural experiments (Durand-Lasserve & Selod, 2009:116-117).

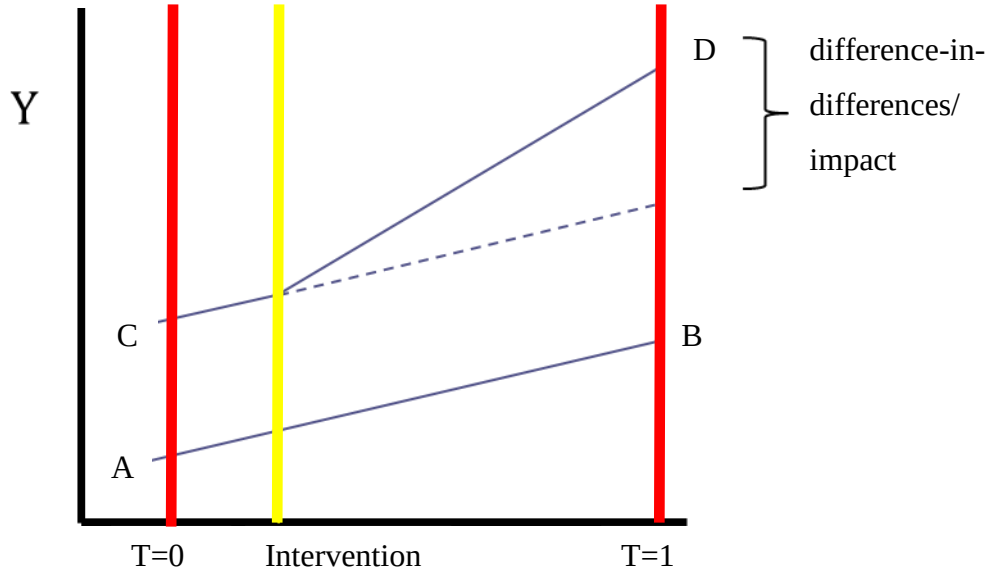
3.2.3 Non-experimental Approaches

Non-experimental approaches are evaluations used in the absence of randomized assignment of treatment aimed at controlling for both observed and unobserved factors influencing the outcome (Durand-Lasserve & Selod, 2009:117). In these approaches, the researcher can use available data to construct comparable groups and then apply econometric technics to estimate the effect of the intervention. The two main non-experimental approaches are differences-in-differences analyses and matching.

Difference-in-differences analyses compare the changes in outcomes before and after an intervention between a population that is exposed to an intervention (the treatment group) and a population that is not (the comparison group) (Durand-Lasserve & Selod, 2009:115; Gertler, Martinez, Premand, Rawlings, & Vermeersch, 2011:95). This approach has the advantage of controlling for factors that are constant over time such as demographic changes and outside time varying factors by comparing with a similar population exposed to similar environmental conditions. The assumption that must be satisfied in difference-in-differences is the assumption of equal trends. This assumption holds that the trend in the outcome

variable for both the comparison group and the treatment group before and after the intervention would be the same without the intervention (Gertler et al., 2011:96). Any identified difference in the trends can therefore be attributed to the intervention.

Figure 3.2. Illustration of Difference-in-Differences as a method of estimation



This approach requires baseline data which needs to be obtained through a panel study or repeated cross-sections (Gertler et al., 2011:95). I use figure 3.2 to demonstrate this method. The first survey is carried out before the treatment group is provided with property rights, that is at baseline (T=0) in figure 3.2. The second after the intervention (T=1). Any difference in trends over the period is the impact attributed to property rights. A second assumption is that there are no changes in the composition of the groups (Blundell & Costa Dias, 2000:429).

The appeal in the use of difference-in-differences comes from its simplicity relative to other non-experimental econometric techniques and its potential to circumvent endogeneity problems that typically arise when making comparisons between heterogeneous individuals (Bertrand, Duflo & Mullainathan, 2004:250).

Difference-in-differences has been criticized in that the assumption of no changes in composition of groups makes choosing a comparison group difficult. Mobility and sample attrition pose challenges (Durand-Lasserve & Selod, 2009:117). Secondly, changes not attributable to the intervention that occur to either group over time are not completely eliminated yet we must assume that no time-varying differences exist between the two groups (Gertler et al., 2011:99). Another problem with difference-in-differences is that if members of

the treatment group can anticipate an intervention long before it is implemented, they can make decisions which can show no effect of the intervention (Durand-Lasserve & Selod, 2009:117). For example, if households anticipate that their informal settlement will be formalised on the basis that other informal settlements are being formalised, they can begin to make housing improvements prior to the formalisation itself. In this case, when the baseline is carried out, difference-in-differences will underestimate the effect of titling on housing improvement, because some of the effects will be misidentified as baseline characteristics.

Likewise, difference-in-differences is less robust compared to controlled experiments and natural experiments. It is an appropriate method only if the intervention is as good as random conditional on time (Bertrand, Duflo & Mullainathan, 2004:250). Also, if the treatment group is affected by another exogenous factor at the time the group is receiving the intervention, the difference-in-differences estimate will be biased (Gertler et al., 2011:104). For example, if at the time of titling residents in a formalised neighbourhood also received a basic income grant while for some reason those in the control did not, difference-in-differences will provide a biased estimate of the effect of titling.

A few studies that were discussed in Chapter 2 have used difference-in-differences to estimate the effects of titling. The majority have been done using data from the titling program in Peru to estimate the effects of titling on labour market participation, access to credit, household investments and child nutritional status (Field & Torero, 2006; Field, 2003b; 2005; 2007; Field & Kremer, 2006; Franklin, 2011; Vogl, 2007). Often it is used in combination with a natural experiment.

An alternative approach entails matching. Matching relies on the selection of enrolled and non-enrolled subjects – typically individuals – to control for observed and unobserved variables. In essence, matching uses statistical techniques to construct an artificial comparison group. To do this, the researcher identifies subjects that did not receive an intervention but have the most similar characteristics possible as those who received the intervention (Gertler et al., 2011:107). Matching thus approximates to an artificial post-hoc ‘experiment’. Similar to the estimation in an experiment, the mean difference in the outcome variable is the size of the impact of the intervention.

A lot of controversy exists in the evaluation literature regarding the biasedness of estimates derived using matching. In his seminal work, LaLonde (1986) demonstrated that non-experimental methods of estimation such as matching do not replicate the results derived

through randomised experimental methods. LaLonde evaluated econometric methods by comparing results obtained through these methods with experimentally determined ones done on employment and training programmes. Further, he showed that non-experimental procedures produce estimates that are usually positive and larger than those of randomized experiments (LaLonde, 1986:617). In response, Dehejia and Wahba (1999; 2002) drew attention to the use of the method of propensity score matching. Propensity score matching is a matching method in which the researcher pairs each program participant with a single nonparticipant, on the basis of the degree of similarity in the estimated probabilities (the propensity scores) of participating in the program (Smith & Todd, 2005:308). Using the same data used by LaLonde, Dehejia and Wahba found very low biasedness. This made propensity score matching the estimator of choice in the absence of random assignment in the evaluation literature because it was thought to solve the problem of random selection (Smith and Todd, 2005:306). However, Smith and Todd (2005) replicated LaLonde's (1986) and Dehejia and Wahba's (1999; 2002) studies and found that Dehjia and Wahba's study used a sub-sample that had excluded about 40 percent of the observations used by LaLonde (1986). When they included the observations, matching produced biased results. Nevertheless, Smith and Todd (2005:310) found that matching when combined with difference-in-differences performed the best in estimating results close to those obtained using randomized experiments but not the same results. However, Morgan and Winship (2007:122) hold that different matching estimators lead to different estimates of causal effects and there is little guidance as to which type of matching estimators work best at estimating the true value.

Some scholars argue that matching only performs well when the data satisfy three criteria which LaLonde's (1986) and Dehjia and Wahba's (1999; 2002) studies did not satisfy (Smith & Todd, 2005; Heckman et al., 1996; 1998; Heckman, Ichimura & Todd, 1997). First, treatment and comparison groups should measure outcomes in identical ways. Secondly, Treatment and control observations should be sampled from the same context or locations. Thirdly, the data should contain a rich set of variables that affect both the outcome and the probability of being treated. If a dataset has a large number of characteristics that can be used to create a matched sample, then the method will work well than one with fewer matched characteristics.

There are some strong weaknesses of matching however. Matching can only be done on observed characteristics that are found in the dataset. It rests on the fragile assumption that there are no hidden biases (Arceneaux, 2010:258). Even with the best possible data possessed

by researchers, one cannot know for sure if there are no hidden biases; "the nagging problem of unobserved heterogeneity remains while matching only addresses the heterogeneity in observed variables" (Arceneaux, 2010:278). This weakness makes matching less robust than the above-discussed approaches. Moreover, matching is not realistic as it creates an artificial comparison group that does not exist in reality. Often, some treated individuals have no meaningful counterpart and have to be left out of the analysis thereby reducing the sample size of a treated group and in turn introducing more bias (Morgan & Winship, 2007:121). Even with the best approximation of a match between the treated individual and the nearest neighbour, no two individuals are identical; given the same situation, they may make different choices. Matching methods are typically used when randomized experiments and difference-in-differences options are not possible (Gertler et al., 2011:115).

Lanjouw and Levy's (2002) study which investigated whether property title affects property values and the substitutability of formal and informal property rights used a matching strategy. No randomized equivalent exists on which to evaluate the lack of biasedness of their findings but other studies carried out elsewhere show that property title may increase property values by about 25 percent (Cantuarias & Delgado, 2004; Dowall, 1998; Friedman, Jimenez & Mayo, 1998). The variation is however wide with some estimates finding up to 100 percent with the lowest estimate being that by Lanjouw and Levy.

In general, although the appeal of non-experimental approaches is that they tend to be less costly, less intrusive to the subject and may be the only alternative for some research questions (Smith & Todd, 2005:306), they also do not match the estimates derived from experimental ones. Glazerman, Levy and Myers (2003) assessed non-experimental methods in the context of welfare, job training and employment services programmes. They replicated impact estimates from 12 studies that used experimental methods. They found estimates that were biased beyond margins required for policy but sometimes came close to replicating experimentally derived results. They did not find study design factors that would eliminate these discrepancies and therefore concluded that non-experimental designs on their own cannot be justified in informing the programmes. Non-experimental methods therefore come close to the estimates derived through more rigorous methods but fall short. In choosing the non-experimental method that is appropriate for a study, Smith and Todd (2005:307) recommend that the optimal non-experimental evaluation strategy in a given context depends critically on the available data and on the institutions governing selection into the

programme. The timing of the intervention and availability of baseline and post-treatment data are most useful.

3.3 The Cases of Khayelitsha in Cape Town and Matero and George in Lusaka

3.3.1 The Case of Khayelitsha

The South African case was one in which the state built new low cost houses and provided them under freehold to those previously disadvantaged by the apartheid system. As a conscious response to correcting apartheid injustices and specifically as a solution to the acute problem of housing for previously dispossessed and discriminated groups, the post-apartheid state claims to have built over 3.6 million houses nationwide and thus to have benefitted more than 10 million people (Republic of South Africa, 2013). Despite the government building many houses, the demand for adequate housing continues to be higher than the rate of production. There are conflicting views on the precise scale of the backlog but there is consensus that it remains large. In Cape Town, 20 percent of the dwellings are informal. Statistics South Africa in 2011 reported that out of the total population of 3.5 million people, 16 percent or 600,000 live in informal settlements. Between 1994 and 2013, the state built 323,000 housing units and provided 140,200 serviced sites in Cape Town (Republic of South Africa, 2013). Clearly the backlog is presumably at least 600,000 given the size of the population living in informal settlements.

3.3.1.1 Background to land and housing for Africans in Cape Town

Prior to the early 1990s, African people in Cape Town had very limited opportunities to own property or find well-paid employment. The state built few new housing after the 1960s so many people lived in shacks with no formal security of tenure. Africans were however able to apply for permits which allowed them to work in the city but live outside the city. Africans were restricted to tenancy in sprawling urban fringe townships built by the state in the 1950s and 1960s for ‘pass’-holding migrant workers coming to work in South Africa from the homelands (Porteous, 2005:34). The first townships constructed in the 1950s and 1960s were at Nyanga and Gugulethu (Wilkinson, 2000:197). This housing was not enough. The situation created conditions that had potential for political unrest. Moreover, the state could not contain the growing squatting problem. The population of informal settlers increased thereby further raising housing demand (Wilkinson, 2000:197). For some time, this demand was deliberately not met with supply. It was rather met with forced evictions. Subsequently, at the beginning

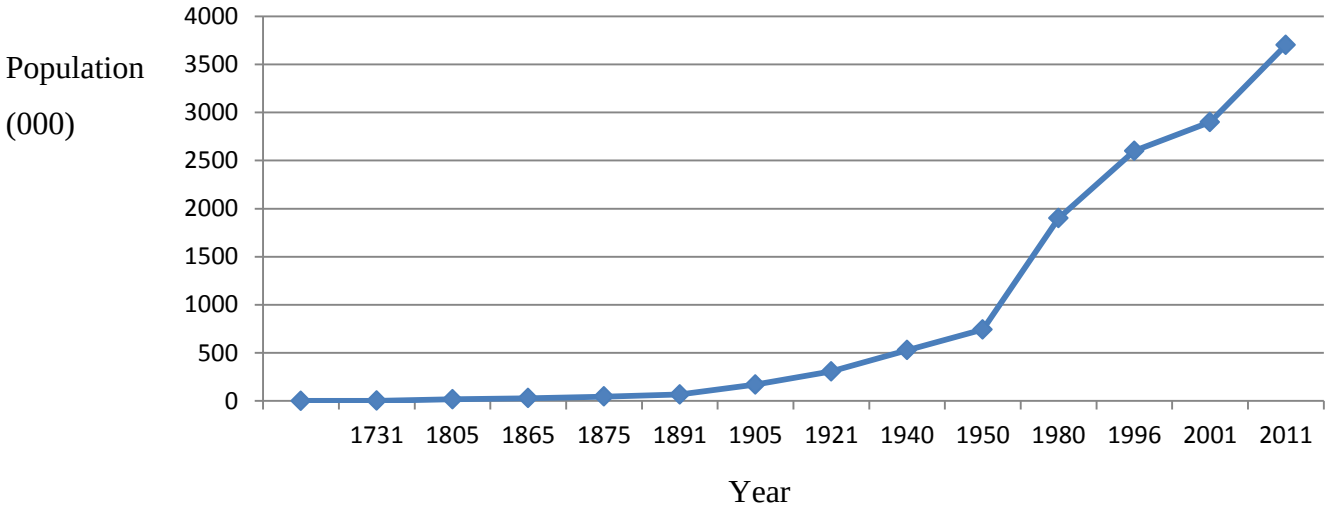
of the 1980s the apartheid state decided to build more housing to address this shortage and potential unrest.

Meanwhile informal settlements accommodating those who had no passes (termed 'illegals') grew on the fringes of urban areas. Many of those whose passes expired ("illegally" in Cape Town) did not return to their places of origin, mostly in the Eastern Cape. They ended up settling in illegal settlements and squatting in formal African townships. It was estimated that as of June 1982, the official population of Africans in Cape Town was 226,000. Only half could be accommodated in the formal townships (Cook, 1986:58). It was estimated that there was a shortage of 10,000 more housing units (Seekings, Graaff, & Joubert, 1990:8). In addition, there was an estimated 76,000 'illegal' immigrants who had violated the terms of influx control (Cook, 1986:58). Some of the Africans were squatting in formal townships of Langa, Nyanga, Gugulethu and Old and New Crossroads.

In the rural areas, with the impending dissolution of Apartheid that preceded its removal, a great many Africans looked forward to migrating to Cape Town (Western, 2002:713). In 1986 the pass laws were repealed and the Coloured Labour Preference Area[5] was dropped in 1988 (Western, 2002:713). Increased urban migration into Cape Town followed. Migrants came largely from the Eastern Cape Province sustaining one of the largest waves of migration in the history of the city. This influx worsened an already acute shortage of housing, which led to a multiplication of slums and slum-dwellers. The population growth of the city before and during this period is shown below:

[5] This was a policy implemented from the 1950s in the Western Cape which gave coloureds the status of preferential labour over other non-white population groups.

Figure 3.3: Growth in the population of Cape Town from 1731-2011



Source: Wilkinson (2000) and Census 1996, 2001, 2011

3.3.1.2 The Context: Khayelitsha

Khayelitsha (meaning 'new home' in isiXhosa) was a township planned by the apartheid state to accommodate Africans that were legally in Cape Town and squatting in the formal African townships (Cook, 1992:125). The development of Khayelitsha was announced by the Minister of Cooperation and Development in the apartheid government, Piet Koornhof, in parliament at the end of March 1983 in response to the severe shortage of housing for Africans in the Western Cape (Seekings et al., 1990:8). 3220 hectares of land were cleared in the area of Driftsands/Swartklip, 35km from central Cape Town and to the east of Mitchells Plain. Squatters from formal settlements were temporarily housed in 14.4 square-metre flexi craft tin huts (Seekings et al., 1990:10; Cook, 1992). Construction of the core houses started in 1984. The first core houses were completed in October 1984 and forty of the 270 families living in the huts were allowed to rent these houses (Cook, 1986:60). House construction in Khayelitsha was completed in March 1985 and 1740 families moved to the town. Earlier in September 1984, an official announcement was made that the Coloured Labour preference policy would be abolished and 99 year-leasehold tenure would be allowed for Africans only in Khayelitsha. Hence those who were given houses in 1985 were provided with leasehold tenure.

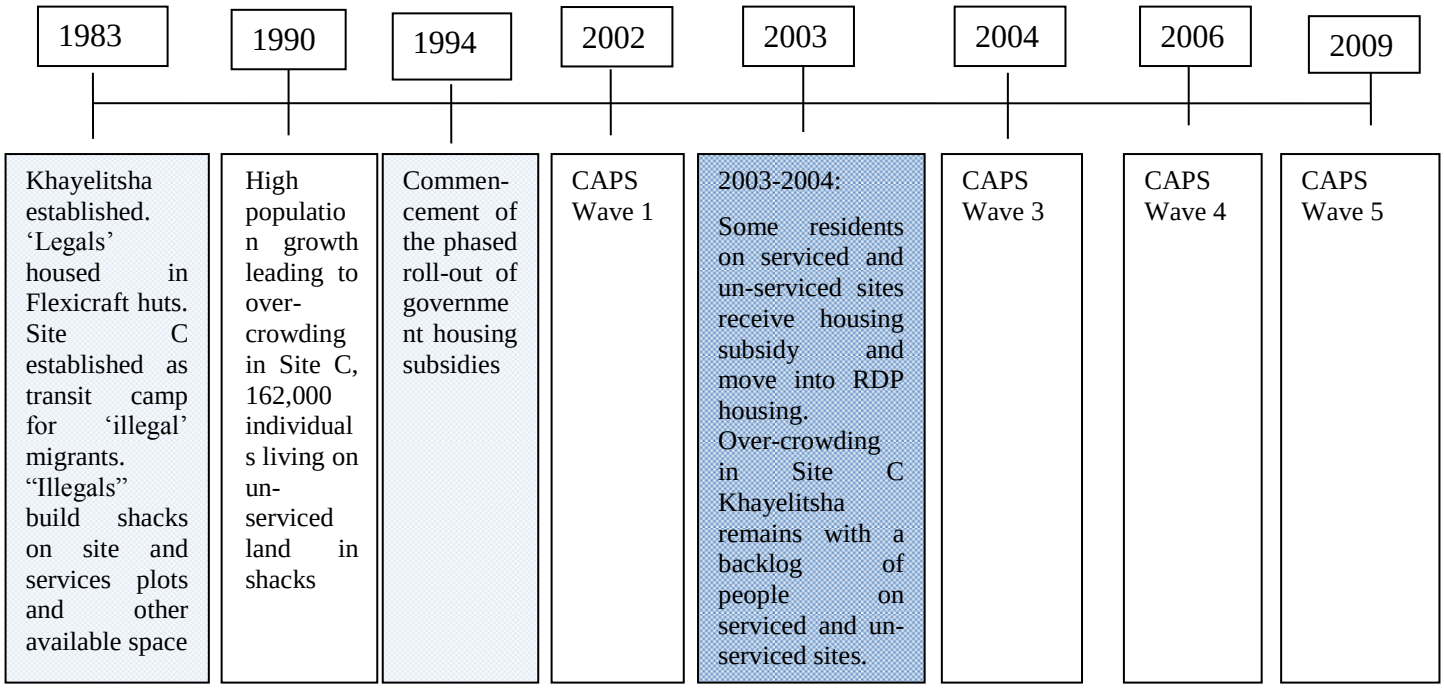
My group of interest is with those who were termed illegal migrants or who arrived subsequently and were not allocated public housing in the 1980s. In November 1984 the government announced that African people who were not legally in Cape Town would be allowed to build shacks on site-and-service plots in Site C, Khayelitsha, near the N2 highway (Cook, 1986:60; Cook, 1992:125). This meant a temporary administrative recognition of occupancy. The Minister of Community Development, Dr. Gerrit Viljoen affirmed that the apartheid government's intention to house the 'illegals' on temporary site-and-service plots was to keep them there pending their re-direction to the rural areas (Cleminshaw, 1985:14). Site C was therefore established as a transit camp (Cook, 1992; Mdewu, 2004; Zonke, 2006). Forty-two families who came from the shacks settlements of Old Crossroads were the first to be resettled in Site C (Mdewu, 2004). Soon after, 8,300 squatter families occupied 4,150 site and service plots. One tap was provided for four sites and one bucket toilet for every two sites. However, adjacent land that had no services of any kind was also occupied. Continued urbanisation that followed the repeal of the pass laws in 1986 and removal of influx control led to dense clusters of shacks on un-serviced sites which were erected on any available open space both in Site C and other areas of Khayelitsha. By mid-1989, an estimated 12 to 13,000 families were squatting on un-serviced sites. The population increased without the increase in serviced sites. In 1988, the population of Khayelitsha was approximately 189,000. It increased to 305,323 in 1989 and was estimated to be 450,000 in late 1990. Of the 450,000, 36 percent (162,000) lived in shacks on un-serviced sites in Site C, Site B, Town Two and other areas of Khayelitsha (Cook, 1992:125-130).

In 1991, the state built serviced sites in Makhaza and Site B where some 'illegal' families on un-serviced sites were moved to. This was based on a housing waiting list on which residents had been asked to register. It is not clear how many were moved but the number of squatters remained high with over 5000 households on the waiting list (Cook, 1992:130). This was the scenario before the government housing subsidy was implemented in 1994.

In 1994, the new post-apartheid state developed a targeted one-off subsidy in form of a grant to low income households, which provided eligible households with ownership of a newly-built, fully-serviced one-bedroom house. Allocation procedures were as follows. Individuals first registered on the housing waiting list by completing a registration form at the Cape Town municipal housing office. The office then captured their information on the Housing Demand Database. A project plan was then drafted by the municipality for approval by the Provincial Government of the Western Cape (PGWC). Once the project plan was approved,

the municipality applied the selection criteria. In order to be eligible, respondents were required to show proof by ID that they were South African citizens, have a household size of 4 or more, provide birth certificates of dependants, and provide a copy of the ID book of their spouse if married or partner if in a partnership. The application forms were then processed through the Housing Subsidy System (HSS), an operational system which keeps track of housing subsidy applications and allocations on a national scale. To be allocated a subsidy, applicants had to have a maximum monthly household income of R3,500 or less with proof of income provided by payslip (Republic of South Africa, 1994). Joint spouses who earned R800 and below would get a capital subsidy worth R15,000 and those who earned between R801 and R1,500 would get a capital subsidy worth R12,500. Following this, the municipality publicised the list of beneficiaries. Beneficiaries contributed R2,479 intended for them to have an economic stake in their asset (Tomlinson, 2006). Then, construction of houses commenced. Once houses were completed, the project manager handed them over to beneficiaries (Provincial Government of the Western Cape, 2013). Beneficiaries moved into their houses from 1997 under freehold tenure. Below is Figure 1 which shows the timeline of events.

Figure 3.4: Timeline of Events: Residents' access to housing in Khayelitsha



There were several problems with the process of allocation. Firstly, the waiting list did not work on a first come first served basis. There were many waiting lists which were drawn up during the apartheid years and some people were on multiple lists in different locations. Attempts by municipalities and the province to merge lists failed (Tissington et al. (2013:25). Although the Cape Town Municipality kept a waiting list, they alongside it used a system based on the allocation to communities in catchment areas of specific building projects. Housing subsidies were allocated according to quotas for each community under a specific housing project. Communities established project committees that were responsible for allocating houses to their members (Seekings et al., 2010:4-6; Franklin, 2011:10; Tissington et al. (2013:26). Through this system, people of Khayelitsha were called to register during a given time period of up to two weeks at a time if they wished to apply for a house. It did not matter how long an individual had lived in the community. Some applicants came from other communities during the registration period and from as far as the Eastern Cape in order to register and were successful in being awarded subsidies[6]. Meanwhile others had received their subsidies through the housing waiting list. There were occurrences of fraud and corruption, with some beneficiaries receiving more than one subsidy, some who had not been allocated subsidies invaded houses and were allowed to stay on by the state while the allocation according to waiting lists was chaotic (Seekings et al., 2010:4-6; Franklin, 2011:10; Tissington et al. (2013:26).

Given this background, the case of Khayelitsha provides an opportunity for the investigation of the effects of real property rights on beneficiaries relative to those with administrative recognition of occupancy. The existence of a group that benefitted and one that did not provides an opportunity for my study to have a treatment and a comparison group. Those who remained in shacks in Site C, Site B, Town One and Town Two are my comparison group while those who had moved to serviced sites in Site B, Makhaza and Kuyasa and eventually moved into state-built houses are my treatment group. Further, the allocation of subsidies was done in phases which ensured that at any one time, there were beneficiaries and non-beneficiaries in Khayelitsha existing simultaneously. Many non-beneficiaries remain on the waiting list on serviced and un-serviced sites. The availability of the Cape Area Panel Survey data with variables on these residents further provides an opportunity for the use of the data

[6] One of my interviewees registered a week after coming from the Eastern Cape and received a housing subsidy six months later. Another used ID books of other family members in order to obtain two houses.

to answer the research question. These data are complimented by in-depth qualitative interviews.

3.3.1.3 The appropriate methodological approaches in Khayelitsha

Experimental and quasi-experimental approaches cannot be used in this case but both non-experimental approaches can be used with the most appropriate being difference-in-differences estimation. Experimental approaches and quasi-experimental approaches cannot be used because of uncertainty over whether houses were allocated entirely randomly or not. Randomisation in this case would require a sample of beneficiaries who were actually eligible and received their houses through the HSS and a control group made up of individuals who have remained on the HSS waiting list but not yet allocated housing. As discussed in the previous section, the process of allocation was chaotic. Among those who benefitted are individuals who were not eligible. For the control, even when it is possible to tell whether a household applied and is on a waiting list, it is not possible to tell whether they are on the HSS and therefore on the actual waiting list or not as this data is not available to the public. This means that not all people living in shacks may be eligible to receive a housing subsidy. There is therefore uncertainty over the random allocation of housing subsidies.

A difference-in-differences approach can however be used because of the existence of two groups with baseline data and post-treatment data available through CAPS. Difference-in-differences can control for both observed and unobserved factors as long as trends are common between beneficiaries and non-beneficiaries. Estimates of the impact may be smaller because of the existence of individuals who may not be eligible for a subsidy in the control group. Estimates may also be larger because of the existence of individuals in the treatment group who were ineligible but received a subsidy. There are two reasons why matching is not the most appropriate. Matching will reduce the already small sample size due to missing values in some of the variables that are used to prepare the matched sample and the dropping from the sample of some treated individuals that do not have a meaningful counterpart. This is the reason guiding my decision not to use matching in combination with difference-in-differences. Most importantly, no matter how extensive the dataset is, matching cannot control for unobserved factors. Further, given that difference-in-differences can provide more reliable estimates using the real sample of beneficiaries and non-beneficiaries without any

statistical manipulations to generate a synthetic control, it is counter-productive to use an estimation method such as matching that generates an artificial control group.

In addition to statistical analyses, in-depth interviews can be used to understand the post-treatment experiences regarding the various outcome measures we expect to see because of titling. These qualitative analyses are useful for providing an in-depth understanding of the reasons why certain effects from the statistical analyses are observed.

This is the approach I use to answer the research question. A detailed discussion of the data and methods is given in Chapters 4 and 5.

3.3.2 The Case of Matero

The Lusaka case entailed the privatisation of state rental housing. Matero and George were adjacent neighbourhoods both under the administrative jurisdiction of the Lusaka City Council (LCC), previously called Lusaka Urban District Council. Matero developed as a state public rental project. In 1996, sitting tenants living in public housing in Matero were offered real property rights to their house and land through leasehold titling. In contrast, George developed as an informal settlement. It was to be demolished following independence. For political reasons, the state decided to upgrade it. The state upgraded the settlement through the provision of services from 1978 to 1981. In 1981, residents of George received the administrative recognition of occupancy having been issued occupancy licenses. At the time Matero residents were offered real property rights, George residents were not offered the public land on which their houses were built. While occupancy titles gave residents of George some tenure security and services but less control over the use of property, residents of Matero had access to the full bundle of rights.

3.3.2.1 Background: The Legal and Administrative Framework

Zambia's property rights system is governed by the 1995 Land Act, which is the culmination of several attempts at land reform which began during the colonial era. A two tier system of property rights was created. Areas under colonial administration were subject to a formal property rights system under British common law, while the rest of the country fell under customary law – which was codified under the Northern Rhodesian constitution in the early 1900s. The two tier system has persisted to this day. In 1975, the Land Act of 1975 was passed. Under this Act, the government exercised eminent domain without compensation and all property rights fell into the hands of the state in the sector-wide nationalisation reforms.

Customary tenure persisted while Freehold tenure was abolished and turned into 99 year leasehold tenure. Two Acts later, the Land Act of 1995 was passed which stated that all land is vested in the republican President and is held by him in perpetuity for and on behalf of the people of Zambia. The 1995 Land Act however removed presidential and state approval in transactions involving land and provided for state compensation in case of eminent domain. In 1996, the Zambian Housing policy – upon which current housing policy is based – was published providing for multiple tenure systems. With regard to homeownership, the policy states as follows:

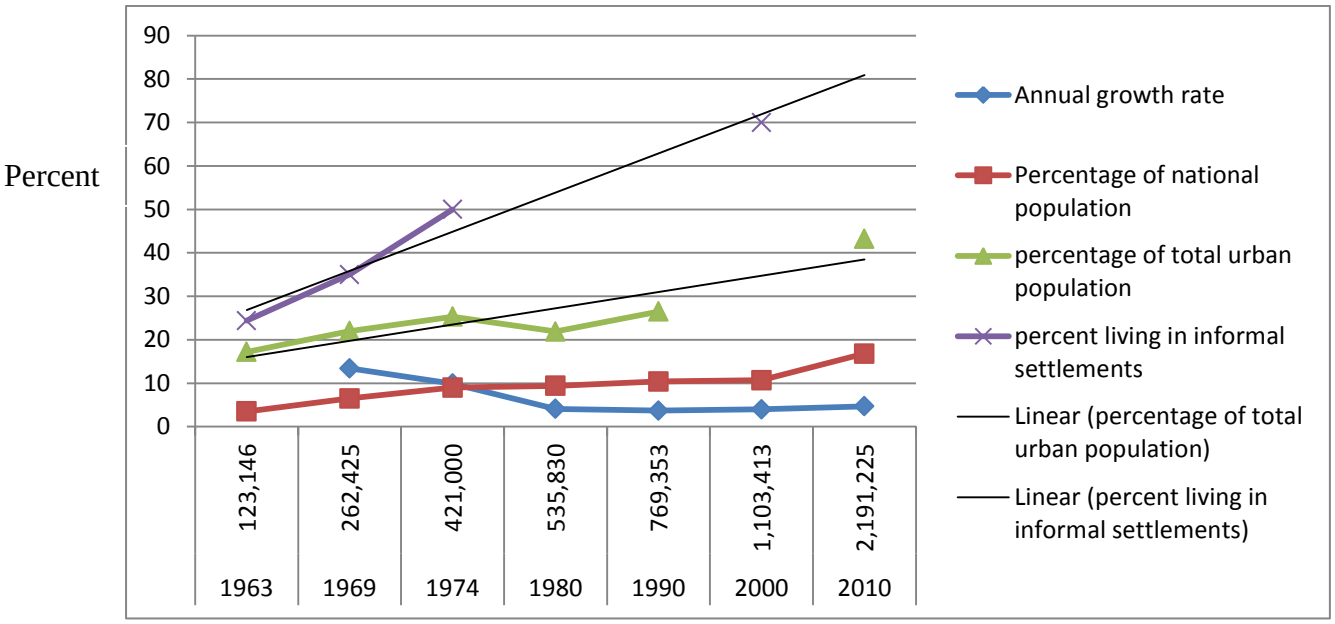
> Government strongly supports the principle of homeownership as a means of providing security, stability and economic power to the family unit and as a basis for the development of economically strong and motivated communities. (Government of the Republic of Zambia, 1996b:18).

Note the strong emphasis on economic power and economically strong family units and the lack of emphasis on human and social capital. Rent control was also removed under this policy because "Removal of rent control stimulates investment in housing. Rent Control is not necessary in a free market economy."(Government of the Republic of Zambia, 1996b:19). Private property rights have therefore been restored. Though individuals have 99 year leaseholds from the state, every new transaction that changes ownership means 99 years for the new owner. Where the Land Act does not agree with the free market policies, which are referred to in the housing policy document, a presidential directive is issued. For example, the privatisation of council housing was not provided for in the constitution, and, therefore, a presidential directive was issued. In 2011, a directive on the productive use of land was also issued (Government of the Republic of Zambia., 2011).

As part of SAP, the state privatised public housing. The aim of SAP was to re-orient Zambia's economy from a socialist based to a market based one. From the middle of 1996 the government 'privatised' 150,000 publicly-owned houses countrywide (African Business, 1997). Of the 150,000, 7,000 were low cost houses transferred to low-income households as a redistributive and developmental strategy (African Business, 1997). The state had pursued a state-rental housing policy inherited from the colonial government. The policy of providing public housing could not be sustained because rapid urbanisation that occurred immediately after independence exacerbated an already acute housing shortage and swelled the number of

people living in informal settlements. At the time of independence, there were about 30,000 people who were living in informal settlements. Independence (in 1964) resulted in accelerated urbanisation and the proliferation of informal settlements. Mulenga (2003:3-4), Hansen (1982:117), Schlyter and Schlyter (1980:16) and others (Andrews, Christie, & Martin, 1973:503) examined population growth in Lusaka and point to the ensuing housing shortage. The population growth rate of Lusaka is shown in figure 3.5 below.

Figure 3.5: Growth of Population of Lusaka 1963-2000



Sources: Adapted from Mulenga (2003:3), Schlyter and Schlyter (1980:16), Hansen (1982) World Bank Country Assessment for Zambia 2002.

Schlyter and Schlyter show that in 1963, Lusaka had an African population of 110,000. Half of these lived in municipal townships, a quarter in informal settlements and the rest in private or government compounds or in servants' quarters in the European areas. From independence to 1970 however, Hansen shows that the number of informal settlements in Lusaka increased from just 9 to 32 and accounted for more than one-third of the city's population. By 1973, one in every two persons in Lusaka was living in an informal settlement (Andrews et al, 1973:503). Mulenga records that Lusaka's overall population doubled from 123,146 in 1963 to 262,425 six years later in 1969. It doubled again to 421, 000 five years later in 1974. It then stabilised doubling again two decades later in the 1990s. Earlier, the colonial state had built hostels and huts outside the city to house workers. Later, in 1959, the state built stronger brick and mortar houses in four areas namely Matero, Chilenje, Lilanda and Kabwata. The

workers were required to pay a poll tax if living without their families and, in addition to a poll tax, a hut tax if living with their families in urban housing. Informal settlements emerged in Lusaka partly because of the poll and hut. Those who could not afford to pay the hut and poll taxes occupied municipal and private farmland on the outskirts of the city (Hansen, 1982:118). Some of those that went to live in informal settlements did so because there was not enough housing for workers.

Meanwhile, even though the provision of adequate housing could not be sustained, the state upgraded some of the squatter settlements with the support of the World Bank in the late 1970s to early 80s. The settlements were placed under the Lusaka Urban District Council. However informal settlements continued to grow and accommodated a large part of the population by the time of housing privatisation.

3.3.2.2 Privatization of Public Housing

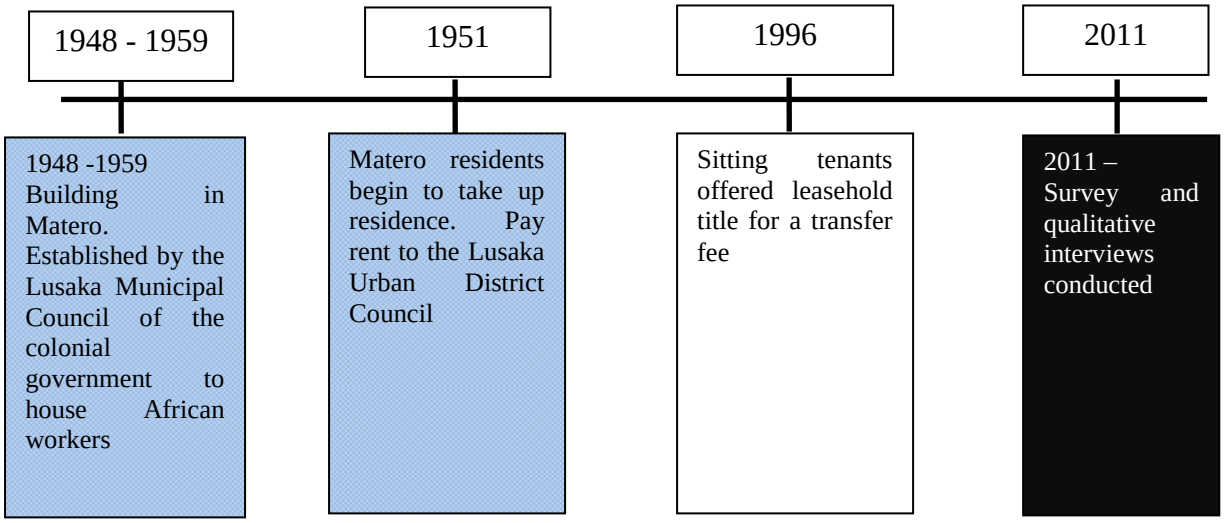
The transformation of the political economy from planned to market dispensations that occurred in 1991 provided the institutional framework within which the transfer of ownership of property rights from the state to private individuals could occur. The government drew up a housing policy in 1996 which was based on the principles of the World Bank's Market Enabling Strategy. Although the housing policy allowed for the recognition of private property rights and emphasised homeownership, it did not allow for the privatisation of public houses. The sale of publicly owned houses was only sanctioned by a presidential directive and not the 1996 housing policy document (Schlyter, 2004:5). The president went as far as determining the prices of some of the houses off the cuff when he visited the areas affected (African Business, 1997). Many commentaries have held that the president privatized houses as a political manoeuvre aimed at assuring him re-election in the same year.

When the state privatized houses, it allowed for individuals who occupied houses by virtue of their occupancy to benefit. This is not to suggest that all employees were offered the houses they occupied. Most employees that resided in squatter settlements were not offered houses because they fell in the backlog, for which they were paid a housing allowance. Also, those whose houses were being rented for them by the council or other institution did not benefit. There was also the unemployed living in informal and upgraded settlements among the non-beneficiaries.

The abridged process of transfer of ownership as recorded in Circular number 2 of 1996 of the Ministry of Local Government and Housing entitled "Revised Procedures for Sale of Council Houses" was as follows (Please see appendix for details). In evaluating the property, the government valuation department took into account the age of the property, physical condition of the property, supply and demand forces and a maintenance and repair discount. Low-cost houses were sold with a discount depending on age. Houses built or purchased by the government from 1991 to 1996 were sold with no discount, houses built or purchased by the government between 1981 and 1990 with a 20 percent discount, and so on up to a 100 percent discount for houses built during colonial times or purchased by the government before 1959. This means that houses in Matero were given almost for free. Tenants had to pay a transfer fee of K10, 500 (US $8) and a surveying fee of K60, 000 (US $50). Those that paid the fees and the cost of the house were to receive their title deed within 30 days (Schlyter, 2004:6). There were no restrictions; the title deed gave new home owners free-hold rights for 99 years.

The Context: Matero

Figure 3.6: Timeline of Events in Matero



Matero as a formal township emerged as a result of the rise in demand for housing among African workers[7] (Mulenga, 2003:6; Schlyter, 2004:7). From 1948 through to 1959, 5,097 houses were constructed and occupied by municipal workers (Mulenga, 2003:7). At the time

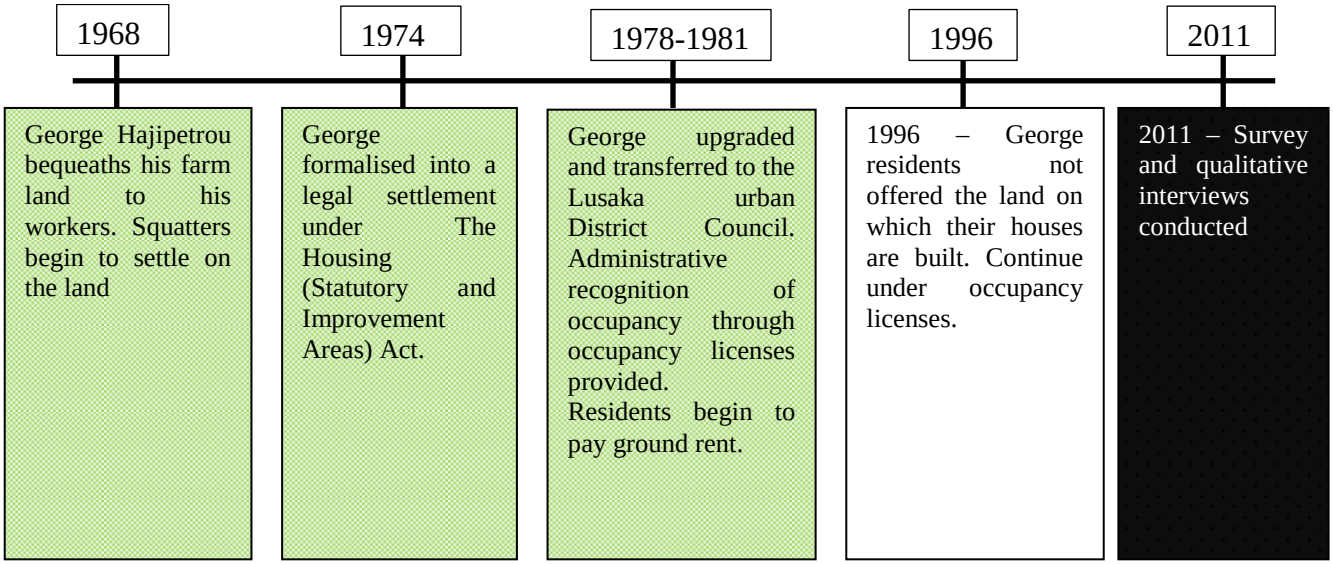
[7] This was partly as a result of increased migration into urban areas that followed the enactment of the African Urban Housing Ordinance. The African Urban Housing Ordinance required employers and local authorities to provide housing for African employees and their wives. (see Mulenga, 2003)

of privatisation, Matero was a poor old working class area where workers paid rent to the council. Many of the houses were dilapidated, had no electricity and had only an external water source and pit latrine.

The primary beneficiaries of the privatisation of housing in Matero were the occupants of rental housing at the time of offer. They included general workers in various government departments and private companies, as well as retired or other people who could afford to pay the modest rent charged up till that point.

3.3.2.3 The Context: George

Figure 3.7: Timeline of Events in George



George compound was one of the neighbourhoods where residents did not qualify to benefit from the state transfer of real property rights to tenants. Neighbouring Matero to the south-west, it was already the largest settlement in Lusaka with a population of 120,000 people by 1996 (130,000 according to UNDP (2006). George compound began during colonial times when spouses and families of urban workers, unemployed urban migrants as well as workers whose contracts had expired ("illegals") settled on an English settler's farm. The farmer, called George, developed a business of making bricks, most of which were used to build Matero. As he employed more workers, he allowed them to build houses on his land. George bequeathed his land to his workers (*de facto* and not freehold) as a gift in 1968 when he opted to move into Lusaka city to foster his growing business empire. In George's honour, his workers called the area George's compound. George was typically the first place where urban migrants established their first households in Lusaka.

At the beginning of the 1970s, the government took over George compound and declared it an illegal settlement earmarked for demolition then later changed earmarking it for upgrading. The initial declaration of George as an illegal settlement meant that it would be demolished; all illegal settlements existing at the time were to be demolished. George however was formalised into a legal settlement following the state's decision to upgrade some squatter settlements under the Second National Development Plan for 1972-1976. George was upgraded from 1978 to 1981. According to Rakodi and Schlyter (1981:9-10), the upgrading of George involved servicing the existing 6,200 houses, and the provision of financial assistance for individuals to build or improve their houses. It also involved the preparation of 4, 400 plots in a new extension to George to accommodate those who had to give way to the building of roads and other essential infrastructure. Servicing involved the provision of a potable water reticulation service through the provision of communal water taps at various locations, grading of gravel roads, building of a primary school and a health clinic. People living in houses with unconventional building materials were provided with building specifications and encouraged but not forced to replace their houses with those made out of conventional materials. George was assigned under the responsibility of the Lusaka City Council (Schlyter & Schlyter, 1980:22). This responsibility included collection of a service fee and the provision of municipal services.

Administrative recognition of occupancy was provided as part of formalisation. Occupants were given 30 year occupancy licenses after which they would have to apply for renewal in 2011. In this case, an occupancy license is a type of document that is given to residents permitting them to occupy council land; they own the dwelling but not the land. On this basis residents of George began to pay a monthly service charge for the use of the land. The Lusaka City Council (2010) has recently referred to this service fee as "ground rent" defined as a "charge paid for a piece of land where a structure is built on council land ... as a stop gap measure between those paying property rates and those not paying anything" (Lusaka City Council, 2010). Residents were also to pay separately for water at communal taps and sewerage services.

Though residents are guaranteed tenure security with an occupancy license, they are subject to several conditions under the terms of occupancy. The following is a summary. They are

i. Allowed to dwell with their immediate families only. They are expected to obtain consent of the council should they take in a lodger or other occupant.

ii. Not allowed to use the premises for other purposes other than the permitted use. Should they require to do so, they have to apply for a business license from the council

iii. Not allowed to sub-license or assign the benefit or part of the benefit within the right granted. This means they cannot rent to another person.

iv. If the occupant does not pay the service fee for three calendar months, they will have to remedy the situation, failure to which they will have to vacate the land. The council shall then remove any buildings and restore the land to its former state and condition

v. The license is not transferable and cannot be used in any financial transactions.

vi. The council retains possession of the premises and have the right to inspect the premises at any time. The council has the right to erect any works thereon which the council deems is in the general interest of the area. If the premises are declared unfit for human habitation by a medical officer of health, he shall be entitled to serve notice on the occupant and the occupant shall have to make alterations accordingly, including demolition if that is the prescription.

As the above list of conditions shows, the occupancy license does not confer the same rights to the occupant as leasehold title. Residents in Matero are allowed to sell their land while those in George are not allowed to do so because the land still belongs to the council (Lusaka City Council, 2010) (Although unofficial transactions do take place). George residents are not allowed to rent out their houses or conduct business on their premises. This also takes place despite the restrictions. Many of these terms are often openly disregarded as I will show in Chapters 6 and 7.

3.3.2.4 Potential for comparison between Matero and George

The two neighbourhoods are similar in many respects, particularly with respect to demographics and municipal services to some extent, but also different particularly in terms of their legal status. Geographically, the two neighbourhoods are adjacent and fall under the same electoral constituency but their historical development is different.

As Figures 3.6 and 3.7 show, the legal status of residents from the beginning was different. Residents of Matero were legal tenants of the LCC while George residents were holders of occupancy licenses. However residents in both areas were under the jurisdiction of the council. They all had obligations to the council prior to privatisation. George residents were supposed to pay a service fee to the council although many houses refused to pay because the

council did not provide services to their satisfaction. Matero residents paid a monthly rent higher than the service fee but slightly lower than the market rate (Schlyter, 2004:7). Because of these differences in conditions, the comparison may yield higher estimates on outcome variables when George is used as a comparison group.

The residents in the two neighbourhoods had similar occupations but those in Matero may have had more earners of regular wages employed mainly in the public sector. They had similar socio-economic status; they were poor, doing working class jobs and earning similar levels of income. The earnings differences could account for observed differences. Initially, all Matero residents were employees paid for by their employers while those in George were a mix of employed and unemployed. However, from 1976, the government allowed people who were not working to continue living in the council house as long as they could pay the rent. Indeed among occupants of Matero were people who had been laid off, retired, unemployed or widowers who had been allowed to stay on after their husbands had died. In fact, during privatisation, the council allowed the transfer of rental tenure from the council to sons and widow(er)s who were not employees (Schlyter, 2004:3). Schlyter (2002:17) also shows that council employees were among the 60, 000 who lost their jobs in Lusaka in SAP between 1991 and 1999, most of this occurring before the mid-1990s. Those retrenched stayed on in the houses in Matero. Not every council employee was accommodated. Those on the long waiting list and living in squatter compounds like George were entitled to housing allowance. The housing backlog in Lusaka was not known but was in 1998 estimated to be over 850 000 (Schlyter, 1998:263).

Both areas had similar municipal services. Neither had electricity and in both areas the toilets were outside the houses prior to 1996. Matero did have better access to water supply in that its residents had a tap inside the yard while those in George had to draw water from communal taps or wells they dug up within their neighbourhood. However from 1993, the communal water supply in George was improved under a Japanese International Cooperation Agency (JICA)-funded programme.

Another important issue is that people in Matero and those in George may have mixed because of home owners renting out houses to people and moving to George or vice versa especially because of their proximity. But the percentage is likely to be insignificant.

In sum, the evolution of housing provision in Matero and George can be taken advantage of to understand the consequences of the provision of real property rights through titling relative to the administrative recognition of occupancy. However, existing differences may yield some higher estimates on outcomes than the actual impact.

3.3.2.5 The appropriate methodological approach in Matero and George

The case of Matero and George should not be considered as a natural experiment because there was no random allocation to the treatment and control group. The neighbourhoods developed differently with those in Matero having been renters and those in George having been occupants who owned their house but not the land. Moreover, it does not meet the assumptions for difference-in-differences because there is no baseline data available. A proper matching approach is also not possible because to the best of my knowledge, there is no available data collected at baseline. Baseline characteristics are essential for matching between the two groups. A major problem in impact evaluation is that without baseline data, there are few options for the evaluation to be done well. The Lusaka case study is limited in this way. However, because of the substantial demographic similarities between the two groups and the geographic proximity, that is the same geographic context, a comparison of the subsequent 'outcomes' in the two neighbourhoods might point to possible effects of the titling.

I used a mixed methods approach to investigate this context. First, I carried out a sample survey with equal sample sizes. A large survey sample of altogether 700 was drawn from both neighbourhoods. The final sample was 623 with 312 in Matero and 311 in George. The analysis was done in such a way that regressions were used with a pooled sample of both neighbourhoods and then tests conducted as to whether housing had an effect on various outcomes. The method is described in detail in Chapter 6. Then I carried out in-depth semi-structured qualitative interviews in order to understand the subsequent experiences of titling regarding the various outcomes. Qualitative interviews were especially useful for understanding social capital which has proved difficult to understand using quantitative methods alone. The method is discussed in further detail in Chapter 7.

3.4 Comparability of Khayelitsha and Matero

This thesis compares the effects of the provision of real property rights to those of the administrative recognition of occupancy in Khayelitsha and Matero in order to explain

similarities and differences in the effects of property rights in different contexts. There are many advantages to carrying out a comparative study of this nature. Evaluations of the effects of titling are scarce and among the few, empirical studies focus on a specific effect which makes it impossible to compare cases and draw general lessons (Durand-Lasserve & Selod, 2009:115). If we are to understand fully the effects of titling in developing countries, we need to build knowledge by testing hypotheses on each outcome in each context. Examining a holistic set of outcomes in Cape Town and Lusaka is an important contribution to this end. Should the findings be dissimilar, the study allows us to understand the contextual nature of the cases and the nature of formal tenure across contexts, which is an important finding in itself.

Although both cases are addressing the same problem, there are important differences. Firstly, the treatments by which real property rights were provided differ. The Cape Town case was a case of the provision of new housing with ownership rights while the Lusaka case involved the transfer of ownership of existing old houses from the state to private individuals. The occupants of RDP houses were the first occupants while those in Matero were in most cases not the first occupants. However, the difference in the quality of housing is not significant because the quality of RDP houses is low – with cracked walls and leaking roofs (Huchzermeyer, 2001:322). Housing subsidies came with a rudimentary structure which beneficiaries were expected to improve (Tomlinson, 2006). This is similar to the houses in Matero which are old and of low quality (Schlyter, 2002). The size of the first RDP houses in Cape Town are also smaller than those in Lusaka, though the ones built later are comparable in size. In the same vein, the owners of houses in Khayelitsha are first generation owners where no inter-generational transfer has taken place while in Matero, there are second generation owners. This is important because from the point of view of the asset-based approach, priorities shift from building physical and social capital in the first generation to building human capital in the second generation. Finally, in investigating the two cases, I use secondary survey data in Khayelitsha while I only use primary data in Lusaka. This can impose methodological constraints.

3.5 Conclusion

Examining a holistic set of effects of real property rights ideally requires experimental or in their absence, quasi-experimental methods of estimation in order to draw causal inference but this is rarely feasible in practice. In this chapter, I have discussed that although controlled

experiments (similar to RCTs) would be ideal for drawing causal relationship between titling and various outcomes in settings such as Khayelitsha and Matero and George, they are not without their own deficiencies and, more importantly are rarely feasible because of financial and time limitations. I also show that quasi experimental approaches are also not feasible because there was no randomisation in the allocation of title. I therefore settle for the use of non-experimental approaches, specifically difference-in-differences estimation in Khayelitsha and a statistical comparison of cases for Matero and George. These are complimented with in-depth qualitative interviews that provide insight into the experiences of beneficiaries. Although different methods of estimation are used to examine the many effects of real property rights in each case, the potential of the comparative approach lies in being able to contribute to the building of general lessons about the effects of titling, which is a need in the literature on the effects of property rights in developing countries. This thesis provides such a comparison presented in the substantive analysis in the next three parts.

PART II

CHAPTER 4

‘BUSTING THE MYTH’ AND ‘SOLVING THE MYSTERY’ IN KHAYELITSHA: EFFECTS OF HOUSING SUBSIDIES

4.1 Introduction

In this chapter, I investigate the effects of the subsidized homeownership scheme in the first case study, Khayelitsha. I aim to demonstrate the benefits of the titling programme that has led to the possession of real property rights and a capital asset among beneficiaries. A systematic study of this nature is important and timely to answer some of the questions that I highlight in Chapter 1 and to systematically investigate those claims that have been raised recently on the impact of subsidised housing on the poor in South Africa. Recently, there have been claims within civil society that the RDP houses have had no benefits to their owners (Social Housing Foundation, 2009:1).

I hypothesize the following;

1. Freehold titling may translate into positive effects on labour market participation in terms of hours of labour relative to occupancy tenure because of the reallocation of time from efforts aimed at securing housing and other basic services.

2. Freehold titling may result in increased household per capita income because of increases in labour market participation, investments in home businesses and increased home employment for members of the household

3. Freehold titling may result in increases in wealth (measured in terms of possession of household durable items) because of the increased space, safety and the feeling of obligation by beneficiaries to fill up the space with household items. This is important because according to the asset-based approach. Some of these household items may be a mechanism for savings which become useful in cushioning consumption during economic shocks

4. Freehold titling may result in improved physical health because of improvements in the housing environment such as access to piped water, flush toilets, and garbage disposal, improved ventilation, reduced overcrowding and generally better housing materials.

5. Freehold titling may result in improved psychological wellbeing because homeowners have a better perceived sense of control over their circumstances following ownership of their houses, trust in their neighbours and have less residential mobility. They are also physically healthier which may contribute to better psychological wellbeing.

6. Freehold titling may reduce anti-social behaviour in terms of

    i. reducing school dropout rates because of increased allocation of resources toward human capital (education and health) and closer monitoring of children

    ii. reduction in teenage pregnancies because of increased emphasis on human capital (education and health) and increased monitoring of children

7. Freehold titling may result in neighbourhood stability because homeowners are more likely to remain in their neighbourhood for longer

8. Freehold titling may affect citizen behaviour in terms of

    i. More memberships in voluntary associations because of the social and economic stake they have in their neighbourhood that drives them to make their neighbourhoods better. Indeed as asset-based approaches suggest, after securing housing, beneficiaries concentrate on building social and human capital (Moser & Felton, 2007).

    ii. More civic participation since their capital asset gives them a stake in their neighbourhood and the need to keep social control and safety

iii. Stronger neighbourhood attachment since they develop stronger bonds because of the anticipation of and longer length of tenure in the neighbourhood

iv. being more politically aware because they are more likely to be politically involved in the affairs of their neighbourhood on the basis of having a stake in their capital asset

In the literature, there is no agreed upon time period when these effects can begin to be observed. Since other studies investigate the effects of homeownership from a minimum of 4 to 10 years (Lemanski, 2011), between 10 and 20 years (Payne et al., 2009) to 30 years and above (Galiani & Schargrodsky, 2010; Moser & Felton, 2007) following titling, this study falls within this range because the beneficiaries of subsidized housing in my data were examined 5 years later. (They received housing between 2003 and 2004 and the evaluation done in 2009). Nevertheless, the range from the literature is a guide and does not necessarily mean that the effects are fully mature. It is reasonable to assume that some effects may materialize after this study has been concluded.

The chapter is outlined as follows. First I discuss the data used in the analysis. Then I discuss the method. Using a non-experimental approach, I use difference-in-differences estimation and OLS regressions to estimate the effects. I then engage in a discussion of the results. Further, I highlight the limitations of using existing data and non-experimental approaches to make these estimations and to study the effects of homeownership, even in data-rich environments like South Africa.

I will show that the effects of freehold titling in terms of the provision of real property rights to shack dwellers are to improve self-reported health status and to increase the proportion of teenage pregnancies. I do not find evidence in support of the other hypotheses I test.

The chapter contributes to knowledge by examining a more holistic set of effects using quantitative data on one case study than most of the studies in the literature. In addition to examining the economic effects in this context, the chapter examines the effects of real property rights on aspects of human and social capital in Cape Town, which have hitherto remained understudied. This will allow for the comparison of the effects of titling with the Matero case study.

4.2 Data

My empirical analysis of the effects of the low income housing subsidy in this chapter employs quantitative methods. I use panel data from the Cape Area Panel Survey (CAPS). The use of this quantitative approach allows me to address the issue of endogeneity which is one of the methodological challenges affecting the estimation of effects of titling (Galiani & Schargrodsky, 2010:700-701). CAPS is an on-going panel study. It follows the lives of a large representative sample of young adults living in metropolitan Cape Town as they undergo multiple transitions from adolescence to adulthood (Lam et al., 2008:1). However, CAPS also administers household level questionnaires. The first wave commenced in 2002. There have been 4 subsequent waves with the latest wave (wave 5) carried out in 2009 when the young adults were aged between 22 and 30. CAPS includes a range of aspects of adolescence including schooling, entry into the labour-market and housing, neighbourhood, sexual and reproductive health and family and kin relations (Lam et al., 2008:1). The panel asks questions about whether the household head or anyone in the household received a government housing subsidy to acquire land or build the house.

The panel included at the outset approximately 4750 randomly selected individuals aged between 14 and 22 years in 2002 and between ages 19 and 27 in 2009. Households were sampled using probability proportional to size and stratified according to population group[8]. First, 440 clusters roughly corresponding to the 1996 census enumerator areas were selected. Then from each cluster, some households were selected. From each household, up to three young adults were selected.

Since CAPS covers the entire Cape Town, I selected a sub-sample consisting of only those respondents who were from shacks in Khayelitsha in 2002[9]. My total sample size came to

[8] By population group, I mean the apartheid era reference to "race". The terminology has remained in common use in post-apartheid South Africa. I will use this terminology where necessary in this thesis purely for purposes of clarity. The population groups include "Black", "white", "coloured" or "mixed heritage" and Indian

[9] To select my sample, I first merged the combined household dataset, the individual level dataset the community level dataset and the wave 5 derived dataset. Then, I generated a sub-sample of all beneficiaries of the government housing subsidy that are in wave 5 of the dataset. This ensured that I had the entire pool of beneficiaries from wave 1 through 5. I then obtained questionnaire IDs of all beneficiaries from the wave 5 dataset. With permission of the principal investigators, I cross-referenced the questionnaire IDs I obtained from the dataset with the actual physical questionnaires and checked the addresses on the questionnaire for location. Then I eliminated all those whose addresses were not located in Khayelitsha. I then took note of the cluster numbers and used them to identify the beneficiaries in the wave 5 dataset. Finally, I restricted the analysis to those respondents who reported not having a subsidy in wave 1 (2002) of CAPS but reported having one in wave 3 (2005). For non-beneficiaries, I used cluster numbers and cross-referenced them with addresses on the questionnaires to locate all those living in shacks in Site C at both points in time.

330. Of these 111 were beneficiaries of housing subsidies and 219 were shack-dwellers at baseline. Table 4.1 below provides a description of the variables.

4.2.1 Dependent Variables

Table 4.1: Variable Descriptions

Variable	Response Categories	Description
Labour participation	Group average	"Did you work in the last twelve months?"/ "how many hours do you work on your current job per day?"
Per capita income	Group average	Log of household income per capita from imputed per capita income variable
Household durables	Average, scale	"Does anyone in your household own …?" (E.g. radio, television, microwave, refrigerator, car etc.)
Physical health	Ordinal scale	"How good is your health?" 0=poor, 1=fair, 2=good, 3=very good, 4=excellent
Teenage pregnancy	Dummy,	"Have you ever been pregnant?" 1=pregnant, 0=otherwise, restricted to females below age of 18 years
School dropouts	Dummy,	Average number of respondents who had not completed matric and were above 18 years 1=dropout, 0=otherwise
Neighbourhood Stability	Dummy,	"Did your household move in the past five years?" (wave 1)/ Have you moved since the last interview (waves 4 and 5) 1=moved in last 4/5 years, 0=otherwise
Psychological health	Composite scale	"In the past 30 days, have you felt …?" (e.g. hopeless, restless, depressed, powerless, worthless) 0=none of the time, 1=a little of the time, 2=some of the time, 3=most of the time, 4=all of the time,
Membership in associations	Composite scale	"Are you a member of…?" (E.g. youth group, political party, church…)

Table 4.1: *Continued*

Variable	Response Categories	Description
Civic participation	Composite scale	"In the last twelve months, have you ever … (e.g. attended a community meeting, demonstration, a petition, boycott?/ "Did you vote in the recent national election held this year in 2009?"
Political awareness	Composite scale	Do you pay attention to what is happening in (1) government and politics (2) news on the radio (3) news on television (4) read about politics in the newspaper (5) chat about politics with friends; 0=never or almost never, 1=occasionally, 2= sometimes, 3=most of the times
Neighbourly attachment	Composite scale	1. Generally speaking, most people can be trusted 2. Most people who live in this neighbourhood can be trusted, 3. If a relative is unable to look after a child, then people will help by accommodating him/her 4. People are happy to help their neighbours if they ask for help doing something 5. If someone's neighbour asks for a small loan of money, he/she will help him

The variables labour participation, per capita income and household durables, physical health, teenage pregnancy and school dropouts, neighbourhood stability and membership in associations had a measure for 2002, the baseline measure, and for 2009, the endline measure. The variables political awareness, civic participation, neighbourhood attachment and psychological health only had observations for 2009.

The labour market participation variable, is a continuous variable derived from the questions "did you work in the last twelve months" and "how many hours do you work on your current job per day". All respondents who said that they did not work are allocated 0 hours of labour and the rest have a self-reported number of hours of work. The scores range from 0 to 24 hours.

I use two imputed per capita household income variables from waves 1 and 5 that came with the data. Respondents were asked to provide the total amount of money the household

received from each member of the household in a typical month. Where this was not possible, respondents were then asked to provide an income bracket where they felt that their total monthly household income would fall. The variables were combined and divided by the household size. Per capita income scores for the entire dataset range from R0 to R23,000. When I restrict it to my sample, the range drops to between R0 and R1000 in 2002 and 0 to 2000 in 2009. The reporting of R0 is problematic. Households who indicated 0 income were under-reporting since urban households cannot survive without any income. This would introduce bias in the estimate. I used boxplots to check for and eliminate outliers and influential points. I further tested the variables for normality using a normal probability plot. The test results showed that the distributions for each of the income variables do not satisfy the assumption of normality. I therefore transformed the variables into natural logarithms which eliminated households that reported no income. The range for the final logarithm of the income variable is 2.2 to 6.9.

Even though income is the preferred indicator of measuring welfare, generally in developing countries income measures can be unreliable. This is because many individuals work in the informal sector where income flow is irregular. They or their households cannot accurately recall their income on account of this irregularity (Sahn & Stifel, 2000:2). Asset-based approaches use an index of household assets as an alternative measure. This is because data are easier to obtain than income data. In this regard, the measure of wealth in terms of household durables will also be used as an alternative to the income measure.

The measure for wealth I use is the number of durable household assets. This measure is a composite score of a series of responses regarding ownership of household items. Respondents were asked the questions "does anyone in your household own … (for example a radio, television etc.)?" A household scored 1 for each asset it owned and 0 if it did not own it. I then constructed a scale by creating a variable that added the number of assets owned by each household. There were 14 variables in total. (Appendix 1 shows the variables that went into the construction of the scale. It further reports a comparison of the distribution of each asset between homeowners and shack-dwellers). For each asset index variable, Cronbach's alpha indicates acceptable levels of reliability[10]. Cronbach's alpha is 0.71 in 2002

[10] Cronbach's alpha is a reliability measure of the extent to which several variables collectively measure the same dimension. Ideally, Cronbach's alpha should be 0.70 and above (Nunnally, Bernstein, & Berge, 1967). However some scholars provide some rules of thumb in which a value of 0.9 is considered excellent, 0.8 good, 0.7 acceptable, 0.6 questionable, 0.5 poor and less than 0.5 unacceptable (George & Mallery, 2003:231). Others suggest that an alpha of 0.5 or higher is considered as a sign of acceptable reliability (Bowling, 2002).

and 0.77 in 2009 which is above the acceptable measure of reliability of 0.70 for both years. The overall asset scale scores range from 0 to 14, which give an intuitive interpretation. If a household scores 0, it means that it owns none of the assets in the index while that which scores 14 has all of the assets listed in the index.

The variable physical health is made up of the response to the question "How good is your health?" The same question was asked in both the 2002 and the 2009 survey. It is an ordinal variable measured on a 5 point likert scale with 1 = "poor", 2 = "fair", 3 = "good", 4 = "very good" and 5 = "excellent".

For measures of socially desirable youth behaviour, I used the rates of teenage pregnancies among female respondents and school dropout rates. Teenage pregnancy rates were defined as the average number of female respondents who reported having ever fallen pregnant before the age of 18. Respondents were asked the question "have you ever been pregnant" in the 2002 survey. Since the age range was 14 to 22, I was able to come up with the measure by creating a dummy with a score of 1 for all those who answered "yes" to the question and those who were below 18 years old and a score of zero for those who answered "no" and were below 18 years old. For the 2009 variable, female respondents were also asked whether they had ever fallen pregnant. Additionally, they were asked the age at which they had fallen pregnant for the first time, second time until the fourth time. My measure is a dummy with 1 composed of those that answered "yes" to ever falling pregnant and those who said they had fallen pregnant before the age of 18 and 0 otherwise.

Dropout rates were defined as the average number of respondents who had not completed matric and were above the age of 18 years old. The South African government defines those learners who are in the wrong grade for their age as dropouts hence this definition. To generate this variable, I use the variable for education and age to generate a dummy variable that equals to 1 for respondents who report completing less than 12 years of education and are above 18 years old and zero for those who are above 18 years old and have completed 12 years of education or more.

The variable neighbourhood stability is a combination of the wave 1 variable "did your household move in the past five years?" and the wave 4 and 5 variables "Have you moved since the last interview". For the 2002 measure, I generated a dummy variable that equals to 1 for those who have moved and 0 for those who have not. For the 2009 measure, I generated a dummy variable equal to 1 for those who report moving since the previous interview in the

2006 survey and also report moving in the 2009 survey and 0 for those who report not moving in both surveys. This variable allows me to identify movements in the 4 years before the 2009 survey. A score of 1 means high stability and a score of 0 means low stability.

The questions on psychological wellbeing were only asked in the 2009 survey so this variable does not have a baseline. I measure psychological wellbeing on a scale composed of six questions. Respondents were asked whether they had felt nervous, hopeless, restless, depressed, powerless or worthless. Responses were a five point ordinal scale from "all of the time" as the highest score, to "none of the time" as the lowest score. In my variable, I recoded this variable with 0 being "none of the time" and 4 being "all of the time" so that interpretation can be more intuitive. That way, high scores mean depression and low scores mean low or no levels of depression. I added the variables and divided by 6. The range of scores for my final variable is from 0 to 4.

I also test the hypothesis that homeowners make better citizens. The measures that I use from the data are participation in membership in voluntary associations, social attachment, civic duties and political awareness. The variable for membership in associations is measured simply by the number of voluntary associations and organisations to which the respondent belongs. The respondents were asked whether or not they were members of any of the type of associations and organisations shown in appendix 2. For each category of organisation, being a member is coded as 1 and non-membership as 0. Scores were summed up for each respondent. This gives the range of scores to be between 0 and 5 in 2002 and 0 to 6 in 2009 because I include 5 associations from the 2002 survey and 6 associations from the 2009 survey that interviewees could belong to. This poses a problem in the measure as there are differences in some of the organisations asked about for the different years. In 2002, study groups, music groups, youth groups and stokvel or savings groups were included while they were not included in the 2009 survey. Likewise, political party, charity or volunteer organisation, trade union and community-based group were included in the 2009 survey but not in 2002. Religious and sports groups were the only ones that were consistent in both surveys. Using an alternative survey year is not an option because there are no questions about associations in the intervening survey years. I proceed in using these measures on the basis that they are measuring one underlying latent variable but wary of the implication for the interpretation of the results.

The variable for attachment among neighbours within the neighbourhood is a composite measure of responses to a series of questions on trust, akin to those of Putnam (1995). These questions were only asked in the 2009 survey and not the 2002 so they do not have a baseline. Respondents were asked if statements regarding their neighbourhood relations applied to them. Each question was made into a dummy with "yes" being 1 and "no" being zero. The list of variables that went into the scale measure "neighbourhood attachment" is presented in appendix 3. Scores were added up and then divided by the number of variables. The variables have a Cronbach's alpha value of 0.55. Following Bowling (2002), I proceed to use this variable bearing in mind that it has the limitation of being of poor or questionable reliability but not unacceptable. The scores range on a scale from 0 to 1. This scale allows for intuitive interpretation. If a respondent has the low score of 0, it means that they have attitudes that indicate low social attachment to their neighbours. A score of 1 means very strong attachment to neighbours. The scores could also be interpreted in terms of percentages.

The measure of civic duties is a composite measure made up of responses to the questions "In the past twelve months, have you ever (1) attended a community meeting?" (2) "…a demonstration?" (3) "… a petition?" (4) "… a boycott?" and; "did you vote in the recent national election held this year in 2009?" I generated dummy variables with 1 equal to the response "yes" to the above and 0 for "no". I then added the variables and divided by 5 (the number of variables). The scores range from 0 to 1.

To measure political awareness, I also estimate a composite measure. Respondents were asked the questions "Do you pay attention to what is happening in (1) government and politics (2) news on the radio (3) news on television (4) read about politics in the newspaper (5) chat about politics with friends. Respondents could answer "most of the time", "sometimes", "occasionally" or "almost never?" I generated a composite measure adding the five variables and then dividing by 5. Scores range from 0 to 2.8 with 0 being never or almost never and 2.8 being most of the time.

4.2.2 Independent Variables

I derived the dummy variable "freehold" from the question "Did anyone receive a government housing subsidy to buy land or build this residence?" asked in wave 1 and wave 3 and the question "What is the main material for the walls of the residence?" asked in wave 3. The dummy has 1 for those who responded "no" in wave 1, "yes" in wave 3 and had responded "permanent building (brick block)" regarding the main materials for the walls of

their residence. The dummy had 0 for those who responded “no” to receiving a housing subsidy in both waves and had responded “traditional materials, temporary shack or permanent shack for wall materials. In this way, I take advantage of the phased in allocation of housing subsidies to restrict my sample to all Khayelitsha Site C, Site B and Town Two residents in the panel who had not yet received a subsidy in 2002 but received one between 2003 and 2004.

In addition, there are several demographic variables that I use as controls. They include the continuous variable age for the “age of the respondent”, the gender dummy “male” with 1= male and 0=female, “years if education completed in 2002” and “years of education completed in 2009” which are continuous variables for the number of years of education completed in 2002 and 2009 respectively, ranging from 0 to 16. Marital status is a dummy with 1 = married and 0 = otherwise. The variable child is a dummy with 0 = no child and 1= one child or more. Household size is a continuous variable for the number of members of the household, which ranged from 1 to 20 in 2002 and 1 to 29 in 2009. Water is a dummy with 1 = access to piped water and 0 otherwise while toilet is a dummy with 1 = access to a flush toilet and 0 otherwise. Finally, rooms was a continuous variable for the number of rooms in the house which ranges from 1 to 8 in 2002 and 1 to 10 in 2009. This range is highly varied because it must include backyard shacks and wendy houses that many households in Khayelitsha have built next to their main shacks or behind or on the side of their RDP houses.

There are several limitations that come with using CAPS data for my research question. Firstly, the panel does not have questions on the threat or fear of eviction to allow me to measure the effect of the housing subsidy on tenure security. There may be unobserved variation in security of tenure prior to receiving a housing subsidy, for example between those living on serviced compared to those on un-serviced plots. Cook (1992:129) documented that those who lived on un-serviced shacks depended on water and sewerage services from those who were on serviced sites. It is also hypothetically possible that subsidies were not allocated randomly according to tenure security. Secondly, as referred to above, some variables relevant to my study are not available in the pre-intervention period but are available in the post-intervention period. These include variables on psychological wellbeing, neighbourly attachment, civic duties and political awareness. This is because new questions are being introduced and others are being removed as the panel progresses. The absence of baseline measures means that the analysis can only provide exploratory results.

Finally, the data did not have a variable for the number of years that the respondents or their households had lived in the neighbourhood prior to acquiring a house. Using this data, I could not distinguish between a resident who had lived in Khayelitsha since 1983 and one who had arrived shortly before treatment. The best I could do was to use the variable "stability" to control for 5 years prior to the first survey.

4.3 Method

In my estimation strategy, I use two methods to estimate the effects of a government housing subsidy. I use a difference-in-differences estimation strategy to estimate the effect of a housing subsidy for the outcome variables that have both baseline and post-treatment data.

The models are of the form

$$Y_{it} = \beta_0 + \beta_1(treat\_period)_{it} + \beta_2(RDP\_homeowner)_1 + \beta_3(treat\_period * RDP\_homeowner)_{it} + \beta_{ki}X_{ki} + e_i$$

Where Y_{it} is any of the outcome variables for observation *i* at time *t*, *treat_period* is a dummy variable with the value of 0 for the period before treatment and 1 for the period after treatment, *RDP_homeowner* is a dummy taking the value 1 if the individual is in the treatment group and 0 if they are in the control group, the coefficient of the interaction between *treat_period* and *RDP_homeowner*, β_3, is the OLS difference-in-differences estimator or the logistic regression odds ratio as the respective case may be. The vector X_{ki} specifies the pre-treatment covariates or controls. e_i is the error term for the unexplained variation in the model.

I estimate difference-in-differences coefficients for labour participation, per capita income, assets, physical health, and membership in associations using OLS regressions. I estimate the difference-in-differences odds ratio for teenage pregnancies, stability and the proportion of dropouts using logistic regressions.

For the variables that do not have baseline data, I do not use difference-in-differences estimation but resort to estimate the effect using cross-sectional OLS multiple regression analysis as my best option to investigate whether there were significant differences between beneficiaries and non-beneficiaries. Though it is the best available option, it is by no means adequate to allow any causal inference. The estimates are exploratory and at best indicative. This is because the data does not meet the assumption that all relevant exogenous variables

are controlled for and so the method cannot justify attributing any differences between RDP homeowners and shack-dwellers to the housing subsidy. It however can provide an indication of the relationship of association.

These models are of the form:

$$Yi = \alpha + \gamma RDP\ homeowner_i + \beta X_i + \varepsilon_i$$

where Y is any of the outcome variables, γ is the estimate which captures the strength and direction of the relationship between having a housing subsidy and not having one, X is any of the characteristics controlled for and ε is the error term which accounts for unexplained variance. In this second analysis, I report only the first difference. I do not attribute changes in the outcome variable to the housing subsidy because of the lack of controls for exogenous factors in the data. I suggest only that there are significant differences between the comparison and treatment group where such is the case.

4.4 Results

4.4.1 Characteristics of RDP Homeowners and Shack-dwellers

Table 4.2. Characteristics of housing subsidy beneficiaries versus shack-dwellers in 2002 and 2009

	Wave 1 (2002)			**Wave 5 (2009)**		
Variable	**Control** *(N=219)*	**Treatment** *(N=111)*	**t**	**Control** *(N=187)*	**Treatment** *(N=102)*	**t**
Age	17.7	18.0	-1.16	24.5	24.6	-0.13
Male	0.43	0.43	-0.10	0.42	0.45	-0.50
education	8.44	8.72	-1.14	10.03	10.26	-0.92
Marital status	0	0	0.72	0.07	0.10	-0.84
Child	0.22	0.27	-0.69	0.32	0.31	0.21
Household size	5.35	5.66	-1.43	5.52	6.06	-1.62
Employment	0.10	0.12	-0.63	0.48	0.43	0.61
Rooms	3.7	3.7	-0.14	3.6	4.3	-3.63***
Piped water	0.61	0.94	-6.60***	0.67	0.93	-5.10***
Flush toilet	0.75	0.93	-4.05***	0.70	0.93	-4.66***

* $p<0.10$ ** $p<0.05$; *** $p<0.01$

Table 4.2 reports demographic characteristics and some characteristics of the dwelling between shack-dwellers and homeowners before and after treatment. The table shows that there are no significant differences in terms of demographics while some characteristics of the dwelling are significantly different in both periods with beneficiaries scoring higher. The lack of demographic differences supports the use of shack-dwellers as my comparison group in the difference-in-differences estimation.

In terms of demographics, at baseline both groups have an average age of 18 years with $t(317) = -1.16$. At endline, respondents in both groups are on average aged 24 years with $t(225) = -0.13$. At baseline, the proportion of males to females, 0.43 with $t(328)=0.10$ for both groups shows no difference. At endline, the proportion of males in the treatment group, 0.45, is slightly more than that in the comparison group, 0.42. There is no statistically significant difference, $t(225)=-0.50$. However in both groups and both periods, we see that there are fewer males than females in the sample. I find that on average, both groups have the same number of years of education. At baseline, beneficiaries score an average of 8.7 years while shack-dwellers have 8.4 years, $t(273) =-1.14$. At endline, both groups have an average of 10 years with $t(271) =-0.92$ showing no significant difference between them. There are almost no married respondents at baseline. The proportion of married respondents is 0 for both groups, with $t(314) =0.72$. This is so because the majority of the respondents were still very young for marriage. At endline, there seem to be more married respondents among beneficiaries, 0.10, than among non-beneficiaries, 0.07, although the difference is not statistically significant, $t(225)=-0.84$. Similarly, the proportion of respondents with children at both baseline and endline did not differ between the two groups. At baseline, the proportion for beneficiaries is 0.27 while that for shack-dwellers is 0.22, $t(317) =-0.69$. At endline, we see an increase to 0.31 for beneficiaries and to 0.32 for shack-dwellers, $t(224) =0.21$. It appears that the rate of increase in the proportion of respondents with children was faster among shack-dwellers than among beneficiaries over the same period. In terms of household size, both groups have an average of 5 members at baseline, $t(319) =-1.43$, while at endline beneficiaries have almost significantly more members with an average of 6.0 while shack-dwellers have 5.5 member, $t(286) =-1.62$. However there is no statistically significant difference. Finally, there are no differences in the proportion of employed respondents. Few respondents are employed at baseline, with beneficiaries scoring 0.10 and shack-dwellers 0.12, $t(317) =-0.62$. The proportions rise to almost half at endline with beneficiaries scoring 0.43 and shack-dwellers 0.48 but with no statistically significant difference, $t(225) =0.61$.

There are differences in the characteristics of the dwelling in both periods, except for number of rooms in which there are no differences at baseline *t*(328)=-0.14 but at endline, *t*(286)=-3.63 where beneficiaries report having more rooms than shack-dwellers. The significant differences are in the household's most often used source of drinking water and the most often used kind of toilet for the residence. In this case, RDP homeowners have better sanitation facilities than shack-dwellers at both baseline and endline. Among beneficiaries, a proportion of 0.94 have access to piped water versus 0.61, *t*(328) =-6.60 at baseline and 0.93 versus 0.67, *t*(286) =-5.10 at endline. At baseline, the proportion of beneficiaries with access to a flush toilet is 0.93 versus 0.75, *t*(325) =-4.05 and 0.93 versus 0.70, *t*(286) =-4.66 at endline. This reveals that more beneficiary households lived on serviced sites than non-beneficiary households prior to treatment. It may also indicate that the roll-out of housing subsidies prioritized households living on serviced sites. It is therefore important to control for these observed differences in the analysis as they may account for variation in the outcomes.

4.4.2 Differences in Hypothesized Outcomes between Beneficiaries of Subsidized Housing and Shack-dwellers in 2002 and 2009

In Table 4.3, I report the means and mean differences in the hypothesized outcomes between the housing subsidy beneficiaries and the non-beneficiary shack-dwellers. The table shows that beneficiaries at baseline are likely to report lower income, more assets, poorer physical health, a higher proportion of teenage pregnancies and more stability in terms of tenure of residence than shack-dwellers at baseline. At baseline, the table also shows no significant differences in the number of hours worked on the current job, membership in voluntary associations and in the proportion of school dropouts between the two groups. At endline, I find that beneficiaries of the housing subsidy are likely to report lower per capita income, more assets, and more memberships in voluntary associations and to be less politically aware than shack-dwellers. I find no differences in labour market participation, physical health, and proportion of teenage pregnancies, proportion of school dropouts, neighbourhood stability, and participation in civic duties, neighbourly attachment and psychological wellbeing.

Labour participation between the two groups is similar in both periods. At baseline, both groups report an average of an hour per day on their current job, *t*(315) =-0.74. At endline, shack-dwellers seem to work more hours but this is not statistically significant. Shack-

dwellers work an average of 4 hours per day while subsidy beneficiaries work an average of 3 hours, $t(222) = 1.03$.

In terms of income, there are significant differences between the groups in both the pre-treatment and post-treatment period. At baseline, housing subsidy beneficiaries report marginally less per capita household income (log), M=5.24, than shack-dwellers, 5.56, $t(315) = 3.47$. Similarly at endline, beneficiaries report less income, 5.88 versus 6.11, $t(269) = 1.97$. The higher income score among the poorer beneficiaries at baseline can be attributed to the selection criteria for beneficiaries, where the poorer households were targeted. During the post-treatment period, the difference is by a smaller margin than that of the pre-treatment period, indicating that there may be some improvements in household per capita income among beneficiaries.

Table 4.3: Summary Statistics on various outcome variables: Beneficiaries versus shack-dwellers in 2002 and 2009

	Wave 1 (2002)			**Wave 5 (2009)**		
	Control *(N=219)*	**Treatment** *(N=111)*		**Control** *(N=187)*	**Treatment** *(N=102)*	
Variable			**t**			**t**
Labour	0.77	1.00	-0.74	4.02	3.41	1.03
income	5.56	5.24	3.47***	6.11	5.88	1.97**
durables	3.89	4.77	3.24***	6.01	6.63	-2.08**
health	4.13	3.78	2.88***	3.81	3.94	-0.85
pregnant	0.06	0.40	2.97***	0.28	0.31	-0.32
dropout	0.71	0.78	-0.78	0.69	0.73	-0.77
Stability	0.86	0.91	-1.34	0.90	0.93	-0.79
Memberships	1.50	1.50	0.06	0.95	0.64	2.82***
awareness				1.81	1.68	1.73*
Civic duties				0.28	0.25	1.20
Attachment				0.37	0.38	-0.31
Psychological				2.67	2.79	-1.00

* $p<0.10$ ** $p<0.05$; *** $p<0.01$

Similarly, there are significant differences in terms of durable assets owned in both periods with housing subsidy beneficiaries likely to report more household durable items than shack-dwellers. On average, beneficiaries report an asset score of 4.8 versus 3.9 at baseline with

t(323) =-3.24. This means that at baseline, we expect a house of a future beneficiary of a housing subsidy to have one asset more than that of a shack-dweller who will not benefit. This may also be attributed to the difference between living on a serviced site and un-serviced site in the sense that a shack on a serviced site has more space than one on an un-serviced site. At endline, the difference remains albeit slightly weaker. On average, beneficiaries of a housing subsidy have 6.6 household items versus 6.0 for shack-dwellers, *t*(285) =-2.08.

With regard to physical health, I find that housing subsidy beneficiaries have significantly lower scores on health at baseline while there is no difference at endline. At baseline, beneficiaries have an average score of 3.78, which means that they are likely to say that their health is good while with a score of 4.13, shack-dwellers are likely to say that their health is very good. This difference is statistically significant with *t*(315) =2.88. At endline, both groups report that their health is good with beneficiaries reporting a higher average score of 3.94 versus 3.81. The difference is however not statistically significant, *t*(-0.85). During the period from baseline to endline, we observe that beneficiaries report an improvement in their physical health while shack dwellers report deterioration. A better physical living environment for beneficiaries can be a factor explaining this difference.

I find that housing subsidy beneficiaries have a higher proportion of teenage pregnancies at baseline but find no difference at endline, even though beneficiaries report a higher proportion of teenage pregnancies. At baseline, beneficiaries report an average of 0.40 as the proportion of teenage pregnancies among girls compared with 0.06 for shack-dwellers, *t*(42) =-2.97. There were however very few observations (n=44) with 34 girls being shack-dwellers and 10 girls being from beneficiary households. This sample makes both analysis and representativeness of the sample a problem. At endline, the sample is larger (n=102) with 67 girls being shack-dwellers and 35 girls being beneficiaries. Beneficiaries report a proportion of 0.31 versus 0.28 for shack-dwellers, *t*(100) =-0.32.

In terms of the proportion of school dropouts, beneficiaries of housing subsidies are equally likely to have dropouts as shack-dwellers in both periods. At baseline, the proportion of school dropouts among beneficiaries is 0.78 versus 0.71 for shack-dwellers, *t*(138) =-0.78. At this stage, few of the young adults in the sample are above the age of 18. For both groups, the proportion of school dropouts drops to 0.73 for beneficiaries and 0.69 for shack-dwellers, *t*(286) =-0.77. It is essential to point out that school dropout rates are very high for both

groups with an average of 70 percent of respondents who are above age 18 not completing their grade 12.

Table 4.3 further reports that beneficiaries of subsidised housing have similar levels of tenure of stay in their neighbourhood as shack-dwellers at both baseline and endline. At baseline, the proportion of beneficiaries that have lived in their neighbourhood for more than 5 years prior to 2002 is 0.91 versus 0.86 for shack-dwellers with $t(328) = -1.34$. At endline, the proportion of stable households is 0.93 for beneficiaries and 0.90 for shack-dwellers with $t(255) = -0.79$. We observe that both groups report high levels of stability and become even more stable at endline. In these neighbourhoods, neighbourhood stability is high with around 10 percent reporting that they moved from residences within 5 years before baseline and within 4 years before endline respectively.

With regard to the hypothesis that homeowners make better citizens, I find that beneficiaries of subsidised housing have fewer memberships in voluntary associations and are less politically aware than shack dwellers. I further find that housing beneficiaries are equally likely to perform civic duties and are equally likely to be socially attached with neighbours as shack-dwellers. At baseline, both groups have an average membership of 1.5 associations, $t(316) = 0.06$, while at endline, beneficiaries score 0.6 while shack-dwellers belong to an average of 1 voluntary association, $t(225) = 2.82$. This may indicate that homeowners become comfortable after they have met their needs through housing. Shack-dwellers may still be trying to obtain services from the state and meet their needs through participation in associations. It also indicates a general reduction in memberships in associations between the two years. In terms of political awareness, beneficiaries of housing subsidies have a score of 1.68 while shack-dwellers score higher at 1.81, $t(212) = 1.73$. The higher scores on political awareness by shack dwellers are consistent with the higher scores that shack-dwellers have with regard to membership in voluntary associations. The same reason for the higher scores may apply here. In terms of civic duties, I find no significant difference with beneficiaries scoring 0.25 and shack-dwellers 0.28, $t(218) = 1.20$. Similarly, I find no significant differences between the two groups in terms of neighbourly attachment. Beneficiaries score 0.38 versus 0.37 for shack-dwellers, $t(205) = -0.31$.

Finally, I find no evidence in mean differences supporting the hypothesis that homeownership is associated with psychological wellbeing. Table 4.3 shows that beneficiaries have a higher score of 2.8 on the psychological wellbeing scale versus a score of

2.7 for shack-dwellers. This means that both groups have poor psychological wellbeing some of the time to a little of the time. The difference is not statistically significant, $t(210) = -1.00$.

On the basis of these mean scores and mean differences, we cannot ascertain that the government housing subsidy is responsible for the observed differences, particularly during the post-treatment period. This is because from the post-treatment mean differences, we do not control for exogenous factors that may have affected the parameters of interest during the course of time. We do control for constant factors in terms of demographics since it is the same individuals observed at different points in time. To control for exogenous factors, I now employ difference-in-differences estimation.

Table 4.4. Effects of the housing subsidy on labour participation, household per capita income, household durables, physical health, and membership in voluntary associations: Difference-In-Differences estimation (OLS Regression without covariates)

	(1) Hours worked per day		(2) Per capita household income (log)		(3) Number of household durables owned		(4) How is your health		(5) Membership in voluntary associations	
	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment
RDP homeowners	1.00	3.41	5.24	5.88	4.78	6.63	3.78	3.93	1.50	0.64
	(0.33)	(0.37)	(0.08)	(0.09)	(0.23)	(0.23)	(0.10)	(0.11)	(0.08)	(0.12)
Shack-dwellers	0.77	4.02	5.56	6.1	3.89	6.01	4.13	3.81	1.51	0.95
	(0.24)	(0.29)	(0.06)	(0.06)	(0.16)	(0.17)	(0.07)	(0.09)	(0.10)	(0.09)
Difference	0.23	-0.61	-0.32***	-0.23**	0.88***	0.63**	0.35***	0.12	-0.01	-0.31**
	(0.40)	(0.47)	(0.10)	(0.11)	(0.28)	(0.24)	(0.12)	(0.14)	(0.13)	(0.15)
Difference-in-differences		-0.84		0.10		-0.25		0.47**		-0.30
		(0.62)		(0.15)		(0.41)		(0.19)		(0.14)
Adjusted R^2		0.16		0.13		0.17		0.02		0.09
Observations		541		588		612		542		545

Standard errors in parentheses

* $p<0.10$ ** $p<0.05$; *** $p<0.01$

Number of observations is a combined total of baseline and endline observations

4.4.3 Effects of the Housing Subsidy on Labour Participation, Income, Durable Assets, Physical Health, and Membership in Associations, Stability, Teenage Pregnancies and Proportion of School Dropouts: Difference-In-Differences Estimation

In this section, I report the difference-in-differences estimates for number of hours of labour worked per day, logged household per capita income, and number of household durable items owned, physical health, membership in voluntary associations, and stability of tenure, teenage pregnancies and school dropouts. I find that the housing subsidy has the effect of improving self-reported health and increasing teenage pregnancies among beneficiaries relative to shack-dwellers but find no effect on the other hypothesized outcome measures.

In Table 4.4 above, the marginal effect implied by the estimated coefficient on the interaction term between RDP homeowner and treatment period is -0.84 hours. This coefficient corresponds to a reduction in the number of hours of labour resulting from having a housing subsidy. However, the estimate is not statistically significant. I fail to reject the null hypothesis. Using basic difference-in-differences estimation, I find no evidence of an association between a government housing subsidy and labour participation.

Similarly, there is no effect of a housing subsidy on household per capita income. The difference-in-differences estimate shows an increase of 0.10. This implies an increase of 10 percent in household per capita income attributed to the housing subsidy. However this was not statistically significant. I fail to reject the null hypothesis.

Likewise, there is no effect of a housing subsidy on the number of household durables items. The estimated treatment effect is -0.25 implying a reduction in the number of household items. This effect is not statistically significant. I therefore fail to reject the null hypothesis of no association.

I find that the marginal effect of a housing subsidy on self-reported physical health is positive and statistically significant. The difference-in-differences estimator (β=0.47) represents the estimated improvement in health attributed to being a beneficiary of a government housing subsidy. This coefficient means that a government housing subsidy increases physical health by 0.5 on a scale of 0 to 4 with 0 being poor and 4 being excellent. In other words, there is a

10 percent increase in self-reported health following titling. I therefore reject the null hypothesis of no association.

With regard to membership in voluntary associations, I find no effect of a housing subsidy. The estimated difference-in-differences coefficient is -0.30 representing a reduction in memberships but this is not statistically significant. I fail to reject the null hypothesis.

Table 4.5: Effects of housing subsidy on Teenage Pregnancy, School Dropout rates and stability of tenure: Difference-in-Differences estimation (logistic regression without covariates)

	(1) Proportion of teenage pregnancies	(2) Proportion of School dropouts	(3) Stability
	(N=123)		
Treat_period	6.33**	0.85	1.42
	(4.93)	(0.24)	(0.46)
RDP_homeowner	10.67**	1.38	1.67
	(10.39)	(0.57)	(0.64)
Period_homeowner	0.11**	0.89	0.87
	(0.12)	(0.44)	(0.53)
Pseudo R^2	0.07	0.00	0.01
Observations	146	428	587

* *p<0.10* ** *p*<0.05; *** *p*<0.01

Number of observations is a combined total of baseline and endline observations

In Table 4.5, I report difference-in-differences estimates for the hypothesis that homeownership leads to socially desirable youth behaviour and stability using basic logistic regression. With regard to teenage pregnancies, I find that teenage girls in households of beneficiaries of a housing subsidy have higher odds of being pregnant than teenage girls who are shack-dwellers. The difference-in-differences estimate shows that the odds of being pregnant for a teenager belonging to a household that benefitted from a housing subsidy are 0.11 times as large than the odds for a teenage girl belonging to a household of shack-dwellers. Although in the baseline teenage girls from beneficiary households have a

significantly higher proportion of pregnancies, the proportion reduces after treatment while that of shack-dwellers rises during the same period. Nevertheless it remains higher. I therefore reject the null hypothesis of no association but find that the direction of association is opposite to what was expected.

I find no effect of a housing subsidy on the proportion of school dropouts. The marginal effect reported in the difference-in-differences estimate is 0.89 but this is not statistically significant. I fail to reject the null hypothesis.

I also report no effect of a government housing subsidy on stability, with the odds ratio being 0.87. I also fail to reject the null hypothesis of no association.

Table 4.6: Effects of a Housing Subsidy on labour participation, household per capita income, household durables, physical health, and membership in voluntary associations: Difference-In-Differences Estimation (Multivariate OLS Regression)

	(1) Hours worked per day		(2) Per capita household income (log)		(3) Number of household durables owned		(4) How is your health		(5) Membership in voluntary associations	
	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment
RDP homeowners	3.24	0.62	6.0	6.6	0.21	0.35	2.99	3.04	0.09	-0.02
	(1.85)	(1.86)	(0.41)	(0.41)	(0.08)	(0.08)	(0.52)	(0.52)	(0.10)	(0.10)
Shack-dwellers	3.16	0.06	6.2	6.64	0.16	0.32	3.35	2.89	0.12	0.04
	(1.84)	(1.83)	(0.40)	(0.40)	(0.08)	(0.08)	(0.51)	(0.51)	(0.09)	(0.09)
Difference	0.08	0.68	0.22*	0.05	0.06**	0.03	0.35**	0.14	-0.03	-0.06**
	(0.49)	(0.50)	(0.11)	(0.12)	(0.02)	(0.02)	(0.14)	(0.14)	(0.02)	(0.03)
Difference-in-differences		0.60		0.16		-0.02		0.50**		-0.03
		(0.70)		(0.16)		(0.03)		(0.20)		(0.04)
Adjusted R^2		0.21		0.24		0.28		0.04		0.12
Observations		464		417		437		436		440

Notes: * *p<0.10* ** *p*<0.05; *** *p*<0.01. Standard errors are in parentheses. Only demographic and significant variables are controlled for in each model. Regression of hours controls for sex, marital status, children, education, household size and physical health. Regression of per capita income controls for age, sex, marital status, children, education, hours of labour and household size. Regression of household durables controls for age, sex, marital status, children, education, employment status and household size. Regression of physical health controls for age, sex, marital status, education, hours of labour, household size, water and toilet. Regression of membership in associations controls for age, household size, education, civic duties and political awareness. Number of observation is a combined total of the baseline and endline observations.

Table 4.7. Effects of the housing subsidy on teenage pregnancy, proportion of school dropouts and neighbourhood stability: Difference-in-Differences estimation (multivariate logistic regression)

	(1) Proportion of teenage pregnancies	(2) Proportion of School dropouts	(3) Stability
Treat_period	25.79***	0.53	4.01***
	(30.53)	(0.23)	(2.05)
RDP_homeowner	49.25***	1.51	2.05
	(65.85)	(0.94)	(1.16)
Period_homeowner	0.02***	0.77	1.42
	(0.03)	(0.55)	(1.75)
Pseudo R^2	0.19	0.08	0.18
Observations	116	273	409

Notes: * *p<0.10* ** *p*<0.05; *** *p*<0.01, Standard errors in parentheses. Only demographic and theoretically important variables controlled for. Regression of teenage pregnancies controls include age, marital status, education and per capita income. Regression of school dropouts controls include age, sex, marital status, children, household size, per capita income and mother's education. Controls for stability include age, sex, marital status, children, household size, education per capita income, hours of labour and memberships. Number of observation is a combined total of the baseline and endline observations.

To understand whether the effects of the housing subsidy observed via basic difference-in-differences estimation are robust, I explore the relationships more closely by examining whether the relationships hold in the presence of other sources of variation.

In the results displayed in Tables 4.6 and 4.7, I show that the difference-in-differences estimators for physical health and teenage pregnancies remain significant when I control for demographic and other explanatory factors while those of labour participation, per capita income, household durables, and membership in associations, school dropouts and stability remain not significant.

As Table 4.6 reports, the marginal effect on physical health estimated by the coefficient of the interaction term between RDP homeowner and treatment period remains significant at 0.50. This means that the government housing subsidy has had an impact of improving self-

reported health by 10 percent among the beneficiaries in the data. I therefore reject the null hypothesis of no association.

In Table 4.7, the estimate for the proportion of the subsample of teenage girls that has experienced teenage pregnancy also remains significant with the odds ratio for the interaction term reducing to 0.02 when I control for other factors. This means that being a beneficiary of a housing subsidy is associated with a marginally larger proportion of teenage girls who become pregnant. I therefore reject the null hypothesis and confirm that the direction of association is opposite what was hypothesized.

The effect of a housing subsidy on the rest of the dependent variables remains not statistically significant for all combinations of controls and therefore I fail to reject their null hypotheses.

4.4.4 Effect of the Housing Subsidy on Civic Duties, Political Awareness, Psychological Wellbeing and Neighbourly Attachment: OLS Regression

In this section, I use multivariate OLS regression analysis to explore the hypotheses that a government housing subsidy is associated with psychological wellbeing, neighbourly attachment and better citizenship on the basis of participation in civic duties and more political awareness. The regressions are done using the stepwise method. I first specify a simple model in which I regress the outcome variable on the RDP homeownership dummy. Then I specify a model that adds demographic variables to the regression equation. In the third model, I include in the equation other explanatory variables that have been shown in the literature to explain the specific outcome variable. Finally in the final model, I specify only variables that are significant in the previous models but include the housing subsidy dummy. With this approach, I am able to perform robustness checks by examining the effect of a housing subsidy given several model specifications in which the housing subsidy dummy is included.

As Tables 4.8 through 4.11 report, I find in some models that having a housing subsidy is associated with lower political awareness but is not associated with performance of civic duties, psychological wellbeing and neighbourly attachment in all the models. The association between the housing subsidy and political awareness however fails the robustness check.

Table 4.8. Housing Subsidy and Civic Duties: OLS outcomes

Independent Variables	Model 1	Model 2	Model 3	Model 4
RDP homeownership	-0.03	-0.03	-0.01	-0.02
	(0.02)	(0.02)	(0.03)	(0.02)
age		-0.02*	-0.02	
		(0.01)	(0.01)	
married		0.081	0.08	0.09*
		(0.05)	(0.05)	(0.05)
child		0.05*	0.05*	
		(0.03)	(0.03)	
male		-0.02	-0.03	-0.04*
		(0.03)	(0.03)	(0.02)
working		0.03	0.04	
		(0.02)	(0.03)	
income			-0.01	
			(0.01)	
education			-0.01	
			(0.01)	
Political awareness			0.08***	0.07***
			(0.02)	(0.02)
Constant	0.28***	0.41***	0.35**	0.16***
	(0.02)	(0.09)	(0.15)	(0.04)
Adjusted R^2	0.00	0.04	0.08	0.07
Observations	220	214	191	202

* *p<0.10* ** *p*<0.05; *** *p*<0.01

As Table 4.8 shows, I find no association between having a housing subsidy and participation in civic duties. In the bivariate model, I find that being a homeowner is associated with lower performance of civic duties (β= -0.03) relative to being a shack-dweller. The explained variation is very small with R^2 being 0.00. This is a poor fit of the data that shows that the data does not explain the variation in civic duties. When I include the demographic characteristics to the equation, the regression coefficient drops to -0.03 but remains not significant. The model fit is improved with R^2 =0.04 but remains a poor fit of the data. In the third model, the coefficient becomes even smaller and remains not significant (β=-0.01) even though the model fit is greatly improved with R^2=0.08. In the final model, the coefficient (β=-0.02) is not significant when only significant variables are included in the equation. Although not statistically significant, the direction of the relationship may suggest further

exploration in other studies of the hypothesis that beneficiaries of government housing subsidies may have lower participation in civic duties.

Table 4.9. Housing Subsidy and Political Awareness: OLS outcomes

Independent Variables	Model 1	Model 2	Model 3	Model 4
RDP homeownership	-0.13*	-0.17**	-0.10	-0.10
	(0.07)	(0.08)	(0.07)	(0.07)
age		-0.07**	-0.06	
		(0.04)	(0.04)	
married		0.25	0.14	
		(0.16)	(0.15)	
male		0.21**	0.23***	0.20***
		(0.08)	(0.07)	(0.07)
working		-0.15*	0.13*	
		(0.08)	(0.07)	
income		0.05	0.04	
		(0.08)	(0.04)	
education		0.05***	0.06***	0.061***
		(0.02)	(0.02)	(0.02)
Political party			0.46***	0.47***
			(0.09)	(0.09)
Civic duties			0.53**	0.52***
			(0.21)	(0.20)
Constant	1.81***	1.41***	1.03***	0.86***
	(0.05)	(0.46)	(0.44)	(0.20)
Adjusted R^2	0.01	0.07	0.23	0.22
Observations	214	195	191	201

* *p<0.10* ** *p*<0.05; *** *p*<0.01

Table 4.9 reports the OLS regression of political awareness on government housing subsidies. The table shows that being a beneficiary of a government housing subsidy is associated with lower political awareness (β= -0.13) in the bivariate model (R^2=0.01). This is significant at the 10 percent level. When I control for demographic characteristics, the effect is larger with β= -0.17 with R^2=0.07 and is significant at the 5 percent level. However this association disappears (β= -0.10) in the third model when I include the main explanatory factors, belonging to a political party (β=0.46) and participation in civic duties (β=0.53). The model fit for this model is good with R^2=0.23. The housing subsidy estimate β=0.10) remains not statistically significant in the final model when only significant variables are included in the equation. This means that it is not because shack-dwellers have occupancy rights that they are

more politically aware but rather that they are more likely to belong to political parties and perform their civic duties, which leads them to be politically aware.

Table 4.10. Housing Subsidy and Neighbourly Attachment: OLS outcomes

Independent Variables	Model 1	Model 2	Model 3	Model 4
RDP homeownership	0.01	-0.01	0.00	0.00
	(0.04)	(0.04)	(0.04)	(0.04)
age		-0.00	-0.01	
		(0.02)	(0.02)	
married		0.01	0.00	
		(0.08)	(0.08)	
male		0.08*	0.08*	0.08**
		(0.04)	(0.04)	(0.04)
Child		-0.00	0.01	
		(0.04)	(0.04)	
working		0.03	0.03	
		(0.04)	(0.04)	
income		0.01	-0.00	
		(0.03)	(0.03)	
education		0.01	0.00	
		(0.01)	(0.01)	
Move			0.06	0.06
			(0.05)	(0.04)
Constant	0.37***	0.29	0.34	0.32***
	(0.02)	(0.26)	(0.27)	(0.03)
Adjusted R^2	0.00	0.02	-0.02	0.02
Observations	207	187	188	201

* $p<0.10$ ** $p<0.05$; *** $p<0.01$

As Table 4.10 shows, I find no association between having a housing subsidy and neighbourly attachment. In the bivariate model, I find that being a homeowner is associated with higher scores on the neighbourly attachment scale ($\beta = 0.01$) relative to being a shack-dweller. The explained variation is very small with R^2 being 0.00 showing a poor fit of the data. In models 2, 3 and 4, the regression coefficient is almost 0 and remains not statistically significant. The model fit remains poor with R^2 being less than 2 percent. The evidence therefore does not point to a stronger neighbourhood associated with a government housing subsidy.

Table 4.11. RDP Homeownership and Psychological Wellbeing: OLS outcomes

Independent Variables	Model 1	Model 2	Model 3	Model 4
RDP homeownership	-0.11	-0.12	-0.09	-0.09
	(0.01)	(0.12)	(0.13)	(0.12)
age		-0.08	-0.08	
		(0.08)	(0.08)	
married		0.20	0.22	
		(0.27)	(0.27)	
male		0.04	0.04	
		(0.13)	(0.16)	
working		-0.09	-0.10	
		(0.13)	(0.13)	
income		-0.15*	0.13	-0.12*
		(0.08)	(0.09)	(0.06)
education		-0.05	-0.05	-0.06
		(0.03)	(0.04)	(0.03)
illness			0.15	
			(0.31)	
religiosity			0.01	
			(0.05)	
Constant	1.33***	3.33***	3.12***	2.62***
	(0.07)	(0.89)	(0.94)	(0.46)
Adjusted R^2	0.00	0.01	0.01	0.02
Observations	212	192	181	197

* *p<0.10* ** *p*<0.05; *** *p*<0.01

Finally in Table 4.11, I find no association between having a government housing subsidy and psychological wellbeing. All the models report that being a beneficiary of a housing subsidy is associated with poorer psychological wellbeing relative to being a shack-dweller (β= -0.11 in Model 1, β=-0.12 in Model 2, β=-0.09 in Model 3 and β=-0.09 in the final model). The estimates are not statistically significant and the explained variation is insignificant. I fail to reject the null hypothesis and conclude that the data does not support the hypothesis that being a beneficiary of a housing subsidy reduces psychological wellbeing.

4.5 Discussion

As a contribution to the broader debate on the effects of titling and upgrading of informal settlements and on the stock and flow of capital assets among the poor, this chapter has examined several possible effects of a subsidized housing scheme which provided poor beneficiaries with real property rights in the form of freehold title and ownership of a capital

asset. The chapter has a specific focus on the township of Khayelitsha in Cape Town. The study contributes by examining a more holistic set of effects than most of the studies in the literature. In addition to examining the economic effects in this context, it also makes a more specific contribution to the study of the effects of titling on aspects of human capital such as physical health, psychological health, teenage pregnancies and school dropouts and aspects of social capital including membership in associations, civic participation, neighbourhood attachment and political awareness in developing countries. The effects of real property rights on these aspects have hitherto remained understudied in the literature. I have concentrated on assessing the direct effects but have also included those effects that assume the role of tenure security in the equation, because the data I use has a serious limitation of a lack of variables on tenure security.

In examining the hypothesis that freehold titling may translate into positive effects on labour market participation in terms of hours of labour, I do not find evidence that the government housing subsidy had an effect on labour participation. This finding is inconsistent with the hypothesis. I suppose it is not that the mechanism of reallocating time from securing services through service delivery protests and other forms of interest articulation towards work is not working. Rather, in an economy with high unemployment (24 percent in 2010) (Statistics South Africa, 2011) and a decreasing market demand for unskilled labour such as South Africa's, it may not be a realistic expectation that an increase in the supply of unskilled labour among beneficiaries would lead to an increase in the number of hours worked or let alone to an increase in employment status. It may be that the pool of the unemployed increases but people just cannot find work even though they have the time. In the broader literature, Gilbert (2004) raised the question whether the provision of housing subsidies in South Africa, Chile and Brazil is worth it given the conditions of high unemployment, widespread poverty and a huge income inequality. I echo this question on the basis of my finding. My finding is similar to that of Galiani & Schargrodsky (2010) but differs from that of Field (2003b) who found that titling in Peru led to an increase in labour participation. The mechanism and economic context in Field's study were different. In Field's case, titled households had significantly low tenure security at baseline that they had to have an adult member present at home at all times. In my study, beneficiaries already had considerably high de facto tenure security before the intervention because they were provided with services. Arguably in Field's study, the Peruvian economy could absorb an increase in labour

supply. Perhaps further research can be done in contexts where unskilled labour is on demand and where there is low unemployment.

With regard to the hypothesis that freehold titling may result in increased household per capita income, I find no evidence of this effect. The finding is also inconsistent with the hypothesis. Because I find no evidence of labour market participation, which is the main mechanism through which I expect the association to occur, it follows logically that there is no effect on income. I do not examine the other mechanisms, that is, investments in home businesses and increased home employment for members of the household because the dataset is deficient of these variables. Given the result, I suspect however that these mechanisms may not be working as expected. The finding should not be surprising because previous studies find similar evidence. My results are similar to Galiani and Schargrodsky (2010) who found no effect of titling on income in Buenos Aires. There is also a resemblance to those of Franklin (2011) who also examined neighbourhoods in Cape Town albeit with a larger sample of neighbourhoods. Franklin found no association between the housing subsidy and income but when he broke down the analysis by gender, he found significant impacts on income for female beneficiaries. These female beneficiaries were able to reallocate their time from home to the labour market. My findings differ from those found elsewhere (Field & Torero, 2006; Field, 2003b; Maura, Piza, & Poplawski-Ribeiro, 2011; Maura, 2011). In all these cases, an increase in income was preceded by an increase in labour market participation which did not occur in the case of Khayelitsha.

I further assess the hypothesis that freehold titling may result in increases in wealth, as crudely indicated by household durable items, because of the increased space, safety and the feeling of obligation by beneficiaries to fill up space with household items. I find no evidence of this. Although beneficiaries of housing subsidies have significantly more household items, none of this difference can be attributed to the housing subsidy. This could perhaps be attributed to the fact that beneficiaries already had enough space and such that they had no obligation to fill up the house as Meintjes (2000) expected. It may also be that they could not afford many of the assets. On average, households had a score of less than half out of the total possible score of 14 items. It may be also that the lack of increase in income affected the ability of households to furnish their houses. Another interpretation is that wealth takes long to accumulate and so it may be that this study came too early. Perhaps an assessment taking place at a longer time after treatment may reveal a different result. I also recommend that future studies use better more refined measures of wealth.

I moreover examine the hypothesis that freehold titling may result in improved health because of improvements in the housing environment. I find a modest but positive effect of the government housing subsidy on physical health among beneficiaries. We should expect that moving shack-dwellers to houses under the housing subsidy would improve their self-reported health by 10 percent. Although this subjective measure is the best measure available in the dataset, it is not deficient of limitations. We do not know how much of it may reflect the mood of the respondent on the day or time of the interview. I cannot tell whether this effect on health is long term or short term. Further, I cannot differentiate between the effects on chronic diseases and short term illnesses. Neither can the evidence extend to child health. The effect I estimate is for general self-reported health status, which has not been done before. The mechanism seems to be that the improvement in the housing environment as shown by the figures on access to piped water and toilets actually translates into better health. Shacks in Khayelitsha and other townships are susceptible to fire, flooding and dust; sources of respiratory and waterborne diseases. Once these are improved, health status improves. Previous studies have found positive effects of titling on health albeit on children. Positive effects of titling on short-term health (weight-for-height) among children but not long-term (height-for-age) have been found (Galiani & Schargrodsky, 2004); Vogl, 2007). The improvement however raises the risk of obesity among children in Peru (Vogl, 2007). Among adults, titled households have a lower occurrence of some chronic diseases although the actual mechanism through which this occurs is not evident (Gandelman, 2010). Future studies should consider examining the effects of titling on physical health among adults using a more objective measure such as actual physical medical tests observed by medical doctors at various points in time.

Likewise, I explore the hypothesis that freehold titling may result in improved psychological wellbeing. I find no indication that the housing subsidy has any effect on psychological wellbeing. Respondents reported moderately high levels of psychological wellbeing, reporting that they experienced psychological stresses some of the time to a little of the time. Because of the methodological shortcomings, my evidence is not conclusive because of the failure of the data to satisfy essential assumptions. The analysis nevertheless may provide an indication of the direction of the relationship. I am unaware of other studies that have been done testing this hypothesis in developing countries. Perhaps the reduction in some chronic diseases such as hypertension (Gandelman, 2010) could be related to reduced stress from

housing. In some developed country contexts, better health among homeowners is mediated by a perceived sense of control emanating from ownership of a house, which is a stable environment one can control (Manturuk, Lindblad, & Quercia, 2010). Further theorising and empirical studies should be done in developing country contexts to understand the relationship between titling and psychological wellbeing. This may be important and informative for understanding crime and violence particularly in poor neighbourhoods in South Africa.

Furthermore, I tested the hypothesis that freehold titling may result in neighbourhood stability because homeowners are more likely to remain in their neighbourhood for longer. I found no effect of having a housing subsidy on neighbourhood stability. In the first place, the neighbourhoods were highly stable with only 10 percent of the respondents reporting a move in the previous 4 to 5 years before the baseline and endline surveys. It is possible that shack-dwellers have not moved in anticipation of obtaining a housing subsidy. It is also possible that the reported movements out of the neighbourhoods obscure moves that occur when a household sales the house and moves back into a backyard shack within the same neighbourhood. Lemanski (2011:62) reported that up to 18 percent of houses have been sold by their original beneficiaries in Westlake village. The Western Cape Occupancy Study (Vorster & Tolken, 2008:13) estimated that about 28 percent of people living in subsidised housing were not the original beneficiaries. These neighbourhoods are in a high state of flux (Seekings, 2008a). Further studies are necessary to build knowledge in this area. For example, why is there a high state of flux within the neighbourhood but not between neighbourhoods? Another question that needs to be answered particularly in the context of South Africa is how long do beneficiaries live in their houses following the housing subsidy and which beneficiaries are likely to live long in the house? For example, many of the beneficiaries in Cape Town who originate from the Eastern Cape do not consider Cape Town as their home. In fact, they look forward to their return. Are other tenure options more cost-effective in this regard? Such are questions that need to be asked for the programme to improve cost-effectiveness.

Also, I have examined the hypothesis that freehold titling may positively affect citizen behaviour in terms of memberships in voluntary associations, civic participation, neighbourhood attachment and political awareness. I find no evidence of the effect of the housing subsidy on these outcomes. In fact, the direction of the relationship, although not

statistically significant, seems to indicate that shack-dwellers are better citizens. My interpretation of the finding is that respondents do not seem to have much of an economic or other stake in their neighbourhood. This is mainly because they did not participate in the process that brought about their houses. This may mean that they do not own the initiative and programme. During the process of beneficiary selection, many of the individuals were not involved in the negotiations. They were represented by committees. Many of the beneficiaries registered on the housing waiting list and when their house was ready, they were given a short induction and handed their keys. They did not expend much beyond the R2479 in order to obtain the houses. There are of course some who waited for over 25 years on the waiting list. My point however resonates with another study. In her study of Westlake village, a beneficiary community of housing subsidies, Lemanski (2008) found that there was no change in civic engagement after people became homeowners. She explained this in terms of the fact that residents had initially not been participants in the process of securing housing. This was a similar case for many housing beneficiaries who received housing through a top-down and not a bottom up process. In contrast, Oldfield (2000; 2004) in her study of the "Door-kickers" of Delft in Cape Town found that this group of invaders of government subsidised houses had developed strong bonds after they occupied, fought for and won their housing in the courts of law. Participation in the process of delivery is therefore an important feature for beneficiaries to have a stake in their houses and neighbourhood, which my respondents did not seem to have.

Although, like Lemanski (2008) I find no evidence of a socially viable community as intended by the housing policy, there are several caveats to my findings. The analyses I use for civic participation, neighbourhood attachment and political awareness are simple comparisons between the groups in the absence of baseline data. I do not control for unobserved factors. Therefore my study is inconclusive as to whether the housing subsidy has an effect on these factors. Also, the measures of memberships in associations at baseline and at endline had some differences in the items that went into the scales. Although the latent variable for these measures is the same, the two measures do not have the same internal consistency reliability. This means the measurement error of the difference-in-differences estimate is large.

Finally, I examine the hypothesis that freehold titling may reduce anti-social behaviour in terms of teenage pregnancies and proportion of school dropouts. Counter-intuitively, I find

that having a housing subsidy results in an increase in teenage pregnancies. Parents may not allocate more resources to education and monitoring of children because they may not have the financial resources to allocate in the first place. Also, with low levels of education, they may not have the kind of cultural capital to transmit to their children. Cultural capital can be defined as those cultural traits or behaviour that help people gain educational success with parental education being the an approximate measure (Sullivan, 2003:v; Bourdieu, 1986). I also speculate that a house may provide the privacy that is lacking in shacks for teenagers to engage in sexually risky behaviour. The shacks may provide a deterrent for teenagers since the shacks are very close together, rooms are small and the wall materials thin and unstable. My finding contradicts that of Galiani and Schargrodsky (2004) who found lower teenage pregnancies among untitled households. Caution must also be exercised in interpreting this result. The sample size at baseline was very small and this may have had an influence as the sample size grew larger. Larger sample sizes at baseline may help improve representativeness and generalizability.

I find no evidence that the housing subsidy reduces the proportion of school dropouts. In fact, the proportion of school dropouts was very high for both groups with only 30 percent of those above 18 having completed high school. Similarly, there may not be as many resources to allocate to education considering that the respondents belong to poor households, some of which depend entirely on government grants to survive. Some authors have shown that in some contexts, titling favours home investments by holders rather than investments in human capital as proxied by education and health (Gandelman, 2011). This means that even with scarce resources, education may not get as large a share of investment as we have hitherto thought. Future studies should look into the effects of titling on the allocation of financial and time resources in the household.

4.6 Conclusion

In this chapter, I demonstrate the effects of freehold titling and slum upgrading by presenting the effects of subsidized housing in Khayelitsha, a township in Cape Town, South Africa. I find that the effects of the housing subsidy are to improve self-reported health status by 10 percent and to increase the proportion of teenage pregnancies. With the results in this case study, I join scholars who argue that the assumed effects of titling on the poor are riddled with methodological challenges and have been exaggerated by both scholars and policy makers. My own data have many missing variables that would make my study truly holistic if

available. Some of the variables are different at baseline and endline making reliability of the measures a problem. The positive effect on physical health that I find is small and the measure is a subjective one relying on self-reported health. My study, like several other studies have not found meaningful economic effects. The effect of increased teenage pregnancies is counterintuitive and inconsistent with other studies in other contexts. The effects on citizenship are also tentative because the method of estimation is very limited in what it can say given the lack of baseline data. However, the analysis of qualitative evidence in the next chapter provides more insight into these findings and on more themes on the effects of real property rights in Khayelitsha.

CHAPTER 5

SUBSEQUENT EXPERIENCES OF HOUSING SUBSIDIES IN KHAYELITSHA, CAPE TOWN

5.1 Introduction

We have seen in Chapter 4 that housing subsidies have had little or no measurable impact on beneficiaries in Khayelitsha. Quantitatively, out of the twelve different effects tested for, housing subsidies were only found to improve self-reported physical health and to be associated with a higher proportion of teenage pregnancies. But what are the subsequent qualitative experiences of the housing subsidy and can we discern a clear distinction between those of beneficiaries and those of shack-dwellers on the basis of their property rights? If we can, then we can have evidence indicative of the idea that freehold titling has a qualitative impact on beneficiaries and that there is a qualitative difference between titling and the administrative recognition of occupancy. This chapter addresses these questions.

5.2 Data and Methods

To address the research questions, I use transcripts from 37 in-depth semi-structured interviews. I had conducted these interviews with household members who were part of both beneficiary and non-beneficiary households. Of these, 28 were with beneficiaries of government housing subsidies while 9 were with non-beneficiaries living in shacks. The head of household (in some cases a young adult from the survey) or young adult who is able to represent the household head was interviewed.

A two-stage cluster sampling technic was used for the selection of interviewees. To select my sample of non-beneficiary interviewees, I first identified the sections of Khayelitsha that were still shack areas and from which CAPS respondents were located. Beneficiary households were located in Khayelitsha Site B, Makhaza and Kuyasa. Non-beneficiary households were located in the AT-Section of Site C, QQ Section of Site B, TR Section of Site B and the SST Section of Town Two. I used the addresses from the CAPS questionnaires to select households located in these different sections, with 3 coming from the AT section, 1 from the QQ section, 2 from the TR section and 3 from the SST section. My sample of beneficiaries

was selected from among the beneficiaries who were part of my CAPS sub-sample. I selected 18 from the M-Section of Site B, 6 from Makhaza and 3 from Kuyasa and 2 RDP houses from Site C.

These in-depth interviews were carried out from June to September of 2011. We were a team of three. Almost all interviews were conducted in isiXhosa by two fieldworkers and a few in English by myself. I also participated in some of the isiXhosa interviews whenever a respondent could speak English adequately or through interpretation. The interviewers were experienced and had been trained to conduct this particular set of interviews before going into the field. Interviews with housing subsidy beneficiaries lasted an average of 30 minutes while those in the shacks lasted an average of 15 minutes. As expected, many of my interviewees moved into Khayelitsha after 1986. They originated from the rural areas of the Eastern Cape. The qualitative interviews complemented the findings in the quantitative analysis by providing thick descriptions and interpretations of the quantitative data.

My method of analysis was a thematic analysis which combined broad pre-determined themes that were used as topics under the interview guide (please see appendix 5) and those that emerged from each of the interviews. I first coded each transcript for emerging themes. Coding was done paragraph by paragraph. This means that the theme was coded according to what the interviewee referred to in the paragraph and not sentence by sentence. Since I had some pre-determined themes, I allocated the codes from the transcripts under each of these pre-determined themes. I then grouped the other emerging themes according to the umbrella themes. For the research findings, I selected the quotes that represented the typical view for a particular theme or ones that were closest to the typical view.

5.3 Findings

5.3.1 Characteristics

Out of the total number of interviews, 32 were female and 5 were male. There were more female respondents in my sample because as with many researches, women are more likely to be found at home during daytime. Women are also more accommodating to research workers than men. Households were generally composed of inter-generational and non-nuclear family relationships with a few being nuclear. Of the households sampled, many were female-headed households. Typically, a woman head of household lived with her children and grandchildren and occasionally with a niece or nephew. There were also instances where

siblings lived together, in some cases with their spouses. On average, the household size was five with that of interviewees from shack households being lower at four. The smallest size was two in a household where Sipho[11] a mother in Makhaza lived with her son. The largest household size was seven in the Madiba family which was composed of the father, mother, four brothers and a grandchild. They lived in Makhaza.

5.3.2 "Everything is not Right": The Poor quality of Houses

Interviewees were dissatisfied with the overall quality of the houses. According to my interviewees, besides cracking, the walls were not plastered inside or outside, the floor was not cemented and finished, the roofs had holes where the nails go through to attach it to the beams, there was no ceiling and doors were poorly fit, some of them with holes that one could see through. When it rained, the roofs had leaks and the walls became wet. They also were not happy about the toilets being located outside the house. Zanele came to Cape Town in the 1980s to find a job. She settled in Site C Khayelitsha. Subsequently in 1991, she was allocated a serviced site in Makhaza. She later received a housing subsidy and her house was built for her around 2000. Zanele's expectations about her house were dealt a blow when she received something different from her envisioned house.

> **Researcher:** The house you received, was it built the way that you were expecting?
> **Zanele:** My house was not built the way I was wishing that it could like be because this house was not cemented in the wall, no ceiling board and also the toilet is outside everything is not right, like if it's raining there are drops of water that are getting inside the roof.
> **Researcher:** What is the difference between living in a shack and in a house?
> **Zanele:** The difference is not that much because the shack leaked too much but the house does not leak more than the shack but there are drops where the nails are joining the asbestos.

Zanele envisioned that there would be a marked difference between her shack and her house but the difference is small, which she measures by saying in a shack it leaked more while in her house it leaked less. For Zoleka, it is the incompleteness of her house that frustrated her. Zoleka came to Site B in 1992. When her son was stabbed to death by gangsters a few days after coming from the Eastern Cape, she bought a shack on a serviced site in another area of Site B. This is where a new house was built for her and in 2003, she moved in. Zoleka

[11] I use this and other pseudonyms to protect the identity of respondents on the Cape Area Panel Study and those I interviewed in Lusaka.

expressed frustration that she had to do a basic thing as cementing her own house when it was supposed to come cemented like any other housing unit.

> **Researcher:** oh...you bought this while it was still a shack?
> **Zoleka:** yes... They said that this is 42 square meters that has no toilet, leaking when it is raining...what I can say is... It is leaking. There's no ceiling, and the cement...people were given cement to cement for us, they didn't, I hired people to cement for me.

Some were frustrated that they are still not completely protected from the elements. For example, Sipho was a mother of one who came from Greenpoint in 1991 to live at a serviced site in Makhaza. She obtained a house in about 2002. In addition to incompleteness, it is that the house cannot protect her against the elements such as wind and accompanying dust that she is frustrated about. Khayelitsha is located on sandy land which blows with the strong South-Easterly wind that Cape Town weather is reputed for among residents and visitors.

> **Researcher:** Are you satisfied with the way that your house was built?
> **Sipho:** Not at all like for instance when it's windy up there you can see when the wind is blowing, all the sand is coming right on my hair and you can see there, I did cement on my own and if I can close that door you can see all the walls. I did complain about that but it's not fixed and I'm not really satisfied.

For Simphakazi, she fears for her life that the wall of her house could collapse and fall on her and her three children and grandchildren. Simphakazi's story is bittersweet. She came from the Eastern Cape to come and visit her children in 1997. Her children were living at the backyard shack of a shack that was on a serviced site. She fell in love with the gentleman who owned the site and they soon got married. A few years later, her husband received his housing subsidy and the house was built for them. Unfortunately her husband passed away a few months before we interviewed her. She appreciates living in her house but points out many of the shortcomings.

> **Researcher:** What is the difference living in a block house and in a shack?
> **Simphakazi:** The difference is that in the shack it is raining. When it is raining also the wind blows and no matter how you fix it, it never becomes secured. Whether you put a plastic covering on top of it, or there is something else you will find it is wrong. The block house is much better even though mine was not built properly because they left it without plastering it and even if it is raining the rain runs through the block wall. And I always say if my house was built by this organization which is building now, it would be better. Sometimes I am worried that maybe this wall will fall down one day when it is raining because you will find that the wall is wet.

In general, the houses were given to my interviewees in an incomplete state and many had to use their own limited financial resources to complete their houses. Several of them have failed to do anything about it. They have accepted to live in the houses which offer better living conditions than the shacks, even though they feel conditions could be better for them and their families.

This finding relates to the broader issue of the often high expectations of not just high quality houses but also other aspects of the formalisation process. Beneficiaries have the unrealistic expectation that such projects will solve all their problems. My interviewees' expectations for the new houses were high but were disappointed by the quality of houses that they received. Elsewhere, Ross (2005:633) has demonstrated in her case study of The Park and The Village that in their imagination and ideational constructs of the new houses, people hoped that the new houses might restore some decency, dignity and respectability to daily lives that were undermined by poverty, everyday humiliation, mobility and violence. This seemed to resonate with the expectations of my interviewees as well.

It is however no surprise that my interviewees complained of the poor quality of houses as other studies collaborate this finding. Initially, households qualifying for a housing subsidy were given a serviced site that they would own. The remainder of the subsidy would go towards the building of a rudimentary structure that would be incrementally developed upon by the beneficiary (Tomlinson, 2006). Many scholars have similarly found that low-cost houses in South Africa were both poorly located and poorly built (Bond & Tait, 1997; Bond, 2000; Huchzermeyer, 2003; Thring, 2003). As a result, houses built after 2004 have been much bigger and stronger under the Breaking New Ground policy (Republic of South Africa, 2004).

Future research should go into the expectations that potential beneficiaries have toward the intervention.

5.3.3 "People are not working especially in this area": Unskilled and Unemployed

It is held that the provision of real property rights can have an effect on labour market participation through increased access to credit and increased tenure security (Durand-Lasserve and Selod, 2009). On this basis, we should expect better experiences of employment from beneficiaries of housing subsidies compared to shack-dwellers. Do we find this to be the experience among my interviewees? The answer is no. My interviewees from beneficiary

households were unemployed, did menial jobs on part time if employed or were trying out in business in order to eke out a living. They worked part time as casual workers, sold illicit alcohol from their houses, while a few worked on a full time basis. There was no difference with those in shacks. Those who worked were employed as taxi [local minibus] drivers, domestic workers and casual workers in heavy industries or in the services sector, especially in supermarkets and restaurants. Those who were unemployed were mainly the youth who had completed high school or those that had dropped out of school. The families of those who had completed high school could not afford to take them for tertiary education. As I walked around the streets during weekdays, I saw unemployed youth chatting in groups while sitting in the sun along the streets. Those who were elderly were either living as pensioners or surviving on old age grants. Mothers were surviving on the child support grants.

Many of the beneficiaries of housing subsidies depend on pensions. Bakhulu was a 62 years old mother and grandmother at the time of the interview. She came to a serviced site in Site B around 1994. Before that, she lived in a shack covered with Railway tents in Site C Khayelitsha. She only remembers that she got the housing subsidy after 2000. Bakhulu describes how she depends on an older person's grant while many people have no jobs, receiving false hope from the government and other organisations. Here is her narrative.

> **Researcher:** Who is assisting you to raise these children?
> **Bakhulu:** It's only me who was working until I was sixty two years old but now I am not working.
> **Researcher:** Are you receiving an old age pension?
> **Bakhulu:** I only started to get my pension from two years ago when I turned sixty years old.
> **Researcher:** Do you have people in this community who are helping other people with jobs?
> **Bakhulu:** No we do not have… People are not working especially in this area. If you look going down the street people are not working and if you move to the other streets you will find people sitting in the sun, there are no jobs. If they are going to look for a job they just leave their CVs and are promised to be called but they will wait until the end of the year.
> **Researcher:** These promises, are they coming from the government or from those business people who are running businesses?
> **Bakhulu:** These promises are from all over we have been to submit our CVs in parliament but it's almost three years now we have been waiting for the responses. They said that they are going to get work for cleaners but until today.

Bakhulu's impression is that there is high unemployment and that opportunities for employment are scarce. The City of Cape Town estimates that of the entire Khayelitsha

population of approximately 410,000 people, the active labour force is 52 percent and 51 percent of that active labour force is unemployed (City of Cape Town, 2008). This means there is a high dependency on those who are employed. Qualifying for one of the grants is therefore a fortunate occurrence when one loses a job. Bakhulu was fortunate to qualify for the older person's grant two year before she stopped work. Depending on one's circumstances, the South African government has put a maximum ceiling of R1,200 per month for the older person's grant, which Bakhulu calls old age pension because that was what it was formerly called. One qualifies for it at age 60, with income less than R44, 880 per annum and ownership of assets worth less that R752, 400 if not married and less than R1,504, 800 for a married couple.

Many depend on social services and others can be referred to as the disgruntled unemployed. Zanele lost her job and now survives on money from her children's child support grant. Her elder son lost his job and decided to leave Cape Town, apparently disgruntled.

> **Researcher:** How are you surviving in this house?
> **Zanele:** Hey… it's difficult since I have lost my job so now I'm surviving with the money for social services because my children are getting child grants.
> **Researcher:** Of those children that you have, how many of them are working?
> **Zanele:** It's only Vuyolwethu who was working but after he lost his job, he decided to go back to Eastern Cape to his uncle.
> **Researcher:** The ones that you are left with, are they not working?
> **Zanele:** They are not working because they are still young.

Both Zanele and her elder son found it difficult to support themselves after losing their jobs. The nature of the jobs they did were short term, unstable and were not a steady source of income. That lack of stability can be a source of frustration as in the case of Zanele. Zanele was however fortunate to have children who were below the age of 18 when she lost her job because she could then get the child support grants which were stable streams of income.

5.3.4 "People do not have money. And all people want money": Income and Deprivation

As the hypothesis holds, we should expect differences in experiences of income following titling because of increased labour market participation, home-based investments and access to credit. My evidence suggests that this is not the case. Over a decade after obtaining their houses, income deprivation remains a constant reality for my interviewees who benefitted from housing subsidies. It is the same for my interviewees in shacks. There is a common

identity around deprivation as people know that they and their neighbours are financially deprived. Considering the occupational status of many of my interviewees, it was not surprising that financial deprivation underlies their narration on many aspects of their identity and experiences. Indeed during their applications for housing subsidies, households were required to satisfy the condition that they earned less than R3,500 per month.

A summary of the situation among beneficiary households is succinctly described by Bakhulu introduced above. She feels that she cannot turn to anyone in the neighbourhood because people do not have money.

> **Researcher:** If you had financial problems and you needed money to do some other things, is there any one you can turn to?
> **Bakhulu:** People do not have money. People are not working, they have a lot of children in the house and its only one person who is working so it's hard to borrow someone money these days. There are no jobs available and all the people are looking for money.

By saying people do not have money, Bakhulu means they do not have money most of the time and that they can barely afford to survive. Similarly for my interviewees in shacks, Nozuko describes the situation. Nozuko came to Cape Town in 1988. They lived in Crossroads for a short time before moving on to the QQ section. They built a shack and have lived there since. They tried many businesses and failed at many of them and now run a shebeen from their shack. Nozuko describes the state of deprivation in their neighbourhood as having nothing.

> **Researcher:** If you need financial assistance, who helps you in this neighbourhood?
> **Nozuko:** I go to my brothers in Khayelitsha
> **Researcher:** Why don't you go to your neighbours?
> **Nozuko:** My neighbours are poor like me. They are like me because they have nothing.

Income deprivation is so severe that some entire households depend on the child support grant. Thembi joined her husband in 1998 to come and live in Khayelitsha Makhaza from the Eastern Cape. Her husband had received a government housing subsidy. She is now a widow taking care of two grandchildren. She runs a household that depends on grants for her two grandchildren. At the time of the interview, the child support grant was R250 (US$30 2011 dollars) for every child below the age of 18 years. This means that the entire household lives on less than R16 (US$2 a day) or R5.36 (US$0.67) per person per day.

> **Researcher:** So now who has been working for this household at the moment?
> **Thembi:** No one is working in this house now.
> **Researcher:** How are you surviving with your grandchildren in this house?
> **Thembi:** We are surviving with the child grant.
> **Researcher:** What about you, are you not getting an old age pension?
> **Thembi:** No, I am not yet receiving it.

Similarly in shacks, the Nandi household had until recently depended solely on Mr Nandi's disability grant. Mrs Nandi was 30 years old at the time we interviewed her. She had come to live in the AT-Section of Site C in 1999 and got married to her husband in 2004. Mr Nandi was living in Kraaifontein at the time but they decided to live in Khayelitsha after they married.

> **Researcher:** Who is working in the household?
> **Mrs Nandi:** My husband is working but he has not been working for a long time, he just started recently because he is getting a disability grant.
> **Researcher:** Does he have a health problem or is he permanently disabled?
> **Mrs Nandi:** He has a health problem.

For one interviewee, the severity of deprivation has led him to contemplate suicide. Mr Stevens is an elderly husband, father of three and grandfather of one, who came to Cape Town in the 1980s and settled in Khayelitsha Site B. Later in 1994, he was offered to move to a serviced site in Makhaza where he soon moved to. He received a housing subsidy and his house was built in 2000. Mr Stevens feels that the change in his life, having lost his eyesight, job and means to a living resulting in financial deprivation is sometimes too hard to take.

> **Researcher:** To wrap-up all that we were discussing, generally... you said your life has been changed; it's not the same as the time you were working.
> **Mr Stevens:** Yes totally changed, and I also sometimes think of committing suicide. Sometimes that thing comes into my mind. But when I think again, if I leave all my things behind and my children, who is going to look after them and I stop myself by hoping that God is going to make a plan
> **Researcher:** Yes father, suicide is not a solution and you will find a plan.
> **Mr Stevens:** Yhaaa I am also listening to the radio. They say that when you have a problem, don't even think about killing yourself. And I also look back when I was growing up as a young man I used to see those who commit suicide as being stupid.

Mr Steves felt powerless and ill-equipped to deal with deprivation. Having lost his sight, he could not perform in his occupation as a driver. He feels that his condition is beyond his strength and can only be resolved by God.

The broader economy here remains an important challenge to increased income and employment. Gilbert's (2004) question referred to in Chapter 4 on whether the provision of housing subsidies in South Africa is worth it given the conditions of high unemployment, widespread poverty and a huge income inequality remains crucial. If the broader economy remains as it is, it may be unrealistic to expect housing subsidies to make a difference in the lives of beneficiaries.

5.3.5 "Some people have become high class": Home Improvements and Status Differences

It is held that land title provides an incentive to improve dwellings. Indeed housing subsidies came with unfinished houses and some extra land on the plot for beneficiaries to extend their dwellings. Did I find that this was the case in Khayelitsha? The answer is in the affirmative and it came with some unintended consequence. Interviewees felt that status distinctions that did not exist among neighbours when they lived in shacks had developed after they obtained their RDP houses. Interviewees gave three main reasons for this occurrence. The first reason was that some residents felt they belonged to a higher status than other residents who still live in standard RDP houses because they had bigger houses either as a result of adding some money on top of the subsidy or extending their RDP houses after they had obtained them. As I went around the neighbourhood, I found that many residents and some of my interviewees had made extensions and improvements to their houses.

Figure 5.1. A Shack on an un-serviced site in Khayelitsha Site C

Figure 5.2. A house obtained through a housing subsidy in Kuyasa

Figure 5.3. Extended house obtained through a housing subsidy

To those that had not extended, the clear differences in size and appearance of dwellings represents conspicuous consumption. Conspicuous consumption in this context is a marker of status. The second reason is that some people just saw themselves as being better than others

and this was perhaps because of differences in lifestyles. In this context of deprivation, carrying plastic bags containing groceries from local supermarkets can attract attention, as we saw. The third reason was that some people just stopped participating in the common practices they had when they lived in shacks, such as sitting in the sun and chatting with neighbours. A typical example of interviewees that observed the emergence of conspicuous status distinctions was Mamela's narrative.

> **Researcher:** What was your relationship like with your neighbours when you were living in a shack compared to your present relationship?
> **Mamela:** It was not like...when we were in the shacks we had a solid relationship, more than here. Now there are those who are high class, who look down on others
> **Researcher:** why do you think that is? Why do you think that people in houses are becoming high class than people in the shacks?
> **Mamela:** I think...I think people once they get brick houses they become high; you only see them going out at times and in the shacks we used to sit in the sun and chat
> **Researcher:** oh...so they don't do that here in the houses...
> **Mamela:** they do it, but not like when we were in the shacks.
> **Researcher:** Your neighbours who you moved in with, has your relationship remained the same, or has it changed?
> **Mamela:** They have changed
> **Researcher:** why did they change, what did they do that they didn't do when you first moved into the houses?
> **Mamela:** They are not like before; even visiting they are not visiting like before
> **Researcher:** why do you think that is?
> **Mamela:** I think they are high, its brick houses; because now they live in brick houses and not in the shacks
> **Researcher:** You got along when you obtained houses...why do you think they changed?
> **Mamela:** I don't know... [long pause]

It seemed to me that besides the conspicuous differences in size of houses, Mamela and the others who felt this way were picking up non-verbal clues which they concluded represented class distinguishing behaviour. This is because they expressed uncertainty in a similar way as observed in the above quote where Mamela says "I don't know" followed by a long pause. Similarly, in the quote below, Zoleka expressed this uncertainty but still suggested that she observed the conspicuous distinguishing features of house size.

> **Researcher:** Tell me about relationship with your neighbours you moved in with...do you still get along or has the relationship changed?
> **Zoleka:** No, it's not like before to some people...

> **Researcher:** why do you think it's...it's not like before...
> **Zoleka:** I don't know, I really don't know why...because they also don't know, but they have noticed that ever since we moved into these houses some people are very high – are looking down on other people.
> **Researcher:** Do you think that relationships changed because you are now in houses, or did they change while you were living in shacks?
> **Zoleka:** We were all getting along when we were in shacks. Everybody says, "Ever since we had these houses we feel very high", it was nice when we had shacks.
> **Researcher:** Do you think that it's because of...
> **Zoleka:** Maybe it's because we are not equal, people have bigger houses than the others and have a lot of things in their houses than the others...I think that's the problem.

Zoleka says she really does not know but yet goes on to attribute the state of some of her relationships with neighbours to the bigger sizes of houses that some of their neighbours have. However, it might just as well be that Zoleka and others such as Mamela were jealous that their neighbours were conspicuously doing better. Since neighbours considered that they were a homogenous group because they had a common history of persecution under apartheid, a common origin from the Eastern Cape and common origin from shacks, similar occupational and social class, jealousy and gossip seemed to be a reasonable response when divergences emerged. There were some of our interviewees who had extended their houses who felt that they did not want to interact with many of their neighbours because there was a lot of jealousy and gossip in the neighbourhood after they had extended or improved their houses. This was the case for Noluthando who felt that some of her neighbours were jealous of her house.

> **Researcher:** Can you tell me about the relationship with your neighbours, while you were living in a shack and now that you are in a house?
> **Noluthando:** We are living very nicely...I would say because...my best neighbours is the one in front and on the other side, there are those you see sometimes that they are jealousy about your house – you see, the way you have improved your house. But I don't want to lie...these two we are living very nicely with them.

While the provision of real property rights can be a driver of housing improvements, in this case limited space in the shacks is a limiting factor. The land available for extensions in shacks is too small because of crowding. However the nature and extent of the housing improvements I saw in Khayelitsha would not be possible in shacks. Such improvements as those in the pictures bring out clear distinctions between beneficiaries. It is no wonder there was jealousy and gossip.

The themes of jealousy and gossip have been found to be prevalent among residents of black African urban neighbourhoods in Cape Town and Johannesburg (Ross, 2010:160-163; Bray et al., 2010:108; Ashforth, 1998). Amidst widespread poverty and deprivation, conspicuous expenditure and consumption can prompt hostility as residents become suspicious as to why their neighbour is doing better than they are. It appears that among my interviewees, the socio-economic disparity that latently existed at the time they lived in shacks gave way to conspicuous differences which they were only able to see following their obtaining of houses. The reaction from those less endowed with financial resources was that of jealousy and gossip.

5.3.6 "I was selling the same things I am selling now": Home-based Investments

Is there a difference in home-based investments now that interviewees have freehold title and live in brick houses? The answer is no. Many of my interviewees in RDP houses do not conduct any business from their houses, some do while others had started businesses for a short while and then stopped for various reasons. Those that did not run businesses or had stopped cited finding starting capital as their main challenge. Of the few that conducted businesses from home, Zoleka, Sefiso, and Nkhosi used to operate shebeens or illegal taverns. Zoleka stopped because she operated without a license but started selling vegetables and meat, which she was still doing at the time of the interview. Sefiso stopped because the shebeen took away the dignity of her house and she felt that it was not right for her as a Christian. Nkhosi who had come to Site C in 1994 and now lives with her children in Kuyasa used to run a spaza shop [grocery store] and shebeen while living in the shack. Once she moved into the RDP house, she had put the business on hold because she did not have enough space. Lezola, who came from Nyanga to Site B and now lives with her husband, children and her sister, had a sewing machine. She waited every day for her neighbours to place orders for dresses. The others did not conduct their businesses of selling potato chips and vegetables and meat from their house but did use their house for storage and preparation. Some narrated how they used to run businesses while living in Eastern Cape but stopped because of the move to Cape Town. Others such as Mamela, who obtained her house in 2001 and lived with her husband and children in Site B narrated that they had started and used to run a business of selling potato chips from their new home but when they took a trip to the Eastern Cape, they did not resume following their return.

Location seems to matter less than financial capital for business as there was no evidence that my interviewees started doing business when they obtained their housing rather than before when they lived in shacks. Those that did business while in the new houses also did it in the shacks. Those that did not do business in the new houses did not also do it in the shacks. Few had started businesses after they moved into their houses and they did not attribute the starting of their business to moving into new housing or because of title deeds. In the case of Zoleka, she even suggests that her business did better when she lived in the shacks of Site C than in Site B where her house was built.

> **Researcher:** What businesses do you conduct in your house?
> **Zoleka:** I conducted many businesses. I was selling alcohol – and the business was going very smooth before the law became very strict about licences...
> **Researcher:** oh...
> **Zoleka:** it was going very well, but when this thing of licences came I stopped, as having a licence you need to have a lot of money; but I was uhm...I was also selling vegetables and everything
> **Researcher:** have you stopped selling everything?
> **Zoleka:** I stopped selling alcohol completely; I'm now selling vegetables and meat.
> **Researcher:** do you see any gain on selling those...?
> **Zoleka:** No, it's not going well because now a lot of people are selling in this area, but at first I was the only one selling here.
> **Researcher:** Did you conduct any business when you were living in a shack?
> **Zoleka:** This one...I was selling the same things I'm selling now. I started there and my people followed me and it was going very well before coming here. My business was going very well before I came here that's why I say life in the shacks was much better than here...
> **Researcher:** Why do you think that your business was running well in the shacks than here?
> **Zoleka:** People who do business were not as many by then, and now almost everybody is doing business. For instance I think most of us in this street are selling one thing (Same thing) and that is not business. Now I am starting to sell clothes, I'm going to see how it goes...I just started.

It was a similar story in the shacks. For instance, Thabo was a gentleman who moved to the SST section of Site C in 1993 and still lives there with his wife and three children. He is on the waiting list hoping that one day he will also benefit from a government housing subsidy. He runs a shebeen and does tailoring from his shack. Below is our conversation with him.

> **Researcher:** Do you conduct any business in this shack?
> **Thabo:** Yes I am running a business of selling alcohol.
> **Researcher:** How long have you been running this business?
> **Thabo:** I have got five years now.
> **Researcher:** Have you ever worked before?

Thabo: Yes I was working in Bellville in 1993 and I have not found any job since that time.
Researcher: When you look at your business how is it doing?
Thabo: It is doing well but I need the money to make it stronger.
Researcher: Have you tried to borrow money from a bank or loan shark to make it stronger?
Thabo: I have tried at First National Bank [FNB] but I failed because they want me to have security so that they can give me the money unfortunately I do not have even a cent in my account
Researcher: Do you have any other ways of making money apart from this business?
Thabo: I have one; I am doing some sewing in the shack when I am not busy.
Researcher: What kinds of clothes are you sewing?
Thabo: I'm good in everything, I am doing women's dresses and if a man brings his trousers to fix, I do that.
Researcher: Have you done any course for sewing or you just learned from someone or perhaps you saw it from your grandmother?
Thabo: I was always sitting next to my grandmother when she was sewing and I learned.
Researcher: What do you use now?
Thabo: I'm using a machine.
Researcher: How long have you been using this machine?
Thabo: It's been a long time but the problem that I am facing is that people don't pay when you have done something for them.

In general, it did not matter that interviewees lived in brick houses or shacks in order for them to start a business but that they had the capital. As seen in both our interviews with Zoleka and Thabo, interviewees living in shacks and those living in RDP houses run similar businesses. At the time we were interviewing them, these interviewees had tried several businesses both while living in the shacks and in the RDP houses. Location does not seem to be the problem for establishing a business in these neighbourhoods. Source of capital was the problem as seen in Thabo's encounter with getting a loan at FNB. If source of capital was not a problem, getting customers presented a challenge in this low income community. Such was the case for many who tried several businesses. Mahala's case paints part of this picture.

Mahala was the niece of the head of the household when we interviewed her. She had come to Cape Town from Tshebe Location in the Eastern Cape to join her aunt in 2000. At that time, her aunt was still living in a shack on the same serviced site in Site B. When her aunt obtained the housing subsidy, they built a backyard shack for her where she sleeps with her two children but is very much a part of the household. Her cousin, who lives in the house works part time for Jet Stores, a chain of stores that sells its own clothing label. She does not work and depends on plaiting people's hair for a fee.

> **Researcher:** What are your cousins doing now?
> **Mahala:** My brother [male cousin] the one that I am living with now is working for Jet stores.
> **Researcher:** What about you?
> **Mahala:** I am self-employed doing hair but I do not have a place where I can say it's my salon. Each person who comes I just use my shack to do her head.
> **Researcher:** Now that you are doing hair, are you having enough profits or its just smaller money so that you can buy something to eat?
> **Mahala:** Brother, it's just to get something to eat because business is not dependable and this place is not right for business. I wish to have the right one, something like a container or a shack that the people could identify as a salon in a busy place.
> **Researcher:** Do you have times when you have been in need of financial help?
> **Mahala:** We have those times and its worse when there are times that there is not even one person who comes to ask me to do her hair so that I can buy something to eat and its worse. I depend on that hair for that money. At the same time my brother is not working fulltime hours and he ends up getting peanuts at the end of the month.

Mahala clearly enjoyed plaiting people's hair but the business hardly gets customers because many people in the neighbourhood do not have enough money to spare for their hair dos. Like many people who were trying out in these small businesses, the main problem was getting customers and if one had customers, getting customers who pay. Many businesses pursued by beneficiaries have failed because customers were getting products or services on credit and did not pay. Eventually the businesses collapsed.

5.3.7 "… this house does not have enough rooms": No Room to Let

Continuing with the theme of investments, the use of a house as a source of income through renting out a room to tenants is a widely recognised way of generating income which was legally at the disposal of my interviewees from households of beneficiaries. However, none of them rented out any of their rooms or houses. Not even backyard shacks were let out to tenants. Rather, backyard shacks were occupied by older children or extended relatives and in some cases to strangers who needed a place to stay for a while. When asked whether they thought of getting tenants, interviewees answered that there were not enough rooms, that they were avoiding fights with tenants, that tenants can bring things such as witchcraft which one would not like, and that they had intentions of letting in the future.

The average household size of five could barely be accommodated in the RDP house, let alone allow for letting a room. In her house, Liliane lives with her husband, children and

nephew in Site B. She came to Site B Y-Section from her shack in W-Section in 1993 to join her husband when she got married. Her household obtained a government housing subsidy in 2002. Given the size of her household, she feels there is not enough room for her to let out one because the house is too small even for her family.

> **Researcher:** Have you ever thought of using one of your rooms to rent out so that you can make some money?
> **Liliane:** No, I haven't thought about that because even to us this house does not have enough rooms.
> **Researcher:** It's too small for you?
> **Liliane:** Yes it is small.

Similarly, the Mpepeto household is too large to be accommodated in the RDP house such that they had built two backyard shacks; one for a married son and the other for the unmarried one. They however plan to rent out a room in a backyard shack once one becomes available.

> **Researcher:** Have you and other members of the household not been thinking about other means of making money by renting a room or shack at the back so that you can have extra cash.
> **Mpepeto:** We have two shacks at the back the one which was used by me, my father is planning to rent it out when I have moved to Makhaza so that they can have some money. The other one is the one which is used by my brother and his wife. Inside the house its only two rooms that is for my father and my sister.

Conversely, though the Madiba household have a large eight roomed house that can accommodate a household size of seven, they have a different reason for why they do not want to let out a room. The Madiba household came from the Eastern Cape and settled in the YB Section of Site B. This was not a serviced site. In 1993, they were moved to a serviced site in Makhaza. After registration, Mrs Madiba got a government housing subsidy. The family took the option of adding money to be built a bigger house with extra rooms. They opt not to rent out a room because Mr and Mrs Madiba want to avoid quarrels. They feel that there can be fights with tenants, possibly because of potential defaulting on rental payments.

> **Researcher:** Have you not thought of using this yard to rent it out or one of the rooms so that you can make some extra cash?
> **Fiona Madiba:** My parents do not want that because what is happening you have an agreement with the people who rent the room or yard but you end up fighting.

Even with extra room, some interviewees opted to assist people with accommodation rather than rent out to them. In the case of Mr Stevens, he had backyard shacks in which he allowed two ladies to live there without paying rent. Even after they left, he had not put any tenant and had not even planned to later on.

> **Researcher:** Other people say because I need money and I have huge land, let me rent out a plot. So have you thought about that?
> **Mr Stevens:** No, I have not but there were two girls who were living at the back yard but we did not give them the place so that we can have rent and they were only staying for a few months.

Even though Mr Stevens needed money as evinced by the poor financial circumstances we found him and his family in, during the interview he was indifferent about letting out a room or backyard shack. This indifference about letting out a room was expressed in many of our interviews.

I find no difference between housing subsidy beneficiaries and shack-dwellers in home-based investments. Businesses are not exclusive to housing subsidy beneficiaries. Renting out is seemingly not a priority nor possible given that many with large household sizes are unable to accommodate their households in their housing units. Elsewhere, Boudreaux (2008:313) in Nyanga (Cape Town) found that formalisation via titling provided benefits to freeholders in the sense that title-holders invested in improving their homes, which raised the value of the home. In turn, home improvement projects provided entrepreneurial opportunities for a wide variety of local artisans. She found that some title-holders used their homes as secure places of business, generating income that residents use to support themselves and their families. Boudreaux's study was a cross-sectional study however. It also did not have a control to show whether such activities investments did not occur prior to titling. In this study, I find that even when my interviewees were living in the shacks and it was illegal under their occupancy terms to conduct any business, they still engaged in such investments. It does not seem to matter that one has real property rights or only occupancy rights for them to engage in home-based investments. Banerjee (2004) in India however finds that formalization increases investments in home-based activities. The results seem to be contextual.

5.3.8 "…how can I borrow people's money? How am I going to pay it back?" Title does not Mean Collateral

Does titling lead to the use of the land and house as collateral to access credit as the hypothesis suggests? According to my interviewees, the answer is not really. In spite of not having capital, all interviewees but one did not use their RDP house as collateral to get a loan, and those in shacks could not either. Even when some interviewees needed the money for completing their houses, they did not use their houses as collateral because of three main reasons. Firstly, many interviewees were not aware that they could use their house to get a loan. Many had never heard of it before. Secondly, some of them feared that should they get a loan by using their house as collateral, they would lose their house because of the risk that they would not be able to repay the loan. The final reason was that some of them were working and felt that they did not need to get a loan.

Zoleka and others she mentioned to us had obtained several loans to complete and extend their houses from the Kuyasa fund. Even then, the title was not the only requirement. She could also not obtain the loan by using the house as collateral alone. She was required to provide payslips. She used payslips from her daughter who was a police reserve. The Kuyasa Fund is a South African non-profit micro-finance institution that provides micro-credit solely for housing to the marginalized, those in informal employment, women and pensioners (Mills, 2007:458). According to their website, by 2011, the Kuyasa Fund was providing loans worth up to R10,000 to people earning less than R3,500. The Kuyasa Fund expected that clients would use the loans for renewable energy products such as solar water heaters, stoves, and lamps along with general renovations such as tiling, tubing, electrification, plastering, painting, fencing, flooring, and structural extensions. The criteria for awarding loans were that clients needed to have a South African ID, a payslip or proof of income if informally employed or remittance dependent and a title deed, proof of savings and a bank account. Here is Zoleka's narrative.

> **Researcher:** Are you aware that you can use your house to obtain a loan?
> **Zoleka:** Yes, you know Kuyasa; Kuyasa is helping us...
> **Researcher:** What does Kuyasa help you with?
> **Zoleka:** Kuyasa cannot lend you money if you don't have a house...
> **Researcher:** ok...have you obtained any loan at Kuyasa and used your house as security?
> **Zoleka:** yes I borrowed money...and they need your house title deed. But now Kuyasa don't lend people who gets pension grant...Kuyasa do not want people who live in a shack – but people with brick houses

Researcher: so uh...you give them your house title deed?
Zoleka: This is something new, we don't normally do that, we used to get it without title deeds I only realise that when I went to get a loan for my daughter...I had to bring my title deed.
Researcher: What happens if you fail to pay the loan?
Zoleka: I never failed to pay because I was working...
Researcher: I mean...do you have someone you know who got a loan from Kuyasa and failed to pay the loan, and what happened?
Zoleka: No I haven't seen any...but all of us in this neighbourhood are getting loans from Kuyasa and we pay well.
Researcher: What were you going to use the money for...if I may ask?
Zoleka: I was going to put ceiling and geyser...but I haven't bought the geyser yet because of my poor health, I think I'm tired from working...
Researcher: were you also working?
Zoleka: I was working, when I started borrowing from Kuyasa, I was working.
Researcher: How many loans have you obtained from Kuyasa?
Zoleka: Wow! What can I say? Kuyasa is the one that built for me. I extended this side of my house with the money from Kuyasa
Researcher: you didn't get a loan only once...
Zoleka: many times, there were people like Bright and Mandisa whom they say now were fired.
Researcher: And...you say most of homeowners here are borrowing money from Kuyasa...?
Zoleka: All of us here...the only thing now is that Kuyasa do not accept pensioners, you need to have a child who is working to go and stand for you – that's why the geyser failed. Because you cannot rely on the youth as they work now and stop tomorrow. The only child I relied on was the one who is a police reservist.

Though many had tried to get a loan and failed, one interviewee in the shacks – Sibongile – could not use his shack to get a loan but was able to access a loan to start up a small business and fix his shack. Sibongile arrived in the QQ section of Site B in 1996 from the Eastern Cape. He first lived with his mother who had come earlier in 1992. He moved because he wanted to become independent. Since he was getting married, he decided to buy a better shack than he had built. He also wished to start up a business. He bought a shack and when he did not have any more money to finish it up, Sibongile got a small business loan of R3,000 from the First National Bank (FNB). He used part of that money for burglar bars and other house needs. He accessed this loan based on his relatively stable job and not his shack.

Researcher: Have you ever got a loan for business or other purposes?
Sibongile: Yes I made a loan
Researcher: Can you tell me more about what the loan was for, and where did you get it from?

> **Sibongile:** I got it from FNB after I bought this house. I bought it because...I wanted to buy a fridge, but I didn't have the money, I spent all my money on buying this house.
> **Researcher:** how much did you buy the house for?
> **Sibongile:** I bought it for R3, 800, but other things were not here...things like these fridges and all that, burglar gates were not there. I borrowed a loan of R3000 at FNB
> **Researcher:** and how do you pay it...monthly or...?
> **Sibongile:** I pay it every month, my monthly instalment is R417.

In general, there was not much of a difference in accessing loans between living in a shack and in an RDP house. Having a steady job or flow of income was the most important criterion. Residents in RDP households could not borrow against their house because they did not know that they could. Where they knew, they did not want to risk losing their house. Like in shacks, even when some expressed interest, they did not meet the criteria in South African banks and only met two criteria for the loans provided by Kuyasa Fund; that of a South African ID and a title deed which was not enough. They needed a stable job.

In the broader scheme, my finding contributes to the growing evidence that titling may not be associated with access to credit because title-holders fear losing their property and the market is reluctant to lend to such high risk clients. My findings corroborate other qualitative studies in South Africa such as Boudreaux (2008), Lemanski (2011), Tomlinson (2007) and Kingwill et al. (2007:53-65) who found that low-income home owners are reluctant to use RDP houses as collateral for credit. Bourdreaux (2008) found that few title-holders put their newly formalised rights to use as collateral for commercial loans although it is not clear whether it is title alone that they used. Lemanski (2011) found that low-income home owners are reluctant to use RDP houses as collateral for credit, thus limiting the financial asset value of state-subsidized houses for low-income households. Tomlinson (2007:17-31) argues that the government's argument that the poor should be able to access credit with the houses is not supported by an increase in beneficiaries accessing credit. The reason is that the banks cannot lend to the poor because the poor cannot sustain repayments. She concludes that property rights among the poor cannot assist them to access credit. Kingwill et al. (2007:53-65) drew on several case studies to come to the conclusion that formalisation of property rights does not increase lending to the poor. Future research should focus on quantitatively ascertaining the extent to which beneficiaries of housing subsidies know about accessing loans and explaining why if a significant number do not know.

5.3.9 "When you are in a brick house you are less worried": Protection of Life and Durable Items against the Elements

Did titling lead to an increase in wealth among my interviewees? Not through the expected channels of increased investments. The true value of a house was in the protection it offered to life and household durables. Although some interviewees said that they bought household durables when they were still living in shacks, many of them avoided to do so because of the risk of fire, theft, and wind and rain water. The other reason interviewees gave was that living in a brick house, comes with certain norms. One is compelled to furnish a brick house while one need not furnish a shack due to the temporary nature and risks associated with a shack. Interviewees talked of the need to buy a lounge suite, curtains, items such as television sets and other electronic goods. Mpepeto put it in this way:

> **Researcher:** Which one is so expensive living in a shack or in a house brick?
> **Mpepeto:** It's a brick house because you are supposed to decorate it by buying furniture and other things. The shack is not that expensive because there is nothing much needed. For example now, look at this floor. It needs tiles and if you look at the shack, there is no need for tiles. If you put a carpet it's fine.

By saying "you are supposed to decorate", Mpepeto expresses conviction that it is a social norm that one must furnish a brick house. This emphasis on furnishing resonates with what Meintjes (2000) found in her comparison of Soweto and Lusaka.

Protection from the elements is the primary need that housing as physical shelter meets. The elements include rain, wind, hot and cold weather, and even environmental hazards such as fire. Whether a particular structure adequately meets this need is the essence of adequate shelter. A shack meets this need to an extent but does not do so adequately. The essence of the South African state providing houses was that they would be able to meet the need for protection against the elements adequately.

All my interviewees from RDP houses felt that being in a house better protected them from the elements compared to being in a shack. Their main concerns when they lived in shacks were fire burning their shacks down, wind blowing their roofs away and rain which in all cases caused leaking roofs, unless one put a tent or railway tent (which interviewees refer to as sails) over the shack. Despite the complaints of leaking roofs, cracking walls and generally low quality of houses, interviewees felt that they were less likely to find a burning or flooded house when they got back home at the end of the day unlike in the shacks. Noluthando

arrived with her husband in the Y Section of Site B in 1986. They received a government housing subsidy and then joined a group called Sinethemba which helped them to build bigger houses with added financial contribution. They moved into their house in 2004 where they live with their children. After living in a shack for 18 years, and in her RDP house for seven years, Noluthando feels that there is a big difference between living in a house and in a shack especially in terms of the risk of fire.

> **Researcher:** What would you say is the difference between when you were living in a shack and now, or of what benefit has the owning of this house been to you?
> **Noluthando:** I would say it's a lot, because when you are living in a shack you can't do things the way you want to. And again when you are in a shack you can make it as nice as you like, but when the wind is blowing...even if it is new, if it was not made properly all that would also blow away with the wind and it will start leaking. It is also easy for the shack to burn...for instance if you left the kids alone. But when you are in a brick house you are less worried. And at the same time in a shack you cannot buy expensive stuff, because you fear for the fire...

Noluthando's life in the shack revolved around the risk of fire. She could not even buy durable assets or expensive things for fear of them burning. In a more nuanced perspective, the attitude towards assets for Mpho, a grandmother and widower living with her four elderly children, was that she cared less for them and her shack when she lived in a shack but has a more positive and appreciative attitude now that she lives in a brick house, despite its small size.

> **Researcher:** Why do you care less when you lived in a shack than now that you live in a brick house?
> **Mpho:** I mean...when you live in a shack; it is made of zinc from the roof and the wall. When it is windy a shack falls, or if it is raining and you are at work, when you come back you will find that the house is full of water. There's no good life in a shack, I was very glad to get a house...even if it is small but I was grateful, I have found a good life. Everything I do...putting tiles, ceiling I do all that because I...It's something I want to do because I got a brick house. I feel very sorry for people who are still in shacks; if it's raining you have to be worried about the leaks...it's not a good life living in a shack

In comparison, interviewees living in shacks did not feel adequately protected from the elements. For example, Mphumi provided a concise but comprehensive narrative. The Mphumi family came to live in the SST section of Town Two in 1995. Before then, they lived in the L-Section of Site B. They moved to the SST section because they found better

conditions there than in Site B. Mphumi felt that living in a shack is just living, perhaps meaning just having life because there is no adequate protection from the elements.

> **Researcher:** What are the bad things about living in a shack?
> **Mphumi:** Living in a shack I mean it's not that nice, yhaa it's nice because we are living. So I say it's not nice because sometimes while you are sleeping, you hear a call that says it's burning and when you go out really the fire is almost close. At that time you are just confused on which way you have to take and what you have to take out of the house. Secondly when it is raining in the shack the water comes through the house you see. Like now in this house the water gets in straight into the door and when you wake up everything is swimming in the house. Thirdly, the shacks in an informal settlement do not have yards. While you are sitting in the house, the dishes are always falling down because people who pass through between the houses lean onto the wall because they are jumping the pools of water.

In sum, beneficiaries of the housing subsidy that I interviewed were able to increase the number of household durables in their houses because their houses offered better protection against the elements than shacks and compelled beneficiaries to do so because it was the social norm. This is despite the houses being of poor quality and in some circumstances a hazard. This finding corroborates Mentjies (2000) finding that residents in Lusaka and Soweto felt compelled to furnish their houses.

5.3.10 "A person can wash and be clean, but you are different when you are clean but living in a shack": Education and Housing Quality

It is expected that because of a better learning environment, titled households should record improvements in human capital. The asset based approach also holds that owning a home reorients households towards investing more in human capital. Are the experiences of beneficiaries of housing subsidies with regard to education of children different from those of shack-dwellers? The answer from my interviewees is yes. Interviewees held that a change in housing quality and the housing environment made preparation for school easier which in turn meant that children could attend school more often. Living in a house was held to be cleaner and healthier for children compared to being in a shack.

> **Mpho**: A person can wash and be clean, but you are different when you are clean but living in a shack [both laugh]. There are lots of things here, a child would put his cereal in a microwave and everything is easy. You take his clothes and put them in a washing machine – how do you like that? They would have improved a lot I wish I had a child who was studying living in a shack and who is here with me now, so I can compare his life. I sometimes

> look at my grandchildren and laugh, thinking the way they should be if they were living in a shack. They are beautiful and healthy now.

Another parent felt that her child was able to go to school more often because he felt safer in the neighbourhood of brick houses than in the shacks. The shacks are so close to each other that there are a lot of unsafe hidden areas. She felt that while in the shacks, her child became dull at school because of missing school on account of a lack of safety

> **Noluthando**: It has improved a lot in so many things perhaps...you would sometimes reckon that a child is always dull because he is not feeling safe, but now you find out that he is relaxed. Even at night when they are sleeping they feel secured because they are in the house.

Not only were shacks unsafe, it is very hard for school-going children to study in a shack because of noise from the wind and rain beating against the thin walls. Interviewees felt that the brick houses were quiet which allowed for a better studying environment.

> **Mahala:** It's hard in the shack because the time you are studying its cold and sometimes it's raining and the drops of water fall into the books and if it's cold you can't concentrate. But in a house it's not cold and there is no water coming through; you are safe.

In addition, the amount of time allocated to studying was reduced in shacks because of the use of candles to study. With electricity, the amount of time they can spend on studying is increased

> **Lindiwe**: It has improved a lot because when we lived in a shack there was not even electricity. If they want to study at night we would light a candle, and if they want to study the whole night I would shout at them saying we should save that candle for the next day...now my children can study for the whole night because we have electricity.

Despite the fact that brick houses provide a better environment for school work, I found that interviewees are barely able to provide financially for school requirements and to help children with school homework. Parents are barely able to raise the amount for registration.

> **Mahala**. It's money. It is not available because when I am going to these courses they want a registration fee which I do not have.

Parents are also unable to help with homework beyond elementary school because they do not understand the work since many of them have only a few years of education.

> **Xolisa**: I don't know...their classes are difficult, what they study now is difficult for me.

I also asked if adults had learned any new skills following the housing subsidy. The answer was no. Only one of the interviewees acquired a new skill. He had learned how to paint since the houses came unpainted.

> **Mamela**: [PAUSE...PAUSE] I learned how to paint, I didn't know how to paint in my previous house but now I can paint by myself.
>
> **Mrs Madiba**: No I haven't learnt any skills, I haven't...because even electric thing I don't even try to fix them myself I call someone to help me, someone who is qualified as it is dangerous.

This finding is in no way suggestive of titling as being responsible for better schooling. Clearly the change in the quality of housing and the quality of the housing environment may be responsible as interviewees report. However there is no way of knowing for sure unless with a bigger representative sample and rigorous quantitative analysis. Even though the quantitative analysis in the previous chapter could not show association between having a housing subsidy and education due to unavailability of variables on children's education, elsewhere it has been found that titling leads to better performance in school among children (Galiani and Schargrodsky, 2004). Galiani and Schargrodsky attribute this to a reduction in the number of days of school that children miss. My exploratory finding resonates positively with this and is an important step for further research testing this hypothesis in this context.

5.3.11 "They call the committee members to discuss it": Civic Participation

It is held that having an asset in form of homeownership would lead to better citizenship because homeowners have a stake in their neighbourhood. They would be involved in civic duties because they have a common interest in keeping their houses (assets) and neighbourhoods safe. Indeed the state required that beneficiaries should pay R2479 which was aimed at giving households a stake in their properties (Tomlinson, 2006). Do we see this in the experiences of housing subsidy beneficiaries? A comparison of the experiences of crime and participation in social control can help answer this question. Social control is the mechanism by which neighbourhoods ensure that their environment or arena for social interaction is safe and devoid of delinquency. It ensures that members of the neighbourhood conform to social norms and refrain from tendencies to disregard them. There are two main social control mechanisms; informal social control and formal social control. Informal social

control is institutionalised particularly by the family but also through other social entities such as the neighbourhood as part of the socialisation process during which social norms, beliefs and culture are internalised. Any deviation or disregard of these norms is sanctioned while conformity is rewarded. Formal social control is institutionalised by the coercive apparatus of the state mainly through government services such as the police force.

Interviewees felt that crime was seemingly ubiquitous and that there was not much of a difference between their experiences in shacks and their experiences in RDP neighbourhoods. They however felt safer in RDP neighbourhoods. The main crimes interviewees experienced and reported were theft and robbery. Interviewees also spoke of violent crimes such as people being killed every day early in the morning or during the night and that only the day time was safer. Others spoke of people being robbed of cell phones. Indeed one of our recorders as we conducted interviews was stolen from us with two recorded interviews. Others spoke of house breakings taking place whenever residents where away at work or to the Eastern Cape for a number of days mainly during the festive season. These crimes were committed by gangs of youth from neighbouring streets or surrounding neighbourhoods which the local gangs worked with. These young adults are usually under the influence of drugs, mainly Crystal Methamphetamine – locally called *tic* – or alcohol. Mpepeto spoke of children within the community committing crimes.

> **Researcher:** So you said the crime here is caused by the children from this community and from other areas.
> **Mpepeto:** Yes, they are doing these things with their friends from other areas and you find out that there are also places where they meet together for smoking.
> **Researcher:** What are they smoking?
> **Mpepeto:** They are smoking what they call tik.

Residents of RDP neighbourhoods used both informal and formal mechanisms of social control while in shacks they could only rely on informal mechanisms. Informal mechanisms were sanctioned by the street committees, a system which was used to counter crime in African townships during apartheid and has persisted in many African townships, informal settlements and new neighbourhoods (Burman and Schärf, 1990:706-708). Street committees were elected from households in the area concerned. The number of households covered can be anything up to a hundred. The elected head of the committee was usually an elderly member called the street chairman. The street committee dealt with day to day affairs concerning the neighbourhood such as hearing complaints among neighbours, settled disputes

within and between neighbours, and made decisions about appropriate sanctions against acts of crime. The street committee could sanction corporeal punishment and could expel a household in cases of multiple offenders. Following up on her narrative above, Mpepeto provided an example where corporeal punishment was used.

> **Researcher:** did you report these cases to the police and what are their responses?
> **Mpepeto:** the police were going around the area every day but they did not find these places that are selling drugs.
> **Researcher:** after you and the community members found out about who did these things what punishment did you give them.
> **Mpepeto:** after we found out as community members we called a meeting and took the decision that it's our kids so let us beat them on the bums.

In addition to street committees, RDP neighbourhoods worked with the police under the rubric of community policing. Often, the police were invited to street committee meetings and worked together with residents in conducting patrols of the neighbourhood. Within informal neighbourhoods, the police did not work with street committees. This perhaps explains why residents felt safer in RDP neighbourhoods.

There was an established procedure that was followed whenever a crime or incident requiring the attention of the street committee took place. First, the resident(s) concerned reported the incident to the chairman. The chairman called a meeting where all households were expected to participate. At the meeting, the matter was discussed and a decision was made as to what should be done about it. In some cases, further investigation was done by committee members. Some cases involved other street committees coming together if the issue involved residents from other streets. The typical procedure was well narrated by Mahala below.

> **Mahala:** when something like that happens in our street, they call a meeting to discuss it, for example here next door, there used to be no one in the house for a few days, so the thugs stole something and kept it there. So when the members found that thing, they called the committee members to discuss it and also tried to find out why there was no one living in the house because these criminals were using it as a place to keep stolen things.
> **Researcher:** those criminals who were doing these things, were they children who are living in this community or another community?
> **Mahala:** in most cases it is the children from the other streets at the back.
> **Researcher:** after you found out about those people what, actions were taken?
> **Mahala:** the members of the committee wrote a letter to the committee members of the other street where those children are living and asked them to come to the meeting to meet with them on the date which was mentioned.

> **Researcher:** after they attended that meeting with that committee, with those people who committed the crime what happened next?
> **Mahala:** they discussed that issue with the committees, with the family of those people and there is a rule in our street that, if your child committed a crime and has been warned for several times, you will be asked by the members of the community to leave the area and sell your house to someone else. But the parents normally ask for forgiveness because they were not sending their children to do that. And the members of the community, because they understand, forgave those parents by warning them.

The street committee system functioned effectively in dealing with crime in both RDP neighbourhoods and shack neighbourhoods but some residents felt that it had grown increasingly ineffective. The reason given is that very few people attended meetings unless they involved crimes committed within the vicinity of their area. In addition, given the poor socio-economic conditions, street committees are unable to address many of the problems such as unemployment. Residents expressed desolation after committee members purporting to organize jobs with companies collected job applications in 2008 and never got back to them since.

Despite the fact that many of my interviewees knew and had heard about the street committees, none of my interviewees was part of the committee. Some members had however expressed that they had attended meetings several times.

5.3.12 "… we do not even have any community organization": Membership in Voluntary Associations

In addition to civic participation, we would expect that interviewees would participate in voluntary associations as members because of the stake they have in their houses and their neighbourhoods. Is this the case with my interviewees? The answer is no. At the time I conducted qualitative interviews, many of the interviewees said there were no community organisations that they could participate in except political organisations like the South African National Civics Organisation (SANCO). SANCO seemed to be responsible for organising street committees. It also organised informal arrangements like savings groups where some neighbours put together money to help them cope with deprivation. SANCO also helped organise burial societies where residents contributed money for use in the event that they had bereavement. I asked residents whether they belonged to organisations that safeguarded their interests as homeowners.

> **Zanele:** In this area I do not want to lie, we do not have.... No, there are no such things here
>
> **Thembi:.**No, there are no activities happening in this community and we do not even have any community organization which is here... No, no there are no community organizations here except political organizations.
>
> **Bakhulu:** The organization that we all have here is for SANCO, it is the one that is coming to community members to discuss the community issues.., and also the police are involved in SANCO.
>
> **Mpepeto:**Yes I have heard about SANCO but it is one of those NGO's that ends up nowhere, even us they said we must join it so that when there are jobs we can submit our CVs but it just ends without a proper thing. And we end up losing hope even us.
> **Interviewer:** So those meetings as people who are not working and staying at home they are not giving you some jobs.
> **Mpepeto:** They used to call us into the hall and told us to submit our CV's but those CV's end up in the air.
> **Interviewer:** Do you think what makes that is it that they are hiring their people.
> **Mpepeto:** Yhaaa I think it's that, because what I remember it's only two people who had a job here through them since that.

As the evidence shows, many of the interviewees did not know of the existence of any organisations and those who had heard or participated were either part of informal associations such as savings clubs, referred to the street committee or had been disappointed by SANCO.

If interviewees had a stake in their houses and neighbourhoods, it was less important than the needs of my interviewees. Interviewees were more interested in what the organisations could do for them rather than what they could do to improve their community. I sensed that interviewees felt that they had so many needs, jobs in particular, to the extent that they could not give anything. As the quotes above show, interviewees lamented that the existing community organisations failed to meet their needs. The needs of my interviewees are no doubt beyond the capacity of voluntary organisations. Many of the issues like jobs are things that voluntary community organisations do not have much influence over and so residents lose hope in the existence of such organisations and see no point in participating.

5.3.13 "… jealousy is too much": Neighbourly Attachment

The hypothesis suggests that homeowners have better neighbourly relations because they expect to live longer together as neighbours and that having a stake in their community as

owners is something they have in common that brings them together. To provide a bit more context, residents who became neighbours in these new neighbourhoods were not neighbours at the time they were living in shacks. They lived in different sections. When they obtained their houses, many of them were meeting for the first time. Lezola described how she and residents in her neighbourhood became neighbours.

> **Lezola:** I didn't come with my neighbours from Site C, we are mixed. They took some from C section, A section, P section...it's something like that, we didn't know each other and when we got here we then built a solid relationship.

Though a part of mundane reality, greeting was a very important aspect of neighbourly relations among my interviewees. If one did not greet a neighbour, or one did not respond to a greeting, the relationship was construed to be unfriendly and animosity ran its' course in the friendship. This was expressed in the following way by two interviewees.

> **Ntombi:** It's difficult my brother I do not want to lie, jealousy is too much, neighbours are not greeting each other so now it is not nice like the old days, there is a difference.
> **Researcher:** What are the things that make you fight the most or that make you not get along?
> **Ntombi:** Like you will find out that its only one neighbour who is doing this and when you greet her you cannot hear if she answered or not. The next day she is the one who is greeting so that causes you to doubt her the next day because you do not know her reaction. So you end up not greeting each other.
>
> **Mpho:** Yes, I also like greeting, there is nothing more important than greeting your neighbour, in the morning, "Hallo my neighbour," I like that very much.

Financial need and assistance was an important but sensitive matter because of deprivation. Interviewees developed friendship networks in which they had one or two people in the neighbourhood with whom they frequently related to, who they could borrow small amounts from. Many opted rather to go to their kin networks. Mamela emphasised that

> "As a person you have your own choice of people – yes, a person you know she can help you when you have a problem. You don't just go to any one, or to everybody...you only have that person."

because as Zoleka put it

> "...hey neighbours gossip a lot, when you leave her door she will tell the others, 'She came to borrow this and that from me.' Sometimes you are carrying a plastic today and yesterday you went to borrow from her and she

> will say, 'she hasn't given me my money,' but the date you said you will bring the money back has not come yet."

Because of jealousy and gossip, many interviewees preferred to relate more within kinship networks that they had in the neighbourhood or outside the neighbourhood. With kin, there was no risk or worry of hearing one's private matter from a third party. Particularly, when one obtained financial support from kin, one enjoyed much flexibility and concessionary terms. One could borrow larger amounts and did not need to pay back the whole amount at a given time. Lezola explains it in this way.

> **Researcher:** why can't you seek help from your neighbours?
> **Lezola:** I am scared to borrow money and fail to pay it back, because we once made groups for borrowing money; when that didn't succeed I thanked God...
> **Researcher:** when someone from your family lends you money...do you have to pay it back?
> **Lezola:** I pay it back but not all...if I borrowed R100, and maybe I have R50 I give him. I do that until I finish paying it.

Interviewees engaged in mutual assistance as a mechanism for coping with deprivation. Neighbours borrowed each other groceries like cooking oil, made grocery savings groups through which they could contribute and lend each other groceries, sharing pressing irons, school shoes among children, slices of bread and electricity. When there was a funeral, they contributed and bought necessities for the funeral.

The thread that ran throughout my interviews was that interviewees guarded against intimacy. Intimacy leaves one vulnerable to jealousy, gossip and envy, which are widespread in these neighbourhoods. As other scholars researching similar neighbourhoods in South Africa have pointed out, intimate knowledge among neighbours is an important ideal of good neighbourliness but close relations can be undermined by gossip, secrecy and jealousy (Ross, 2010:162–3). In some other studies, this has been found to breed conflict and physical violence and injury among members of interdependent households, as Ramphele (2002) recounted in Steering by the Stars. Indeed Ross (2010:160-163), Bray et al. (2010:108) and Ashforth (1998) also discuss how jealousy undermines relationships in South African neighbourhoods. Ashforth (1998:507) puts it into perspective by showing that in Soweto, the new post-apartheid opportunities have generated inequalities among Africans who in previous generations were compelled to live in conditions of relative socio-economic parity. These factors expand the prospects for jealousy, envy and gossip while the privacy of home offers some assured level of protection.

5.3.14 "planning to… go back to Eastern Cape": Sense of Belonging

A comparison of residents' experiences of the sense of belonging, sense of place identity and pride in the neighbourhood are an important attribute of neighbourly relations which should be examined because one's locale is a symbol of personal and social identity, a locus of sentiment, meaning and home for the individual. Intuitively speaking, if people have no sense of belonging to their neighbourhood, they will not be invested in improving their neighbourhood and will constantly look for opportunities to leave.

Many residents of both RDP houses and shacks felt that their neighbourhoods were not their home for varied reasons while some in RDP houses felt satisfied with their neighbourhood but with reservations. Almost all of my interviewees travel back to the Eastern Cape every year in June and or in December. Indeed among the households of our interviewees, some of the elderly members have gone back to the Eastern Cape living their children in the houses. Some of those on pension talked of going back home to the Eastern Cape to be buried. Many still feel that they are in Cape Town for work and will go back later.

Among those who live in RDP houses, Zuma who came from the Eastern Cape to Cape Town in 2000 to join his mother and look for work says Cape Town is only good for work while Eastern Cape is good in terms of relationships with people. Another, Mr Stevens who had recently lost his job said he had only been satisfied to live in Makhaza when he had a job. Another, Simphakazi said she has been forced to live in Cape Town for health reasons and would not be around if it was not for that. She goes to Eastern Cape every year to compensate for her absence. Yet another said he was planning to move because there was nothing beautiful in his neighbourhood and all that was there was jealousy (Mpepeto).

Sentiments of my interviewees from shacks were similar albeit with stronger emotion. Many felt that they did not intend to stay when they came to Cape Town. They planned to raise enough money to build their house in Eastern Cape and then return some day. Sandile was precise about his plan for coming to Cape Town. Sandile came to Cape Town in 1997. He settled in the AT- Section of Site C where he lives with his wife and three children. He had a specific plan which did not quiet work out the way he wished but his alternate plan still retains the ultimate theme of raising money and returning to Eastern Cape.

> **Researcher:** When you came to Cape Town, did you intend to live here all your life?

> **Sandile:** No I was thinking that God was on my side by being here, so I was planning to work here for five years and go back to Eastern Cape to open something that can make me survive with my kids.
> **Researcher:** Do you now intend to live in Cape Town all your life?
> **Sandile:** If God can make me a plan or just win a lottery I can go back home and open a shop selling groceries there and supplying the old pensioners with everything and deliver door to door just if I can be lucky to have at list R250 000. It's a lot of money to me.

The few others that were satisfied with their neighbourhood felt this way because they were proud homeowners of RDP houses. They were happy to be beneficiaries of housing. As Mahala put it, "I saw myself as a special person because there are people who have been applying for houses for a long time but even now they are still living in the shacks." The other reason advanced by Thembi is that she will stay in her neighbourhood because her son is there and she has no relatives remaining in Eastern Cape.

In short, the sense of belonging, identity and home for many interviewees in both RDP neighbourhoods and shack neighbourhoods is still in Eastern Cape. My interviewees therefore do not have much of a stake in their houses and neighbourhoods as this is a temporary space for them.

5.3.15 "I didn't know that I can be a madam": Status Attainment, Decency and Respectability

Having an RDP house was a symbol of status and respectability among interviewees who owned RDP houses. Mpho felt that obtaining her house allowed her to attain the status of a "madam". The word "madam" in this case is a term of respect and high status used to refer to the lady of the house who used to be her boss in Cape Town's affluent Southern Suburbs. Mpho who used to work as a domestic worker for many years says

> **Mpho:** I used to look at my Madam at work and never knew that I can also be like her. I used to watch her eating her breakfast, wearing her gown and thought I will never be like her. But today I do everything, I am happy.

Respectability, decency and dignity are recurring themes in the urban ethnographic literature on new housing in South Africa (Ross, 2010; 2005a; 2005b) and elsewhere. It manifests in different ways. Because of owning a house, respectability is expected in the mundane realities of everyday life. For Mpho, respectability may involve the emulation of everyday pleasantries such as eating breakfast at her table in the comfort of her home. Although

emanating from ownership of a house, respectability extends beyond mere residential abode. At the everyday level of informal neighbourly mixing elsewhere in Cape Town, respectability has been found to mean greeting in the streets, visiting homes, inter-marriage and sharing of common spaces (Lemanski, 2006).

5.4 Conclusion

This chapter has explored the experiences of beneficiaries of housing subsidies with regard to the effects of titling compared to the administrative recognition of occupancy. It aimed to understand whether titling has an impact and whether the experiences of beneficiaries of housing subsidies and shack-dwellers differ on the basis of the bundle of rights each has. Overall, the experiences between the two groups do not differ on the basis of property rights but rather on the basis of improvements in housing conditions. My findings on quite a holistic set of qualitative themes support this argument.

Labour participation does not seem to have improved on the basis of title. My interviewees were unemployed, did menial jobs on part-time if employed, or were trying out in business. Over a decade after obtaining their houses, unemployment and income deprivation remains a part of their lived realities. Given the high levels of unemployment, poverty and inequality in the broader economy, it may be unrealistic to expect the housing subsidies to have led to labour market participation and better income.

Housing improvements were associated with narratives of success among beneficiaries. Success was measured in terms of conspicuous consumption, particularly by the extent to which beneficiaries had extended or improved their homes. Houses that had extended and improved their houses were deemed to be high status. As an unintended consequence of the subsidy, the “high status” of some individuals affected relationships by generating gossip and jealousy. Following long periods living at relative parity with neighbours, the slightest visible differences can cause animosity, envy, jealousy and gossip.

Home-based investments are not exclusive to housing subsidy beneficiaries. In particular, rental investments were not a priority and houses were too small to accommodate renters. Context seems to be important here as titling has been found to lead to investments in some neighbourhoods but not in others. In this particular context, it may not have worked because of the prevailing economic conditions where the poor are too poor to purchase from each

other. In a society with one of the highest rates of inequality in the world, the poor are extremely poor with weak purchasing power that cannot support nor sustain businesses.

Titling does not seem to offer better experiences of access to credit. Similar to other contexts in the broader literature, title-holders fear losing their property in the event that they fail to repay the loan. The market is reluctant to lend to these high risk clients. In addition, with a stable source of income, a few beneficiaries of housing subsidies and shack-dwellers alike have managed to secure small loans.

Moreover, housing quality provides the mechanism for increased wealth in the rudimentary sense of using durable items as a measure of wealth. Houses provide protection against the elements to life and property and may lead to increases in durable items because of the prevailing norm that brick houses ought to be furnished.

Likewise, better experiences of education have been linked to the better and healthier housing environment. Children of housing subsidy beneficiaries experience fewer days when they are absent from school, experience longer studying time due to the use of electricity as opposed to candles in shacks and have quieter study environments because of the stronger wall materials that can block off noise much more effectively than shacks.

Furthermore, experiences of citizenship in the sense of civic participation, membership in community voluntary associations and neighbourly attachment do not seem to differ between beneficiaries and shack-dwellers. Interviewees do not seem to have a stake in their neighbourhood and seem to guard against intimacy for fear of jealousy and gossip.

In addition, their idea of home and sense of belonging is not in their urban neighbourhoods but in their places of origin in the rural areas of the Eastern Cape where they hope to return.

Besides, the experiences of the housing subsidy have been associated with status attainment, decency and respectability. Shack-dwellers also associate their shacks with independence but do not go beyond to claim any status attainment, decency or respectability.

Most of the differences observed can therefore more adequately be attributed to the change in housing quality and the housing environment rather than to the difference between having real property rights and administrative recognition of occupancy. Status attainment could more aptly be attributed to ownership status of the dwelling but one wonders whether ownership of the land without the house would have received the same status given the

importance of conspicuous consumption in this context. In short, whether one has freehold title or the official recognition of occupancy rights does not offer much difference in subsequent experiences in this particular context except in terms of an increase in social status.

More quantitative and qualitative studies with rigorous methods examining a holistic set of outcomes need to be carried out in other contexts for comparison in order to build up knowledge that will facilitate drawing of general lessons. This thesis engages with this idea in Part III.

PART III

CHAPTER 6

‘BUSTING THE MYTH’ AND ‘SOLVING THE MYSTERY’ IN MATERO: EXPLORATION OF THE EFFECTS OF TITLING

6.1 Introduction

This chapter will examine the effects of real property rights relative to the administrative recognition of occupancy by evaluating the effects of leasehold titling in Matero relative to occupancy licenses (squatter owner–regularised settlement) possessed by residents of George in Lusaka. The Chapter fits into the overall thesis by examining a wide range of effects in Matero in order to facilitate comparison with the analysis on Khayelitsha that has been presented in Chapters 4 and 5. Within Lusaka and with specific reference to Matero and George, only studies of a qualitative nature have been undertaken to investigate privatisation in Matero and the impact of upgrading in George. However no study of a quantitative nature has been undertaken. This chapter fills that gap in the literature.

I test the following ten hypotheses

1. Leasehold titling may raise property values for titled households (Lanjouw & Levy, 2002).

2. Leasehold titling may lead to better access to credit because property title allows the household to use the property as collateral or enable them to borrow at a low interest rate (De Soto, 2000; Durand-Lasserve & Selod, 2009; Field & Torero, 2006).

3. Leasehold titling may translate into positive effects on labour market participation. There are two mechanisms; Titling is held to increase tenure security which in turn leads to labour market participation because adults who would be protecting the house against eviction are freed to work. In the case of Matero and George, we know that they both have tenure security but we do not systematically know whether there are differences in labour market participation on the basis of a difference between real property rights and

the administrative recognition of occupancy. In the second mechanism, titling may increase the return on investment for home business activities, which in turn encourage home employment. Titling can lead to increased access to credit, which in turn leads to the opening of small businesses, which leads to labour market participation (Durand-Lasserve & Selod, 2009:107 & 108).

4. Leasehold titling may increase women's labour market participation because titling empowers women from constraining social relationships (Durand-Lasserve & Selod, 2009:110)

5. Leasehold titling may lead to the opening of small home-based businesses or home-based investments because once credit constrained households are titled, they are able to access credit which in turn provides the capital to make such investments (De Soto, 2000; Durand-Lasserve & Selod, 2009:109). Titled households also gain the right to use their premises for business activities while those on occupancy licenses face restrictions from the administrative authority.

6. Leasehold titling may lead to higher income from home-based business investments relative to occupancy licensing

7. Leasehold titling may result in increased household per capita income because of increases in labour market participation, investments in home businesses and increased home employment for members of the household (Durand-Lasserve & Selod, 2009:107).

8. Leasehold titling may result in increases in wealth as crudely represented by household durable items because of the increased space, safety and the feeling of obligation by beneficiaries to fill up the space with household items. This is important because according to the asset-based approach, these household items are a mechanism for savings which become useful in cushioning consumption during economic shocks. By definition, wealth refers to those things which are produced by labour, can satisfy human wants and must have an exchange value.

9. Leasehold titling may affect citizen behaviour in terms of

v. More memberships in voluntary associations because they have an economic investment in their homes and see their participation as a way to protect their homes (Blum & Kingston, 1984; Rohe et al., 2002:16). Both Matero and George residents are expected to exercise citizenship but those in Matero own their land and have a bigger stake than those in George. A difference would reflect the differences in how much the residents value their property.

vi. being more politically aware because they are more likely to be politically involved in the affairs of their neighbourhood on the basis of having a stake in their capital asset.

vii. Higher frequency of volunteerism since their capital asset gives them a stake in their neighbourhood and need to keep social control and safety in their neighbourhood

viii. Stronger neighbourhood attachment since they develop stronger bonds because of the anticipation of and longer length of tenure in the neighbourhood (Rohe & Stewart, 1996:54-55). Because homeowners stay longer in their neighbourhood, they come to identify strongly with their homes and are more likely to have collective socio-psychological feelings of pride as homeowners which may foster social attachment and interaction.

10. neighbourhood satisfaction because of the idea that owning a home is an important goal which once attained must result in satisfaction (Rohe et al., 2002:2). Secondly, satisfaction may arise from housing maintenance and improvements (Rohe et al., 2002:3; Saunders, 1990). Thirdly, customizing housing units to one's taste can result in satisfaction with one's living environment (Rohe et al., 2002:3). Fourthly, making financial investments based on the house may result in a better financial position, which in turn can lead to satisfaction (Rohe et al., 2002:3). In theory, Matero residents should be more satisfied than George residents because they have the legal rights to do these activities which are determinants of satisfaction. The answer to this particular hypothesis is important because if residents are satisfied with their neighbourhood, the potential for unrest is greatly reduced.

6.2 Data

Data on the relationships I aimed to test and in the communities I was investigating were not readily available in Zambia. To go about this, I conducted a household survey from July to August of 2011, fifteen years after the privatisation of houses in Matero. I decided to draw a sample that was as close as possible to 10 percent of the number of households that bought houses. There were 5097 households altogether (Government of the Republic of Zambia, 1996a). This would have meant drawing a sample size of 500 in Matero. Due to financial limitations, I decided on a sample of 350 households. I drew this sample using interval sampling. I used intervals of 10 houses using a Google Earth map as a sampling frame. For George, the initial idea was to draw a matched sample using the respondents' database from the Zambian census of population as a sampling frame. The database is not publicly available and can only be requested from the Central Statistics Office. I was however not given permission to access this database. I proceeded with drawing an unmatched sample of 350 households from George as the best alternative. This meant that the robustness of the analysis would be weakened but would still be useful in giving an indicative understanding of the effects of titling. I also used interval sampling with Google Earth map as a sampling frame.

My method of data collection was a structured questionnaire (Please see appendix) administered by enumerators. I employed 7 enumerators to assist me in administering the questionnaires. Three interviewers were recent graduates from the University of Zambia (UNZA), three were students there at the time and one was a student at the Copperbelt University (CBU). I conducted a one-week training on how to administer the questionnaire. A pilot was conducted with each enumerator conducting one interview before the end of the training. Then the questionnaire was reviewed according to the comments made.

We interviewed heads of households or their competent proxies. In Matero, we interviewed households in which the head was a direct beneficiary of the 1996 privatisation, and who held a title deed or deed of sale. In George, we interviewed holders of occupancy licenses, out of approximately 25,000 households.

I ended up with a realised total sample size of 623 households (89 percent response rate). I obtained a total of 312 completed interviews in Matero and 311 in George. However, in the end I could only work with 498 observations because some of the observations indicated that they moved into the houses after 1997 despite having bought the houses from the council. It is likely that these are individuals who bought the houses after some sitting tenants failed to

raise the required amounts much later after they were offered or obtained the houses through corrupt means.

Data were captured on a Microsoft Excel spread sheet and then cleaned and analysed using Stata version 11. Altogether, there were 296 variables and 623 sets of observations. The variables used in this chapter are summarised in table 6.1 below.

Table 6.1: Variable Descriptions

Variable	Response Categories	Description
Dependent Variables		
Property value	Group average	What is the market value of the dwelling (in Zambian Kwacha)?
Credit access	Binary	Have you used this house in any way (e.g. as collateral) to obtain loans or credit? 1 = yes and 0 = no
Employment status	Binary	Employment status of head of household, 1 = employed and 0 = not employed
Employed female	Binary	Employment status of female head of household, 1 = employed and 0 = not employed
Home-based investments	Binary	Has the house been used for any income generating activities? 1 = yes and 0 = no
Income from home-based investments	Group average	How much income is realized from these (home based investment) activities?
Logged Per capita income	Group average	What is the total monthly income for this household?
Logged household consumer durables	group average	Does anyone in the household own the asset listed below in working/running condition? Respondents get a score of 1 for each (Please see questionnaire in appendix for list of durables)
Memberships in voluntary associations	Group average	Are you a member of (association/organization)? Please see list in the questionnaire in appendix for list of voluntary associations.
Political Awareness	Composite, ordinal	Here is a list of famous people, indicate what area of life they are associated with. Do you watch news on television 1=yes and 0 = no (7) Do you read newspapers 1 = yes and 0 = no

Table 6.1: Variable Descriptions *continued*

Variable	Response Categories	Description
Volunteerism	Ordinal	How often do you do voluntary work? 0 = never, 1 = not often, 2 = often, 3 = very often
Neighbourhood attachment	Group average	Answer if the following statements apply to you. (Respondents get a score of 1 for each that apply and 0 for each that does not apply (Please see questionnaire in appendix for list of statements)
Neighbourhood satisfaction	Binary	Answer if the following statements apply to you. I am satisfied with my neighbourhood. 1 = yes and 0 = no
Independent and control Variables		
Leasehold title	Binary	Tenure type, 1 = leasehold title, Matero residents and 0 = occupancy license, George residents
Age	Group average	Age of household head
Gender	Binary	Gender of household head. 1 = male and 0 = female
Education	Group average	Number of years of education completed by head of household
Father's education	Group average	Number of years of education of father of head of household
Mother's education	Group average	Number of years of education of mother of head of household
Household size	Group average	Number of household members residing in the dwelling
Rooms	Group average	Number of rooms in the dwelling
Duration	Group average	How long respondent has lived in the house if year occupied house is before 1997

6.2.1 Dependent Variables

These dependent and independent variables are summarized in Table 6.1 above. The dependent variables include property value, credit access and labour market participation, home-based investments, income from home-based investments and household per capita income, household consumer durables, citizenship and satisfaction with the neighbourhood.

Property value is a continuous variable proxied by the responses to the question "What is the market value of the dwelling?" Respondents were asked to provide an amount based on the last official valuation of their house and land, which they were required to do as part of the process of applying for their title deed. If valuation had not yet been done, respondents were asked a second question requesting them to provide an estimate of what they think would be the value of their house. Most used the value at which their friend or neighbour had sold their house. Also, some respondents had had their land and houses valuated over ten years earlier and also decided to use the value at which their neighbour sold their house. Only responses to the first question were used in the analysis in order to reduce inflation of housing prices. This reduced the number of observations for the analysis (n=351).

The variable credit access was operationalized through the question "Have you used this house in any way (e.g. as collateral) to obtain loans or credit?" It is a dummy with 1 = yes and 0 otherwise.

Further, employment status is a dummy with 1 = employed and 0 not employed. Respondents were asked to provide information for the head of household regarding his or her employment status. Respondents could choose from (1) employed, (2) unemployed, (3) unemployed but been looking for a job in the past 4 weeks, (4) unemployed and not actively looking for a job. Respondents that belonged to category 4 were not included in this variable because the unemployed who are not looking include mainly pensioners.

Also, employed female is a dummy with 1 = employed female heads of household and 0 = not employed female heads of household.

Moreover, the variable home-based business investments is a dummy with 1 = households that engage in home-based businesses and 0 = otherwise. Respondents were asked the question "Has the house been used for any income generating activities?" Respondents could answer "yes" or "no".

In addition, the variable income from home-based investments is a continuous variable indicating the amount of income a household earned each month from a combination of income generating businesses conducted from the premises of their property. Respondents were first asked the question "What income generating activities have been carried out using this house". Responses included renting out a room, partial use as a tuck shop/restaurant and renting to a business, brewing beer for sale, selling groceries etc. in the yard and day care or

tutoring centre and welding. They were then asked to provide information on how much income was realised from these activities each month and each year in separate variables.

Household per capita income was a continuous variable operationalized through the questions "What is the total monthly income for this household?" and "household size". I divided the household monthly income by the number of members in the household. Values for this income variable did not have a normal distribution. This is a common problem in surveys and in developing countries where there is irregular income flows. Particularly, residents in George and Matero are mainly in the informal sector as I will show in Chapter 7. Income data tends to have a non-normal distribution mainly because of being prone to missing observations and inaccurate recollection. There were 153 missing observations as a result of non-responses. Of the missing values, 89 (58 percent) were George respondents and 64 (42 percent were Matero residents). The available observations were transformed into natural logarithms of household income. Variable transformations using natural logs exclude observations scoring 0. The transformations did not exclude respondents as there were no respondents that reported 0 incomes. The missing values left 470 observations. To mitigate the problems in income data, the variable on household consumer durables is also utilized as an alternative to income following the asset based approach (Sahn & Stifel, 2000).

The variable for household consumer durables was operationalized through the construction of a scale. Respondents were asked if they owned items on a list of durable household items in working condition in their house. A household scored 1 for each asset it owned and 0 if it did not own it. The resulting score is the sum of the items owned by each household. Section E of the questionnaire in appendix 4 shows the variables that went into the construction of the scale. The overall score ranged from 0 to 15. If a household scored 15, it means that it owned all the assets in the scale indicating more wealth while that which scored 0 had none of the assets listed in the scale and indicated the least wealthy households. A Cronbach's alpha score of 0.84 indicated that the measure was reliable. I transformed the variable into natural logarithms because it did not meet the assumption of normality. Interpretation of the regression coefficient is therefore in terms of percentage change.

There are several measures of citizenship that I use to test the hypothesis that homeowners are better citizens.

Firstly, the variable for membership in voluntary associations is a scale measure. Respondents were asked if they were members of any of the type of associations and

organisations shown in Section F.1 of the questionnaire in appendix 4. There were 9 voluntary organisations listed. The variable was constructed by adding the number of associations that each household head reported being a member of. Scores ranged from 0 to 3 with 0 indicating those household heads that did not belong to any of the listed groups and 3 indicating those that belonged to the most groups in the neighbourhood. There was no household head that reported being a member of all 9.

Secondly, political awareness is a composite measure made up of responses to seven questions on political personalities and activities. Respondents were given a list of twenty locally and internationally renowned individuals. They were asked to assign one of five areas of life from a list to each listed individual. The areas of life were science, politics, art, music and novels. The politicians associated with politics on the list were George Kunda, the then Vice President of Zambia, Ban Ki Moon, UN Secretary General, David Cameron, Prime Minister of the United Kingdom, Mahmood Achmedinejad, then President of Iran and Wangari Maatai, Nobel Laureate, then MP and Minister in the Kenyan Government. Respondents were also asked whether they watched news on television and whether they read newspapers. The responses to these questions were constructed into dummies with 1 equal to the correct assignment of individuals and answering in the affirmative to watching news and reading newspapers and 0 otherwise. Then the scores were added and divided by 7 (number of variables). The scale ranged from 0 to 1 with 0 being low awareness and 1 being high awareness. The lowest score was 0 and highest score was 0.71 (71 percent score). During data collection, interviewees were not told the result of their performance during or after the interview to avoid bias and the sharing of answers with other residents so that the test remains valid with the next interviewee. I am aware of the limitation that the variable on watching news may impose on the measure due to some respondents not owning a televisions and that imposed by the financial difficulty in accessing of newspapers by the poor when they have other competing demands. Previous research shows that individuals in poor neighbourhoods borrow newspapers and go to watch the news at the residences of their friends and neighbours.

Thirdly, frequency of volunteerism was an ordinal scale variable. It is indicated by the frequency with which individuals engage in voluntary work. This is different from being a member of a voluntary association. It is a civic activity not tied to any organisation. The variable is behavioural. Individuals were asked the question “How often do you do voluntary

work?" The measures range from 0 to 3 with 0 = never, 1 = not often, 2 = often, 3 = very often.

The fourth and final variable in citizenship, neighbourhood attachment reflected the behavioural dimensions of one's attachment to neighbours and the neighbourhood. Respondents were asked if each of a series of statements regarding their neighbourhood relations applied to them. Each question was a dummy with 1 = yes and 0= no. Scores were added up to establish the neighbourhood attachment variable. The scores ranged from 1 to 18. The list of variables that went into the neighbourhood attachment variable is shown in Section F.2 of appendix 4. They had a Cronbach's alpha value of 0.78, which is a very good measure of reliability.

Finally, the variable neighbourhood satisfaction was a dummy operationalized by the response to the statement "I am satisfied with my neighbourhood." The value of 1 = yes and 0 = no.

6.2.2 Independent Variables

As regards independent variables, leasehold title is a dummy variable with 1 = leasehold tenure and 0 = occupancy license. Respondents were asked what the tenure type was for their property to which they could answer (1) Occupancy license (2) Title deed (3) don't know (4) refused. In some cases, respondents showed us their title deeds and occupancy licenses. Each questionnaire also had a neighbourhood identifier as a validity check. Both the neighbourhood identifier and the question on tenure type were highly correlated (r=0.79, p=0.00). The neighbourhood identifier and the tenure type variables are almost the same. However the question on tenure type had 20 don't knows, 3 refusals and 4 respondents who indicated the opposite tenure type. The neighbourhood identifier was then used in the analysis.

Under demographic characteristics variables used as covariates, the variable 'gender' is a dummy variable for being male relative to not being male (i.e. being female). The variable 'age of household head' is a continuous variable for the age of the head of household. The variable 'years of education' is a continuous variable for the number of years of education for the head of household. Similarly, the variable 'marital status is a dummy with 1 = married or living with partner and 0 = divorced, separated and widowed. The variables 'years of education of father' and 'years of education of mother' are continuous variables for the

number of years of education for the parents of the head of the household. The variable 'household size' is a continuous variable for the number of people who were members of the household. The variable 'number of rooms' is a continuous variable for the number of rooms a household had at its disposal on the plot. Moreover, the variable duration is a continuous variable reflecting the length of household tenure. Respondents were asked to provide information as to when they moved into the house and how long the head of household had lived in the house. The data reveals that a few observations have their year of occupation as being after 1997. These observations are eliminated from the analysis on this variable and the entire analysis in the thesis. The variable and the entire analysis therefore only include residents who occupied their residence during or before 1997.

6.3 Method

The aim of the chapter is to explore the effects of titling by comparing the effects of titling relative to those of occupancy licensing. I use both OLS and logistic regression analysis to estimate the effect. The equation to make the estimates is as follows:

$$Yi = \alpha + \gamma \text{Leasehold title}_i + \beta X_i + \varepsilon_i$$

where Y is any of the outcomes under investigation (namely property value, credit access and employment status, employment status of female household head, home-based investments and income from investments, income per capita, consumer durables and membership in voluntary associations, political awareness, frequency of volunteering and neighbourhood attachment and neighbourhood satisfaction) for observation i, γ is the estimate which provides an indication of the effect of the leasehold title variable, leasehold title being a dummy variable that equals 1 for leasehold title and 0 for occupancy title, X is any of the covariates controlled for mainly but not limited to background characteristics (age, gender, number of years of education, father's number of years of education, mother's number of years of education, marital status) and ε is the error term.

Regression models follow a similar procedure. Models are first run between the respective outcome variable and the dummy for leasehold title. The second model regresses the respective outcome variable against demographic characteristics. The third model adds variables that are held by the respective theory as determinants of the outcome. Essentially, the combination of models is aimed at testing whether leasehold title remains a significant predictor relative to holding of an occupancy license when other observable factors are

controlled for. Cross-sectional survey data is susceptible to heterogeneity, which should be addressed in order to satisfy the OLS model assumption of homoscedasticity. In order to satisfy the assumption, all regressions are run using robust standard errors and outcome variables that do not satisfy the assumption of normality are transformed into logs. The estimates I find do not mean that titling has a particular effect measured by the regression coefficient. It rather provides a tentative indication as to whether the variables may be related (or not as the case may be). Although most appropriate this is the most appropriate estimation method, I cannot control for unobservable factors that may be driving observed variation in the outcome. While the two neighbourhoods are quite similar, they are not the same and so may be affected by different factors. Unobserved factors can only be controlled for in the presence of baseline data which I lack.

6.4 Results

Table 6.2: Characteristics of beneficiaries of titling in Matero versus George residents

Variable	Matero n=262	George n=236	t
Property value	17.99	17.17	-8.12***
Credit access	0.03	0.01	-1.11
Employment status	0.71	0.67	-0.84
Employed female	0.14	0.07	-2.52**
Home-based investments	0.58	0.65	1.79*
Income from home-based investments	224,864	209,098	-0.60
Rooms	5.20	5.70	2.06**
Rent	0.52	0.63	2.29**
Home-based business	0.30	0.31	0.17
Income per capita	11.67	11.29	-4.21***
Household consumer durables	1.61	1.22	-5.48***
Membership in voluntary associations	1.30	1.36	0.81
Political awareness	0.36	0.29	-3.85***
Volunteerism	0.45	0.50	0.83
Neighbourhood attachment	10.52	10.88	1.12
Neighbourhood satisfaction	0.86	0.77	-2.72***
Age	55	54	-0.89
Male	0.52	0.64	2.80***
Education	9	7	-4.80***
Marital status	0.52	0.56	0.92
Household size	6.34	6.19	-0.65
Father's education	6.95	6.76	-0.31
Mother's education	4.67	3.95	-1.27
Duration	27.48	30.58	2.75***

* $p<0.10$ ** $p<0.05$; *** $p<0.01$

I analyse the potential effects of property titling relative to those of the administrative recognition of occupancy. In Table 6.2, I present the characteristics of my respondents in Matero and George and compare their mean differences.

As regards demographic characteristics, there are no differences in terms of age, marital status, father's education, mother's education and household size. Respondents in the Matero sample are likely to be more educated with an average of 9 years than George residents who have an average of 7 years ($t(484)=-4.80$, $p=0.00$). It also however means that the typical respondent in both neighbourhoods is likely to be a school dropout. The proportion of male heads of household in the Matero sample is lower (0.52) compared to that of George (0.64) ($t(495)= 2.80$, $p=0.00$). This difference may be attributed to the original demographics in George where at the time of settling, only men settled there as unmarried women were prohibited to live in cities at the time. Matero had a section called the married quarters where married workers were allowed to live with their families. Many of the families have remained in their original plots. In fact, respondents in Matero have a slightly lower length of housing tenure compared to George. On average, my respondents in Matero have lived there for 28 years compared with 31 years for George respondents ($t(479)=2.74$, $p=0.00$).

As regards the outcome variables, respondents in Matero report higher logged property values (17.99) compared to those from George (17.17). In currency terms, Matero residents report that the average value of their houses is K75.2 million (US$14,500) while those in George report an average of K42.8 million (US$8,200). This difference is statistically significant at the 1 percent level with $t(275) =-8.12$, $p=0.00$. I reject the null hypothesis of no difference. Despite their geographical proximity, houses in Matero have a higher property value.

In terms of credit access, there is an insignificant minority of respondents in both neighbourhoods who have used their house as collateral to obtain a loan. This means that the chance of finding a household head who has obtained a loan using his/her house as collateral in either neighbourhood is almost zero. Of the Matero sample, 3 percent are able to obtain loans using their house as collateral compared with 1 percent for respondents from George. This difference is not statistically significant with $t(496) =-1.11$, $p=0.27$. I fail to reject the null hypothesis.

As regards labour market variables, Matero respondents are not different from George residents. Matero respondents have a higher proportion of employed household heads at 71 percent while George respondents had 67 percent. The difference is however not statistically significant (t(376) =0.84, p=0.40). Similarly, there are no significant differences in the proportion of female heads of household that are employed. Matero respondents have a score of 0.66 percent and George 0.65 percent with *t*(148) =0.060, p=0.95.

With respect to engagement in home-based investments, Matero respondents have a lower proportion compared to those in George. Matero respondents have a score of 0.58 compared with 0.65 for George residents. The difference is statistically significant at the 10 percent level *t*(491) =1.79, p=0.07. This means that Matero respondents are less likely to run businesses relative to George respondents.

Essentially, fewer households in my Matero sample rent out part of their house than those in George. The proportion is 0.52 for Matero compared with 0.63 for George. The difference is statistically significant at the 5 percent level (*t* (444) =2.29, p=0.02.

There are no differences in terms of non-rent-based business investments with Matero respondents scoring 0.30 and George respondents 0.31, *t*(274) =0.17, p=0.86.

Despite fewer households engaging in home-business investments and particularly rent investments, Matero respondents are likely to have the same amount of income derived from these activities. On average, Matero respondents are likely to have a monthly return of ZMK225,000 (US$43) compared with ZMK209,000 (US$40). The difference is not statistically significant with *t*(433) =-0.60, p=0.55.

Besides, Matero respondents report a higher household per capita income than those in George. The logged per capita income score of Matero respondents is 11.67 compared with 11.30 for George respondents with *t*(331) =-4.21, p=0.00. As expected, the variable for household income has many missing observations which are a challenge in many surveys. Often, measures that are less likely to have missing observations such as expenditure data and durable items are used as a proxy. Durable items are also used as a crude measure of wealth.

In this regard, Matero respondents have more durable household items than George respondents. Matero households score 1.61 on the logged household durables scale while those in George score 1.22 with *t*(488) =-5.74, p=0.00. In real figures, Matero respondents (M=6) have on average two household durable items more than those in George (M=4).

With regard to measures of citizen behaviour, Matero respondents report higher political awareness but the same number of membership in voluntary associations, frequency of volunteerism and neighbourly attachment. Matero respondents score 0.36 out of 0.1 on the political awareness scale while George respondents scored 0.29. The difference is statistically significant at the 1 percent level ($t(484) =-3.85$, p=0.00). Matero respondents belong to an average of 1.30 voluntary associations against 1.35 for George, ($t(475) =0.81$, p=0.42), 0.45 out of 3 on frequency of volunteerism against 0.50, ($t(493) =0.83$, p=0.41) and 10.52 out of 18 on the neighbourly attachment scale against 10.89 for George ($t= (494) =1.13$, p=0.26). Attachment is strong in both neighbourhoods; a score of about 60 percent on the attachment scale for both neighbourhoods.

Finally, Matero respondents are more likely to be satisfied with their neighbourhood than George respondents, although levels of satisfaction are comparably high for both neighbourhoods. The proportion of Matero respondents who are satisfied is 0.86 compared with 0.77 for my George sample. This is statistically significant at the 1 percent level ($t(481) =-2.72$, p=0.00).

Overall, the results show initial indication of support for the hypotheses that leasehold titling increases property values, female employment and household income per capita, household consumer durables, political awareness and satisfaction with the neighbourhood. Counter-intuitively, there is initial support for the hypothesis that leasehold titling leads to fewer home-based investments in general and rent-based investments in particular. Nevertheless, based on T-tests, we cannot ascertain the strength of these relationships. We cannot also ascertain the magnitude of association in these relationships unless it was in a natural experiment. Correlation and regression analysis are employed to explore these hypotheses and to generate a sense of the likely magnitude of the relationships and relationships of association.

Table 6.3: Pearson's pairwise correlations between each outcome variable and leasehold title

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Leasehold title	1													
2 Property value	0.44***	1												
3 Credit access	0.05	0.04	1											
4 Employment status of head	0.04	0.01	0.06	1										
5 Employed female heads	-0.01	-0.04	0.05	1.00	1									
6 Investments	-0.08*	0.06	0.01	0.04	0.00	1								
7 Income from investments	0.03	0.10*	0.03	0.02	-0.01	0.72***	1							
8 Income per capita	0.23***	0.18***	0.08	0.05	0.07	-0.02	0.15***	1						
9 log consumer durables	0.25***	0.21***	0.11***	0.06	0.07	0.05	0.20***	0.38***	1					
10 Memberships	-0.04	0.08	0.05	-0.08	0.01	0.01	0.01	-0.02	0.18***	1				
11 Political Awareness	0.17***	0.15***	0.06	0.17***	0.01	-0.02	0.12***	0.25***	0.51***	0.23***	1			
12 Volunteer frequency	-0.04	0.06	0.03	-0.14***	-0.02	0.11***	0.08*	-0.06	0.13***	0.29***	0.21***	1		
13 Neighbourhood attachment	-0.05	-0.08	0.01	-0.13***	0.00	0.05	-0.01	-0.07	-0.13***	0.04	-0.10**	0.06	1	
14 Neighbourhood satisfaction	0.12***	-0.02	-0.02	-0.07	0.04	-0.03	-0.04	-0.09	-0.17***	-0.16***	-0.16***	-0.13***	0.38***	1

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table 6.3 reports the correlations between leasehold title (i.e living in Matero) and each of the dependent variables. The correlation coefficient is a measure of the strength and direction of the relationship. The correlations reveal that leasehold titling is positively correlated with property value, household per capita income and household consumer durables, political awareness and neighbourhood satisfaction relative to occupancy licensing. This means that a change in the leasehold titling variable from 0 to 1 is accompanied by an increase in the above-mentioned outcome variables. Leasehold titling is negatively correlated with home-based business investments in general. This means the same change in in the leasehold titling variable is accompanied by a reduction in home-based business investments. There is no correlation between leasehold titling and access to credit, employment status, employment status of female heads of household and income from home-based investments, membership in voluntary associations, frequency of volunteering, and neighbourly attachment. This means that the same change is accompanied by no change in these outcome variables.

The correlation coefficient between leasehold tenure and property value is r=0.45 (p=0.00). This means that 20 percent of the variance is shared between the two variables. This is a large shared variance for only two variables. The strength of the relationship is weak but statistically significant. We can be 99 percent confident that this is not a chance occurrence. That between title and per capita income is r=0.23 (p=0.00) which represents a 5 percent shared variance. With consumer durables, the coefficient is about the same at r=0.25 (p=0.00) which represents 6 percent of the shared variance. Leasehold titling and political awareness share a coefficient of 0.17 (p=0.00) or 3 percent of their variance. With neighbourhood satisfaction, the coefficient between the two variables is 0.123 (p=0.01) or 1.5 percent of the variance. Between leasehold titling and home-based business investments, I find a negative correlation of 0.08 (p=07); a shared variance of 1 percent. This is a very week relationship.

There is no relationship or shared variance between leasehold title and access to credit (r=0.05, p=0.27), employment status (r=0.04, p=0.40) and employment status of female heads of household (r=-0.01, p=0.95), income from home-based investments (r=0.03, p=0.55), membership in associations (r=-0.04, p=0.42) and frequency of volunteering (r=-0.04, p=0.41) and neighbourly attachment (r=-0.05, p=0.26).

The correlation analysis informs us that the strengths of the relationships are generally weak for the variables that are correlated with leasehold titling. Correlation analysis however does not provide us with an indication of the magnitude of the change in the outcome variables

that can be associated with a leasehold title relative to an occupancy license. I employ regression analyses to provide such estimations. I proceed to explore only the hypotheses that I have found to be correlated with leasehold titling.

Table 6.4: OLS regression of property value against titling and other covariates

Independent variables	(1) Model A	(2) Model B	(3) Model C
Leasehold	0.82***	0.74***	0.80***
	(0.10)	(0.11)	(0.14)
age of household head		0.00	0.01
		(0.01)	(0.01)
Male		-0.13	-0.06
		(0.13)	(0.13)
Education		0.05***	0.01
		(0.01)	(0.02)
Household size		0.02	0.04
		(0.02)	(0.02)
Employment status			-0.23*
			(0.12)
Employed members			0.34***
			(0.13)
Per capita income			0.32***
			(0.08)
Married		0.06	
		(0.12)	
Constant	17.18***	16.51***	12.70***
	(0.09)	(0.33)	(1.12)
R-squared	0.19	0.23	0.34
Observations	277	254	151

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6.4 reports the OLS regression of property value against leasehold titling and other covariates and shows that leasehold title is associated with property values 70 to 80 percent higher relative to an occupancy license. The bivariate regression in Model A reports property values 82 percent (β=0.82) higher than those for occupancy title. When demographic characteristics are included in model B, the regression coefficient reduces to 74 percent (β=0.74). The explained variation increases to 23 percent (R^2=0.23). When I include employment status, secondary employment and per capita income variables, the coefficient shows property values higher by 80 percent (β=0.80). The explained variation rises to 34 percent (R^2=0.34) in the final model. In all the models, the regression coefficient is

statistically significant at the 1 percent level indicating that this is not a chance occurrence. The finding remains robust with various controls; the leasehold titling variable does not lose significance when demographic and other variables are included in the models.

By interpretation, the result merely shows that there is a significant difference in property values between titled households in Matero and households with occupancy licenses in George. What this analysis cannot say for sure is that this difference is attributed to titling. The evidence is at least exploratory and at best indicative of titling being responsible for higher property values. Pre-titling data on property values in both neighbourhoods would be useful in strengthening the analysis. My own survey did not include some variables such as ease of accessibility of water services, tarred roads and the existence of a planned grid which are all factors that favour Matero relative to George.

Table 6.5: Logistic regression of home-based investments against titling and other covariates

	(1)	(2)	(3)
Independent variables	Model A	Model B	Model C
Leasehold	-0.33*	-0.41**	-0.01
	(0.19)	(0.21)	(0.30)
Age of head		-0.01	-0.00
		(0.01)	(0.01)
Education		0.02	-0.05
		(0.03)	(0.04)
Married		-0.18	-0.29
		(0.21)	(0.28)
Household size		0.04	-0.08
		(0.04)	(0.05)
Log of household durables			-0.02
			(0.23)
Employed			0.15
			(0.31)
Rooms			0.48***
			(0.08)
Constant	0.64***	0.87	-0.68
	(0.14)	(0.56)	(0.86)
Adjusted R^2	0.01	0.01	0.17
Observations	493	445	298

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6.5 above reports the regression of home-based investments against leasehold titling and demonstrates that titled households are associated with a lower probability of running home-based investments but this effect disappears when the variable number of rooms is

introduced into the equation. This suggests that the observed effect of titling on home-based investments is actually explained by the number of rooms and not property title. In Model A, respondents from titled households are found to have lower odds relative to George respondents by 0.33. In Model B, the odds further reduce to 0.41 when demographic variables are included. The explained variation rises to 1 percent. In the final model, the title variable ceases to be statistically significant once the number of rooms variable is introduced into the equation. The explained variation rises to 17 percent. The regression also suggests that the kind of income generating activity affected by the number of rooms is rent based investments. Basically, the evidence suggests that all the variation is explained by the number of rooms a household has. This suggests that almost all home-based investments are rental investments which require more rooms in the house for it to rent out a room or more.

Table 6.6: Logistic regression of rent investments against titling and other covariates

Independent variables	(1) Model A	(2) Model B	(3) Model C
Leasehold	-0.44**	-0.53**	0.06
	(0.19)	(0.21)	(0.30)
age_head		-0.01	-0.01
		(0.01)	(0.01)
Education		0.03	-0.04
		(0.03)	(0.05)
Married		-0.20	-0.43
		(0.22)	(0.31)
hhold_size		0.02	-0.08
		(0.04)	(0.06)
Log of Household durables			-0.06
			(0.06)
Employed			0.28
			(0.31)
Rooms			0.58***
			(0.09)
Constant	0.52***	0.81	-0.66
	(0.14)	(0.58)	(0.85)
	0.01	0.02	0.21
Observations	446	401	286

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

As a robustness check, I went further and employed a logistic regression analysis with rent investments as the dependent variable. The two variables are slightly different in the sense

that home-based investment is a general measure of all investments while rent focuses only on letting out a room to a household or to a business. The result is reported in Table 6.6 above.

As the analysis shows, the effect of leasehold titling disappears and the effect of rooms on rent investments increases from an odds ratio of 0.49 to 0.58. The explained variation also increases significantly to 21 percent (R^2=0.21).

As regards the interpretation, the results are simply indicative and not conclusive. The analysis tells us that real property rights are not important but that rooms are what are important in households running businesses, the predominant business being renting out a room. Many studies have shown that even without title, households engage in housing improvement such as building extra rooms. In George, where the terms of occupancy do not allow for building extra rooms, there are several residents that I met and photographed who have made extensions on their houses. However the argument that title provides the right to build extra rooms that can be used for businesses in the first place cannot be thrown out on the basis of this evidence; given that the case studies do not meet the assumptions for a natural experiment, cross-sectional data cannot allow one to make this argument.

So far, the evidence indicates that there is no effect of leasehold rights on the mechanisms through which it increases household per capita income; Leasehold titling has no effect on access to credit, employment status and employment status of women and on home-based investments. Does the evidence indicate that leasehold title is positively associated with household per capita income? Counter-intuitively, the answer is yes. Table 6.7 below reports that household incomes are between 28 and 38 percent higher among Matero respondents compared to George respondents. The bivariate regression in Model A reveals that leasehold titling is associated with a coefficient of β=0.38 relative to occupancy licensing. This means that per capita income among Matero respondents is 38 percent higher relative to those in George. The explained variation is 5 percent (R^2=0.05). When I add the demographic variables and particularly education to the regression equation, the coefficient reduces to β=0.28 (28 percent higher). The explained variation increases to 28 percent which is a good model fit. In the final model, I find that respondents in Matero have per capita incomes 32 percent higher (β=0.32) relative to those of George respondents. The model fit is good with R^2=0.34.

Table 6.7: OLS regression of household income per capita against titling and other covariates

Independent variables	(1) Model A	(2) Model B	(3) Model C
Leasehold	0.38***	0.28***	0.32***
	(0.09)	(0.09)	(0.10)
age of head		-0.01**	-0.00
		(0.00)	(0.00)
Male		0.02	0.05
		(0.10)	(0.11)
Education		0.06***	0.05***
		(0.01)	(0.01)
Married		0.22**	0.27**
		(0.10)	(0.12)
household size		-0.11***	-0.12***
		(0.02)	(0.02)
Rooms			0.05***
			(0.02)
Employed			-0.01
			(0.11)
employed members			0.11
			(0.12)
Constant	11.30***	11.82***	11.44***
	(0.07)	(0.22)	(0.28)
R-squared	0.05	0.28	0.34
Observations	333	309	237

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

There are many reasons why titled respondents may have higher income. It could be that one or more of the mechanisms are actually working but the data and methods used cannot pick it up. This result can also be attributed to some unobserved factors not controlled for; the two main ones being pensions and remittances. Although both neighbourhoods have pensioners, it is possible that Matero has more given that they had to be in formal employment to access a house. There may also be benefitting from higher remittances from children. It is also possible that after obtaining ownership, Matero respondents have become more successful at lobbying for extended family support (Schlyter, 2004:7) that result in higher income. The factors can only be speculated. Returning the focus to the data, despite the fact that Matero respondents have fewer odds of engaging in home-based investments, incomes from rent on average is higher among Matero respondents. Although the difference is not statistically significant, Matero respondents report earning an average of K224,864 compared with

K209,098 in George. Employment status is also higher in Matero (71 percent of household heads) compared to George (67 percent) despite the fact that these differences are not statistically significant. Incomes from these small differences can become significant. Another problem could be that it is just the measure which is not working well. This last point is addressed in the regression of household durables against leasehold titling. These measures are correlated (r=0.38, p=0.00).

Like in the regression analyses above, the result is merely an indication of the possibility that titling or real property rights may be associated with higher income relative to the administrative recognition of occupancy.

Table 6.8: OLS regression of consumer durables against titling and other covariates

Independent variables	(1) Model A	(2) Model B	(3) Model C
Leasehold	0.39***	0.28***	0.33***
	(0.07)	(0.07)	(0.07)
age of head		-0.01***	-0.01***
		(0.00)	(0.00)
Male		0.01	0.01
		(0.07)	(0.08)
Education		0.08***	0.07***
		(0.01)	(0.01)
Married		0.01	0.01
		(0.07)	(0.07)
employed members			0.20***
			(0.07)
Rooms			0.06***
			(0.01)
Constant	1.22***	1.03***	0.67***
	(0.06)	(0.17)	(0.17)
R-squared	0.06	0.30	0.37
Observations	438	407	389

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

In line with having more household per capita income, do households with leasehold title have more wealth as measured by household durables? Table 6.8 shows that the answer is in the affirmative. The Models report that Matero respondents have between 28 and 40 percent more consumer durables relative to George respondents. In Model A, titling is associated with 39 percent (β=0.39) more wealth relative to holding an occupancy license (R^2=0.06).

Controlling for demographic variables, leasehold title is associated with 28 percent (β=0.28) more consumer durables and the model explains 30 percent of the variation (R^2=0.30) which is a good model fit. Once I control for number of rooms and employment status, the regression coefficient shows titling to be associated with 33 percent more durables with the model explaining 37 percent of the variation (R^2=0.37) which is an even better measure of good fit. The coefficients are very similar to those for the regression of logged household income per capita which shows that the measures are interchangeable with the household durables variable having more observations and the models explaining more variation.

Table 6.9: OLS regression of political awareness against titling and other covariates

	(1)	(2)	(3)
Independent variables	Model A	Model B	Model C
Leasehold	0.07***	0.03*	0.03*
	(0.02)	(0.02)	(0.02)
age of head		-0.00	
		(0.00)	
Male		0.00	0.02
		(0.02)	(0.02)
Education		0.02***	0.02***
		(0.00)	(0.00)
household size		0.01*	0.01**
		(0.00)	(0.00)
Married		0.02	
		(0.02)	
Member in political party			0.01
			(0.03)
Constant	0.29***	0.13***	0.06**
	(0.01)	(0.05)	(0.03)
R-squared	0.03	0.29	0.30
Observations	486	439	460

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Further, I test the hypothesis that real property rights are associated with more political awareness relative to occupancy tenure. Table 6.9 reports the regression of leasehold titling against political awareness and reveals that real property rights are associated with more political awareness. The bivariate model reports a regression coefficient of β=0.07. On the scale, this means a level of political awareness 7 percent higher relative to that of respondents in George. The coefficient is statistically significant at the 1 percent level and the explained

variation is 3 percent which is not a good model fit. Controlling for demographic characteristics, including education which is higher among Matero respondents and likely to influence the result, the coefficient reduces to β=0.03 or 3 percent with a good model fit (R^2=0.29). The significance level reduces to 10 percent meaning that much of the effect comes from the level of education but that titling has its own independent effect. In the final model, in which I include belonging to a political party, the regression coefficient remains at β=0.03 significant at the 10 percent level. The model fit is good with R^2=0.30.

By nature the process by which residents of Matero obtained housing was highly political. Matero and George have historically had a reputation for being highly political neighbourhoods (Rakodi & Schlyter, 1981). In 1975, George was one of the areas that were meant to be demolished. In order to gain political support from the area however, President Kaunda decided to upgrade it. Similarly in Matero, many believe that the then President Frederick J.T. Chiluba, fearing to lose the 1996 election to then former president Kenneth Kaunda, decided to offer the houses to sitting tenants in order to win their support. By the logic of induction, this is the reason why a presidential directive was issued to sell the houses even though the National Housing Policy did not provide for privatisation of public housing.

With this background, the regression models point in the direction of titling being associated with political awareness especially in this context where the process was politically motivated.

Given all this, does leasehold titling lead to neighbourhood satisfaction? As mundane as the question may sound, it is an important question because if residents are satisfied with their neighbourhood, the propensity for neighbourhood unrest is reduced. The answer is a tentative yes. Table 6.10 reports that leaseholders in Matero are two to three times more likely to be satisfied with their neighbourhood relative to occupancy license holders in George. In Model A, leasehold title is associated with a score of β=1.90 times more than occupancy tenure. This is statistically significant at the 1 percent level. The model only explains 2 percent of the variation (R^2=0.02) which is not a good model fit. In Model B, the odds ratio (β=2.34) is higher and remains significant at the 5 percent level and the model fit increases to 5 percent (R^2=0.06) but still not a good model fit. In the final model, leasehold title is associated with even higher odds of satisfaction (β=2.57). This is statistically significant at the 1 percent level. The model fit is improved to 6 percent (R^2=0.06). Compared with other models that predict attitudinal or subjective measures in general, this is a good model fit.

Table 6.10: Logistic regression of neighbourhood satisfaction against titling and other covariates

Independent variables	Model A	Model B	Model C
Leasehold	1.90***	2.34**	2.57***
	(0.46)	(0.80)	(0.74)
Age of head		1.52*	1.42*
		(0.34)	(0.28)
Male		1.28	1.37
		(0.49)	(0.45)
Education		0.73*	0.69***
		(0.12)	(0.09)
household size		1.03	1.03
		(0.06)	(0.05)
Married		0.78	0.68
		(0.30)	(0.22)
Income		1.05	
		(0.12)	
member of religious organisation			0.77
			(0.41)
Duration			1.00
			(0.01)
Pseudo R-squared	0.02	0.06	0.06
Observations	483	299	422

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results provide an indication that titling may be associated with a feeling of satisfaction with the neighbourhood among leaseholders which is higher relative to occupancy license holders. Possession of title to property such as a house is an important goal in life which should lead to satisfaction once achieved. For respondents from Matero, evictions and the threat of eviction for failure to pay rent to the council were a frequent occurrence as I shall show in the next chapter. These evictions ended following the homeownership scheme. No doubt this brought contentment to many who had difficulty paying rent. However, in this case the evidence cannot unambiguously tell us whether it is in fact the title that is responsible.

6.5 Discussion

In this chapter I set out to examine the effects of real property rights relative to the administrative recognition of occupancy by evaluating the effects of leasehold titling in Matero and by using the holding of occupancy licenses in George as a comparison. The aim was to examine a wide range of effects in order to facilitate comparison with the analysis on Khayelitsha that has been presented in Chapters 4 and 5. I set out to test thirteen hypotheses;

leasehold titling has an effect on property value, access to credit and employment status of household heads, employment status of female household heads, home-based investments and income from home-based investments, household per capita income, household consumer durables and membership in voluntary associations, frequency of volunteering, political awareness and neighbourhood attachment and neighbourhood satisfaction. The results are exploratory and at best symptomatic due to problems in the process of data collection. A lack of existing survey data on the subject in these neighbourhoods meant that I had to collect and analyse survey data to test these hypotheses. The data was meant to be collected by first drawing a random sample in Matero and then matching that sample with a sample from George on the basis of a similarity of a wide set of characteristics. The matching was not possible because a sampling frame could not be accessed. An alternative decision was made to draw a random sample in George using interval sampling. This meant that the result would be less robust and by no means satisfy the assumptions for a causal argument to be made.

Given this background, I find that leasehold title is associated with higher property values. My estimate is that property values rise to about 80 percent more than that of households on occupancy tenure. This is a combined value of the land and house. Elsewhere, titling has been found to substantially increase property values. My own estimate is on the higher end comparable to that of Dowall and Leaf's in their work with land brokers in Jakarta, Indonesia, who found an increase of 73 percent (Dowall & Leaf, 1991), and Alston and Libecap who reported a 100 percent increase in Brazil (Alston & Libecap, 1996). Other studies reporting a high increase include Jimenez in Davao, Philippines who found a 58 percent increase in value (Jimenez, 1984) and Dowall who finds an increase of 45 percent in Indonesia (Dowall & Leaf, 1991). Most studies however estimate an increase of around 25 percent in Ecuador (Lanjouw & Levy, 2002), in Peru (Cantuarias & Delgado, 2004) in Indonesia (Dowall, 1998) and in Manila in the Philippines (Friedman, Jimenez, & Mayo, 1988). My own estimates include post-titling housing improvements and may also be slightly higher because of respondents who reported the value comparing that of their neighbours instead of valuation by the land surveyor. However, in general land and housing prices have appreciated in Lusaka in particular and Zambia in general. Further research would benefit from using actual price valuations from land surveying departments to estimate property values.

Despite high increases in property values, my evidence tentatively indicates that there is no association between leasehold title and access to credit. Out of my entire sample, 98 percent did not use their house as collateral to access credit. I will show in the discussion in the next chapter that the main reason is fear of losing the house due to failure to repay the loans. Another reason is that banks and other financial lending institutions require that one is employed. Without employment, they are reluctant to accept low-cost houses on their own as collateral. I can also speculate from my experience that in general, Zambians have a culture of saving for their expenses. The culture of credit or debt is not widely appreciated. This could be a factor affecting credit access. I find no systematic scholarly studies investigating the effect of titling on access to credit in urban areas of Lusaka in particular and Zambia in general. A study in rural Zambia finds that small-scale land-holders are wary of using their land as collateral even when they can access credit (Home & Lim, 2004). Elsewhere, the findings are ambiguous with a leaning towards no effect of titling on credit access (Boudreaux, 2008; Dower & Potamites, 2005; Field & Torero, 2006; Galiani & Schargrodsky, 2010; Gilbert, 2000; Lemanski, 2011; Van Gelder, 2009). Future research should focus on the role of culture in influencing credit and whether the poor in slums do in fact consider credit as a need.

Similarly, my evidence does not support the hypothesis that leasehold titling has a positive effect on labour market participation relative to occupancy licensing. Their probabilities of employment are the same. Correspondingly, the assumption that leasehold title has a positive effect on employment status of female heads of households relative to occupancy title was not supported. In both neighbourhoods, unemployment rates are around 30 percent which should be lower given that both neighbourhoods are tenure secure. Again, Gilbert's (2004) question as to whether the provision of title is realistic given the conditions of high unemployment, widespread poverty and high income inequality is worth posing on this occasion. Titling is unlikely to lead to increased employment if the economy in general cannot support a larger labour force. Elsewhere, studies find positive effects of titling on household labour participation and hours allocated to activities outside the home mainly through the mechanism of tenure security (Field & Torero, 2006; Field, 2003b; 2005; Field & Kremer, 2006; Field, 2007; Maura et al., 2011; Maura, 2011) while others find no significant effects (Galiani & Schargrodsky, 2010; Rose, 2006). In Senegal the impact of titling on the economy of families is "limited and barely measurable" which means titling barely has an effect on labour market outcomes (Payne et al., 2009). Further research is required as to what

the optimal economic conditions are for titling to have a positive effect on labour market participation either through increases in home businesses or increases in tenure security.

Congruently, I do not find evidence in support of the assumption that leasehold titling increases home-based investments relative to occupancy tenure. Also, the hypothesis suggesting the effect of leasehold titling on income from home-based investments is not supported. Despite the fact that the terms of occupancy for George respondents prohibit holders from engaging in business activities, they are nevertheless as equally likely as Matero respondents to run home-based businesses. I can apply work from scholars on perceived tenure security to explain this result. It has been shown that psychological pathways of thinking and feeling influence how dwellers make decisions about the probability of eviction and determines their level of fear of eviction (Reerink & Van Gelder, 2010; Van Gelder, 2007; 2009; 2013). It is clear that respondents in George feel that even if they engage in activities that go contrary to their terms of occupancy, they will not be evicted. They are then able to engage in businesses from that perspective. Much of this application has been made to housing improvement in the literature but it is also applicable in this situation. Further, enforcement of the terms of occupancy by the Lusaka City Council seems absent. It would cost the Lusaka City Council more economically and politically in terms of unrests if they enforced many of the terms of occupancy. More research on this mechanism is required. Particularly, the field of knowledge would be enriched by an understanding of alternative ways through which new title holders finance their home-businesses using title when they cannot access credit.

Notwithstanding, I find uncertain evidence that leasehold titling increases household per capita income. My evidence shows that the mechanisms by which this is likely to occur do not work. Due to the limitation of lack of a baseline in my data, there is a likelihood that the mechanisms are working and the evidence cannot pick up these effects. It is likely that higher property values attract higher income from rent. Following titling, Schlyter (2004:7) documented the practice of raising finances for houses in Matero through the extended family in order to make extensions. Due to a still strong extended family system, houses are viewed as family homes despite being in the name of one person or several siblings. Such contributions can be exchanged for domicile rights. It is possible that this can also be a factor. Other studies, the evidence focuses on higher income generated through the mechanism of labour market participation and hours allocated to activities outside the home (Field &

Torero, 2006; Field, 2003b; 2005; Field & Kremer, 2006; Field, 2007; Galiani & Schargrodsky, 2010; Maura et al., 2011; Maura, 2011; Rose, 2006). There is a scarcity of studies that have been done to investigate the effect of titling on income through the mechanism of opening new businesses. A cross-sectional qualitative study in South Africa that found that titling resulted in opening of small businesses (Boudreaux, 2008). However it did not show whether businesses were being run before titling. In South Africa, shebeens are well known business ventures that operate illegally in informal areas. Nevertheless there is a lack of studies because research has concentrated on access to credit and not beyond. Since the mechanism of access to credit does not generally work, it is either assumed that title holders cannot proceed to opening businesses or the mechanism is neglected. My study therefore demonstrates that by virtue of having title or tenure security, the poor can open small home-based businesses and obtain an income as the analysis home-based businesses and income from home-based businesses has shown.

Moreover, the findings indicate indeterminately that leasehold titling increases wealth as crudely measured by household consumer durables. My finding differs from that of Galiani and Schargrodsky (2010:716) who in their study of the effects of land titling in Buenos Aires find no significant relationship between property rights and durable asset consumption. The main difference is that my study had a longer list of durable items as compared to Galiani and Schargrodsky's (2010:716) who had only included a refrigerator with freezer, refrigerator without freezer, washing machine, television and cellular phone. Further, Galiani and Schargrodsky's (2010:716) models use a dummy variable for possession of each asset relative to the lack of possession of that asset as a dependent variable while my study uses an index of a more exhaustive list.

The hypothesis that leasehold titling is associated with more memberships in voluntary associations is not supported. Likewise, I do not find evidence that leasehold titling increases the frequency of volunteerism. There are two main issues regarding this analysis. First is that volunteerism is generally not a widely practiced activity in communities particularly among the poor. Much of the time is spent on looking for the next meal. Secondly, the question of having an economic stake is not addressed but I suspect this is very important in the case of Matero respondents. One can argue that they did not have much of an economic stake as they only paid administrative costs. It can however be argued that having an economic stake can be dependent on what amount can be said to constitute a stake. For some households with very low incomes, the costs of obtaining the house may have been enough to constitute an

economic stake. Future research should examine what constitutes an economic stake for the poor in the process of titling. One other study examining this hypothesis among 17 Latin American countries finds no effect of title on membership in voluntary associations (Pecha & Ruprah, 2010).

Nonetheless, the findings provide indefinite support for the hypothesis that leasehold titling increases political awareness. In contrast, there is no evidence supporting this hypothesis in Latin American countries (Pecha & Ruprah, 2010).

Furthermore, leasehold titling is not related to neighbourhood attachment. However social attachment is strong in both neighbourhoods. This could be attributed to the fact that social relationships in the two neighbourhoods have been stable for a long time such that neighbours know each, trust and understand one another well. In both neighbourhoods, respondents have lived an average of about 30 years during which they have built strong social networks.

Finally, I find tentative evidence supporting the hypothesis that leasehold titling leads to neighbourhood satisfaction. Although Matero's satisfaction levels are higher, satisfaction in both neighbourhoods is generally high. If the idea holds that owning a home is an important goal many individuals have which brings satisfaction once the goal is attained (Rohe et al., 2002:2), then both neighbourhoods should be satisfied because they both own their houses. Matero respondents should even be more satisfied because they have the full bundle of rights while those in George should be less satisfied because they do not possess the full bundle and that is what seems to be going on here.

6.6 Conclusion

Overall, the evidence is weak but points toward real property rights having an effect on some but not most measures, relative to the households subject to administrative recognition of occupancy. On 9 out of the 13 measures, real property rights provide similar effects to those of the administrative recognition of occupancy. The tentative evidence indicates that titling contributes to an increase in property values, household income per capita and wealth in terms of household durables, political awareness and neighbourhood satisfaction. There is no effect of titling on employment status of heads of households, employment status of female heads of household and access to credit, home-based investments, income from home-based investments and membership in voluntary associations, neighbourhood attachment and frequency of volunteerism. I have examined several effects of titling thereby addressing some

of the concerns in the literature about studies not being holistic. In this way, comparison can be made on the basis of quantitative analysis with the Khayelitsha case study on many of the effects. The methodological challenges pointed out in literature are corroborated with my own encounters in this study; the results are ambiguous but do provide an indication of the effects of real property rights relative to occupancy tenure.

CHAPTER 7

SUBSEQUENT EXPERIENCES OF THE TITLING OF RENTAL HOUSING IN MATERO, LUSAKA

7.1 Introduction

In Chapter 6, this thesis has presented quantitative evidence tentatively indicating that titling may have had the effects of raising property values, household per capita income, wealth (as crudely measured by consumer durables) and neighbourhood satisfaction in Matero. I also found no evidence of the other effects that were hypothesised at the beginning of the chapter. These findings need further interpretation. Quantitative evidence alone cannot provide the full interpretation of what the subsequent experiences of beneficiaries of the homeownership scheme are after leasehold titling. It cannot tell us comprehensively whether the experiences of leasehold title holders differ in qualitative terms from those on occupancy tenure and why. In addition, because the results were indicative, it is useful to compliment the evidence with qualitative evidence in order to clarify the role of leasehold title with respect to the hypotheses tested.

In light of the quantitative findings presented in Chapter 6, this chapter examines the effects of real property rights relative to the administrative recognition of occupancy by examining the qualitative evidence regarding the subsequent experiences of leasehold ownership among Matero residents relative to the experiences of holding occupancy tenure among George residents. I examine whether the subsequent experiences of leasehold titling differ between Matero and George in terms of employment status, tenure security and access to credit, housing improvement, home-based business investments and wealth, human capital, attainment of social status and neighbourly attachment, civic participation and membership in voluntary associations.

7.2 Data and Methods

I used qualitative data in order to answer the research question. Between the second half of July and the first half of August 2011, I conducted in-depth semi-structured qualitative interviews with household heads in Matero Township and George Compound of Lusaka. I

asked questions on the prior and subsequent experiences of homeownership from a purposive sample of Matero and George residents.

I used a kind of cluster sampling technique. I divided both neighbourhoods into clusters. I aimed for the sample to be as geographically representative as possible. To ensure geographic representation, the most recent (2009) Google Earth images of the terrain were used to identify clusters of households. The clusters were defined by boundaries defined by the road grid. Then households within the cluster were selected in such a way as to represent sub-clusters or concentrations of households within the cluster. From each cluster, I selected one, two or three households depending on the size and density of the cluster. Altogether, 35 households were sampled, 25 being in Matero and 10 in George.

My method of data collection was an interview schedule (Please see appendix). This is a question guide that I prepared before going for fieldwork. It was loosely structured in order to allow interviewees to be as expressive as possible. The topics on the guide included questions about the individuals and the dwelling, economic benefits, social benefits and benefits under human capital. The idea behind structuring the questions this way was to avoid biasing the interviewee. This ensured that interviewees provided what they thought was the benefit rather than being asked specifically whether a pre-known theme such as credit access for example was something the interviewee thought was a benefit. I recorded each interview using a recorder and stored the audio files on a computer.

Each interview lasted an average of 32 minutes in Matero and 27 minutes in George. The longest interview in Matero was 55 minutes and the shortest approximately 10 minutes. In George, the longest interview was 52 minutes and the shortest lasted 9 minutes. One interview, with a male local magistrate judge in Matero was not useable as it had become apparent during the course of the interview that the interviewee had been drunk. He requested that I return to redo the interview later but I had other appointments to meet on that day and was unable to return in the few days that remained.

Altogether, a total of 35 household interviews were conducted. Of the total, 16 were female interviewees and 19 were male. In George, 10 interviews were conducted in total. Seven of the interviews were with females while three were with male interviewees. In Matero, 25 interviews were conducted. Ten interviews were with male and 15 with female interviewees. Eleven interviews were conducted in English, seven in Bemba and seventeen in Chinyanja. I translated the interviews conducted in Bemba and Chinyanja into English during the process

of transcribing. Being a native speaker of Bemba and Chinyanja and having received instruction in English through my entire schooling, I am confident that there were few misunderstandings.

My method of analysis was a thematic analysis similar to the one done on the qualitative data in the Cape Town case study. First I transcribed all the interviews. Then I coded each interview transcript according to emerging themes. These themes were then categorised under broader themes considered benefits of titling and homeownership. In this chapter, I summarize what the interviewees' views are and provide at least one quote to give a typical narrative on the theme.

7.3 Findings

7.3.1 Characteristics of the Interviewees

About two-thirds of the households interviewed in Matero were the original occupants of the houses from the time the houses were built by the British colonial administration in 1959. Interviewees occupied the houses between 1959 and 1964. However, some of the original heads of households were no longer alive at the time of my interviews. The heads of household I found were their children and in some cases the surviving spouses of the original heads of household. Others occupied their houses in the 1970s and the rest in the 80s and very early 90s.

Almost all households interviewed in George were among the first occupants of the land after George Hadjipetrou had bequeathed it to his workers. Three moved in around 1964, two about 1975, two about 1980, one in 2008 and the other two could not remember but said it was a long time ago. Similarly, some of the original heads of household were still alive, in some cases only spouses and in a few cases children of original household heads who had established their own families.

In Matero, the average household size was seven, with most households having eight members. In one case, the household had twelve members but only eight have their needs met by the head of household while 4 have their needs met by their mother, a daughter of the household head who lives in an extended section of the house. The smallest household had one person while the largest had fourteen. In George, the household sizes of my interviewees were larger with two having 12 while the smallest had two. The survey data however shows that both areas have similar household sizes.

In terms of composition, households were either nuclear family households, household ran by grandparents or households occupied by siblings only. Typically in Matero, households ran by nuclear families were those referred to by interviewees as family houses. These are households in which members were caretakers appointed by extended family members, typically the siblings of the head of the household. In this situation, the house was bequeathed to all the children of the primary beneficiary. Though some interviewees in George regarded their houses as family houses, there was no legal provision for several members to be included on the occupancy license and the license was not legally transferrable. The concept of a family house is discussed in the next section on obtaining a lease in Matero in the paragraph describing how residents obtained their title deeds.

7.3.2 "most people are not working": Employment Status

In the survey, I found no evidence supporting the hypothesis that leasehold titling increased labour market participation in Matero. The experiences show that unemployment is high in both neighbourhoods such that most respondents depend on the informal sector, meagre retirement benefits and remittances from elderly children to earn a livelihood.

Many of the heads were employees of either the government or state-owned enterprises that were privatized during the 1990s. Many of them held clerical and menial jobs (general workers) while a few like Phiri who is a retired laboratory assistant were doing jobs that were technical in nature.

> **Singumbe:** And what sorts of jobs did people used to do, the people who ended up renting these houses
> **Phiri:** Most of them were general workers, mostly civil service, yeah. In my case I was, well I stood out in the crowd, I used to work for the University of Zambia then, School of Medicine, yeah I was in the lab.

Phiri represents a unique case, fortunate to have worked for a reputable institution that honoured his pension when many others were not as fortunate as him. Many of the interviewees who retired have exhausted their pension benefits. Those who were retrenched have exhausted their severance package. Those who were pruned when state-owned enterprises were privatized were unfortunate as their severance packages were inadequate. Chongo's story below is a narrative of many of the retirees and retrenchees.

> **Chongo:** For me my life, even if I have been empowered with a house, coming to the job that I was working, and the way the job came to be, let's say

> I was on normal retirement. Now my retirement letter was given to me in 1994. Until 1995 I had not received my terminal benefits. The day I went there they told me they did not have the authority, let me say the management did not have the authority, the company was now in the hands of the receiver**…**They said no wait for the receiver manager after that he will solve your problem. Now they started paying me in instalments, they would give me K200,000 and like that, that's how that money has finished. What useful thing can you do if they are paying you in that way? Nothing. That is my main worry. Until today I am not happy about it because even the children who are in schools, I am just struggling. For others even now we have school fees which we have not paid, yes that's the problem I have found. Even if I have a house, there some things that are troubling me.

The elderly children of the heads of household are mainly involved in informal activities mainly piece work while others have formal full-time jobs mainly in companies established by foreign investors especially from China, Korea and the Middle East. The foreign investors are known to pay very low wages for long hours of manual labour. Chomba gave some insight into the kind of work available to those in formal employment;

> **Singumbe:** The others that I was interviewing were saying unemployment is too much here, many youths have no jobs
> **Chomba:** Yes it's true because a long time ago, the companies belonged to the government. Then after privatisation, some of the companies that were not making profits were closed you see. Then the investors who come now are the Chinese who just open a shop and then gives you a K200,000 at the month-end. Now where will the K200,000 take you? Because you will just buy a bag of mealie meal and a container of cooking oil and that money will be finished. So that's the problem. Though now at least the investors are opening some companies

For those in informal employment, piece work is the main economic activity. Particularly, piece work is built around the bourgeoned construction business that emerged and has developed in Matero since 1996 as people began improving their existing houses or built new houses on the same plot. Many of my interviewees had done so. The bourgeoning construction business was laid testament to by Chileshe who is himself a bricklayer;

> **Singumbe:** So what kind of jobs are found here in Matero which you do
> **Chileshe:** I do bricklaying, there are a number of building projects within the compound
> **Singumbe:** There are a lot of building projects eh?
> **Chileshe:** Yes since the houses were sold people have been building a lot. Some are extending, others are renovating making the houses good

As I walked around Matero, I saw a number of informal brick-making businesses that were established on any vacant land and even on the premises of the houses. Some were located on the roadside. Along Commonwealth Road, which is the main road that runs across the centre of Matero separating the northern part from the southern part, there were several blocks displayed for sale. Right across from there would be bags of cement and heaps of sand and of rock also for sale. The pictures below are only examples of these businesses which are providing jobs for residents.

Figure 7.1: Informal sector workers at a home-based brick-making business

Besides piece work tied to the housing construction business, other types of piece work include car washing and digging garbage pits. A garbage pit is usually a 1.5m by 1.5m wide and 2m deep pit dug for purposes of disposing of household garbage in neighbourhoods that have no or irregular municipal services for garbage disposal.

The employment conditions in George are similar to Matero. There are limited formal employment opportunities, respondents depend on scarce blue collar employment from foreign investors, and depend on informal business and piece work. The similarity in

employment conditions can be seen in the answer by Bwalya when I asked him what the biggest problem in George was;

> Bwalya: Generally it is just the issue of what we would say poverty maybe, poverty as you know this is a shanty compound, where most people are not working. I think the biggest problem that people are facing here is just poverty, yeah.
> Singumbe: And what do you think is the main cause of that poverty for people in George
> Bwalya: Ahh, I think one it's, if you look at maybe the type of jobs that people are getting of late, yeah they are not as stable as the jobs that they used to get. I mean for example in the UNIP government, yeah at that time most of the companies were owned by the government. So when a person was employed that person was expected at least to be in employment for a long time. But of late we have this the changing of investors, today this company is bought by this one, the next one who comes will try maybe to eliminate some workers from there replace them with others, just like that. So most people find themselves out of employment. I think that is one factor which has contributed to poverty in this area yes, ehe

Overall, there is no difference in the experiences of employment by both residents of Matero and George. There is high formal unemployment and most respondents depend on informal businesses to survive.

7.3.3 "it's a tough going period": Living Conditions

With the prevailing conditions of high unemployment and unpredictable nature of piece work, interviewees in Matero faced deprivation mainly in meeting non-shelter needs. Even though heads of households and dependants contributed to household income, for many households the amount of household income earned through the various sources is not enough to meet all non-shelter needs. Interviewees like Chomba above already explained how it was possible for them to meet their needs with their income before the national economic reforms and that now the K200,000 earned is not enough to meet their food needs in a month. Interviewees such as Mwansa below are a typical example of the views I encountered. The households can afford mealie meal and cooking oil but no other vital foods that help meet a daily calorie intake. They are sometimes not sure where their next meal will come from.

> **Mwansa:** … it's a tough going period such that I cannot manage to describe it any way. I only pray to God who keeps us that when I pray that He gives us

> food, when God sees, then some person will come oh sir, K5,000 or rap[vegetable] you eat you sleep.

George's living conditions are similar to Matero but are augmented by difficulties in accessing water and sanitation facilities, healthcare, schools and electricity. With regard to basic services, the term "shanty compound" adequately describes the living conditions in George. By "shanty compound" also referred to as "*komboni*", (literally compound) in common parlance of Lusaka, Bwalya in the quote above and other respondents mean an unplanned slum area where poor people live in conditions lacking modern facilities and services. The term is often used in contrast to "*kuma yard*" (literally the yards) which refers to modern middle class or upper class suburbs and inner city neighbourhoods where residents espouse modern values and lifestyles. Matero is referred to by some as *kuma yard* and others as a "*komboni*".

7.3.4 "'Are these our houses, they just lied to us'": Tenure Security

My survey provided tentative evidence that leasehold titling is associated with higher property values in Matero but respondents are at a risk of losing their property. Getting a title deed has meant higher property values and tenure security in the short run but does not really mean long term tenure security for many of my respondents. Interviewees fear losing their houses due to failure to pay their newly introduced land rates. I was told that immediately after privatisation, residents did not have to pay rates. It seems the council might have been waiting for the valuation of property and registration of title to be done. My respondents felt that the council should not have introduced land rates as that has nullified the benefits of homeownership they had experienced because now they had to worry about paying land rates the way they used to worry about paying rent. The penalty for lack of payment of land rates was eviction via court bailiffs and selling of property for the council to recover both the arrears from the land rates and the costs incurred in the process of recovering the arrears. The view by Chongo shows how respondents lamented this state of affairs;

> **Chongo:** What I can say is that being given houses, because in one's life, what they call shelter is very important. A person should have a house. Today someone can't just start building a house because just this slab or just starting a house, before it even riches window level it's millions of Kwacha. Now a person like me, where will I get it from?… Let's say like the way they gave us houses, before we had what they call land rates, we were very happy. Because now all you concentrate on is what will I eat what will I eat. That problem of

> paying rent and they will evict me out of the house, that was all gone. But now they have reminded us of the way it was a long time ago. Because with these land rates the council comes with court bailiffs to come and remove property from the house. It is not a good system. Because when you give someone something, you can come again with another way saying no you will be doing this, how would I feel, am I going to be proud that this is my house? While another is waiting for me to take money for a license to live in the house, no. It should have remained there, 'we have given you the houses' they even remove and keep their hands off. Not the way they are coming. Already many are saying 'Are these our houses, they just lied to us'. That's what people are saying now because they have been taken aback. They are being reminded of a long time ago of paying rent for the houses

For some respondents, this has evoked memories of past evictions that took place in Matero and the fear that was felt by residents. With the unpredictable flow of income that many of the households are undergoing, this fear is resurrected and comes with a feeling of insecurity.

Similarly, interviewees in George cited that they enjoy a similar benefit with their houses and that it is only recently in 2011 that they felt insecure when they were told that they could not renew their licenses without settling their ground rent arrears. For a long time, interviewees felt that the houses were theirs and that no one could come and take them away from them or their descendants. In the 1980s, some of them decided to stop paying the service fee completely when there was a boycott. The boycott was to protest that the council was not providing services even when residents paid their service fee. However, as mentioned above, interviewees became worried about recent evictions from private land that they were hearing about in several informal settlements. They were also worried about the elections at the end of 2011 as they wondered whether the new government would allow them to stay on. This is how Mabo and her daughters and grand children who sat in on the interview expressed their sense of insecurity about their house;

> **Daughter:** they send us papers saying they want the money for land. "If you don't pay we will come and remove you from our land."
> **Singumbe:** So the land is not yours at all?
> Daughter: the land
> **Mabo:** The land, let's just say that the land belongs to God but the government is the custodian. They are the ones who want the money
> **Singumbe:** So if they had to repossess their land, would you just leave the house just like that and go and live elsewhere?
> **Daughter:** No we would not leave it
> **Granddaughter 1:** Ok what happens is if they say that, if the arrears are too high, then they tell you that if you don't pay until a certain maximum value, they send the bailiffs. So they will come and evict you from the house. So if

> they evict you then you have to find where to go. So that is what happens. They remove all the property from the house and leave it outside just like that and they lock the house… At this time it is not too common because the council understand… It's not too common that they come and evict

Even though they have security in the sense of possessing an occupancy title, they fear that they may be evicted having violated the terms. In the event that they lost the protection from their occupancy license, they provide another basis for which they should not be evicted; essentially that the land belongs to God and since we are all God's children so we deserve it; the council is understating and will provide alternative ways of sorting out the problem. Even after administrative recognition of occupancy, the possibility of eviction lingers on.

It has been argued that titling may actually act to reduce tenure security in the case where the poorest households may not have the means to pay the costs associated with formalisation (Durand-Lasserve & Selod, 2009:107). In Senegal, some households guard against such tupes of insecurity by beginning the process of formalisation in order to be tenure secure but suspending it indefinitely in order to avoid the costs (Payne et al., 2009:407).

7.3.5 "we can get a loan at will": Access to Credit

In the survey, about 98 percent of respondents had not used their house as collateral to access credit. The qualitative evidence shows that even though interviewees in Matero knew that they could use their house as collateral for a loan, I confirm that none of my interviewees had used their house to get a loan. Most of my interviewees pointed out that they desired to get loans and some even felt that they could get a loan at will. Those that tried said none of the banks would accept their houses as collateral and that they feared that they would lose the house in the event that they failed to repay. The alternative that some used was to use informal loans. However informal loans are not secure; some were defrauded in the process. Interviewees in George were aware that their occupancy licenses were not acceptable for getting loans.

> **Mambwe:** …though we haven't really gotten into it but I would also claim it as a benefit for example we can get a loan at will with one of these banks because we have collateral, yeah with this collateral you can get a hundred million kwacha at least, yeah things like that yes

In Mary's case, she wished to get a loan but could not borrow from a bank due to lack of employment. She argued the merits of her case

> **Mary:** My son what I can say as a last word, those who built houses, I don't know if they got large loans then they built houses, I am sure they are well here in Matero. They are well because in a house, if they connect electricity and someone from a company rents, each month it brings in about K800,000. Now with that would you say you would fail to repay a loan? You can pay because that money when they give you, you can take a bit and pay to the bank where you borrowed the money because you have something big which brings in the money more than just business. In your business if you have no ideas it goes down but a house does not lose. A house does not lose. If I want to get a loan, I can get one for a house, build me a house and then that house I can put someone to rent. If I put someone there to rent, every month I should pay back to the bank, I would be happy with that my child because I know that a house does not lose compared to any other business…. Unlike here even when you have a house we suffer, where will you get the money to pay for another house… Now for us who do not have, it's like this, you will even think of selling your house when your child gets sick and go to the village… Getting a loan can profit you. Me I would be happy if you helped me or the government. A house I would be happy. If you would want to help me, a house, that's what I would want that's it. Or now when they give us some money if we will not lose [the court case against the neighbour on encroaching onto her land], I would want a house because a house is a big asset

Some tried to get informal loans but were defrauded by some individuals who took advantage of their ignorance on accessing credit using houses as collateral. They were told to make monthly contributions by their leaders acting on behalf of these individuals. When loans were to be given, most contributors were not given. For Chilufya, the leaders decided to pay her back some of her money but the money for other contributors had disappeared.

> Chilufya: There are these new things that have come about loans, they are giving loans to leaders. You who are followers they don't give you because they don't know you. When money comes they do not give you any they only give those others. Those who charge money they make you pay K7,500 or K5,000. When the money comes they do not give you any
> Mother: These same loans… recently we were making contributions. Contribute money so that you get loans. We paid that money but did not see the loan. Those people who did not pay are the ones getting the loans.
> Singumbe: Who provides those loans
> Mother: These same ones for this world that we are struggling with
> Singumbe: Who was giving the loans
> Chilufya: She does not know them well she was just being crooked
> Mother: They just crooked us. So some came back and said the money you had contributed we have returned it, they brought it back and gave me back. But the other money just went like that

Their leasehold titles have not provided them access to credit just as occupancy titles have not provided George interviewees with access to loans. This finding is consistent with what has been found in Khayelitsha and elsewhere in the literature.

7.3.6 "we extended and put someone for rent and it brings in some money": Housing Improvements

Housing improvement after titling was one of the most cited benefit in Matero; that interviewees had won the right to make modifications such as extensions and to build more houses within their plot. They also pointed out that they could sell the house if they wanted and make money out of it.

> **Wife:** The houses are working because people have even now extended
> **Chileshe:** Because the people staying in these houses have now made extensions, they have built other structures and those with money have made them look very good comparing to the time the houses belonged to the council. So the houses have been very helpful, they are helping the people a lot
> **Singumbe:** So in your own experience, what benefit have you found?
> **Chileshe:** The benefit, ahhh we extended the bedroom, we extended and put someone for rent and it brings in some money. That is the benefit we find
> **Singumbe:** So how many rooms have you added in your extension
> **Chileshe:** We have added two rooms
> **Singumbe:** So are you renting out each room
> **Chileshe:** No it's a two room unit
> **Singumbe:** So how much do you get every month from rentals
> **Chileshe:** At the end of the month we get K500,000

Extensions were not only important for income generation through rentals but primarily because original houses were too small to accommodate the typically large families. Original houses came with a bedroom, a sitting-room, a kitchen and a bathroom with a toilet outside. Household sizes were approximately 8 people which meant four people per room. The houses were over-crowded. Below are pictures of an original house and two extended houses.

Figure 7.2: Original house in Matero

Figure 7.3: Extended house in Matero

Though they did not enjoy the legal right to, interviewees in George also enjoyed the benefit of extending houses and building more structures if there was space to do so. This is done without the consent of the council as the council only allows residents to use only the land upon which the house is built. I found Bwalya working on extending his house and sat down for an interview with him. I asked him whether he and his neighbours get approval from the council;

> **Singumbe:** And do you have to get approval from the council first
> **Bwalya:** Normally we don't, normally people here don't get approval from the council because those building we just, they'll do the planning on their own, they will do everything on their own so it means there is no need for someone to approach the council and seek their approval before anything can be done, ehe

The regulation from the council is openly disregarded as this picture of a newly extended house along Commonwealth Road in George shows (Commonwealth Road extends westward from Matero forming the northern boundary with George).

Figure 7.4: Extended houses in George with regular houses in the backgound

Therefore despite the regulations, there is no difference in terms of housing improvement between Matero and George interviewees as they all extended their houses.

7.3.7 "some they have turned their houses into businesses": Home-based Business Investments

In my survey, I did not find evidence supporting the hypothesis that leasehold title is associated with opening of home-based business investments as people in George did the same. My qualitative evidence also shows no difference between Matero and George interviewees. Indeed income generating activities were of different types but were mostly to do with renting out as pointed out in the previous chapter, turning an entire house or part of the house into a shop, selling of groceries on a stand in the yard or using the premises to prepare products that would be taken to the market to be sold. For example, Banda was a young adult aged 19. His mother died the year before I interviewed him. Being the eldest child and without a father, he was forced to become the breadwinner at home for his six siblings and an aunt. He turned part of the house into a shebeen. He narrates the benefit he has found in having a house;

> **Singumbe:** ok, amhh, so to just sum up and to sort of put things into context, what do you think have been the benefits of getting these houses
> **Banda:** The benefits, the benefits, as we said, some they have turned their houses into businesses, so when you put K80,000, K90,000 at the end of the month you get something you provide for your family, it really helps, that's the benefit like to my side. Yes those are the benefits that I have come to enjoy and the same money that you get at the end of the month you can even use it to extend the other flat so I think those are the good benefits that we have enjoyed so far

Similarly in George, interviewees conducted business from their premises although this was dependent on the amount of space available. Renting out extra room was the main business. The income realized from rent however was generally lower than that realized from rentals in Matero. Rentals in George generated about K100,000 less for a room than in Matero. One interviewee used to sell scrap metal from her premises in the past. Others sell groceries and vegetables. There was therefore not much difference between Matero and George regarding operating businesses from premises except that people in Matero have the legal right while those in George do not.

7.3.8 "things of high quality, things that are big": Wealth in terms of Consumer Durables

I found tentative evidence in my survey that leasehold titling was associated with more wealth in the crude sense of ownership of household durables. Interviewees in my qualitative interviews also said owning a house provides the incentive for them to accumulate large and

high quality durable items. When interviewees lived in the smaller council houses, they bought household durables but not as large and not of very high quality. The lack of room and presumably the threat of eviction, the expectation that a day would come when tenants would have to vacate the house and the risk of damage when moving discouraged purchases of large durable assets. Mambwe put it this way;

> **Mambwe:** After. Okay before yes we did have them but of course the size was small, it was quite limited but after getting the house after extending the house after space now becomes more available, you even get things now which are at least of high quality, things that are big, things that would accommodate more people in the house and stuff like that.

In George on the other hand, the theme did not emerge as a benefit in any of the interviews. This is perhaps attributed to the fact that there is not much space for residents to extend their houses except in George extension area where I did not conduct interviews. Because the houses remain small, there is not much room to put large and expensive assets. The further restriction comes from the fact that the household sizes are large hence accumulation of assets creates a bigger problem for already crowded houses. In her comparison of Lusaka and Cape Town, Meintjies (2000) found similar results.

7.3.9 "balance in expenditure": Reallocation of Expenditure from Physical to Human Capital

In both neighbourhoods, interviewees felt that the money that would have been going towards paying rent was being channelled to pay for other needs, thereby allowing the families to meet other needs more adequately. The first priority to which this extra income is channelled is toward educational expenses. Interviewees narrated how they were now more able to pay school fees and acquired the option of taking children to higher quality schools that are farther away from Matero. The point was eloquently articulated by Mambwe who has lived all his 30 years of life in Matero and was speaking on behalf of his uncle;

> **Singumbe:** Ok that is good, what do you think has changed in your life and the life of your household in general since getting the house, compared to the time you were renting from the council?
> **Mambwe:** I think what has changed mainly I think it has to do mainly with balance in expenditure, yes that is what I would say because you no longer have to pay rents like every other month and everything like that so you are able to channel those other resources to some other useful events that you can do. For example even the payments of school fees became quite easier and everything else. It can be easy to go to a school that is far like in Kabulonga, Kamwala or Libala because instead of paying money for rentals you would

> use that money for transport and everything else. So yes I would say there are more benefits to that.

This was not different in George either as interviewees pointed out that their main benefit was the fact that they do not pay rent and therefore can concentrate on sorting out other non-shelter expenses, specifically school fees. This point was succinctly articulated by Masiye, who has lived in George since 1974.

> **Singumbe:** So having your own house, what sort of benefits do you find in it?
> **Masiye:** Having a house that is mine, the benefit that I find is this; I live with my children and I don't pay. That is the only benefit that is there, that's the only benefit

> FridahA: So you have asked to say how does the house help you?
> Singumbe: Yes
> FridahA: We have two households renting. So when they pay, we have three children with the dad. So when the tenants pay, my husband pays for school for the children and then the other one we buy electricity. We buy electricity for K300,000. Each tenant pays K350,000. So the K350,000 from one tenant is the one we pay for school fees for the children

My finding echoes what has been found elsewhere. An important lesson from over 26 years of longitudinal research on asset poverty by Moser (2006) in Guayaquil, Ecuador, is that the priorities of the poor change over time. In Moser's case, once housing was established, titled households directed their focus to raising income and developing human capital. Parents raised income and invested in their children's education and spent on luxury consumer durables. Later, the new generation of better-educated children has benefitted from assets accumulated by parents, an improvement in social capital has occurred and there is an emphasis on income earning. Thus Moser (2006:7) has concluded that different assets are important at different times as they demonstrate the pathways through which households make it out of poverty over time. Similarly, homeowners in Matero invest more in education following homeownership as do George residents.

7.3.10 "it has given me the pride that I own a property": Status Attainment and Satisfaction with Life

Interviewees in Matero but not in George reported that they felt a feeling of pride that owning a house provides to the owner. Interviewees also felt that they had property over which they could exercise control. This relates to the status and esteem that owning a house casts upon the owner in society. For example, Chongo has not been able to use his house for any income

generating activity. He managed to extend his house with the financial assistance from his children. However, with a household size of 14 people, he is not able to rent out any room. The benefit that he has experienced is in the pride that he owns a valuable asset;

> **Chongo:** After I bought it, it has given me the pride that I own a property. That is how it has helped me. I have property, even when I look at it this is money. If I want I can sell and go somewhere

By saying "if I want I can sell", Chongo is demonstrating the fact that he can exercise control over a valuable possession which gives him pride, dignity, esteem and satisfaction. With the lack of control that characterises poverty, having a valuable possession over which one can exercise control can be dignifying.

7.3.11 "as you know we are Africans": Neighbourly Attachment

I did not find evidence indicating that leasehold titling led to neighbourly attachment. Qualitatively, neighbourly relations in both Matero and George are considered healthy by interviewees. When asked how relationships with their neighbours were, all interviewees responded positively using various adjectives and phrases; 'we live well', 'fine', 'very fine', 'cordial', 'very cordial', 'we get along well' etc. According to interviewees in Matero, there were three main sources for this state of affairs. The first source of cordial relationships was referred to as the 'African setup'. Interviewees referred to being African as embodying expectations of knowledge of and knowledge about each other and living in an urban setup with relationships modelled after those in rural areas. Problems are not personal problems but neighbours help and support one another in solving them. This was well-explained by Mambwe who referred to being African as a source of cordial relationships;

> **Mambwe:** The relationships with the neighbours is very good, as you know we are Africans, there is nothing like whereby you don't know your neighbour or this and that. No we all live one, yeah like in the community we live more like in a village concept, we just live one yeah, exactly. We have got very good relationships with neighbours on either side. When we are in trouble we run to them when they are in trouble they run to us for anything like that yeah. Very good relationships locally yeah, yes.

Among interviewees, it is an expectation and a given that one should know that Africanism embodies values, beliefs and practices of interpersonal bonds that transcend familial boundaries.

Secondly, there were no wall fences between houses in many but not all streets. This allowed neighbours to interact more frequently and to walk freely to each other's houses whenever they needed each other and at any time of day. As Sibeso quoted below highlights, the lack of wall-fences facilitates mutual assistance. Sibeso contrasts this state of affairs from Lusaka's most affluent neighbourhood where most expatriates and government elites live behind very high wall-fences;

> **Singumbe:** What would you say about relationships with neighbours in Matero, how are they?
> **Sibeso:** Ah, relationships with neighbours? They are good. Coz ok there are times in our home we don't have mealie meal, or we don't have relish. I can ask from the neighbour mealie meal and here relish, then I cook. The day passes. Ok in Matero, not only in Matero, but places like these where there are no wall fences, we're quite eh, we know how to deal with your friend the neighbour. But you will find these places where they say ok for example in Kabulonga, you find the wall fence is too high, you've never even seen your neighbour for almost three months. When you find that in your home you are lacking salt, you will feel shy to go and ask for salt from your neighbours. Yeah the relationship with the neighbours is just ok. Yeah we are fine, we are doing fine.

Christianity was cited as another important source of cordial neighbourly relations by several interviewees. Interviewees often assumed that all their neighbours were devout Christians and therefore expected their neighbours to adhere to Christian values in their neighbourly relations. Principals for neighbourly relations were often cited in the interviews. This was the case in the interviews with Kalyata shown below.

> **Singumbe:** Ok, so how do you live with your neighbours?
> **Kalyata:** We live well because for us people, respect is about yourself. You hear grandpa right, me as a person I go to those people there and I live as a person who has pride in myself, life will not be good, life even changes, you see right. But if you humble yourself and you live like a young child. So at all time, the Lord Jesus said you should humble yourselves, don't be proud no, even if you have strength or you have gone to school or have not gone to school, be humble. If you humble yourself you will have peace. No we live very well with neighbours. The neighbours love us.

In the Zambian context, Christianity as a source of neighbourly relations was institutionalized on December 29, 1991 when Zambia was formally declared a Christian nation by President Chiluba. This declaration was included into the preamble of Zambia's 1996 constitution.

Christianity therefore is a source of principals for both government and social relations in the nation.

There were of course some who were indisposed to the mainstream values, particularly values that are thought to embody Africanism. Despite acknowledging that relationships are cordial, one interviewee, Chando – who lived in a semi-detached house – felt that his privacy was being violated and that he could not get to work together with his neighbour because the same values of Africanism that were regarded as a source of accord for other interviewees were a source of discord to him.

> **Chando:** Hmm the only problem I have found living in compounds like this, the biggest problem I have found with our friends our neighbours here, they don't want to mind what is happening in their own houses. They want to know what is going on in their neighbours' houses. That's one. Then two, what I have found as a problem, like these houses that are not independent, like this one, coz these are semi-detached, they give us problems instead of hygiene. Why I say that, you see how this house is, it's a flat. Here you might be clean but those on the other side are unclean. For example even if you treat cockroaches, you could treat here but they will run to the other side. Then after some time they come back like that. Rats things that I don't want at all.
> **Singumbe:** So how are your relationships when dealing with such? Do you work together in harmony with neighbours or
> **Chando:** Like such things you know, because of this [African] skin of ours, you might think that what you are saying is good but they will take it in another light, because they can come and say that eh, there was one time I bought poison for this house to get rid of cockroaches. I got the same poison for my neighbours so that they also spray. They said how do you think of us, you think we are dirty. You see but then you just want…, so that's a problem

Indisposition to the mainstream values was only one source of discord as land conflict was the other significant source that some interviewees experienced. Despite the delineation of plot boundaries during the process of obtaining title deeds, some neighbours went beyond their boundary into the neighbours' when extending their houses or when building a new structure. This led to a bitter physical altercation in Mary's case and misunderstanding in Lina's case. Both cases were resolved amicably however.

The departure of some neighbours and the large influx of new owners and renters has upset the neighbourly dynamics. The large influx of new owners and renters came about when some of their neighbours sold their houses to new people and when others either rented out part or all of their property and/or built new houses on their premises where they took in

renters. Indeed many of the renters stayed only for a few months and moved. This affected the neighbourly relations negatively because they did not get to know each other well.

> **Mambwe:** In terms of the relationship in the neighbourhood, ahhh somehow yes there has been a difference and one that I would point out is that in some of the neighbours' places you find that since the owner bought the house, he has put the house on rent, ok so he is living somewhere else, ok. So you find that if you are renting a house there is no guarantee that you will be there forever and ever. So sometimes maybe you have this influx of people coming into the neighbourhood to rent they are here maybe for a year, others six months others two years you know. … the way it is others are shifting others are coming in, it disturbs the mood a little bit here and there, that's what it does yeah

Also, the new entrants are serious about the informal enforcement of sanctions against trespassing which has been socially unnecessary due to the assumed Africanism among prior owners. The new owners have built high wall-fences. The renters do not take kindly to strangers getting into their premises or passing through uninvited. Many of the interviewees referred to renters as '*abalendo*' (visitors or guests) implying that they did not fully accept them as members or citizens of Matero but rather as guests or temporary residents.

> **Singumbe:** and eh in terms of relationships with neighbours, how, or let me say the kind of neighbours that you had before when you were renting the house right, from the council, and the kind of neighbours you have now, are they the same?
> **Sante:** no not really because eh I'll tell you because most of the old guys that were like my neighbours they have sold the houses off and then these a lot of guys here are like new. They are a few that are like old ones. But a lot of them they are like new fellows
> **Singumbe:** and what has been the effect on the relationships…and just the way that the neighbourhood is now. What has been the difference?
> **Sante:** I mean there are a lot of differences that I can allude to, ah if you just, you can see the state that the way it is eh, we used to have like roads here. We would understand with the neighbour here, I can just use this [path] rather than use a road [to go around]
> **Singumbe:** right where you just walk…
> **Sante:** past my neighbour, yeah but nowadays you can't do that because they've like fenced them off, the whole of, like all these new guys that have come, they've blocked the things that we used to call roads, they've blocked them out so you can't just pass at somebody's house, that's the major…
> **Singumbe:** so meaning you don't interact as much
> **Sante:** yeah but ok we interact but not that much

Studies elsewhere in Africa like that of Meinzen-Dick and Mwangi (2009) have noted the effects of property rights on social relationships, although their study was located in rural Kenya and not in an urban setting. That study found that formalisation property rights led to a breakdown of shared life patterns and an increase in conflicts over trespass. The study explained that formalisation of property rights created exclusive forms of ownership and therefore cut pre-existing webs of overlapping interests.

Interviewees in George on the other hand felt that nothing had changed in neighbourly relations over time despite the fact that many of the original heads of household are dying and leaving their houses to their children. Interviewees explained how well they lived together and even described each other as family. The relationships with the younger generations were described as being the same as the way their friends left them. The old lady Nasilele has lived in George for approximately 45 years and feels that relationships had not changed.

> **Singumbe:** So the neighbours you have, are they the same ones you found when you came to live in George or have they changed
> **Nasilele:** Uh uh, no. The neighbours I found when I came from the neighbours, I found in here the husband is still here the wife died, this house behind here the husband and wife both died, also the one behind this side and this other one also the husband and wife both died. So the ones we are with now are new, yes
> **Singumbe:** Is it their children who live in there or is it just other people
> **Nasilele:** These houses that I am talking about? It is their children, yes it is their children. Some of them have rented their houses but behind here there is no one renting unless this one, yes their children are the ones there
> **Singumbe:** How do you get along with people who own houses?
> **Nasilele:** The way we live, we live just well, Yes we live just well there is nothing like fighting because the people who live here are my children, their mother and father is not there, also the ones living behind are my children their father and mother is not there. So we just live like that the way our friends left us

However, there occurrences of conflict involving land boundaries, much more so than in Matero. The conflicts occurred with more frequency and were harder to resolve. Some residents sold part or all of their plots without clear delineation and consent from the council. Residents could not go to the council for their resolution but still resolved to go to the local court.

> **Singumbe:** So many times when they [neighbours] are fighting? What is the cause?

> **Granddaughter 1:** The biggest cause is the plots, this same land. That is the main reason. Mostly you find people fighting saying no this is ours you have encroached on our land, you have taken from us. Then it even goes to court. That is the main issue, very much.
> **Singumbe:** Has the council delineated the plots properly or is it just the delineation according to where the house is?
> **Daughter 2:** This George the way it used to look, it was just a farm. When you arrive wherever you put yourself that is yours, wherever you want to build your house. Now those who were there first, a long time ago are the ones who started selling to people who were later arriving
> **Singumbe:** Oh they are the ones who started selling to people
> **Daughter 2:** Yes they started selling; all those who were leaving to go to other places sell just like that

7.3.12 "we take them to the elders": Civic Participation

There was more civic participation in Matero than in George. Civic participation in Matero is defined in terms of formal and informal action against crime. Informal action involved collective action by neighbours during the process of a crime being committed in their communities. Formal action involved participation in neighbourhood watch and street committees. All interviewees in Matero were in unanimous agreement that whenever a crime occurs and one of the neighbours calls for help, neighbours answer the call for help by coming out of their houses collectively. Some interviewees however pointed out that only the original neighbours come out to help while the renters and recent buyers stay on locked behind their houses. Chanda articulated the point well;

> **Singumbe:** Ok, what about working together when there are issues of theft etc., do you work together?
> **Grandson:** We work together, if there are thieves, if a thief comes the people in this neighbourhood will call each other and come out in order to help each other. When they just hear that there is a thief, even if it is at night everyone comes out and it even seems as if it is daytime and yet it's at night

In addition to coming out to help when a call for help is made, interviewees explained that Matero had a social control system where there were section chairmen and an irregular albeit functional neighbourhood watch. The street chairman has a similar capacity to that of the street committee chairmen in South Africa. The street chairman is responsible for resolving conflicts between neighbours and mobilizing residents for community issues. The chairman is also responsible for organizing people to participate in the neighbourhood watch and organize policemen from Matero Police Post to accompany residents on patrol.

> **Banda:** Yea yeah yeah yes we have, we have this man he is our Chairman Mr David. SO if there is a problem in the neighbourhood if people are quarrelling we will go there, we take them to the elders then they sit them down and then they solve that problem.
> **Singumbe:** You told me the chairman Mr David, he is a chairman for what?
> **Banda:** Here in Matero?
> **Singumbe:** The entire Matero
> **Banda:** No no not the entire Matero just for this section from that far end at the wall fence there to the end where there is that tree there, yes these houses
> **Singumbe:** Oh, almost like a street committee
> **Banda:** Yes
> **Singumbe:** Oh and do other streets have the same kind of arrangement?
> **Banda:** Yes yes they have, every street they have
> **Singumbe:** Ok so it's quite organized. Ok so in terms of dealing with crime, is it the chairman who organizes people or it's just ah
> **Banda:** No no the chairman will organize people and then they go to the police. Yes there we have police posts. They will sign the paper, employ the guys like in the streets and then the police will even give you a police officer which you will be moving with during the night

Though this arrangement for social control seems to be working for many interviewees who mentioned that they could count on the work of the chairman and the neighbourhood watch, some interviewees feel that some of the criminals who live in their neighbourhood infiltrate the neighbourhood watch in order to gain information about which houses to attack. This though was based on hearsay as none of my interviewees had seen this happen. Indeed some interviewees suspected that some of the crimes were committed during patrols but again there was no evidence provided.

Although there were similar informal reactions to crimes, George however did not have a system of chairmen and section committees. Interviewees pointed out that the system of chairmen existed prior to 1991 before the introduction of multi-party democracy in Zambia. At that time, it was a requirement by the United National Independence Party (UNIP), the party that was in power at the time, to have such arrangements.

> **Linda:** For me here, since we entered democracy we do not know any chairman. When the one party state was still on, we had a chairman because every weekend we used to have a meeting. On Saturday like this time we would be at a meeting. For two hours we would go and discuss the things that are troubling you at the section where you live. After you report, they would take the papers. Since democracy came, no, we don't see the meetings

In terms of civic participation, my interviewees in Matero are more organised than my interviewees in George.

7.3.13 "they will just think that you want to use up their money for personal gain": Membership in Voluntary Associations

In the survey part of the study, the hypothesis that leasehold titling is associated with more memberships in voluntary associations was not supported. In my qualitative interviews as well, although I found that Matero had a functioning social control system through chairmen and a neighbourhood watch, there were no other voluntary community organizations that my interviewees belonged to. When asked why, interviewees cited the reason that they did not know of such associations operating in their neighbourhood. The most cited reason however was that they did not trust each other when it comes to community initiatives. Interviewees revealed that whenever a neighbour came up with a community initiative, project or plan, neighbours were always sceptical because people had used such avenues as money-making scams before. Chomba gave testament to this well;

> **Singumbe:** Ok, are there some organizations in the community which you as neighbours have, perhaps committees that oversee your houses?
> **Chomba:** No there is nothing, because ok the way people are, they are people such that when you come up with that same idea, they will just think that you want to use up their money for personal gain and yet you want to put them in a good way

Interviewees however confirmed that prior to the coming in of the Third Republic in November 1991 when UNIP was replaced by the MMD, such organizations and initiatives were functional and many of them lamented their loss. This was because UNIP encouraged neighbourhoods to organize themselves along the socialist ideology.

Interviewees in George also said there were no community organizations and also had the same sentiments regarding the existence of committees prior to the Third Republic.

7.4 Conclusion

In this chapter, I have examined whether several themes on the subsequent experiences of leasehold titling differ qualitatively in Matero relative to experiences of occupancy tenure in George and why. Titling improved the social status of beneficiaries in Matero and increased their wealth in terms of household durable items but had the effect of reducing tenure security in the long term. I find no differences in experiences regarding other observed themes.

I have shown that ownership of the property provided beneficiaries with the experience of possessing a valuable asset and with it a sense of pride, control, esteem, dignity and satisfaction. In terms of wealth, when interviewees lived in the smaller council houses, they

bought household durables but not as large and of high quality as that after titling. Counter-intuitively, a title deed does not really mean long term tenure security for many of my respondents due to the costs (property rates) associated with owning the house.

I find no differences in experiences on other observed themes. There are no differences in terms of employment status because unemployment is high in both neighbourhoods such that most respondents depend on the informal sector, meagre retirement benefits and remittances from elderly children to earn a livelihood. Moreover, interviewees desire loans but are either turned away at the bank or fear losing their house if they default on loans. There is no difference in terms of housing improvement because respondents in George also extend their houses despite the prohibition on their licenses to do so. The disregard for prohibitions may indicate a perception among residents that they will not be evicted. Similarly, home-based business investments are conducted in both neighbourhoods even though George residents are prohibited to do so. The typical activity is renting out a room or rooms. In both neighbourhoods, attention to human capital occurs because of the reallocation of family resources that would have gone to paying for rent towards education of children. In both neighbourhoods, relationships are strong drawing on values of the African rural setup, Christianity and a lack of fences between houses. In Matero however, this dynamic has been affected negatively by new entrants in form of renters and new owners who have a stronger orientation towards the enforcement of property rights. Matero respondents depend on both informal and formal mechanisms of civic participation while those in George depended only on informal mechanisms. There are no differences in terms of membership in voluntary associations because residents do not trust each other's management of finances in community initiatives and some do not know of the existence of associations operating in their neighbourhood.

The effects of titling in Matero are few and some of the intended outcomes are producing unintended results that carry negative implications for the few observed benefits. Whereas the intended effect of the privatisation of public housing was to empower people through tenure security and a valuable asset, the long term effect may result in the loss of a valuable asset and the disempowerment of those that cannot afford to pay the cost of titling. By implication, the status and wealth attained may be lost for some who are unable to bear the cost of titling.

A comparison based on the findings in Lusaka can now be made with those in Khayelitsha using a holistic set of themes. This is done in Part IV, the discussion and concluding section.

PART IV

CHAPTER 8

‘BUSTING THE MYTH AND SOLVING THE MYSTERY’: WHAT MECHANISMS EXPLAIN SIMILARITIES AND DIFFERENCES IN THE EFFECTS OF TITLING IN KHAYELITSHA AND MATERO?

8.1 Introduction

In light of the findings in the two case studies, this chapter addresses the last research question that I posed in Chapter 1; “What explains similarities and differences in how beneficiaries are affected by real property rights?” In answering this question, I compare the effects of freehold and leasehold title relative to occupancy tenure in Khayelitsha and Matero and discuss the main findings within a broader discussion on the effects of property rights. While my findings cannot be generalised to all contexts, nor even to the entire cities within which these neighbourhoods are located, they can shed some light on the research question and help frame future studies of these or other neighbourhoods. As mentioned in the introduction, we should beware of generalisation in this field of housing and titling in particular, because too few studies have been carried out and existing studies have been insufficiently holistic. My study of neighbourhoods in two African cities is therefore a kind of “baby step” in the direction of more holistic studies and the end goal of deriving general lessons.

The chapter is outlined as follows. First, I highlight some of the issues that complicate comparison between the case studies. Then I compare the findings in the two case studies based on the variables and themes that were present in both studies. I compare the cases according to the nature of the evidence, that is, quantitative and qualitative. I engage with the literature as I make the comparison to draw possible general lessons on the respective variable or theme. I then draw a conclusion on the basis of this process of comparison.

8.2 The Complications of Comparison

Contextual differences pose a challenge to finding any general lessons about the effects of real property rights in difference contexts. Khayelitsha and Matero are at different points in

their historical development which poses a challenge for the objective of the comparison. Although the literature does not address this issue, it is a possibility that certain mechanisms and subsequent effects may work differently in newly-established and long-established neighbourhoods. Matero was established in 1959 and George by 1960 while Khayelitsha began to be established only in 1983, and many sections within Khayelitsha are of much more recent origin. Further, Matero's change in titling in 1996 entailed an in-situ development while that of Khayelitsha entailed occupying new sites in a greenfield development. Households in Khayelitsha moved from Site C to Makhaza, Site B and Kuyasa while those households in Matero did not need to move from their premises in order to obtain leasehold tenure. In Khayelitsha, many of the residents are still the first generation of migrants from the Eastern Cape (at the time of my interviews) while many households of Matero were transitioning into the second generation of the original lessees. This means that friendship and kinship networks were well established in Matero. Although there seems to be silence and perhaps an implicit assumption in the theory that the stage of neighbourhood development may not matter for the effects of real property rights to be observed, caution should be exercised in the interpretation of the results that emerge from the comparison.

Along with these differences between the two case study sites, there are also important differences in the data collection process. The Khayelitsha study uses existing data while the Lusaka study uses primary data. The average age of respondents in the Khayelitsha panel is 25 years while that of Matero is 55 years. The typical respondent in the Khayelitsha dataset is entering the labour market while the typical respondent in Matero is leaving it. The typical respondent in the Khayelitsha panel is a secondary beneficiary while the one in Matero is a primary beneficiary of changed tenure.

In sum, observed effects may be contingent upon contextual factors. A lack of effect on an outcome in Khayelitsha and an effect in Matero on the same outcome may be driven by local factors. This implies that the results may apply to the specific conditions in the respective context. I highlight this as I make the comparison below. Data limitations also make it difficult to tell if a particular relationship between real property rights and an outcome of interest is driven by conditions common to different contexts or specific to each context.

8.3 Comparison of the Effects of Homeownership

Table 8.1: Summary of the effects of real property rights relative to occupancy rights in Khayelitsha and Matero

Variable	Quantitative analysis		Qualitative analysis	
	Khayelitsha	**Matero**	**Khayelitsha**	**Matero**
Financial capital				
Tenure Security	.	.	.	+ → −
Housing improvement	.	.	+	0
Property value	.	+	.	.
Access to credit	.	0	0	0
Labour market participation	0	0	0	0
Home-based business investments	.	0	0	0
Household per capita income	0	+	.	.
Wealth (consumer durables)	0	+	+	+
Human Capital				
School dropouts	0	.	.	.
Children's education	.	.	+	0
Teenage pregnancy	+	.	.	.
Physical health	+	.	.	.
Psychological health	0	.	.	.
Status attainment	.	.	+	+
Social Capital				
Membership in voluntary associations	0	0	0	0
Neighbourly attachment	0	0	0	0
Civic participation	0	0	0	0
Frequency of Volunteerism	0	.	.	.
Political awareness	0	+	.	.
Neighbourhood satisfaction	.	+	.	+
Sense of belonging	.	.	0	.

Table 8.1 summarizes and compares the findings on the effects of real property rights relative to occupancy tenure in Khayelitsha and Matero based on both statistical and qualitative evidence. The signs mean as follows. The "+" and "–" signs represent a positive and negative effect relative to occupancy tenure respectively. The "0" sign means that there was no effect relative to occupancy tenure. The sign "+ → −" means that the effect is first positive and then moved towards a negative after some time. The "." sign means that the variable or theme was not available using the type of evidence specified.

8.3.1 Labour Market Participation

The first point of convergence is the similarity in labour market participation. In both contexts, the two neighbourhoods are assumed to be more tenure secure because they have state-recognised freehold or leasehold tenure. The point of testing this hypothesis is that we do not systematically know whether there are differences in labour market participation on the basis of a difference between real property rights and the administrative recognition of occupancy. The finding is that there is no difference between the two tenure types. Both quantitative and qualitative analyses reveal that both Khayelitsha and Matero have large proportions of unemployed respondents. In an economy with high unemployment and a decreasing market demand for unskilled labour such as South Africa's, it may not be a realistic expectation that an increase in the supply of unskilled labour among beneficiaries would lead to an increase in the number of hours worked or let alone to an increase in employment status. This is the same in the case of Matero where the macro-economic context is defined by high formal unemployment rates. In both cases, it is very likely that the pool of the unemployed increases but people just cannot find work even though they have the time because of the broader problem of high unemployment.

In an extensive study using detailed nationally representative surveys, Banerjee et al. (2008) investigated why so many South Africans were unemployed. They found that large increases in the supply of labour (especially among women) had not been matched by any increase in demand for labour (Banerjee et al., 2008:716). This mismatch was especially acute for unskilled labour, with declining demand for unskilled labour in the mining and agricultural sectors. Unemployment persisted in part because when demand for labour fell, it was not accompanied by a fall in wages enough to clear the labour market (Banerjee et al., 2008:716-717). In this kind of labour market, increases in labour market participation in titled households (or resulting from any other intervention) would have little or no effect on

employment and hence income. Unemployment is a similar challenge in Zambia. Structural adjustment policies resulted in the closure of companies, job losses and a rising unemployment rate (Hampwaye, 2008:191-192). The unemployment rate increased from 13 percent in 1990 to 30 percent in 2000. The economy has been in decline for many years. The size of Zambia's labour force increased from 7.6 million in 2006 to 8.5 million in 2010 (Central Statistics Office, 2011:100). Only 15 percent are employed in the formal sector and the rest are classified self-employed in the informal sector. Labour force participation has gradually declined from 65 percent in 2006 to 62 percent in 2010. In such an economic environment, titling may result in an increase in labour supply but not in employment and higher household income.

8.3.2 Housing Improvement

A comparison between Khayelitsha and Matero in terms of housing improvement shows similarities but also important differences. Respondents and interviewees in both neighbourhoods extended their houses. In Khayelitsha, beneficiaries of housing subsidies extended their houses more than shack-dwellers. This difference cannot be explained in terms of economic factors such as higher incomes and access to credit. It is very likely that the extensions in Khayelitsha are due to psychological factors (such as the perceived permanence of houses relative to temporary shacks) as well as physical factors (such as the availability of space). In addition, the houses for beneficiaries were designed to be improved following roll-out to beneficiaries. In Matero, the lack of difference is attributed to the fact that George residents make extensions to their houses even when the terms of occupancy prohibit extensions. The general point here is that as long as there is a certain level of perceived tenure security, adherence to rules governing land use in areas where the state has recognised occupancy is relaxed. This means the difference with titling using real property rights may be diminished in practice.

8.3.3 Access to Credit

Titled households are almost as unlikely as untitled households to report accessing or obtaining credit using their houses as collateral in both Khayelitsha and Matero. In both cases, interviewees and respondents fear losing their houses in the event that they fail to repay the loan. In both cases, some interviewees expressed a desire to obtain loans but were told that a house alone was not enough. Being in employment was the most important criterion. The lesson here seems to be that titling may enhance the chances of one getting

access to credit but that one primarily requires a job. This result supports the findings of most of the studies carried out elsewhere. In Peru, Field and Torero (2006) find no evidence that titled households access credit from private banks but that titled households are 10 times more likely to get loans for housing improvement from public sector banks. Given that the titling project was a government led programme in that country, public sector banks would be inclined towards providing loans to beneficiaries to ensure success of the program. The case in South Africa is similar (Lemanski, 2011; Boudreaux, 2008). In Buenos Aires, both Galiani and Schargrodsky (2010) and Van Gelder (2009:141) find that titled households were no different from untitled households in accessing credit. However titled households are more likely to access informal credit (Galiani & Schargrodsky, 2010:710). Only in Indonesia has it been found that having a formal title significantly raises a household's probability of having a formal loan and the size of working capital loans it receives (Dower & Potamites, 2005). It is not clear why Indonesia is different in this respect but Dower and Potamites think that the property title sends a signal to the bank that the titled household is credit-worthy. They feel that it is not about the value of the collateral. In Bogota, informal finance is available from the onset of the formation of an illegal settlement and there is little formal financing that is forthcoming after legalisation (Gilbert, 2000).

8.3.4 Home-based Business Investments

Holders of real property rights and occupancy tenure equally engage in home-based business investments. In Khayelitsha, interviewees reported that they started their businesses before they obtained their housing subsidy. Shack-dwellers also engaged in businesses from their premises. Similarly, title holders in Matero and occupancy license holders both conducted businesses from home. In fact, the statistical evidence indicates that there were significantly more respondents conducting income generating activities in George than in Matero. In contrast however, in Matero and George the predominant activity was renting out while renting out did not seem to be as widespread among my interviewees in Khayelitsha. The general point here is that titling does not matter in these contexts for one to engage in business. The broader point however is that psychological pathways of thinking and feeling influence how dwellers make decisions about the probability of eviction and determines their level of fear of eviction (Reerink & Van Gelder, 2010; Van Gelder, 2007; 2009; 2013). It is clear that occupants of shacks in Khayelitsha and respondents in George feel that even if they engage in activities that go contrary to their terms of occupancy, they will not be evicted.

8.3.5 Household Income

Despite the fact that the mechanisms through which title was expected to result in higher income did not work in both cases, there was no effect of freehold title on household per capita income in Khayelitsha while I found tentative evidence that leasehold tenure in Matero had a positive effect. In both cases, respondents had little or no access to credit, were mostly unemployed and did not conduct business more than occupancy tenure holders. It is possible that one or more of the mechanisms actually work in Matero but this cannot be picked up by the methods of estimation due to the limitations in what the data can reveal. It may also be the case that there may be no effect if I had the baseline data to help me measure the effect. Increased family contribution towards housing improvement and investments and the subsequent increase in rental income has been documented in Matero before. Schlyter (2004:7) documents the practice of raising funds for houses in Matero through the extended family. Due to a still strong extended family system, houses are viewed as family homes despite being in the name of one person or several siblings. However these fundraising ventures apply specifically to funding house extensions in order to bring in renters in the new rooms. My findings in Matero and not Khayelitsha support previous studies carried out elsewhere by Maura and Bueno (2009) in Brazil and Field (2007) in Peru. The difference with these studies is that the mechanisms through which titling led to increases in income was via an increase in labour market participation. However in Matero, the evidence does not seem to support this mechanism and is not conclusive.

8.3.6 Wealth

Real property rights were associated with more assets relative to occupancy rights in Matero but not in Khayelitsha. The two cases also differed in the reasons for accumulation. In Khayelitsha, respondents felt that they already had the potential to buy more assets when they lived in the shacks but avoided to do so because of the risks of fire, flooding and theft that came with living in the shacks. In Matero on the other hand, respondents attributed their accumulation of bigger and more durable household goods to having the extra space for family members and goods after making extensions. They could (or would) not make these extensions without title.

The results contrast with those by Galiani and Schargrodsky (2010) in their study of the effects of land titling in Buenos Aires. They found no significant relationship between property title and durable asset ownership. My study however uses a longer (though by no

means comprehensive) list of assets than Galiani and Schargrodsky, who included five items and who regressed against ownership of each asset (a dummy variable with 1 = possession of the asset, 0 = lack of possession) and ownership of title, whereas I ran the regressions using a scale for assets. On a general scale, my result may also differ from Galiani and Schargrodsky's on the basis of differences in context.

8.3.7 Children's Education

In terms of children's education, both cases reported this as an improvement following titling but in Matero, there was no difference relative to George. In Khayelitsha, Interviewees held that a change in housing quality and the housing environment made preparation for school easier which in turn meant that children could attend school more often. Children were also able to go to school more often because they felt safer in the neighbourhood of brick houses than in the shacks. Not only were shacks unsafe, it is very hard for school-going children to study in a shack because of noise from the wind and rain beating against the thin walls. In addition, the amount of time allocated to studying was reduced in shacks because of the use of candles to study. On the other hand in Matero, interviewees felt that they had allocated the money that would have gone to paying for rent towards other expenses with education of children as a top priority. Similarly, those in George argued that because they do not pay rent, their resources are directed towards the education of children. The general point as articulated from the perspective of the asset based approach is that once physical capital is secured, households of the poor direct their attention towards the development of human capital with education being a top priority.

8.3.8 Membership in Voluntary Associations

The finding that titling is not associated with membership in associations is consistent in both cases. The reasons of the absence of difference are also different. In Khayelitsha, homeownership was not associated with membership of associations most likely because houses have provided a private space in which beneficiaries can limit their interaction. Privacy is what residents in these new neighbourhoods have been found to turn to in the context of wariness of intimacy, distrust, fear/ubiquity of crime and violence, fear of gossip and jealousy, and a poor sense of identification with place (Muyeba & Seekings, 2012). Also, beneficiaries do not have much of an economic stake in their neighbourhood relative to shack-dwellers. On the other hand, interviewees in Matero either do not know of such associations operating in their neighbourhood or do not trust each other particularly with

management of their finances when it came to community initiatives. Studies elsewhere attribute the lack of community engagement in general to a lack of project participation in housing provision. In her study of Westlake village, a beneficiary community of RDP housing, Lemanski (2008) found that there was no change in civic engagement after people became homeowners and explained this in terms of the fact that the state did not involve residents as participants in the process of housing provision.

8.3.9 Neighbourly Attachment

Despite the above differences, the analysis using statistical data showed no effect of low-income homeownership on neighbourly attachment in both Khayelitsha and Matero. In general neighbours in Matero were more attached to each other than neighbours in Khayelitsha. Out of a maximum possible score of 1, respondents in Khayelitsha scored 0.38 (38 percent). In contrast, those in Matero scored 10.89 (61 percent) out of a maximum possible score of 18. Though the number of questions was different, they measured similar attitudes. Indeed the qualitative interviews revealed that networks were stronger in Matero as residents lived like families with common bonds based on values of Africanism, cultural values and Christian values. On the other hand, although these values were important in Khayelitsha, gossip, jealousy and emerging disparities in consumption were divisive. People in Khayelitsha preferred just to greet each other and were unable to refer to a common set of bonding values like those in Matero. They tended to have close relationships with only one neighbour, rather than a network of many. The difference could be attributed to the fact that the change from renter to owner in Matero did not entail any geographical move and hence possibly social dislocation, as in Khayelitsha. Social relationships in Matero were well-established over many years while in Khayelitsha, some people were meeting and building bonds for the first time when they moved into their houses. In Matero however, the dynamics were beginning to change because of new-comers into the neighbourhood – renters and people who bought houses from original owners – who preferred to strictly enforce property rights, which interfered with the prevailing social relations prevalent in the neighbourhood. This attribute is found elsewhere in rural Africa by Meinzen-Dick and Mwangi (2009). Provision of property rights can interfere with existing bonds and social capital either by dislocation as in the case of Khayelitsha or by interfering with established social relations, values and common practices, particularly in contexts in which values of solidarity have been fused into urban contexts (Ferguson, 1999) as is the case in much of urban Africa and many parts of the developing world.

8.3.10 Civic Participation

In neither Khayelitsha nor Matero, was there much individual civic participation. Informal organisations like street committees were present in both cases and operated in similar ways. In Matero, I was informed that these street committees were very active in ensuring a functioning neighbourhood watch that worked with the police. However, none of my interviewees were participants. In Khayelitsha, street committees were instrumental in community mobilisation. During my fieldwork, they organised protests for improved service provision and access to electricity[12]. Social order and control under these street committees was functional in similar ways in both neighbourhoods. In Matero however, my interviewees reported that they responded by coming out to answer the call for help whenever their neighbour needed them while this was less so in Khayelitsha. It is possible that the more violent nature of crime in Khayelitsha deters residents from such potentially high risk responses.

8.3.11 Political Awareness

There was more political awareness among titled households relative to those on occupancy tenure in Matero than in Khayelitsha. In Khayelitsha, belonging to a political party was the main driver among titled households which accounted for the variation in political awareness. The point about having a stake and the lack of participation in the process of housing delivery also applies in this case. On the other hand in Matero, although belonging to a political party did not matter, the process by which residents of Matero obtained housing was highly political, with the president issuing a directive and personally going to visit and declare the prices of houses in Matero (African Business, 1997). My interviewees attribute the obtaining of their houses to the man Frederick Chiluba rather than to his role as president. In addition, Matero and George have historically had a reputation for being highly political neighbourhoods (Rakodi & Schlyter, 1981). However this is a tentative finding which may differ if baseline data were available. In general, the lesson here is that context differs but also that the extent of both political players and beneficiary involvement in the process of titling and housing delivery are important aspects in cultivating post-titling citizenship behaviour.

[12] Nleya (2011) has examined the relationship between service delivery and protests in Khayelitsha using path analysis and found a positive and statistically significant relationship

8.3.12 Status Attainment

The sentiment about the attainment of higher status is an important effect attributed to titling relative to occupancy tenure expressed by beneficiaries in a similar way in both cases. In Khayelitsha, ownership of an RDP house was a symbol of status and respectability among interviewees who owned RDP houses. Respectability, decency and dignity are recurring themes in the urban ethnographic literature on new low income housing among the poor in South Africa (Ross, 2010; 2005a; 2005b). These are important themes particularly because the experiences of evictions, forced removals and the denial of the right to own housing in urban areas during apartheid were humiliating and led to indignity (Ross, 2010; 2005a; 2005b). In Matero, the ownership of a house gave beneficiaries a sense of pride and control, which are building blocks of self-esteem. From this theme, a lesson that can be drawn is that the historical context of dispossession or poverty when substituted with real ownership rights and not occupancy tenure can bestow upon the owner a feeling of self-worth, respect and dignity which poverty and dispossession take away from the person. This particular theme seems to be consistent between the two contexts, that real property rights may increase social status among beneficiaries.

8.4 Conclusion

The comparison in this chapter has highlighted the similarities and differences in the effects of titling between the two cases studies. The comparison indicates that there are different but related mechanisms in the two contexts that follow varying processes to produce similar effects. Several processes are however common to both cases. First, the macro-economic environment is an important element in driving the effects on labour market participation. A poor macro-economic environment in which there is high unemployment works against the potential effects of real property rights. Secondly, perceived tenure security is more important than the difference in rights between those with real property rights and those with occupancy tenure because the lack of adherence to rules governing land use in areas where the state has recognised occupancy diminishes the difference in the rights exercised and therefore the effects between the two types of tenure. Thirdly, there is little effect of titling on access to credit. Without employment, the chances of getting credit for those on title are no different from those on occupancy tenure. Fourthly, I reiterate what other studies have shown that titling may reallocate the priorities of the poor from those of securing physical capital to human capital, primarily children's education. The fifth lesson is that even in the urban

context, the provision of real property rights can interfere with existing bonds and social capital either by dislocation as in the case of Khayelitsha or by interfering with established social relations, values and common practices as happened in Matero. The sixth lesson is that the extent of involvement by both political players and beneficiaries in the process of titling and housing delivery are important aspects in cultivating post-titling citizenship behaviour of beneficiaries. Finally, real ownership rights and not occupancy tenure can bestow upon the owner higher social status and feelings of self-worth, respect and dignity which poverty and dispossession take away from the person particularly if there are historical processes of dispossession involved.

In spite of the many lessons derived from this comparison, out of the many points of comparison, only status attainment is found to be an effect of titling present in both contexts. In short, the provision of housing subsidies and the titling of rental housing have yielded few benefits between them. Despite the examination of a holistic set of effects in each case study, the evidence indicates that there are much fewer effects of title to low-income homeowners on real property rights compared to what is claimed. As Reerink & Van Gelder (2010:84) suggest, the claimed effects of property rights are exaggerated.

CHAPTER 9

CONCLUSION: MYTH "BUSTED" AND MYSTERY SOLVED?

9.1 Introduction

As I end the PhD journey, many myths and mysteries about the effects of property rights remain. There is still much to be discovered in this field. I cannot claim to have "busted" the myth or solved the mystery in general but can claim to have partly demystified and de-mythologized it in the specific contexts of Khayelitsha and Matero. This chapter brings the thesis to a conclusion.

The broad aim of this study was to contribute to knowledge and scholarship on the effects of titling and homeownership in developing countries. More specifically, the objective was to examine a wide range of effects of real property rights in comparison to the effects of the administrative recognition of occupancy rights. To do this, the study undertook an investigation of two above-mentioned case studies, in Cape Town (Khayelitsha) and Lusaka (Matero).

The study used property rights theory to guide the research on the effects of titling. This theory – which I call titling theory – emphasises economic effects such as those on property values, labour supply, access to credit, home-based investments and some human capital effects (such as those on physical health and teenage pregnancies). Titling theory, which is mostly concerned with the challenges of economic development in "developing" countries, has not considered adequately a wider range of effects, including human capital effects on psychological health, higher status attainment and school dropout rates, and social capital effects on civic engagement, membership in associations, social attachment, neighbourhood satisfaction and political awareness. The study then drew on homeownership theory and asset-based approach to strengthen titling theory. The findings of the study showed that titling had effects not just on physical health, children's education, and ownership of consumer durables, housing improvements, property values, and income which are theorised effects

under titling theory but also on social status, political awareness and neighbourhood satisfaction – i.e. effects that are emphasised in homeownership theory. These findings demonstrate that, in the cases of Cape Town and Lusaka, the effects of titling extend beyond those emphasised in titling theory to additional effects identified by homeownership and asset theories. Titling theory focusses on too limited a set of effects, and provides an incomplete and possibly misleading assessment of the overall effects of titling. Homeownership theory strengthens and supplements titling theory. The combination of titling and homeownership theory is stronger than orthodox titling theory alone because urban slum upgrading is often accompanied by the formalisation of informal houses and because titling sometimes occurs simultaneously with housing provision. Scholars should take into account the effects of homeownership in order to understand the full extent of the effects of titling.

The study makes an empirical contribution in three ways. Firstly, the thesis contributes to the dearth of existing empirical studies done in Southern Africa. The study offers an original contribution of empirical knowledge on property rights among low income beneficiaries in South Africa and Zambia. In Cape Town, some studies have been carried out but these examine fewer hypotheses. In Lusaka, while studies have been carried out on the privatisation of rental housing and upgrading in George, this study is more comprehensive in terms of scale, themes and methods. Moreover, there is a dearth of quantitative studies on this subject done in Southern Africa and this study contributes to reducing this deficiency. Secondly, while most empirical studies on titling have focused on narrowly-defined economic effects, this study has gone beyond by also examining effects on aspects of human and social capital. Finally, this study also offers lessons about the mechanisms driving the effects of titling that, in a small way, can be a first step toward more generally applicable lessons.

The findings of the study can help develop policies that involve making the choice between the provision of real property rights and the administrative recognition of occupancy given the high and rising population in urban slums and the high and rising incidence of urban poverty among slum-dwellers (as demonstrated in chapter 1).

9.2 Synthesis

In Chapter 2, the thesis reviewed titling theory and strengthened it by drawing on homeownership theory and asset-based approach to interrogate the claims that titling and slum upgrading have effects that reduce poverty and improve living conditions among the

poor. From this review of literature, it was shown that real property rights potentially have a positive effect on tenure security. Tenure security in turn results in housing improvements and investments, increased health, higher educational attainment among children of owners and investment in community assets such as social capital. It was also shown that titling improves labour market participation among adults and reduces child labour in beneficiary households and increases access to credit. Homeownership in particular is held to result in social stability, psychological health, and good citizenship in terms of participation in voluntary associations and voting, socially desirable youth behaviour and satisfaction with the neighbourhood and with life. The asset-based approach strengthened the titling theory by allowing for categorising of the effects in terms of economic, human and social capital and by allowing for a long term understanding of these effects.

In chapter 3, I first discussed the existing methods for the evaluation of the impact of development interventions. These methods included experimental ones such as RCTs, quasi-experimental designs which are natural experiments and non-experimental designs which included difference-in-differences estimation and matching. I then discussed the two case studies in detail in order to provide a basis for the selection of the appropriate evaluation methods. I argued for the use of a research design that employs both quantitative and qualitative approaches. I also explained the choice of a difference-in-differences estimation method and a thematic analysis of in-depth interviews in my Khayelitsha study, and OLS and logistic regression analyses and in-depth interviews in my Matero study.

In the background to the case studies I showed that Khayelitsha was established in 1983 to accommodate legal migrants to Cape Town. Legal migrants were given 99 year leasehold title. Illegal migrants were however given temporary site and service plots. But even land with no services was also occupied. From 1994, the post-apartheid state provided a once-off capital housing subsidy to many but far from all residents of shacks. This resulted in a situation where beneficiaries of housing subsidies and non-beneficiaries (shack-dwellers) exist simultaneously. Given this background, I argued that the case of Khayelitsha provided an opportunity for the investigation of the effects of real property rights (in new, subsidised public housing) relative to those with the administrative recognition of occupancy (in shacks). The availability of the CAPS dataset with variables at baseline and during post-intervention on these residents further provided an opportunity for me to use difference-in-differences estimation to answer the research question. I complimented the analysis of

quantitative data through the use of in-depth qualitative interviews. Experimental approaches could not be used in this case because the assumption of randomisation was not met. A non-experimental approach using difference-in-differences estimation was useful because of the existence of two comparable groups with baseline data and post-treatment data available through CAPS. Difference-in-differences estimation did not require the assumption of randomisation to be met. In-depth interviews were useful as they generated data that enabled an understanding of the post-treatment experiences of titling.

In providing a background to the Lusaka case, I described the beginnings of Matero, which was established between 1948 and 1959 by the Lusaka Municipal Council, then under the British colonial government, to house African workers who were working and living in Lusaka city legally. Residents paid rent to the Lusaka Municipal Council. In 1996, sitting tenants were offered leasehold title for a transfer fee and other titling costs; payment of which gave them real property rights. My comparison group, George compound, began as a farm. Following independence, squatters occupied the land. It was upgraded from 1978 to 1981 and residents were provided with occupancy licenses thereby being provided with the administrative recognition of occupancy. I argued that the case of Matero and George did not satisfy the assumption of a controlled experiment because allocation was done naturally; nor does this case meet the assumptions for a natural experiment because there was no random allocation of participants into the treatment and the control groups. The development of the two neighbourhoods occurred differently legally and historically. Moreover, as a candidate for a non-experimental approach, I argued that the case does not meet the assumptions for difference-in-differences estimation because there was no baseline data available. A proper matching approach would have been useful, but it was also not possible because no data were collected at baseline. A sampling frame to facilitate matching even for cross-sectional analysis was not accessible. The Lusaka case study was limited because of these methodological difficulties. Because of mainly demographic similarities and geographic proximity between the two groups, a statistical comparison was still useful. Such a comparison yielded exploratory and at best indicative results on the effects of titling relative to occupancy tenure. Ordinary Least Squares regression was used as an estimation strategy for the quantitative data. A thematic analysis was used for the analysis of in-depth qualitative interviews.

The results of the analysis using CAPS data were presented in Chapter 4. The thesis found that the effects of the housing subsidy were to improve self-reported health status by 10 percent and to increase the proportion of teenage pregnancies in Khayelitsha. The effect of increased teenage pregnancies is counterintuitive and inconsistent with other studies elsewhere. The effects on citizenship were also exploratory and the methods of estimation very limited in what they can say given the lack of baseline data. The analysis revealed no effects of the housing subsidy on labour market participation, income and durable assets, membership in associations, stability, and proportion of school dropouts, civic participation, political awareness and psychological wellbeing and neighbourly attachment.

Moreover in Chapter 5, the overall finding was that apart from status attainment, experiences between subsidy beneficiaries and shack-dwellers do not differ on the basis of property rights but rather on the basis of improvements in housing conditions. I showed that interviewees were dissatisfied with the overall quality of their houses. Labour participation does not seem to have improved on the basis of title. My interviewees were unemployed, did menial jobs on part-time if employed, or were trying out in business. Housing improvements were associated with narratives of success, status attainment, decency and respectability among beneficiaries. As an unintended consequence of the subsidy, the "high status" of some individuals generated gossip and jealousy. Home-based investments were not exclusive to housing subsidy beneficiaries. In particular, rental investments were not a priority and houses were too small to accommodate renters. Titling does not seem to offer better experiences of access to credit. Similar to other contexts in the broader literature, title-holders feared losing their property in the event that they failed to repay the loan. Some with a stable source of income, beneficiaries and shack-dwellers alike, managed to secure small loans. Moreover, housing quality provided the mechanism for increased wealth since they provided protection to life and property against the elements and may have led to increases in durable items because of the prevailing norm that brick houses ought to be furnished. Likewise, better experiences of education were linked to the better and healthier housing environment. Furthermore, experiences of citizenship in the sense of civic participation, membership in community voluntary associations and neighbourly attachment did not seem to differ between beneficiaries and shack-dwellers. Interviewees seemed to guard against intimacy for fear of jealousy and gossip. In addition, their idea of home and sense of belonging is not in Khayelitsha but in their places of origin in the rural areas of the Eastern Cape. Shack-dwellers did not claim any status attainment, decency or respectability.

Results presented in Chapter 6 show that real property rights in Matero had a higher impact on a few measures relative to the administrative recognition of occupancy. Leasehold title was found to be associated with higher property values. My estimate is that property values are about 80 percent higher than those on occupancy tenure. I also found uncertain evidence that leasehold titling increases household per capita income, wealth as measured crudely by possession of household consumer durables, political awareness and neighbourhood satisfaction. Despite high increases in property values, the evidence indicates tentatively that there is no association between leasehold title and access to credit, labour market participation and home-based investments, income from home-based investments and memberships in voluntary associations, volunteerism and neighbourhood attachment.

The qualitative evidence reported in Chapter 7 complemented those in Chapter 6 by providing descriptions of experiences regarding many of the themes thought to be outcomes of real property rights. The thesis showed that unemployment is high in both neighbourhoods such that most respondents depend on the informal sector, meagre retirement benefits and remittances from elderly children to earn a livelihood. In terms of property values and tenure security getting a title deed may have meant higher property values and tenure security in the short run but does not really mean long term tenure security for many of my respondents due to the costs of owning the house. Moreover, most of my interviewees pointed out that they desired to get loans but were either turned away at the bank or feared losing their house. There was no difference in terms of housing improvement between the two neighbourhoods. House extensions were important for income generation through rentals and to accommodate typically large families since original houses were too small. Similarly, home-based business investments were done in both neighbourhoods. The typical activity was renting out one room or more in the house. In terms of wealth, households in Matero had more durable items because they bought household durables that were larger and of higher quality after titling than those they had when they lived in the smaller council houses. In addition, there was no difference in experiences regarding human capital. In both neighbourhoods, attention to human capital occurred because of the reallocation of family resources such as those that would have gone to paying for rent to paying for children's education. More so, the house provided some interviewees from Matero the feeling of attainment of social status. There was no difference in terms of neighbourly attachment because in both neighbourhoods, relationships were based on values of the African rural setup, Christianity and lack of fences between houses. This dynamic was however affected negatively by new entrants in form of

renters and new owners who had stronger enforcement of property rights. With regard to civic participation, Matero residents depended on both informal and formal mechanisms of civic participation while those in George depended only on informal mechanisms. Finally, there was no difference in terms of membership in voluntary associations. The most cited reason was that they did not trust each other in community initiatives. Others said they did not know of such associations operating in their neighbourhood.

In Chapter 8, a comparative analysis was conducted and several potential general lessons drawn. I found that the macro-economic environment shapes the effects of titling on labour market participation. An environment with high unemployment works against the potential effects of real property rights. A second lesson drawn is that perceived tenure security is more important than the difference in rights between those with title and those with occupancy tenure. This is because lack of adherence to rules governing land use in areas where the state has recognised occupancy diminishes the difference in the rights exercised and therefore diminishes the difference in effects between the two types of tenure. The third lesson was that without employment, the chances of getting credit for those on title are no different from those on occupancy tenure. Another lesson is that titling may reallocate the priorities of the poor from those of securing physical capital to human capital, primarily children's education. Also, the provision of real property rights can interfere with existing bonds and social capital even in the urban context. Moreover, I have showed that the extent of involvement by both political players and beneficiaries in the process of titling and housing delivery are important aspects in cultivating post-titling citizenship behaviour of beneficiaries. Finally, real ownership rights and not occupancy tenure can bestow upon the owner a feeling of self-worth, respect and dignity.

Table 9.1 below provides a summary of the results other selected studies in the literature have found and those found in this thesis. By most measures, titling had no effect in either of my cases. In both case studies, titling is associated with higher status attainment relative to those on occupancy tenure.

Table 9.1: Comparison of findings of other studies and the thesis on effects of property rights

Variables	**Findings of other studies**	**Thesis findings**
Tenure Security	Positive and in some cases negative but titled households more likely to feel secure	Qualitative evidence shows improved then later worsened in Matero because of long term costs of titling. Not examined in Khayelitsha
Perceived tenure security	Positive effect	Not examined
Housing improvement	Positive effect through de jure, de facto and perceived tenure security	Positive effect in Khayelitsha and no difference with occupancy tenure in Matero using qualitative evidence
Property value	Three studies find increases of about 25 percent. Others find 100, 73, 58 and 45 percent.	An increase of 80 percent in Matero. Not examined in Khayelitsha.
Access to credit	Insignificant increase but titling may increase likelihood and informal access. Increase in Indonesia, signal of creditworthiness.	Insignificant increase. Enhances chances but one primarily needs a job.
Labour market participation	Positive effect in Brazil and Peru but not in Argentina through increased tenure security.	No effect. High unemployment rates and low demand for unskilled labour on the labour market.
Female labour market participation	Positive effect in Metropolitan Cape Town	No effect in Khayelitsha and Matero
Child labour	Reduction in Peru and Ecuador	Not examined
Home-based business investments	Increase in Langa, Cape Town but cross-sectional study did not have a control. No real wealth created from businesses.	No difference with those on occupancy tenure in both cases.
Household per capita income	Positive effect in Peru, Brazil, Argentina and Mexico via increase in labour market participation	Positive effect in Matero but no effect in Khayelitsha
Wealth (consumer durables)	No effect in Argentina	Positive effects in both cases using qualitative evidence. Positive effect in Matero using quantitative but no effect in Khayelitsha
Belief in capitalism/political ideological inclination	Positive effect in Argentina. No effect in 17 Latin American countries using Latin Barometer survey	Not examined

Table 9.1 *Continued*

Variables	Findings of other studies	Thesis findings
Human Capital		
School dropouts	Not examined to the best of my knowledge	No effect in Khayelitsha. Not examined in Matero
Children's education	Positive effect in Argentina although housing investment favoured over investments in education for children under 16 in Uruguay	Positive effect in Khayelitsha using qualitative evidence but no difference with those on occupancy in Matero
Teenage pregnancy	Reduction in Argentina	Increase in Khayelitsha
Physical health	Improvement in children's short term health but may be associated with obesity in long term health in Argentina and Peru	Improvement of 10 percent in self-reported health in Khayelitsha. Not examined in Matero
Psychological health	Not examined to the best of my knowledge	No effect in Khayelitsha, not examined in Matero
Chronic diseases	Reduction in Uruguay but mechanism not known	Not examined
Status attainment	Positive effect on economic status in Mufulira, Zambia using qualitative evidence	Positive effect in both Khayelitsha and Matero using qualitative evidence
Fertility	Reduction in Peru and Argentina	Not examined
Satisfaction with life	Not examined to the best of my knowledge	Positive effect in Matero using qualitative evidence
Social Capital		
Membership in voluntary associations	No effect in Latin America	No effect in both case studies
Volunteerism	Not examined to the best of my knowledge	No effect in Khayelitsha using qualitative evidence, not examined in Matero
Neighbourly attachment	Not examined	No effect in both case studies
Civic participation	No effect in 17 Latin American countries using Latin Barometer survey	No effect in both case studies
Political awareness	Not examined to the best of my knowledge	Positive effect in Matero and no effect in Khayelitsha, shack-dwellers more aware on account of membership in political parties
Neighbourhood satisfaction	No effect in 17 Latin American countries using Latin Barometer survey	Positive effect in Matero, not examined in Khayelitsha
Sense of belonging	Not examined to the best of my knowledge	No effect in Khayelitsha using qualitative evidence. Not examined in Matero

9.3 Limitations

There are some caveats with regard to these findings. The finding on the Khayelitsha case does not portray the complete picture because of some limitations in the data. The most important and main limitation was data availability. I had no baseline data for some of the variables. Also, the data did not allow me to desegregate between those who had become shack dwellers in 1983 and those who had moved in more recently. I could not distinguish between those beneficiaries who previously lived in shacks on un-serviced sites and those on serviced sites. There was also no survey data available on the households prior to 1991, which was the time some residents were relocated to serviced sites. In CAPS, the interviewees were young adults and so there was a limitation in terms of the generalizability to the older population. Also, some variables such as those that measured membership in associations were not completely the same at baseline and post-intervention. Also, the measures that did not have baseline data such as those that went into the social attachment variable were not in all previous waves until 2009 and so we do not know what happened to social attachment in the neighbourhoods prior to 2009. Further, the social attachment variables could have also benefitted from additional questions such as "I talk to my neighbours a lot/when necessary/rarely" to reflect frequency of interaction, "I have a strong attachment to my neighbourhood", "I am satisfied with my neighbourhood" which would capture other dimensions of social attachment and allow for a more valid measure to compare with that of the Matero case study.

The effects examined are of real property rights; both title and land and property on the land. This means in the Khayelitsha case, the effect is of both the housing subsidy and freehold ownership. In Lusaka, the effect is of both leasehold ownership and the privatized house. The effects of each cannot be separated.

Further, the duration from the time beneficiaries obtained housing to the time of my evaluation on Khayelitsha provides evidence for short to medium term effects of formal tenure. Therefore the evidence does not cover longer term effects such as those cases that have people who have been beneficiaries for over 30 years and have a second generation take over from original beneficiaries.

In addition, the study in Lusaka was cross-sectional which did not allow for any conclusions about causality. At best, the results are not more than a comparison of means.

Caution needs to be exercised in how the general lessons drawn from the comparison between the case studies are interpreted. Because the cases are at different stages of neighbourhood development, the lessons may no longer hold between cases at another stage or in a different context.

The results of the study should not be taken as representative of all contexts as they were particularly focussed on beneficiaries in the cases of Khayelitsha and Matero and can at best be narrowly representative of Cape Town and Lusaka respectively.

9.4 Conclusion

After examining a wide range of effects of real property rights, the main finding is that the provision of housing subsidies in Khayelitsha and the titling of rental housing in Matero have yielded some but not all of the effects identified in both policy and scholarly work in other "developing" countries. The thesis has examined a holistic set of effects beyond those hypothesised in the literature on titling including the social and human capital effects of titling, which have remained largely understudied in developing countries. As other studies have found, this study revealed the methodological challenges in studying the effects of titling. Essentially, the methods of estimation are limited in what they can say. In both Khayelitsha and Matero, the actual effects of titling were smaller and fewer than predicted. In neither case was titling associated with improvements in most of the measures of poverty reduction, supporting the argument that the benefits of titling may be exaggerated if researchers focus on selected variables rather than a broader set of measures. In terms of theoretical significance, the findings demonstrate that, in the cases of Cape Town and Lusaka, the effects of titling extend beyond those emphasised in titling theory to additional effects identified by homeownership and asset theories. Scholars need to go beyond orthodox titling theory and take into consideration hypotheses drawn from theories of homeownership. Further holistic case studies would help to build knowledge in the field so that general lessons can be drawn. Granting that much has been discovered about real property rights in Khayelitsha and Matero, much more remains unknown on account of methods. Myths and mysteries on effects of property rights in these contexts endure.

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APPENDICES

Appendix 1: Items in the assets scale and mean differences in percentage scores between RDP homeowners and shack-dwellers

Does anyone in the household own the asset listed below in working/running condition?	**2002**			**2009**		
	RDP home owners	**Shack-dwellers**	**t**	**RDP home owners**	**Shack-dwellers**	**t**
Radio, stereo or cassette recorder	0.73	0.75	0.47	0.87	0.82	-1.16
Television	0.75	0.63	-2.23**	0.86	0.86	-0.60
Video, VCR, DVD	0.05	0.16	-3.62***	65	63	-0.38
Telephone (not cellular)	34	22	-2.37**	0.20	0.06	-3.51***
Refrigerator	0.71	0.50	-3.78***	0.77	0.74	0.54
Cellphone	0.37	0.39	0.36	0.96	0.95	-0.33
Stove	0.55	0.45	-1.67*	0.92	0.90	-0.48
Microwave	0.16	0.8	-2.21**	0.38	0.39	0.18
Washing Machine	0.09	0.05	-1.60	0.20	0.10	-2.43**
Bicycle	0.04	0.04	0.22	0.09	0.08	-0.41
Motorcycle	0	0	0	0.03	0.02	-0.43
Car	0.11	0.07	-1.24	0.15	0.08	-1.97**
Computer	0.01	0.01	0.37	0.06	0.03	-1.10
Books	0.76	0.67	-1.68*	0.48	0.35	-2.09
Cronbach's Alpha	0.70			0.77		

* $p<0.10$ ** $p<0.05$; *** $p<0.01$

Appendix 2: Items in the membership in voluntary associations scale (2009 data) and comparison between RDP homeowners and shack dwellers

Does anyone in the household own the asset listed below in working/running condition?	**2002**			**2009**		
	RDP home owners	**Shack-dwellers**	**t**	**RDP home owners**	**Shack-dwellers**	**t**
Variables						
Sports group or team	0.29	0.34	0.88	0.06	0.08	0.060
Religious group	0.28	0.27	-0.24	0.41	0.55	2.00**
Study group	0.24	0.30	1.14			
Music group	0.18	0.16	-0.43			
Some other youth group	0.02	0.02	0.33			
Stokvel, Goi Goi, community savings etc	0.50	0.42	-1.38			
Political party				0.13	0.25	2.27
Community-based group				0.03	0.05	0.55
Charity or volunteer organisation				0.01	0.02	0.55

* $p<0.10$ ** $p<0.05$; *** $p<0.01$

Appendix 3: Items in the neighbourhood attachment scale and mean differences between RDP homeowners and shack-dwellers

Question	**2009**		
	Home Owners (%)	**Non-home Owners (%)**	**t**
I16. Generally speaking most people can be trusted	0.24	0.23	-0.22
Most people who live in this neighbourhood can be trusted	0.35	0.31	-0.58
E2.5.If a relative is unable to look after a child, then people will help by accommodating him/her	0.48	0.44	-0.55
I25.4.Do you feel safe walking in your neighbourhood during the day?	0.62	0.64	0.33
I25.5.Do you feel safe walking in your neighbourhood after dark?	0.20	0.12	-1.55
E2.4.People are happy to help their neighbours if they ask for help doing something	0.37	0.44	0.48
E2.6.If someone's neighbour asks for a small loan of money,he/she will help him	0.47	0.47	0.00
Cronbach's Alpha	0.57		

* *p<0.10* ** *p*<0.05; *** *p*<0.01

Appendix 4: Research Questionnaire for Lusaka Survey

A. Interview details

A.1	**Matero**	**1**		**George**	**2**

A.2	Tenure type	Occupancy License	1
		Title Deed (Freehold)	2
		Don't know	3
		Refused	4
		Other specify:	5

A.3	Number of rooms		

A.4	Interviewer Name				
A.5	Date of interview				
A.6	Start time	:		End time	:

Interviewer: Please record the details of the head of household below.

A.7	Name					
A.8	Address:					
A.9	Cellphone number					
A.10	Telephone number	W		H		
A.11	Email address					
A.12	Household size					
A.13	Year occupied house					
A.14	How long respondent has live in house					years

B. Demographic Information (Household Head)

B.1	Gender	1. M	2. F

B.2	Age at last birthday		

B.3	Occupation		

B.4	Marital Status	Never married	1
		Married	2
		Divorced	3
		Separated	4
		Widow/widower	5
		Living with partner	6
		No response	7
		Refused	8
		Other specify:	9

B.5	Employment Status of head of household	Employed	1
		Unemployed	2
		Unemployed and been looking for a job in the past 4 weeks	3
		Unemployed but not actively looking for a job	4
		No response	5
		Refused	6
		Other specify:	7

B.6	Are there other members of this household who have full-time paid jobs?	yes	1
		No	2

B.7	What is the total monthly income for this household?	K……..

B.8	What is the total monthly expenditure for this household?	K……..

B.9	Do you consider this household as	poor	moderate	Well to do	
		1.	2.	3.	

C. Dwelling

C.1	Did you benefit from the privatisation of low-cost government houses?	yes	1
		No	2
		Don't Know	3
		Refused	4
C.2	Did a member of this household buy this house from the council during the government transfer of public housing to sitting tenants?	yes	1
		No	2
		Don't Know	3
		Refused	4
C.3	Does the head of this household or other member of the household own the dwelling?	Yes	1
		No	2
		Don't Know	3
		Refused	4

C.4	What is the market value of the dwelling? Please provide an estimate if your house has not been valuated.	Market Value K…….
		Personal Estimate K…….

C.5	Has the house been used for any income generating activities? (**Skip C.6 if answer is no or don't know and go to D.1**)	Yes	1
		No	2
		Don't Know	3
		Refused	4
C.6	What income generating activities have been carried out using this house	Renting out a room	1
		Partly used as a tuck shop/Restaurant	2
		Renting to a business	3
		Brewing beer for sale	4
		Selling groceries etc in the yard	5
		Used as day care or tutoring centre	6
		Welding	7
		Other, specify in the column to the left	8
		Don't Know	9
		Refused	10

C.7	How much income is realized from these activities?	Each month K……..
C.8		Each year K……..

D. Interview details

D.1	**Does any member of this household have a**	Yes	No	Refused	Don't know	
D.1.1	Home loan / Bond	1.	2.	3.	4.	
D.1.2	Personal loan from a micro-lender	1.	2.	3.	4.	
D.1.3	Loan with a loan-shark	1.	2.	3.	4	
D.1.4	Study loan	1.	2.	3.	4.	
D.1.5	Vehicle loan (car payment)	1.	2.	3.	4.	
D.1.6	Credit card	1.	2.	3.	4.	
D.1.7	Hire purchase agreement	1.	2.	3.	4.	
D.1.8	Loan from a family member or friend	1.	2.	3.	4.	
D.1.9	Cellphone contract	1.	2.	3.	4.	

D.2	Have you used this house in any way (e.g as collateral) to obtain loans or credit? Skip D.3 and go to E.1 if answer is no.	Yes	1
		No	2
		Don't Know	3
		Refused	4
D.3	What were the values of these loans?	K…….	
D.4		K…….	
D.5	What kind of loan or credit did you obtain	Micro-credit	1
		Bank Loan	2
		Home-Loan	3
		Personal loan from loan shark	4
		Study loan	5
		From family member or friend	6
		Hire purchase	7
		Vehicle loan	8
		Credit card	9
		Other specify.....	
D.6	Was the house the primary requirement for you to obtain this loan?	Yes	1
		No	2
		Don't Know	3
		Refused	4
D.7	Have you paid back the loan	Yes	1
		No	2
		Don't Know	3
		Refused	4
D.8	Have you used income from this house to pay back the loan or credit?	Yes	1
		No	2
		Don't Know	3
		Refused	4
D.9	(If yes to D.8) In what way have you used the house to pay back the loan?	Through rent income	1
		Through profits from home business	2
		By borrowing against the house from another source	
		Other specify	
		Don't Know	3
		Refused	4

E. ECONOMIC CAPITAL (Property Rights, Assets/Wealth and Income)

E.1	Does anyone in the household own the asset listed below in working/running condition?	Yes	No	Not sure	
E.1.1	Radio, stereo or cassette recorder	1.	2.	3.	
E.1.2	Hi Fi, CD player, MP3 Player	1.	2.	3.	
E.1.3	Television	1.	2.	3.	
E.1.4	Free to Air decoder & Satellite dish	1.	2.	3.	
E.1.5	Multichoice decoder and dish	1.	2.	3.	
E.1.6	Video, VCR, DVD	1.	2.	3.	
E.1.7	Digital camera	1.	2.	3.	
E.1.8	Video camera	1.	2.	3.	
E.1.9	camera	1.	2.	3.	
E.1.10	Telephone (not cellular)	1.	2.	3.	
E.1.11	3G or 4G Cellphone	1.	2.	3.	
E.1.12	Cellphone	1.	2.	3.	
E.1.13	Refrigerator	1.	2.	3.	
E.1.14	Freezer	1.	2.	3.	
E.1.15	Cooker (gas or electric)	1.	2.	3.	
E.1.16	Stove (two plate)	1.	2.	3.	
E.1.17	Paraffin stove	1.	2.	3.	
E.1.18	Microwave	1.	2.	3.	
E.1.19	Washing Machine	1.	2.	3.	
E.1.20	Sewing/knitting machine	1.	2.	3.	
E.1.21	Bicycle	1.	2.	3.	
E.1.22	<200cc Motorcycle/scooter	1.	2.	3.	
E.1.23	>200cc Motorcycle	1.	2.	3.	
E.1.24	Private Car	1.	2.	3.	
E.1.25	Commercial Car	1.	2.	3.	
E.1.26	Computer/Laptop	1.	2.	3.	
E.1.27	Hammer mill	1.	2.	3.	
E.1.28	Ox cart	1.	2.	3.	
E.1.29	Wheelbarrow	1.	2.	3.	
E.1.30	Grinding mill	1.	2.	3.	
E.1.31	Plough	1.	2.	3.	
E.1.32	Tractor	1.	2.	3.	
E.1.33	Vacuum cleaner/Hoover	1.	2.	3.	
E.1.34	Unit trusts, stocks and/or shares	1.	2.	3.	
E.1.35	Bank account	1.	2.	3.	
E.1.36	Pension or retirement annuity	1.	2.	3.	

E.2	Does anyone in this household own livestock listed below?	Yes	No	Not sure	
E.2.1	Cattle	1.	2.	3.	
E.2.2	Sheep	1.	2.	3.	
E.2.3	Goats	1.	2.	3.	
E.2.4	Pigs	1.	2.	3.	
E.2.5	Horses	1.	2.	3.	
E.2.6	Donkeys and Mules	1.	2.	3.	
E.2.7	Chickens	1.	2.	3.	
E.2.8	Ducks and Geese	1.	2.	3.	
E.2.9	Guinea fowl	1.	2.	3.	
E.2.10	Rabbits	1.	2.	3.	
E.2.11	Other, specify	1.	2.	3.	

E.3	If so, how much is earned from the sale of livestock and its' products per month?	K
E.3.1	Cattle	
E.3.2	Sheep	
E.3.3	Goats	
E.3.4	Pigs	
E.3.5	Horses	
E.3.6	Donkeys and Mules	
E.3.7	Chickens	
E.3.8	Ducks and Geese	
E.3.9	Guinea fowl	
E.3.10	Rabbits	
E.3.11	Other, specify	

F. SOCIAL CAPITAL (Size and value of Networks of beneficial connections)

Associations/Organisations (Interviewer, ask the head of household)

F.1	Are you a member of	Yes	No	Not sure	
F.1.1	Religious organization, e.g. Church, Mosque, church choir, prayer group	1.	2.	3.	
F.1.2	Political party	1.	2.	3.	
F.1.3	neighbourhood watch	1.	2.	3.	
F.1.4	street committee	1.	2.	3.	
F.1.5	Sports club or recreational club	1.	2.	3.	
F.1.6	A charity or volunteer organization	1.	2.	3.	
F.1.7	Trade Union	1.	2.	3.	
F.1.8	Burial Society	1.	2.	3.	
F.1.9	Stokvel/Akalimba	1.	2.	3.	
F.1.10	Sewing group	1.	2.	3.	
F.1.11	Singing or music group	1.	2.	3.	
F.1.12	Youth Group	1.	2.	3.	
F.1.13	Men's association	1.	2.	3.	
F.1.14	Women's association	1.	2.	3.	
F.1.15	School Committee	1.	2.	3.	
F.1.16	Water Committee	1.	2.	3.	
F.1.17	Development Committee	1.	2.	3.	
F.1.18	Housing committee	1.	2.	3.	
F.1.19	Tribal Authority	1.	2.	3.	
F.1.20	Informal trader's group	1.	2.	3.	
F.1.21	Farmer's Association	1.	2.	3.	
F.1.22	Community Garden group	1.	2.	3.	
F.1.23	Ward Council	1.	2.	3.	
F.1.24	Other, specify	1.	2.	3.	

Neighbourhood relationships

F.2	Answer if the following statements apply to you	Yes	No	Not sure	
F.2.1	I intend to move from Matero/George	1.	2.	3.	
F.2.2	Many people in this neighbourhood can be trusted	1.	2.	3.	
F.2.3	I trust my immediate neighbours	1.	2.	3.	
F.2.4	My neighbours can trust me	1.	2.	3.	
F.2.5	I talk to my neighbours a lot	1.	2.	3.	
F.2.6	I love my privacy and not talking to my neighbours	1.	2.	3.	
F.2.7	I can count on my neighbour for financial assistance	1.	2.	3.	
F.2.8	I assist my neighbours financially	1.	2.	3.	
F.2.9	my neighbours help me with household supplies	1.	2.	3.	
F.2.10	I help my neighbours with household supplies	1.	2.	3.	
F.2.11	My neighbour helped me get a job	1.	2.	3.	
F.2.12	I helped a neighbour get a job	1.	2.	3.	
F.2.13	I can count on my neighbour for safety and security	1.	2.	3.	
F.2.14	My neighbour can count on me for safety and security	1.	2.	3.	
F.2.15	My neighbour is a close friend	1.	2.	3.	
F.2.16	We share meals with my neighbour	1.	2.	3.	
F.2.17	My neighbourhood is generally safe	1.	2.	3.	
F.2.18	My neighbourhood has a lot of crime	1.	2.	3.	
F.2.19	I have a strong attachment to my neighbourhood	1.	2.	3.	
F.2.20	I don't like my neighbourhood	1.	2.	3.	
F.2.21	I am satisfied with my neighbourhood	1.	2.	3.	
F.2.22	I have a personal responsibility for cleanliness in my neighbourhood				
F.2.23	I have a personal responsibility for safety in my neighbourhood				

F.3. <u>Connections with people of high status (Interviewer, ask the head of household or the name of the person who is on the title deed)</u>

Below, please think carefully and then list your connections These should include notable people who you know that you can rely on and draw upon for favours regarding financial assistance, employment in case you need a job, people in influential positions that help you to access resources e.g. land, information about market for goods or services, people who connect you with other people cheaply or people who help you access services and opportunities quickly without much cost regarding time or money. Please be assured that this information will be treated with the utmost confidence.

Within this neighbourhood.

1. Name_____

Title_____Occupation_____

Educational Level_____

Position_____

Type of connection_____

F.3.1 Perceived financial value of benefits from person 1? K_____
(upper limit of how much the respondent believes he/she can draw upon from person 1)

2. Name_____

Title_____

Educational Level_____

Position_____

Type of connection_____

F.3.2 Perceived financial value of benefits from person 2? K_____

(upper limit of how much the respondent believes he/she can draw upon from person 2)

3. Name_____

Title_____

Educational Level_____

Position_____

Type of connection_____

F.3.3 Perceived financial value of benefits from person 3? K_____

(upper limit of how much the respondent believes he/she can draw upon from person 3)

Outside this neighbourhood

4. Name_____

Title_____

Educational Level_____

Position_____

Type of connection_____

F.3.4 Perceived financial value of benefits from person 4? K_____

(upper limit of how much the respondent believes he/she can draw upon from person 4)

5. Name_____

Title_____

Educational Level_____

Position_____

Type of connection_____

F.3.5 Perceived financial value of benefits from person 5? K_____

(upper limit of how much the respondent believes he/she can draw upon from person 5)

6. Name_____

Title_____

Educational Level_____

Position_____

Type of connection_____

F.3.6 Perceived financial value of benefits from person 6? K_____

(upper limit of how much the respondent believes he/she can draw upon from person 6)

G. CULTURAL CAPITAL (Educational activities and cultural competence)

G.1 Highest Level of Education

	0. Never/Grade 0		0
	1. Grade 1/Sub A		1
	2. Grade 2/Sub B		2
	3. Grade 3/Standard 1		3
	4. Grade 4/Standard 2		4
	5. Grade 5/Standard 3		5
	6. Grade 6/Standard 4		6
	7. Grade 7/Standard 5		7
	8. Grade 8/Standard 6		8
	9. Grade 9/Standard 7		9
	10. Grade 10/Standard 8		10
	11. Grade 11/Standard 9		11
	12. Grade 12/Standard 10		12
	13. Certificate <6months without Grade 12		13
	14. Dip/Cert >6 months without Grade 12		14
	15. Dip/Cert < 6mos with Grade 12		15
	16. Dip/Cert >6mos with Grade 12		16
	17. Univ. Diploma with Grade 12		17
	18. Undergraduate degree		18
	19. Postgraduate degree		19
	20. Other		20
	99. don't know		99

G.2 Father's Highest Level of Education

	0. Never/Grade 0		0
	1. Grade 1/Sub A		1
	2. Grade 2/Sub B		2
	3. Grade 3/Standard 1		3
	4. Grade 4/Standard 2		4
	5. Grade 5/Standard 3		5
	6. Grade 6/Standard 4		6
	7. Grade 7/Standard 5		7
	8. Grade 8/Standard 6		8
	9. Grade 9/Standard 7		9
	10. Grade 10/Standard 8		10
	11. Grade 11/Standard 9		11
	12. Grade 12/Standard 10		12
	13. Certificate <6months without Grade 12		13
	14. Dip/Cert >6 months without Grade 12		14
	15. Dip/Cert < 6mos with Grade 12		15
	16. Dip/Cert >6mos with Grade 12		16
	17. Univ. Diploma with Grade 12		17
	18. Undergraduate degree		18
	19. Postgraduate degree		19
	20. Other		20
	99. don't know		99

G.3 Mother's Highest Level of Education

	0. Never/Grade 0		0
	1. Grade 1/Sub A		1
	2. Grade 2/Sub B		2
	3. Grade 3/Standard 1		3
	4. Grade 4/Standard 2		4
	5. Grade 5/Standard 3		5
	6. Grade 6/Standard 4		6
	7. Grade 7/Standard 5		7
	8. Grade 8/Standard 6		8
	9. Grade 9/Standard 7		9
	10. Grade 10/Standard 8		10
	11. Grade 11/Standard 9		11
	12. Grade 12/Standard 10		12
	13. Certificate <6months without Grade 12		13
	14. Dip/Cert >6 months without Grade 12		14
	15. Dip/Cert < 6mos with Grade 12		15
	16. Dip/Cert >6mos with Grade 12		16
	17. Univ. Diploma with Grade 12		17
	18. Undergraduate degree		18
	19. Postgraduate degree		19
	20. Other		20
	99. don't know		99

G.4	Did you obtain any skills or qualifications funded by financial proceeds from the house?	Yes	1
		No	2

Reading books

G.5	How many books are in your home?	0	1
		Less than 5	2
		More than 5 but less than ten	3
		More than 10	4

G.6	Do you own a world map?	Yes	1
		No	2

G.7	What kind of books do you read?	Yes	No	
G.7.1	Fiction novels	1.	2.	
G.7.2	Non-fiction novels	1.	2.	
G.7.3	Biographies and autobiographies	1.	2.	
G.7.4	Self-help books (mind, body and spirit)	1.	2.	
G.7.5	Religious books	1.	2.	
G.7.6	Science-fiction, fantasy and horror	1.	2.	
G.7.7	Romantic novels	1.	2.	
G.7.8	Magazines	1.	2.	
G.7.9	Modern literature e.g animal farm	1.	2.	
G.7.10	Newspapers	1.	2.	
G.7.11	Other, specify	1.	2.	

Types of TV Programmes

G.8	What types of TV programmes do you watch?	Yes	No	
G.8.1	Soap opera	1.	2.	
G.8.2	Reality popular drama	1.	2.	
G.8.3	Serious TV (Interviews)	1.	2.	
G.8.4	Zambian comedy	1.	2.	
G.8.5	New drama	1.	2.	
G.8.6	Documentary	1.	2.	
G.8.7	Nature	1.	2.	
G.8.8	News	1.	2.	
G.8.9	History	1.	2.	
G.8.10	Sports	1.	2.	
G.8.11	Arts programmes	1.	2.	
G.8.12	Movies/films	1.	2.	
G.8.13	Cookery/home	1.	2.	
G.8.14	Lifestyle	1.	2.	
G.8.15	Quizzes	1.	2.	
G.8.16	Police/Detective	1.	2.	
G.8.17	Variety/Chat e.g Oprah	1.	2.	
G.8.18	Zambian Local Music	1.	2.	
G.8.19	Plays	1.	2.	

Music

G.9	What kind of music do you listen to?	Yes	No	
G.9.1	Zamtunes (Contemporary Zambian e.g Danny Kaya,)	1.	2.	
G.9.2	Zambian gospel (Matthew Ngosa etc)	1.	2.	
G.9.3	Contemporary Christian (e.g Michael W Smith, Freddie Hammond, Kirk Franklin)	1.	2.	
G.9.4	Rock e.g Linkin Park	1.	2.	
G.9.5	Urban	1.	2.	
G.9.6	Electro e.g Cream, Rozalla Miller	1.	2.	
G.9.7	Country e.g Dolly Parton	1.	2.	
G.9.8	Classic e.g Mozart, Bach, Vivaldi	1.	2.	
G.9.9	World e.g K'Naan	1.	2.	
G.9.10	Jazz	1.	2.	
G.9.11	House	1.	2.	
G.9.12	Kwaito (South African) Mafikizolo, Malaika	1.	2.	
G.9.13	R&B	1.	2.	
G.9.14	Rap (with explicit content) e.g JZ, Eminem	1.	2.	
G.9.15	Rap (Soft)	1.	2.	
G.9.16	Classic Kalindula e.g PK Chishala	1.	2.	
G.9.17	New Kalindula e.g Glorious Band	1.	2.	
G.9.18	African e.g Ismael Lo, Youssou N'Dour, Salif Keita, Oliver Mtukudzi	1.	2.	

Activities

G.10	What kind of activities do you do?	Yes	No	
G.10.1	Going to the museum and art galleries	1.	2.	
G.10.2	Going to concerts	1.	2.	
G.10.3	Evening or daytime classes	1.	2.	
G.10.4	Playing musical instruments	1.	2.	
G.10.5	Going to the library to read (Member of a library)	1.	2.	
G.10.6	Going to play soccer or any other sport	1.	2.	
G.10.7	Going to play chess	1.	2.	
G.10.8	Going to watch movies/films	1.	2.	
G.10.9	Going to night clubs	1.	2.	
G.10.10	Going to parties at friend's houses	1.	2.	
G.10.11	Watching television	1.	2.	
G.10.12	Voluntary work to help others	1.	2.	
G.10.13	Going to see plays and sketches	1.	2.	
G.10.14	Going to restaurants to listen to a band playing	1.	2.	
G.10.15	Going to the tavern for some chibuku	1.	2.	
G.10.16	Going to a bar	1.	2.	
G.10.17	Going to church to besides the normal service time	1.	2.	

How often do you do these activities?

G.11	Watching television	Not often	often	very often	Not sure	
G.11.1	Playing outdoor sports	1.	2.	3.	4.	
G.11.2	Playing indoor sports and games	1.	2.	3.	4.	
G.11.3		1.	2.	3.	4.	
G.11.4	Going to parties at friend's houses	1.	2.	3.	4.	
G.11.5	Going to night clubs	1.	2.	3.	4.	
G.11.6	Going to art galleries or museums	1.	2.	3.	4.	
G.11.7	Voluntary work to help others	1.	2.	3.	4.	
G.11.8	Going to the cinema	1.	2.	3.	4.	
G.11.9	Going to see plays	1.	2.	3.	4.	
G.11.10	Going to classical concerts	1.	2.	3.	4.	
G.11.11	Going to pop concerts	1.	2.	3.	4.	
G.11.12	Playing an instrument	1.	2.	3.	4.	
G.11.13	Listening to classical music	1.	2.	3.	4.	
G.11.14	Listening to pop music	1.	2.	3.	4.	
G.11.15	Reading books	1.	2.	3.	4.	
G.11.16	Going to the tavern	1.	2.	3.	4.	
G.11.17	Going to the bar	1.	2.	3.	4.	

Current Affairs

Here is a list of famous people, indicate what area of life they are associated with. Interviewer, insert 1 for correct answer and 2 for incorrect. Do not tell the respondent the result of any of his/her responses.

G.12		Science	Politics	Art	Music	Novels	
G.12.1	Binwell Sinyangwe						
G.12.2	George Kunda						
G.12.3	Chuna Achebe						
G.12.4	John Grisham						
G.12.5	Albert Einstein						
G.12.6	Lameck Goma						
G.12.7	Henry Tayali						
G.12.8	Elvis Presely						
G.12.9	Ban Ki Moon						
G.12.10	Isaac Newton						
G.12.11	Enock Ilunga						
G.12.12	Malama Katulwende						
G.12.13	Pontiano Kaiche						
G.12.14	Wangari Maatai						
G.12.15	Wolfgang Mozart						
G.12.16	Marie Curie						
G.12.17	Pablo Picasso						
G.12.18	Angelique Kidjo						
G.12.19	Mahmood Ahmadinejad						
G.12.20	David Cameron						

Interviewer record time at end of interview and thank the respondent.

Appendix 5: Question Guide on the subsequent experiences of low-income homeownership (General version for both Khayelitsha and Matero)

About the Interviewee

Tell me about yourself

About the Dwelling

When did you move into this neighbourhood?

How did you obtain your house?

Who do you live with?

Tell me about where you lived before coming to this neighbourhood.

How different were the houses in your previous neighbourhood to the ones in your current neighbourhood?

Economic Capital

What are the benefits of living in this kind of house?

What are the bad things about living in this house?

What businesses do you conduct from this house?

(If no)Why don't you conduct business from here?

Did you used to conduct these same businesses before you obtained this house? If so what is different about doing business from here?

How do you conduct the business(es)?

What other ways do you use to obtain an income from this house?

Have you ever got a loan for business or for other purposes? How/Why?

What large assets do you have in this household?

Would you buy or keep assets like a four plate cooker, computer, microwave, freezer in this house?

Social Capital

Tell me about your relationship with neighbours?

Do you get along with people in this neighbourhood?

Do you live with family members close by?

Do you live with close by people from the same area of the Eastern Cape where you came from?

Did you move into this neighbourhood with other relatives or friends from the same area of the Eastern Cape you came from?

Do you organise yourselves with neighbours to deal with issues in the neighbourhood such as crime, delinquency, service provision, and schools for children? If so please tell me how and please give examples

What organisations do you belong to that safeguards your interests as a member of this neighbourhood?

What do you do in those organisations?

If there was a time you were in financial need, can you please tell me about the people in this neighbourhood who helped you?

Why did you go to those and not others?

What pass time activities do you do together with your neighbours e.g chatting, watching TV, playing sports etc?

When you came to Cape Town, did you intend to live here all your life?

Do you now intend to live in Cape Town all your life?

Do you intend to live in this house all your life?

Cultural/Human Capital

Do you have any educational items such as encyclopaedias, books, world maps, study desks etc. for your personal improvement? What do you have?

How has living in this house helped learning for children and members of this household?

Do you and other members of the household visit museums, art galleries, the library, or attend classical music concerts?

Do you and other members of this household assist learners to do their homework?

How has living in this house helped you to improve your knowledge about how to live life in general?

Thank you