

**MEASURING THE IMPACT OF
INSTITUTIONAL AND SUSTAINABILITY
INFLUENCES ON RENEWED HOUSING
DEVELOPMENT STRATEGIES:
IMPLICATIONS FOR
THE SHARED EQUITY HOUSING MODEL**

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DEDICATION

My Creator and Family

LIST OF ABBREVIATIONS

ADZ	Accelerated Development Zones
AH	Affordable Housing
AMOS	Analysis Of Moment Structures
AONB	Areas of Outstanding Natural Beauty
BCCLT	Bishops Castle Community Land Trust
BF	Brown field land
BU	Bottom up
CBH	Community Based Housing
CBHO	Community Based Housing Organisation
CBS	Community Benefit Society
CDW	Community Development Worker
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CFS	Community Finance Solutions
CG	Community Group
CHCC	Company House and Charity Commission
CIC	Community Interest Company
CIC	Community Interest Company
CICR	Community Interest Company regulator
CIL	Community Infrastructure Levy
CLF	Common Latent Factor
CLG	Community Limited by Guarantee
CLG	Guarantee Registered Charity
CLP	Community Led Plan
CLT	Community Land Trust
CLT (SEHM)	Community Land Trust (Shared Equity Housing Model)
CRESRS	Centre for Regional Economic and Social Research Sheffield
DCLG	Department of Community Local Government
DF	Development Fund
EFA	Explorative Factor Analysis
EL	Ethical Lenders
FSA	Financial Service Authority
FSA	Financial Services Authority
FTB	First Time Buyer
GA	Government Agencies
GAMHI	Median Household Income
GB	Green belt
GI	Government Institutions
GL	Green Land
HA	Housing Associations
HB	High street banks
HCA	Homes Community Agency
HCA	Homes and Communities Agency
HQI	Housing Quality Indicators
IFI	Incremental Fit Index

KMO	Kaiser-Meyer-Oklin
K-S	The Kolmogorov-Smirnov
KWLS	Key Worker Living Scheme
LA	Local Authorities
LABV	Local Asset Backed Vehicles
LCHOS	Low Cost Housing Schemes
LPA	Local Planning Authorities
MHP	Median Housing Price
ML	Mortgage lenders
NCLTN	National Community Land Trust Network
NIMBY	Not In My Backyard
OECD	The Organization for Economic Co-operation and Development
ONS	Office for National Statistics
PD	Private Developers
PDF	Public Development Fund
PFI	Private Finance Initiative
PQP	Pre-Qualification Processes
PWLB	Public Works Loans Board
RG	Regeneration Goals
RHE	Rural Housing Enablers
<i>RMSEA</i>	Root Mean Square Error of Approximation
RTB	Right to Buy
SCI	Statements of Community Involvement
SEHM	Shared Equity Housing Model
SEM	Structural Equation Modelling
SHMA	Strategic Housing Market Assessments
SIG	Special Interest Groups
SIG	Special Interest Group
TD	Top Down
TFI	Tax Increment Financing
TRQ	Trustworthiness Rigour and Quality
TSA	Tenant Services Authority
TUF	Top up Fund
UK	United Kingdom
UN	United Nation
US	United States

SYNOPSIS/ABSTRACT

Policy plays a major role in the state of housing in any given community; therefore housing policies can make an immense difference to tackling disadvantage, and also ensure that households even on the lowest incomes live in decent homes and engaging communities. In contrast, if policy fails, this could result in the lack of satisfactory homes, and a reduced quality of life. Despite continual government effort, existing research still reflect a continual shortfall of homes in the United Kingdom (UK). The low perennial underrepresentation of FTBs also remains an indicator of the state of housing in the UK. However, affordable housing accessibility for this group remains an uphill task in the midst of current austerity measures and their constantly changing demographic characteristics. As a sort of panacea to the aforementioned issues, literature has consistently touted the Shared Equity Housing Model (SEHM) in the form of a Community Land Trust (CLT) as a viable alternative for affordable housing. It also appears to be an adaptable vehicle towards easing the FTB (First Time Buyer) housing ownership dilemma. Amidst these seeming potentials, the CLT SEHM is underperforming in the housing sector, occupying a niche outside of the mainstream, squeezed out by supposed municipal and voluntary provisions. In essence what this research aims to do is to identify the gap in knowledge on how the housing delivery performance utilising the SEHM can be improved both as model and as a CLT vehicle employed in easing FTB ownership problems.

The study investigated barriers militating against the Community Land Trust Shared Equity Housing Model (CLT SEHM) from attaining its set targets and also obstacles preventing FTB engagement of the model as a viable route towards home ownership. To achieve this aim a comprehensive literature review was undertaken to justify the need for this research (Chapter Two). A triangulated and mixed methodological approach was employed to unequivocally fulfil research objectives as a route to ultimately accomplish the overarching research aim which is to design a framework that would enhance the overall effectiveness of CLT SEHM in affordable housing provision. Semi-structured interviews and questionnaire surveys were targeted at concerned identified stakeholders in affordable housing to achieve set research goals.

Research findings indicated that amidst a competitive housing provision sphere, a viable model should be able to compete effectively by providing a service that actually solves a problem. The state of FTB housing ownership problems has been an enduring aspect of housing research, yet with no significant improvement in their plight. Findings focused on the potential strategic role of the CLT SEHM in alleviating the underrepresentation of FTBs in housing ownership within the ramifications of this study. The quest of engaging FTBs for the CLT SEHM was however found to have its problems which manifests as barriers to home ownership. Also, the supposed panacea in the form of the CLT, a shared equity housing model (SEHM) was also found to have underperformed consistently. The state of underperformance was found to be linked to inherent affordable housing problems, which is part of the crux of the problems that have relegated the FTBs to a disadvantaged position on the housing ownership ladder, besides other personal attributes and limitations that were rigorously addressed in the course of this study. The cross-validation process of literature with text analytical findings identified in juxtaposition a two tier classification of obstacles to the CLT (SEHM) i.e. institutional and sustainability impacts alongside their mitigating drivers. In order to achieve empirical validation, the research employed questionnaires strategically targeted at population groups to investigate the ramifications of these two tier barriers, thus defining mitigating drivers. Descriptive and statistical tests were employed for this process. Moreover, strategic data findings were subjected to Structural Equation Modelling (SEM) with AMOS to address the research hypotheses. Combinations of these triangulated findings make up the consolidated elements used to achieve the research aim i.e. to propose a viable CLT (SEHM) development framework to address aforementioned key barriers.

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

It is commonly accepted that everyone should be given a fair chance to own an affordable decent home. It is also imperative that attempts at provision of affordable housing should meet the needs of the community as a whole including those whose needs are not being met by the housing market. Providing these homes should take into consideration a good balance of housing types and tenures (Bennet *et al*; 2006, pp. 52).

In a report by Gallent (1997, pp. 43) he observed that attempts at housing provision have focused on trends that have included affordable housing providers turning to the planning mechanism as a means of reducing producer costs at a time of decreasing public subsidy for low-cost house-building across the United Kingdom. Later studies indicated that this trend, particularly in England and Wales has not been successful because the planning system is failing in its bid to deliver in this regards. Housing needs of the local communities have also suffered greatly causing housing deficit that has so far remained as evidenced by Best (2003); Jones *et al* (2010). Furthermore, it is evident that the affordable housing delivery mechanism which is still heavily reliant on the planning system has failed to meet up with set targets in England. These deficiencies have long been highlighted by JRF (1994) research which suggested that the land-use planning system operated in the UK is incapable of maintaining a sufficient supply of affordable housing on its own. Therefore, its role should be complementary to the activity of other alternative housing mechanisms. Till date, there have only been slight changes in this regard. The affordable housing sector in the United Kingdom (UK) has endured a creeping recession, uncontrolled inflation even in recent times which has made the dream of owning a home increasingly unattainable either through outright ownership or rental routes. Previous research has shown that the number of households living in temporary accommodation has more than doubled since 1996 from 43,000 to 94,000 (Barker, 2004, pp. 92). Not much progress has been made in this regards, as recent reports show that the level of home ownership is still predicted to fall drastically

in the coming years, buttressed by a National Housing Federation (2011) forecast which indicated an expected slump of about 63.8% over the next decade, a figure which represents the lowest since the mid-1980s (National Audit Office, 2005, pp. 9).

The under supply of housing has obvious debilitating consequences on the social economic makeup and the functioning of the larger society. This creates difficulties and hardship for members of the community stuck with inappropriate accommodation arrangements. Assessing an economy just smarting from recession and subsequent excruciating bouts of vicious cuts to public and social budgetary expenditures, the social housing sector is faced with lots of challenges. Quite recent results suggest that the number of public household on the social housing waiting list in England stands at 4.5 million households according to government figures (CLG, 2010). This shortage has in turn resulted into higher housing prices, inflation, instability, high volatility and worsening cases of un-affordability. For the fact that housing supply is still low compared to demand, the ability to purchase available ones for First Time Buyers (FTB) is significantly limited. This affordability gap poses a problem to this very important group. So, how do you improve housing supply, delivery and ownership? Policies aimed at increasing the number of home-owners by one million between 2005 and 2010 should have required an acceleration of recent trends of housing inflow from 140,000 to 200,000 per year, but according to (Communities and Local Government, 2007), this policies nevertheless failed to meet set targets as home ownership had instead experienced a decline from 71% to 67% since 2010 (RICS, 2010, pp. 1). Some other government efforts in the past include proposing long-term supply and intermediate tenures, while this seemed viable in high demand regions, however the decline in house-building was successfully predicted to go against these proposals which has since remained persistent (Stephens *et al*, 2008, pp. 20). Other government efforts have included the launching of traditional shared equity and ownership schemes with the primary goal of promoting ownership, however its success has remained debatable. It is also worth noting that these schemes vary from the CLT SHEM, due to its ability to keep housing permanently affordable. These concepts were discussed at length in later sections.

Undoubtedly, there is an urgent need for alternative housing products with simpler, more attractive structures that does encourage ownership as well as having good value

for money (Whitehead and Gaus, 2007: 30). The SEHM delivered through the Community Land Trusts (CLT) is an affordable housing delivery model/ mechanism *‘Involving the community control and ownership of land to help ensure affordable housing is built and remains affordable in perpetuity for the community’* (Paterson and Dunn, 2009, pp. 749). Existing literature views the SEHM through the CLT as an alternative vehicle that can correct affordable housing deficits as well as tackle social and economic exclusion (Paterson and Dunn, 2009). On this note, it is deemed necessary to identify the sources of barriers to the model’s performance from a CLT perspective. This would involve exploring its viability as an alternative to traditional housing provision shared equity housing models (SEHM); its effectiveness in addressing affordable housing problems and most importantly to find out best practice capable of improving the model’s representation in the United Kingdom’s housing stock both as a housing delivery model and as vehicle to improving homeownership rates among the research focused FTBs. The latter task involved highlighting housing ownership problems faced by the FTBs and the possible mitigating role and requirements of the model for this purpose.

1.2 PROBLEM STATEMENT AND RESEARCH GAP

From the introduction and background it can be seen that the state of affordable housing is plagued with limitations that are interrelated by complex networks of problems which in most times have a negative impact on the provision of affordable housing. The background also shed light on the potential role of SEHM through the CLT vehicle in affordable housing provision and probably solving some of the highlighted problems. It then concluded that, there is an urgent need for alternative housing products with simpler, more attractive structures that can encourage ownership coupled with good value for money such as the CLT.

Existing knowledge suggested the potentials of the CLT SEHM as an alternative vehicle that can correct affordable housing deficits and possibly the social and economic exclusion problem in the United Kingdom’s housing sphere (Paterson and Dunn 2009). However, amidst these seeming potentials the CLT SEHM is

underperforming in the housing sector, occupying a niche outside of the mainstream, squeezed out by supposed municipal and voluntary provisions. In essence what this research aims to do is to identify the gap in knowledge on how the housing delivery performance utilising the CLT SEHM can be improved both as model and a vehicle towards easing FTB ownership problems. The study investigated barriers militating against the model from attaining its set targets and also obstacles preventing FTB engagement of the SEHM as a viable route towards ownership. To achieve this aim a comprehensive literature review was undertaken to justify the need for this research. As earlier mentioned, a triangulated and mixed methodological approach was employed to unequivocally fulfil research objectives as a route to ultimately accomplish the overarching research aim which is to design a framework that would enhance the overall effectiveness of the CLT SEHM in affordable housing provision. Semi-structured interviews and questionnaire surveys were targeted at concerned identified affordable housing stakeholders to achieve set research goals.

1.3 AIM AND OBJECTIVES

The aim of the research is to propose a framework that would enhance the performance/ effectiveness of the Community Land Trust (Shared Equity Housing Model) in affordable housing provision in the United Kingdom. This aim would be accomplished through the following objectives:

1. To develop an understanding of affordable housing problems and the underrepresentation of the CLT as a Shared Equity Housing Model.
2. To develop an understanding of FTB engagement as potential CLT (SEHM) beneficiaries and the impact of sustainability.
3. To identify barriers to CLT Shared Equity Housing Model development and their mitigating drivers.
4. To propose a framework for a viable Shared Equity Housing Model development from the CLT perspective.

1.4 RESEARCH QUESTIONS

In order to address the research problem and hence fulfil the research aim, two questions were identified to enable the investigation of barriers to CLT development in the UK.

Q1 What are the barriers causing CLT Shared Equity Affordable Housing Model underrepresentation?

Q2 What are the barriers to FTBs adopting the CLT Shared Equity Housing Model for homeownership?

From the premise of the research questions and the build up from extant literature, two hypotheses were constructed/derived:

H1. Perceptions in practice towards strategic drivers aimed at tackling barriers to CLT Shared Equity Housing Model development influence one another significantly.

H2: The level of individual social capital has a causal relationship with the propensity to support the Community Land Trust Shared Equity Housing Model development.

1.5 RESEARCH APPROACH

The approach undertaken by this research to achieve research aim, objectives, research questions and hypothesis involved the following process:

- A comprehensive literature review helped develop a contextual understanding of housing affordability, affordable housing problems and their links to CLT SEHM underperformance. Also, a thorough review on the potential strategic role of the CLT Shared Equity Housing Model in alleviating the underrepresentation of FTBs in housing ownership was also carried out. Furthermore, literature findings proposed the CLT as a potential option for alleviating FTBs ownership problems

through the localism platform, but this would require an active engagement and an enabling environment for social capital and this to be feasible.

- As an integral part of the investigation on areas synthesised from extant literature and research questions, semi-structured interviews was embarked upon to yield the identification of potential barrier sources and partial sources of mitigation drivers. The data collected were subjected through the text analytic process employing Nvivo 9. The cross-validation process of literature with text analytical findings identified a two tier classification of barriers to the CLT (SEHM) i.e. Sustainability Barriers and Institutional Barriers and the foundations for their mitigating drivers.
- For empirical validation, the research employed questionnaires targeted at strategic population groups, to investigate the ramifications of these two tier barriers i.e. sustainability and institutional barriers, thus validating mitigating drivers. Descriptive, statistical tests and SEM were employed for this process. A combination of triangulated findings made up the integrated consolidation of elements for the CLT (SEHM) development framework.

1.6 CONTENT/ STRUCTURE OF THESIS

The structure of the thesis was built according to the following seven chapters and their respective themes;

Chapter 1: Introduction

This chapter covers background of study, problem statement gap, research aim and objectives, research questions, scope of study, research design plan and the structure of thesis.

Chapter 2: The concept of affordability, CLT shared equity housing model (SEHM) and the UK affordable housing milieu

The is the contextual, holistic exploration of existing literature surrounding housing affordability, the performance of the UK affordable housing delivery chain and the

possibility of improving it by paying more attention to the SEHM, employing the CLT approach.

Chapter 3: The First Time Buyer (FTB) Dilemma and a viable CLT Shared Equity Housing Model CLT (SEHM).

The chapter involved a comprehensive study of the possible role and limitations of the SEHM as an employable vehicle to alleviate the well documented pressing affordable housing ownership deficit among FTBs. This involved a thorough review of the FTB dilemma in affordable housing and the possible 'roles and requirement' of the SEHM from a viable CLT perspective.

Chapter 4: Methodology

This chapter is concerned with the evaluation, identification and justification of the most suitable research philosophy and methodology for this study. The mixed method combining the qualitative and quantitative methodologies is employed justifiably and methodological triangulation is used for data collection to enable cross validation and rigour in research process.

Chapter 5: Qualitative analysis/ Interview findings

This chapter deals with the analysis of interview findings, in order to identify and address in real life applicative contexts, the sources of barriers to the CLT (SEHM) performance. Content and text analysis of data was carried out here as part of data source triangulation to inform the empirical validation process.

Chapter 6: Quantitative Analysis

This chapter deals with the analysis of questionnaire findings through an empirical validation process to investigate the ramifications and implications of interview findings, thus validating mitigating drivers. Descriptive, statistical tests and SEM were employed for this process. The combinations of triangulated findings making up the integrated consolidation of elements for the CLT SEHM framework were also carried out in this chapter.

Chapter 7: Discussion, recommendations and conclusion

The key findings were reviewed here, in accordance to research objectives, questions and hypothesis to display how they have been addressed justifiably through triangulated enquiries informing an integrated consolidation of elements extrapolated for the CLT SEHM framework development to fulfil the overarching research aim. The contribution to knowledge was elaborated and future research recommendations were also proposed for study undertakings outside the scope of this research.

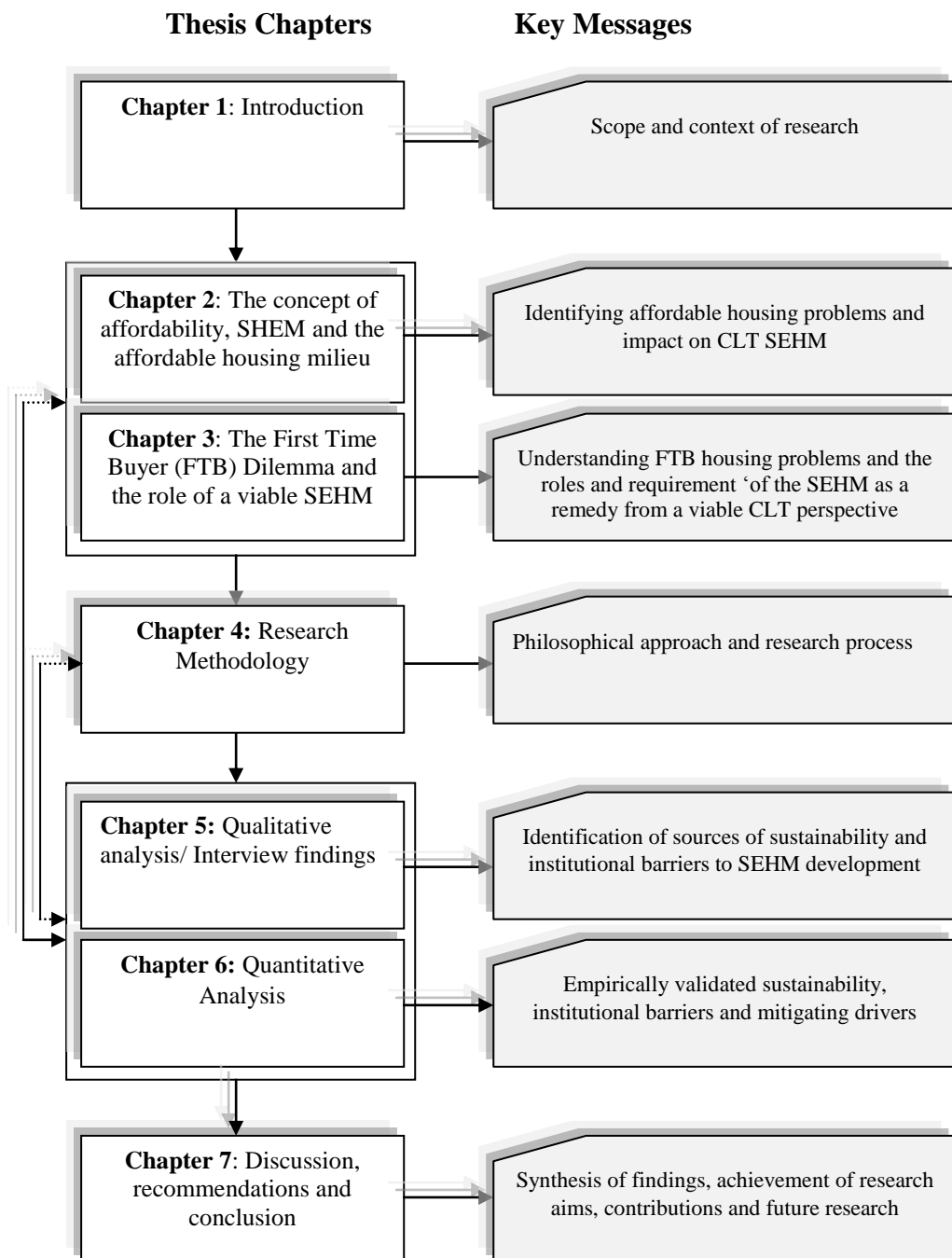


Fig 1.1: Outline of the chapters and key messages

1.7 CHAPTER SUMMARY

This section has introduced the scope of research by presenting a case for the underperformance of both affordable housing and the CLT in the UK. The research plan, structure and execution has been highlighted setting the stage for the literature review which will address the main research question and gap needed to proceed to the investigation phase.

CHAPTER 2

THE CONCEPT OF AFFORDABILITY, CLT SHARED EQUITY HOUSING MODEL (SEHM) AND THE UK AFFORDABLE HOUSING MILIEU

2.1 INTRODUCTION

The CLT SEHM implementation occurs within the ramifications of community based housing initiatives which can be defined as efforts in which members of community group or tenants join together to produce, rehabilitate, manage, and/or own affordable housing. The CLT's SEHM is regarded as having a stronger cooperative approach which epitomises local community membership, empowerment, and democratic stewardship of assets (Mayor of London, 2004; Varady, 2012). Historically in the UK, this concept draws from Henry George's theory as a mechanism to reduce the impact of unrestricted unfair profits from the appreciation of land values and leasing of community land according to necessity. The CLT SEHM based on this premise is hereby expected to ease housing delivery and maintain affordability in perpetuity. However, the extent of its successes in this context and application is debateable, particularly when affordable housing goals and international comparisons are drawn. This chapter therefore covers a contextual, holistic exploration of existing literature surrounding housing affordability, the performance of the UK affordable housing delivery chain and the possibility of improving it by paying more attention to the SEHM, employing the CLT mechanism. Moreover, the approach here also reviewed the institutional structure of the housing delivery sector. The chapter hence explored literature on land use policy sources of barriers to the SEHM in practice with international comparisons drawn in search of best practices. Furthermore, institutional based affordable housing problems and how they impact the development of the SEHM with emphasis on the Community Land Trust as a concept and a delivery vehicle were also reviewed.

2.2 LAND USE SOURCES OF BARRIERS AND THE CLT SHARED EQUITY HOUSING MODEL IN THE UK

Due to the on-going uneasy developments in finance and housing markets, housing affordability has remained central in the UK government policy scope, hence the affordability debate remains relevant in the housing and research sphere (McCord *et al.*; 2011). Several factors contribute to this uncertain concept, both social and economic, which has always necessitated a continual need for adaptation through transitional phases of the affordable housing provision timeline. These adaptations have been executed by policy dictates contested between the need for alternative delivery mechanisms and the continual reliance on traditional options that appear to operate in the auspice of restrictive land use policies (Cheshire and Sheppard, 1989, 1997; Evans, 1991; Monk *et al.*, 1996). The UK's housing affordability ratings has consistently underperformed, and literature signifies the adoption of restrictive land use policies as partially responsible (Cox and Pavletich, 2010), also compelling trends reveal that vibrant community based housing options such as the Community Land Trust does play a role in affordability index performance (Rodgers, 2009); however the UK has a very low representation when it comes to these community based options (Birchall, 2004; Clark, 2012). The reviewed literatures are unanimous in regards to the existing shortcomings of housing sphere in regards to CLT SEHM problems. Therefore, in a bid to shed more light on the underperformance of housing affordability ratings, there is a need to explore the impact of policy choice and approach on the SEHM options to help tackle inherent barrier sources, possibly contributing towards improving availability of affordable housing markets in the UK.

This section reviewed how disparities within different international geographical spheres affect the interrelationship between the dynamics of housing affordability ratings, restrictive land use policies and community based housing. The study highlighted the links between the adoption of restrictive land use policies and a low housing affordability index, also reviewed is the trend in countries with a well-developed community based housing mechanism appear to outperform others in availability of affordable housing markets. Within these ramifications, this study has set out to investigate approach to affordable housing and the community based housing option with emphasis on the Community Land Trust (CLT) and the impact of the choice

of land use policies, to emphatically identify sources of barriers to CLT successes as a justifiable catalyst to improve housing affordability ratings in the UK. The concept of housing affordability has been traditionally viewed mostly in conceptual and empirical terms. This study however approaches this concept from a housing market perspective and the socio economic impact of key stakeholder approach to community based housing options and how this affects housing affordability in general by identifying socially significant sources of barriers, through the use of structured interviews and investigations carried out in a top down and bottom up approach research categorisation. The concept of affordability is hereby reviewed in the terms of community based tenure options, along the lines of tackling inherent sources of barriers in the research focused CLT as another angle that housing policy makers can look into as part of an overall strategy to improve UK's affordability ratings.

The research methodological process involved; the perspectives of both categories of key respondents on approach to housing affordability and, how prescriptive land use policies affect housing prices and land use for CLTs in the UK as later addressed in the interview process.

2.2.1 AN OVERVIEW OF AFFORDABILITY AND AFFORDABLE HOUSING

Homes and Communities (2011) generically viewed affordable housing as housing that does not exceed 30% of the inhabitant's household's income: This definition defines a parameter for affordable housing which infers that when combined household running cost is more than 30% of the household income, the house is considered to be unaffordable. The salient point in this definition connotes affordability by adjusting it to the cost of running rather than the actual cost of purchase, making it more dynamic in terms of applicability in a social perspective. How does this affect the distinction between socially rented and intermediate housing options? The PPS3 provides an insight into this that; *'social rented is housing owned and managed by local authorities and RSLs (Registered Social Landlords) for which guideline target rents are determined through the national rent regime'*, while *Intermediate affordable housing is housing at prices and rents above those of social rent but below market price or rents*. Both of these options share the housing and rental cost component, also they are noticeably

connected by the same ‘affordability’ concept as a salient determining factor for affordable housing. According to the SSP3; the terms ‘affordability’ and ‘affordable housing’ have different meanings. *‘Affordability’ is a measure of whether housing may be afforded by certain groups of households.* This group represents those that affordable housing are meant for which excludes open market housing classifications (Community and Local Government, 2010, pp. 25).

The concept of affordable housing could be conflicting, as existing literature explored showed varying definitions with their own highlights and fulcrum points. The PPS3 (Planning Policy Statement 3) for example considers social rented and intermediate housing restricted to certain sectors of the population with limitations unmet by the open market. In regards to qualifying conditions, affordable housing should meet the needs of eligible households with a cost low enough to be affordable. The relativity of affordability and housing need as concepts hereby remains an on-going debate that challenges what actually determines and defines affordable housing. Isolating the affordability component and concentrating on the tenure in itself Community and Local Government (2010, pp. 25), pinpoints that *‘The home is to be retained for future eligible households’ for the subsidy to recycle’*, without doubt tenure type does play a role in determine affordable housing, as well as affordability in itself. In earnest tenure types adopted in a country could as well help determine therein the state of affordable housing markets. Nevertheless, defining housing affordability beyond these ramifications could reflect ambiguity; a position adopted earlier on by (Linneman and Megbolugbe 1992; Field 1997) and best summed up by Stone (2006) as;

‘An expression of the subjective social and material experiences of people, constituted as households, in relation to their individual housing situations’. Therefore an attempt to contain or restrict the subjectivity of these terms isolates the very essence of what the housing affordability concept and its determinants entail.

This section established the variability of affordability and affordable housing. An international assessment however revealed a more rigorous insight into how this variability affects housing affordability as elaborated in the next section.

2.2.3 AN INTERNATIONAL ASSESSMENT OF HOUSING AFFORDABILITY DETERMINANTS

Internationally, several factors contribute to determining housing affordability. Taking the United States (US) for example; Sultana (2002) concluded that the distance operational between the location of jobs and housing is one of the most important determinants for housing affordability. He further suggests that if expensive open market housing is located close to the job-rich communities, this might make it affordable on the long run because it will benefit the working population in the aspects of commuting cost and time. In essence, if commuting time can be reduced, the overall cost of living is also reduced. In this context; commuting distance influences affordability as well as the earlier mentioned total cost of living and overall maintenance. Thompson (2004) sees cost as the most dominant factor in defining housing affordability, from the previous SSP3 definition which focuses mainly on socially rented and intermediate housing options; there is a collection of entities that define housing affordability. However, Hulchanski (1995) concluded that the most generally accepted notions for determinants of affordability were based on household consumption, which could have conflicting empirical and methodological errors.

Surveys conducted by the Demographia International Housing Affordability Survey where Cox and Pavletich (2010); Cox and Pavletich (2013) compares affordability in 272 housing markets in Australia, Canada, Ireland, New Zealand, UK and USA. It employed an empirical approach that would rate affordability as a median multiple that is inversely proportional to Median Housing Price (MHP) and the Gross Annual Median Household Income (GAMHI). According to this survey there are 107 affordable markets of which there were no affordable housing markets in the UK scoring a (Median Multiple \leq 3.0), whereas all the 107 affordable markets studied were distributed between the United States and Canada respectively (see Table 2.1).

Table 2.1 Showing demographia survey for affordable housing ratings expressed in median multiples for the United Kingdom (UK), Canada and the US

Housing Affordability Ratings By Nation (Median Multiples)						
Nation	Affordable (Less<3.0)	Moderately Unaffordable (3.1 – 4.0)	Seriously Unaffordable (4.1 – 5.0)	Severely Unaffordable (Greater>5.1)	Total	National Median
UK	0	2	14	17	33	5.1
Canada	8	17	4	6	35	3.6
USA	100	87	13	16	216	3.1
Total	109	110	43	75	337	

Table 2.1 Housing affordability Ratings by Nation, Adapted from: Demographia International Housing Affordability Survey (Cox and Pavletich, 2013)

Fisher and Jaffe (2003) adopted the use of multivariate analysis of macro-level data from 106 countries to explain the disparity in affordability ratings. They concluded that factors such as political, legal and cultural were more reliable as determinants compared to empirical variables such as income and demography apparently used in their analysis. Gwin and Ong (2004); Atterhog (2005), similarly were of the opinion that higher affordability and ownership ratings disparities could be traced to government assistance in the forms of programs and subsidies. This is further buttressed in a report by the Conference Board of Canada (2010, pp. 15) of which the Canadian experience clearly reflects a similar narration.

This section argued that Housing affordability ratings based on Median Housing Price (MHP) and the Gross Annual Median Household Income (GAMHI) are the most widely empirical determinants of housing affordability, however socio political factors (government assistance, subsidies etc.) are seen as even more reliable determinants, this highlights the importance of the impact and strong influence of government policies such as land use, which the next section addressed.

2.2.4 THE SECTION 106 AND THE IMPACT OF LAND POLICIES

The impact of government influence in affordable housing delivery, boils down to the approach and policy implementation routes it chooses to adopt, implemented as land use policies. *‘Land-use policies determine how land can be used for residential purposes, sometimes creating scarcity that drives up housing costs’.*

Cox and Pavletich (2010) classified land use policies into the:

- Restrictive Land Use Policies: Restrictive/ Prescriptive land use regulation allows development only prescribed under strict conditions that are consistent with stringent land use plans and policies. The effect of this type of policy is that it creates a situation of scarcity of land that artificially raises the price of housing. The result is a volatile housing market prone to risky mortgage debt.
- While, Responsive Land Use Policies on the other hand allows land development to respond to the market as determined by the preferences of the community, people and businesses.

Evidence from various studies suggests that the choice made between prescriptive land use and responsive land use regulations play a huge role in the UK deficit in affordable housing markets. As most severely unaffordable major markets are subjected to a more restrictive land use regulation (Metropolitan Area 2008), an approach which becomes detrimental to housing affordability on the long run. Cox and Pavletich (2010) attempts to justify the adoption of the prescriptive land use policy as a means of reducing infrastructure costs, however the negative result outweighs this objective, because higher housing cost in prescriptive regulated markets obviously exceeds infrastructure costs incurred from allowing demand driven housing expansion in more responsive land use regulation areas. This was backed up by Barker (2006), who long blamed the United Kingdom’s housing affordability problems on its restrictive land use policies under the Town and Country Planning Act of 1947, which in effect originates from the system of planning control based on the notion that no one can exploit land without the permission of planning authorities. Drawing inferences from Best (2003) that the

controls over the supply of land constrains new house building greatly. According to Monk *et al* (2006); *a significant proportion of affordable housing provision in the UK is delivered through the land use planning system using Section 106 (S106) agreements* (Monk *et al*; 2006, pp. 1). To fully understand the role of the Section 106, an overview of the planning system is explored. The move to provide affordable housing through the planning system was fully entrenched by the 1989 policy, which allowed rural planning authorities to grant planning permission for low cost homes on land which would not otherwise be developed at all. This move marked the advent of using policy instruments in securing new affordable housing through the planning system (DETR, 1998; DTLR, 2000; Crook *et al*; 2006a). Summary and further updates to this information include the use of the Section 106 as a tool adopted by the current planning policy in providing land for affordable housing (Stephens *et al*, 2005).

The section 106 of the Town and Country Planning Act 1990 106 in context seeks to provide a cushion for the perceived impact of developments by requiring the inclusion of affordable housing requirements or allowing local authorities to seek cash or contributions in kind from developers to mitigate the impact of unregulated housing development as Monk (2006); DCLG (2010) pointed out. This is intended to ensure that local residents are essentially no worse off as a result of the development (Barker, 2006; DCLG, 2010). This act stipulates the effective demonstration of affordable housing needs in the identified target area, the source of contributions by the planning authority through the ‘planning gain mechanism’, helping to restrict profits acquired by private developers from the benefits gained from planning approval and public infrastructure (Gurran *et al*, 2007).

The S106’s main functions are; provision of land for affordable housing, provision of mixed communities and affordable housing appropriate to the area, the increment of financial contributions both implicit and explicit from developers and other stakeholders (Stephen *et al*, 2005). Considering the outlined objectives of the Section 106 (S106), Crook *et al* (2006b) assessed its performance which they pointed out in an analysis that suggests that; although more affordable housing is being delivered through the S106, the rate of provision is however dismal compared to the number produced in the 1990s, particularly in the aspects of planning permissions received and granted (see Fig 2.1).

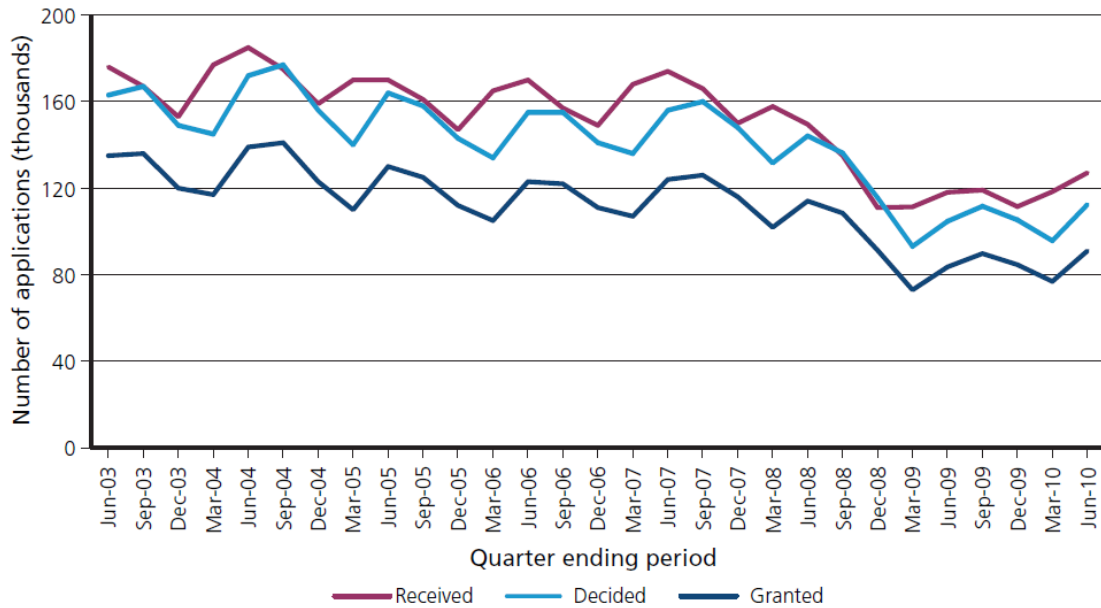


Fig 2.1: Planning applications received, decided and granted by district level authorities, England, June 2003 to June 2010 (DCLG, 2010)

This represents a fluctuating deterioration compared to the performance of affordable housing systems obtainable in the 90s and post 2003. Despite increasing population figures, (Crook and Whitehead 2004; Monk *et al*, 2010) points out that the possible reason for the non-performance of the S106 is the lack of enough funding for affordable housing with its inability to sustain its contributions during the market downturn. This is due to the fact that the planning gain mechanism responds better in favourable economic conditions. Another reason forwarded by Monk, Whitehead and Burgess (2010) is that planning regulations which the S106 operates with is expensive, complicated and slow moving. It also functions on a policy that restricts urban extensions, hence negatively affecting housing affordability considerably (Cheshire and Sheppard, 1989, 1997; Evans, 1991; Monk et al., 1996). Furthermore, a report by Best (2003) elaborated that these findings suggested that the planning system is continually failing to release sufficient land thereby spurring shortages and inflation of housing prices. Albeit continuous government’s review of the planning system, like the redirection of a portion of the S106 financial contribution towards wider community needs (Barker 2004), however (Dwelly, 2001) appeared to predict that these new reforms are in turn plagued by time delays and huge financial costs; concluding that the requirements of the reforms were ambiguous and unnecessary, hence negatively

affecting delivery of affordable housing. This is confirmed by the (DCLG, 2010; NHF, 2011) (Fig 2.2).

The planning system has long required a levying of tax on the increase in the value of land resulting from the grant of permission for development (Chancellor of the Exchequer, 2007). This however has not stopped the underlying problem of widespread and vociferous opposition to almost any development by those already well-housed: Not In My Backyard agitators (NIMBY). Also, an earlier report by (Edwards, 2000) which concluded that support from planners and the public is much easier to obtain for development on Brownfield land, (*abandoned or underused industrial and commercial facilities available for re-use*) (Brownfield Centre, 2011). Unfortunately these sites tend to be mostly available where housing demand is low or where substantial expenditure is required before it can be put to use. This again is not any better than urban sites where prices are already same with or above development value. Likewise, Rural Exceptional Sites (RES) like Areas of Outstanding Natural Beauty (AONB), which according to DCLG (2012), the rigid requirements for its development limits the council's ability to deliver without ready access to adequate finance and some form of cross subsidy. Other RES like the Green Belt zones which is land reserved to control development, unrestricted sprawl and the merging of towns to protect the openness of countryside (The Coalition 2010). Also, the existing policy on the greenbelt remains highly restrictive, thus preventing even its rational utilisation for affordable housing projects that could benefit its domicile community (DCLG, 2012).

(Wu and Cho 2007, pp. 74) observed the effects of the imposition of strict land use control, finding out that it reduced land development by 10% in the five western US (United States) states between 1982 and 1997. Other percentage reductions occurred in Washington (13.0%), followed by Oregon (12.6%), California (9.5%), Idaho (4.7%), and Nevada (2.8%). The other implication of this trend across the five western states in the US was that land use regulation increased average housing prices between 1.3% and 4.7%, depending on the intensity (Cho, Wu and Boggess 2003; OECD, 2005). Glaeser (2002) also concluded that the US then faced a lesser housing affordability crisis because land costs were low and housing prices were less than the cost of construction. On this premise it appears that places where housing is quite expensive, zoning restrictions appeared to have created these high prices. In the UK, where there are less

affordable housing markets a report noted that besides the restrictive land policies playing a negative role, other factors affecting housing affordability are; restrictions on the availability of land for residential housing development that can constrain the responsiveness of supply (Restrictions on availability of Land), tough zoning rules and cumbersome building regulations (Complex and inefficient Zoning Regulations), slow administrative procedures (Slow authorisation processes) (OECD, 2005). Consistent with these findings the Barker (2006) report summed up these downsides as a situation where complex and inefficient local zoning regulations alongside slow authorisation process dwindles housing supply. This is reflected in the underlying gradual rise in house prices since 2002 (Fig 2.2).

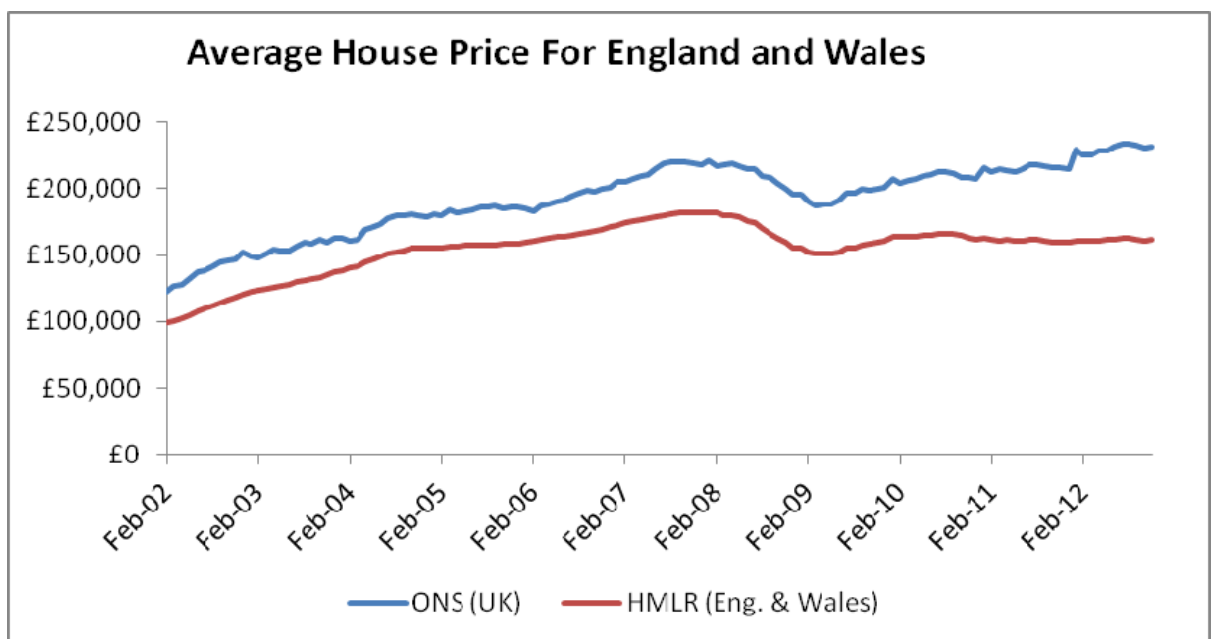


Fig 2.2: Average house prices for LR HPI and ONS HPI from February 2002 to November 2012. The LR reflects price for England and Wales and the ONS price for UK (ONS, 2013).

From the outlined evidence, government policies appear to negatively affect housing affordability ratings. Gwin and Ong (2004) argued that the rate of home ownership rate is a reliable determinant of the impact of policy approach to housing affordability as it satisfies ownership and rental cost components. Proxenos (2002) however disagrees, suggesting that homeownership is not enough to determine a country's affordability rating, suggesting a more intricate dynamic that interacts in a social context, like tenure choice and the adoption of alternative community based delivery models, a direction

that could be examined to help understand the disparities in housing affordability ratings between various countries.

The section has identified the shortcomings of the land use policy, which was found to be prescriptive and inadequately effective in affordable housing provision, identifying attributes of the policies within the UK and US, in respect to acceptable affordability target ratings. The section also found out that the nature of the housing delivery mechanism adopted such as alternative community based delivery options is equally as important. The next section focused on the impact of the Community Land Trust: Shared Equity Housing Model (SEHM) on housing affordability in an international context.

2.2.5 THE CLT SHARED EQUITY HOUSING MODEL (SEHM) AND HOUSING AFFORDABILITY: AN INTERNATIONAL ASSESSMENT

Affordable housing is usually targeted at those whose housing needs cannot be met by the open market due to inadequate purchasing power. The housing expenditure and income ratio historically has been part of subjective regulations used in assessing eligibility and the determination of rent levels for affordable housings models. This helps to filter higher income households from those in actual need (Jones *et al*, 2010). These households according to Hulchanski (1995) represent those who spend inordinate percentage (30%) of their income on housing expenditure (housing expenditure to income ratio) as earlier mentioned. These views are rather ambiguous as it could imply the proportion of income that should not be exceeded when paying for a home of adequate size and quality or whether the income left over after paying for a decent home is sufficient to allow a ‘reasonable’ standard of living (Jones *et al*, 2010). Additionally, in the context of the median multiple indicators i.e. median housing price and gross annual median household income. Considering this scale, areas considered to be more than three (3.0) are considered not affordable. This approach might not take into consideration those whose residual incomes are well below acceptable poverty thresholds among other factors (Grigsby and Rosenburg, 1975) in (Jones *et al*, 2010). Community and Local Government (2010), pinpoints the importance of keeping some homes in such areas affordable in perpetuity.

There are some assumptions and observations that have been proposed on the impact of the choice of restrictive land use policies and its impact on median multiples, housing affordability, and seemingly the CLT, SEHM and its perpetuity attributes. Despite UK's long history with this model, (Mayor of London 2004; Clark, 2012) suggested that housing cooperatives and other community based SEHM still occupied a space outside of the mainstream, squeezed out by municipal and voluntary provision. In comparison to other European countries like Sweden, Norway and Austria which fared much better than the UK in median multiple scores (Cox and Pavletich, 2013). The community based housing model accounts for 18%, 15% and 8% (Sweden, Norway and Austria) of their total housing stock respectively. This is a sharp contrast to the United Kingdom's 0.6%, with less than 0.1% for CLTs (Birchall, 2004; Clark, 2012). Similarly, the US and Canada outperforms the UK in affordability ratings, with median multiples of 3.1 and 3.6 with 100 and 8 (number of affordable housing markets) respectively, compared to the UK's median multiple of 5.1 and 0 affordable housing markets (Table 2.1). These aforementioned countries also fare better than the UK in community based housing, as housing cooperatives are the largest in their not for profit housing sector. In the US, it is estimated that 85-90% of all new for-sale housing is within the management of community based housing, including housing cooperatives (Treese, 2006; Bratt, 2009). These findings seem to suggest that affordability rating figures in countries with a relatively well developed community based housing models tend to outperform the UK, where more favoured/widely accepted options such as the housing associations are derided by literature (Price Waterhouse, 1995; Bleatherton and Pleace, 2008). These assumptions are however subjective and largely theoretical, but empirical evidence from literature attests to the fact that countries with more prescriptive land use regulations tend to record higher median multiples (Fig 2.3), Showing a positive relationship between more restrictive land use regulations and increasing median multiples.

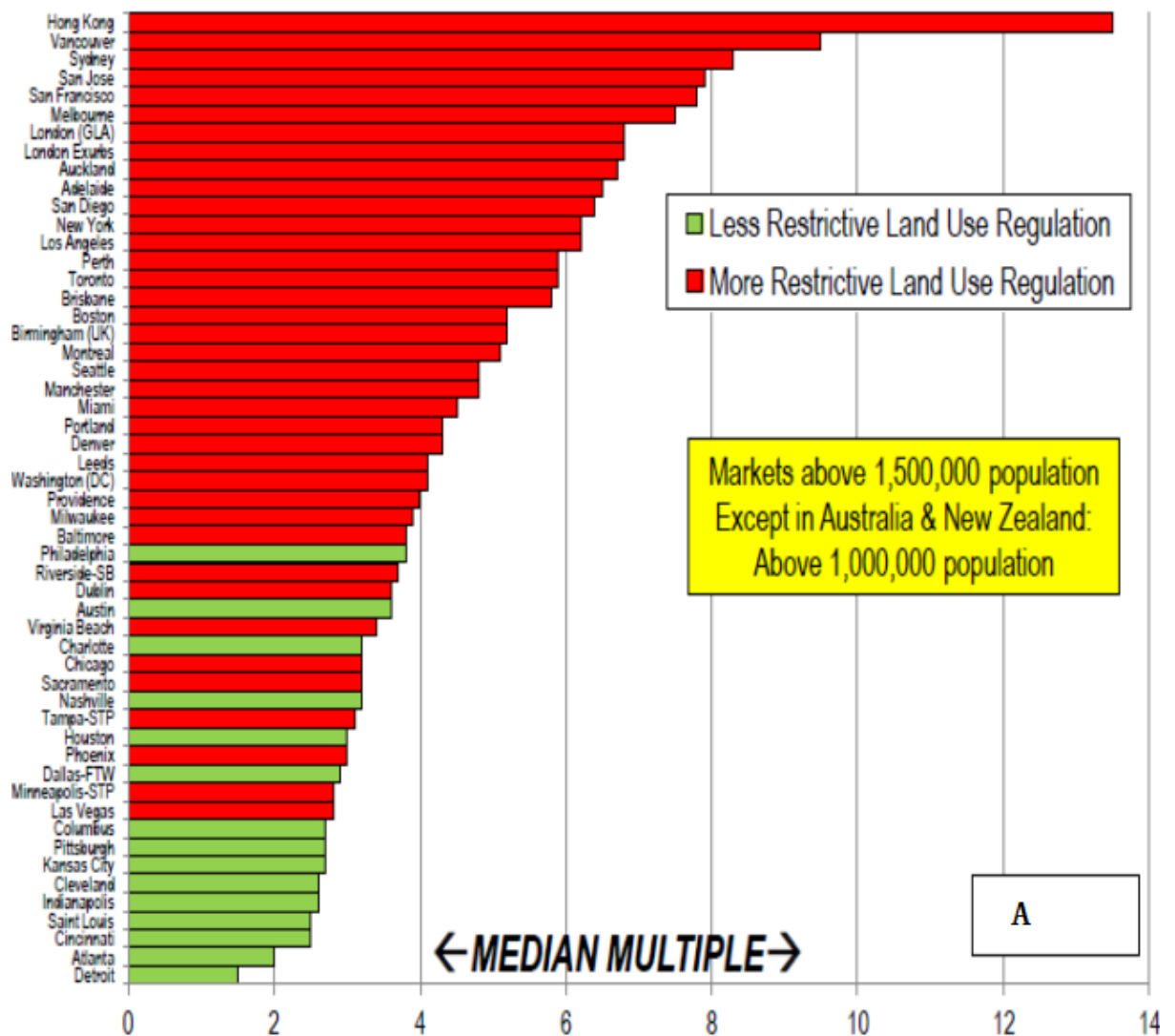


Fig 2.3: Housing affordability and land regulation: Demographia International Housing Affordability Survey. Source: (Cox and Pavletich, 2013).

If an assumption of possible connections between CBH successes and median multiples scores are at all certain, it could as well be attributed to inherent barriers faced by CBH due to higher levels of restrictive land use regulations obtainable in the subject countries/areas respectively. On this note, the research investigated if there are land use sources of barriers to CBH with emphasis on the research focus Community Land Trust (CLT) in the UK.

This section suggested that countries with a relatively well developed Community Based Housing (CBH) tend to outperform the UK in median multiple ratios. It is worth pointing out that these trends are neither absolute nor validated, but this research deems it to be in line with the ideological potential viability of the role of the CLT SEHM in

affordable housing. The next section will concentrate on the overview of the research focus on the attributes of the Community Land Trust (CLT) and the possible impact of restrictive land use and policy approach.

2.2.6 THE CLT SHEM HOUSING ATTRIBUTES AND THE IMPACT OF RESTRICTIVE LAND USE POLICY APPROACH

According to Bratt (2005), community based housing initiatives can be defined as efforts in which members of community group or tenants join together to produce, rehabilitate, manage, and/or own affordable housing. SHEM initiatives comprises of different formats (development trusts, housing cooperatives and other mutual affordable housing models) each with their own strengths and weaknesses. The defining attribute of the research focused CLT's SHEM is its stronger cooperative approach which epitomises local community membership, empowerment, democratic stewardship of assets and the overwhelming evidence that it effectively combats foreclosures (Mayor of London, 2004; Varady, 2012).

The CLT concept historically draws from Henry George's theory as a mechanism to reduce the impact of unrestricted unfair profits from the appreciation of land values and leasing of community land according to necessity, as exemplified in England's garden city concept and India's Gramdan. Attempts to statutorily qualify the CLT include Community and Local Governments (2008) which sees the CLT as; *a local community-controlled organisation set up to own; manage land and other assets in perpetuity for the benefit of the community. The assets other than land may be, for example, affordable housing, workspaces, agricultural facilities, commercial outlets, or community facilities.* A more comprehensive outlook is that of the Housing and Regeneration Act 2008, Part 2, Chapter 1, Clause 79, which defines the CLT as a corporate body:

- *established for the express purpose of furthering the social, economic and environmental interests of a local community by acquiring and managing land and other assets in order - to provide a benefit to the local community to ensure that the*

assets are not sold or developed except in a manner which the trust's members think benefits the local community.

- *established under arrangements which are expressly designed to ensure that: any profits from its activities will be used to benefit the local community (otherwise than by being paid directly to members) individuals who live or work in the specified area have the opportunity to become members of the trust (whether or not others can also become members), the members of the trust control it.*

The process of ensuring that the CLT provides permanently affordable housing within these statutory confines involves the adoption of a form of rental and shared equity model that enables beneficiaries to build up just enough equity for a future part purchase, but not to the extent that it hampers the benefits of future tenants, hence a significant portion of the equity growth remains with the CLT (Paterson and Dunn, 2009).

Considering the impact of the CLT SHEM and restrictive land use policies on housing affordability ratings (median multiple ratios), the CLT has definitely enjoyed far more success in the United States (US) and Canada than the UK, although in varying degrees and scales. In the US, Urban Research Centre (2008) highlighted that due to successes of the CLT in preserving affordability and preventing subsidy leakage, cities like Chicago and Irvine have both made it their primary mechanism for affordable housing delivery, a status that could help resolve issues of resourcing and skills acquisition (Cox and Pavletich, 2010). So far, both of these cities have reported well documented successes in this regard. Irvine for example has successfully provided 60 permanently affordable CLT homes to combat affordable housing shortages (Burtseva, 2010). Since its completion, the project has received local, state and national attention with industry awards for creativity in affordable housing. This success has since yielded a new set of developments that will encompass a total of 74 additional homes due for completion in February 2014 (Stribling, 2013). Chicago on the other hand has also developed 45 CLT SHEM homes with the intention of further acquiring even more pre-existing and new affordable housing generated by other programmes/schemes in the city.

It is on record that Chicago and Irvine adopts an inclusionary zoning policy similar to the UK's S106, however with a more responsive policy approach such as the requirement that 15% of new housing is affordably priced, with priorities afforded to sustainable models in regards to provision of concessional zoning flexibility, density bonuses, reductions in parking requirements, waivers of fees or taxes and facilitation of expedited reviews and approval processes (Brunick, 2008). In England, the Section 106 is employed to supply land for affordable housing (Stephens *et al*, 2005), by ensuring the provision of mixed communities and affordable housing appropriate for the subject area, employing financial contributions both implicit and explicit from developers and other stakeholders (Stephen *et al*, 2005). Monk *et al* (2010) however berated the S106 as an expensive, complicated, slow moving process that operates on restrictive policies which frustrates urban housing extensions, hence resulting in affordable housing market deficits. CLTs in the UK appear to be facing planning barriers stemming from the aforementioned lapses and conflicting policies (CFS, 2011). These are exemplified by existing bureaucratic and land sourcing difficulties faced by start-up CLTs such as East London CLT and Bickington CLT (NCLTN, 2011).

The salient difference between the UK's S106 planning systems and the US's inclusionary zoning policies appears to lie in the active support available for capturing the value generated by the flexible zoning schemes, made possible by the municipal governments in cities such as Chicago (Brunswick, 2008). There are challenges; however they are more of recession related issues than to planning or zoning restrictions. Recession studies notwithstanding indicate a relative foreclosure proof attribute among CLT homes much better than their open market counterparts during the property downturn of 2008 (Thanden and Resenberg, 2010). Further evidence also buttress the greater resilience to recession demonstrated by affordable housing delivered through the CLT over the S106 and the housing associations as deduced from CCHPR (2012). CBHs also face problems in regards to the existence of the conundrum in having to forgo vital revenue from levy/taxes on planning gains or S106 contributions due to planning concessions towards CLTs over traditional developers such as the housing associations (Davis and Jacobus, 2008).

Commonly adopted vehicles for delivering affordable housing include models such as TFI (Tax Increment Financing), ADZ (Accelerated Development Zones), CIL

(Community Infrastructure Levy), PFI (Private Finance Initiative), LABV (Local Asset Backed Vehicles) and shared equity models adopted by housing associations. They all have their strengths and weaknesses, with a common commitment to development. However, the element that defines the CLT in housing affordability delivery to beneficiaries is its stronger cooperative approach which epitomises local community membership, empowerment, democratic stewardship of assets and the overwhelming evidence that it effectively combats foreclosures (Mayor of London 2004; Varady 2012). Moreover, the affordable housing delivered through the aforementioned models to a large extent in comparison to the CLT are either more vulnerable during austere economic climates or prone to lose built up equity to the open market, hence becoming less affordable to new beneficiaries upon transfer or resale (see Table 2.2) for comparison of affordable housing delivered through various development models.

MODEL	HOW IT WORKS	STRENGTHS	WEAKNESS
Tax Increment Financing (TIF)/ Accelerated Development Zones (ADZs)	Used in USA to stimulate economic development by enabling anticipated tax revenues to be spent to enhance the area.	Can be created specifically to fund affordable housing. ADZs are similar but use retention of business rates and so sidestep legal problems that were a barrier to TIFs in UK	The major inherent risk of TIF is that the projected tax revenue will not materialise. Borrowing against projected TIF revenues may be overly optimistic and may lead to financial problems if growth does not match projections.
Community Infrastructure Levy (CIL)	Local authority uses developer contributions to provide necessary infrastructure.	Would enable homes to be built where Infrastructure is lacking	CIL will be dependent on the viability and profitability of market development, hence will only produce affordable homes that will be lost to the open market.
Private Finance Initiative (PFI) set up in 1992	Local authority awards a 20- or 30-year contract to a private consortium to refurbish estate and provide services	Over 12,000 refurbished homes and 1,000 new build by April 2009	The evidence on PFI is that PFI projects are extremely inflexible and thus difficult to operate (Grace <i>et al.</i> , 2008). It has worked in a limited way for the refurbishment of street properties and some new building (Hodkinson, 2011). There are little or no evidence that affordable housing generated from this model would not be lost to the open market or beneficial to new beneficiaries on resale.
Local asset backed vehicles / local housing company (LABV)	Public sector invests land or stock into the SPV which are matched in cash by private partner	Special Purpose Vehicles (SPV) owned by public/ private partnership for regeneration and renewal	CLTs have a lot in common with LABVs; they both depend on public authorities, however the cost of finance is usually more expensive than traditional housing association model. Hence, the affordable housing created from the LABV might be unaffordable for new beneficiaries. Harrison and Marshall (2007) also found LABV contracts are too complex and expensive to set up.

Table 2.2: Affordable housing delivery development/funding models: Adapted from (CCHPR, 2012).

The LABV and the CLT might appear similar in their relative dependence on Local Authorities. However, Harrison and Marshall (2007) found LABV housing contracts too complex and expensive to set up. Criticisms attributed to the traditional shared equity and ownership models adopted mostly by housing associations in delivering their low cost housing schemes (LCHOS) include Pretty and Hackett (2009)'s identification of a consistent fall in homeownership with the number of households on waiting lists and those stranded on temporary accommodation, which are on a continuous rise (DCLG, 2007). Moreover, shared ownership models adopted by housing associations play out as temporary affordable housing provision strategies, where equity gained are ultimately lost to the open market, with a largely unaffordable 50% share left for subsequent beneficiaries (CFS, 2009).

This study therefore compared the housing association shared equity model to the CLT SEHM, through the adoption of income multiple and resale value appraisals. This links the property price to income by adjusting resale price in proportion to changes such as median income for the area (CFS, 2009). Results showed the depreciating attractiveness of LCHOS classic schemes compared to the CLT model at the time of property transfer to beneficiaries such as the research focused typical First Time Buyer (FTB). The house price to earnings ratio at resale/transfer was recorded at 2.4 for the CLT SEHM and 4.6 for the LCHOS scheme. This makes the CLT SEHM a lot more favourable and attractive in terms of affordability to potential or subsequent beneficiaries. Also, a resale value of £95,000 was recorded for the CLT compared to the LCHOS's £122,000, which builds a strong case for the model.

The limitations on the current low cost home ownership schemes can be best expressed with the following illustration which is an update to the Building and Social Housing Foundation shared equity model. According to Land Registry figures, it is not nearly enough to make property affordable for most First-Time Buyers. While the average salary in the UK is just £26,510, the average price of property is still more than six times that at £163,177 (Land Registry 2011), The Annual Survey of Hours and Earnings (ASHE, 2011).

Considering average salary in the UK being £26,510, the average price of property is still more than six times at £163,177 (Land Registry 2011; ASHE 2011).

Average house price 2002: £112,375
 Average house price 2011: £163,177

Housing ownership schemes provide equity loan of 25% of target property.....£28,093
 Assuming initial owner purchased the property with a 75% mortgage for..... £84,281
 According to (Nationwide 2011) as at year 2002;
 FTB gross house price to earnings ratio was 3.3 (mortgage multiple of 3.3 x income)

Hence, annual income at 2002 if average house price is £163,177 is..... £25,539
 9 years later assuming house is resold at average price..... £163,177
 Average house price increase 2002-2011 @45%.....£50,802
 While average wage ages increase from 2002-2011 @3%.....£971

Therefore; 25 per cent capital receipt from resale for recycled subsidy..... £40,794
 Recycled subsidy now assists towards purchase price@75% mortgage.....£122,000

There household purchasing property at an average income of..... £26,510
 Will result in a mortgage multiple of.....4.6x
 House price to earnings ratio.....4.6

In comparing both house prices to earnings ratio over the 9 year period; 3.3 to 4.6; this shows that the scheme has become a lot less attractive to new beneficiaries.

CLT SEHM Illustration

The CLT equity sharing formula in comparison to the above illustration using same assumptions and time frame, aims provide an avenue to help a household into full home ownership and subsidise the cost of purchase for the subsequent beneficiaries.

Open Market Value at initial purchase at year 2002.....£112,375
 Assuming initial purchaser obtains subsidy@ 25% of target property£28,093
 Initial purchaser acquires the target property@75% mortgage for.....£84,281
 9yrs after property is resold at average price in 2011.....£163,177
 House price increase 2002-2011 @45%..... £50,802
 In place of the recycled subsidy in the first illustration, the CLT uses the resale formula which involves;
 The repayment of the initial purchaser's mortgage.....£84,281
 House price increase@25%.....£10,160
 Initial purchaser's return after resale.....£94,441
 New open market value at resale 2011.....£163,177
 New Resale Price for next beneficiary.....£68,737

Initial Purchaser's return = Initial Purchaser's Mortgage + House price Increase@25%.
New Resale price for next beneficiary = New OMV- Initial Purchaser's return.

At £68,737 of resale price, house price to earning ration at 2011 @ £26,510 income.....2.4
 In comparison to the LCHOS illustration of 4.6

- The house price to earnings ratio at resale/transfer is 2.4 for the CLT and 4.6 for the LCHOS scheme; this makes the CLT a lot more favourable and attractive.
- A resale value of £95,000 for the CLT compared to the LCHOS's £122,000 this builds a strong case for the CLT's model as well as making it also attractive to new beneficiaries. Adapted from, (CFS, 2009).

This illustration is further buttressed by a United States (US) case study of the Burlington Community Land Trust in which resale data showed both retention of affordability on resale and a substantial increase in value 14yrs later (Davis and Demetrowitz, 2003).

Other issues faced by the CLT SEHM despite its viable attributes are in the aspects of community asset transfer. The US land use policies appear to transcend that of the UK in these aspects by favouring the transfer of land and property to community organisations, due to their documented prospects in increasing the revenue generating potential of run down properties (Aiken *et al.*, 2008). However in the UK, literature cites asset transfer problems attributed to lack of specificity in regards to dealing with CLTs (DCLG, 2006).

This section has found the CLT Shared Equity Housing Model (SEHM) to be an effective affordable housing delivery option as attested to by the international experiences of countries with better affordability ratings; however the CLT has underperformed in the UK

In a bid to further explore how these problems areas manifests as restrictive land use sources of barriers; this research later implored a research classification of stakeholders in a top down and bottom up context to obtain their balanced perspectives. The next section hence focused on the overview of the CLT SEHM development structure and key stakeholders.

2.3 A REVIEW OF THE CURRENT STATE OF CLT DEVELOPMENT IN THE UK

2.3.1 CLT ESTABLISHMENT AND LEGAL STAKEHOLDERS

The community land trust model development is a complex mesh of processes that involve several stakeholders in different capacities, some a necessity, but some apparently imposed as part of the necessary housing regulatory process in England. The current arrangement for establishing a CLT is not fixed, but is determined by the peculiarities of the community and policy implications therein. An overview of the CLT timeline reveals that establishing a CLT can occur in a variety of ways, some have been started with little or no foundation at all, some have developed as outgrowth of already existing organisations like alms-houses and charitable trusts, which Hudson (2009) defined as various types of expressions of trust dedicated to charitable goals, which could be housing for the disadvantaged, this status exempts them from various forms of taxes. Usually start-up CLTs can be constituted as one of the following legal formats according to (National CLT Network, 2010).

- Community Benefit Society (is an Industrial and Provident Society created for the Benefit of the Community).
- Community Interest Company Ltd. by Guarantee (registered charity).
- Company Ltd. by Guarantee which is also a registered Charity Company Ltd.

All these legal formats are limited liability organisation, hence with legal implications. So, in the event of the CLT not being able to repay its debts, the liability of the members (including directors) is limited to either the amount they have paid for their shares (if a Community Benefit Society) or the amount they have guaranteed which is usually £1 (if a CIC Ltd. by Guarantee or a Company Ltd. by Guarantee). There are various stakeholder bodies responsible for registering these formats.

The Community Benefit Society (CBS), is regulated by the Financial Services Authority (FSA) that require the CLT to undergo an expensive evaluation; which might be a tall order for a start-up CLT, however the most cost effective way to register

the CBS is through the ‘Model Rules’ that is only applicable through a valid sponsor, this regulations however are supposed to ensure the CLT remains effective, efficient and economical. The organisations also should demonstrate that their activities remain channelled to the community, hence remaining committed to the terms of their registering, however the avenues of CBSs having access to tax breaks, keeps getting slimmer, due in part to the onset of the Charity Act 2006.

Community Interest Company Ltd. By Guarantee (CIC) is regulated by the Community Interest Company Regulator, however the control of the CIC is determined by share ownership, which ultimately threatens the democratic and community principle of the CLT, however the CIC has the advantage of raising share capital; but this shares are usually beyond the reach of the members in itself which opens the door to outside influence on the CIC decisions, this highlights the need to consider unique drafts on voting rights during registration. The Community Limited by Guarantee Registered Charity (CLG) is regulated by the Companies House and Charity Commission (Paterson and Dayson, 2011; CFS, 2011; National CLT Network, 2010).

2.3.2 CLT AND THE HOUSING SECTOR

Currently, one of the CLTs most important stakeholder relationships is with the Housing Associations (HA). Policy has made the CLT SEHM dependent on the HA structure, therefore to a certain degree the model lacks autonomy in regards to its implementation, particularly if the intention is to access grants. As a private entity, the housing associations should be independent of state control, and can be registered as either a charitable or non-charitable industrial and provident society, just like aspiring CLTs, but continuous legal challenges to this status, and the obvious presence of government influence in their activities resulted to an EU ruling that termed the HA as a procurement public body. This was also followed by a court ruling that the HAs are not just a public body, but an authority *‘that operated within a particular sector, that of social rented housing, which was not simply subject to detailed regulation but was permeated by state control and influence with a view to meeting the Government’s aims*

for affordable housing, and in which RSLs worked side by side with, and could be said to take the place of, local authorities' (Richards and Swift, 2008).

This ruling clearly sets the HAs apart as the government's prime affordable housing implementation arm. Since the 1st of December, 2008 the Homes and Communities Agency (HCA) has been dealing with funding and regeneration initiatives, while the Tenant Services Authority (TSA) has taken responsibility for regulation of all providers of social housing including the HAs, irrespective of the private, public, for profit or not for profit status. The outcome of all of these is the debatable influence of the government on the CLT as an affordable housing provider. One of which is the enforced dependence on the HAs as registered mutual partners, should they intend to access public funding (Housing Corporation 2007, pp. 8; NCLTN, 2010). On this note the CLT SEHM development process has had to acclimatize to an ever changing structure that is constantly in need of adaptation.

A landmark report by CFS (2011); Paterson and Dyson (2011) elaborated on the CLT implementation structure, the report highlighted that communities that intend to develop affordable housing based on the CLT SEHM, the democratic concept of management and control is one of the attributes that makes it attractive for this purpose. Furthermore, it is usually overseen by local members, whose responsibilities include electing a board of directors for the trust, comprising of residents from the immediate community, non-residents with professional skills related to land management and stewardship, and finally some influential members to gain political standing. The report further inferred that the main function of the board of directors should be to represent the interest of the overall community, thus protecting the primary tenet of the CLT SEHM, which is to ensure the homes supplied remain affordable in perpetuity, hence ensuring the sustainable recycling of equity. In pursuit of these goals, sourcing skilled staff and volunteers is a challenge start-ups usually have to deal with. In comparison to their mainstream counterparts the HAs usually have paid staff, a committee or board made up of volunteers, representatives from local authorities, business associates, politicians and community groups. This is a strong and influential network not so common when compared with the CLTs. Recommendations by Paterson and Dayson (2009) has included the improvement of the state of strategic partnership with the aforementioned stakeholders.

2.3.3 COMMUNITY LAND TRUST SEHM DEVELOPMENT STAKEHOLDERS

Community Land Trusts are supposed to work in partnership with a variety of stakeholders; like the housing association, charities, local authorities and enterprises according to the current structure. For a starter community interested in the CLT SEHM, an interactive functional mesh of stakeholders and a platform for community development networks for knowledge transfer and sharing will be required. The National Community Land Trust Network (NCLTN) is one of such which was formed in 2010 as a national body for CLTs that promotes and supports CLT development. Overall the NCLTN aims to ensure an enabling environment for the CLT sector to grow. Other roles include the lobbying of government and key stakeholders in affordable housing on CLT issues such as quest for affordable land, access to technical advice and support, development finance for CLTs and Mortgage lending to CLT beneficiaries (NCLTN 2011). The NCLTN also assists start up CLTs in accessing and improving the HCA funding routes. The NCLTN has partnered with Community Finance Solutions (CFS) within knowledge and research capacities. This has been instrumental in the development of CLTs in more than 14 communities as part of a pilot demonstration programme by assisting them with vital technical support where necessary. More recently, their research continues to enable communities find their way around the renewed focus on the localism route. Community development network platforms such as NCLTN has employed the building of links between community groups through the CLT discussion forum, CLT Practitioner Events and the new peer to peer learning programmes, 'See it and believe it' to promote the CLT movement through arranged visits of successful CLTs across the country for knowledge sharing purposes (NCLTN, 2011; CFS, 2011).

This current structure however appears to be localized and centred mainly on communities seeking to adopt the CLT model, hence possibly limiting the potential of the CLT model in itself as a mainstream instrument for large scale affordable housing. This route could potentially place CLT practitioners, or developers hoping to adopt its SEHM model on an equal bargaining footing with their housing association counterparts in affordable housing provision, which on the long run compliments the current arrangement. According to Ndlela and Du Toit (2000) mainstream recognition

and utilisation of budding concepts can be potentially achieved through effective collaboration with a support system among concerned stakeholders. Despite substantial efforts in these areas, there still exists a substantial degree of competition with the traditional affordable housing providers. Furthermore, the model's utilisation has been largely restricted to small scale community developments. It appears the current collaboration structure is more of cooperation than actual collaboration with key housing institutions and law makers. There are however clear distinction between both concepts, Roschelle and Teasley (1995) found out that cooperation is achieved by the division of labour among participants as an activity where each stakeholder is responsible for a portion of the problem solving, while collaboration involves the mutual engagement of stakeholders in a coordinated effort to solve the problem together through a target goal and a shared conception. Hence, the distinctive factor between the two concepts is the common goal, which appears to differ between government agencies and the various ramifications of the CLT SEHM. There appears to be a conflicting nuance on what the government wants for the CLT movement and what the CLT can potentially deliver. Therefore, a situation of limited cooperation thrives in a restricted but convenient capacity where there appears to exist an assertion of dominance over the subordinate partner, which ultimately results to competing goals and a relationship that might appear contradictory. This is exemplified by the issue of leasehold enfranchisement and full staircasing right requirements for CLT developments. On the other hand, collaboration is a more constructive relationship that focuses on accomplishing common goals, identifying and resolving grey areas for the benefits of all concerned stakeholders (Roschelle and Teasley, 1995), which might just be what the current state of the CLT (SEHM) requires.

According to Paterson and Dyson (2011) there are about 137 existing CLT housing, with 92 still at developmental stage (See Table 2.3), with over 229 homes supplied by 18 CLTs in England with varying tenure types including, 35% (81 homes) for rent and 59% (135 homes) are for part sale and 6% (13 homes) are for outright sale. Self-build homes or plots account for 34 homes or 15% of the total, and they all seem to centre mainly on the acquisition of land and the correction of the home ownership imbalance in rural communities.

CLT HOMES PROVIDED OR UNDER CONSTRUCTION IN ENGLAND (2011)					
Homes Provided	Total homes	Rental Homes	Part Sale Homes	Open Market Homes	Comments
Allendale Community Housing, Northumberland	3	3			
Bishops Castle CLT, Shropshire	2	2			
Buckland Newton CPT, Dorset	10	5	5		
Cornwall CLT, <i>Blisland (6), Blunts (8), Bryher Close Kelly Bray (15) & St Teath (10)</i>	39		39		
Foundation East, Suffolk	2	2			+1 retail & 8 business units
Holsworthy Community Property Trust, Devon	11	1	10		
Homes for Wells, Norfolk	15	15			
Lindisfarne Community Development Trust	11	11			Built over 3 phases
Stonesfield CLT, Oxfordshire	14	14			The first CLT in England
St Ewe Affordable Homes, Cornwall	4		4		
St Minver CLT, Cornwall	20		20		Self build first phase 12 homes, second phase 8 homes
Waterhouse Housing East Portlemouth , Devon	6	6			
	137	59	78		
Homes under construction					
Cornwall CLT, <i>Lizard Village (3), Nancledra (2), Bryher Close Kelly Bray (4)</i>	9		9		
Camelot Country CIC, Cornwall High Bickington Community Property Trust, Devon	14		14		Open market are outright sale home
High Bickington Community Property Trust, Devon	21	7	9	5	
Holsworthy CPT (Bridgerule) Devon	4		4		
Luxulyan CLT, Cornwall	13		13		Open market are self build plots
Lyvennet Community Trust, Cumbria	20	10	2	8	Self build with a further 2 homes with planning permission
St Just in Roseland CLT, Cornwall	6		6		
Worth Matravers CLT, Dorset	5	5			
	92	22	57	13	
Total Homes	229/100%	81/33%	135/58%	13/6%	

Table 2.3: CLT homes provided or under construction in England (Paterson and Dayson, 2011).

2.3.4 CLT SEHM LAND USE AND FINANCE STAKEHOLDER RELATIONSHIPS

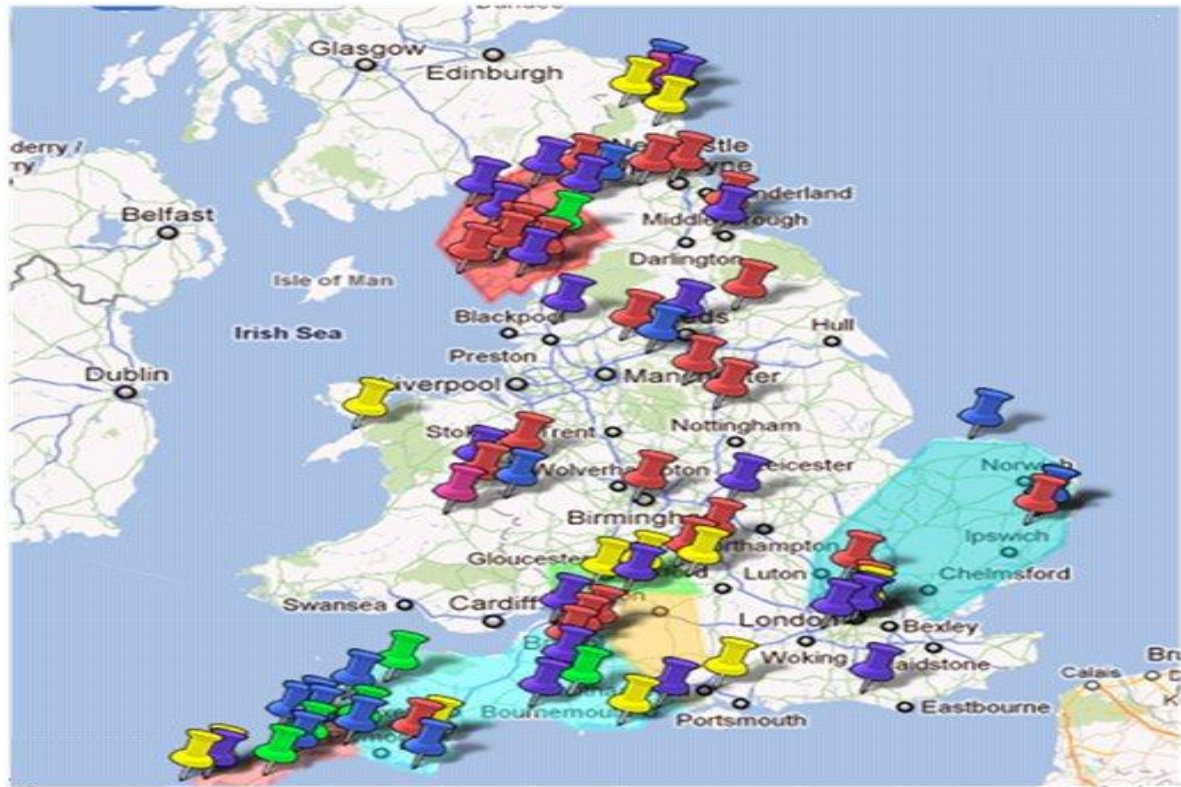
According to NCLT (2012), a CLT may receive public land at little or no cost, purchase a rural exception site (RES) at about agricultural value or acquire a site at open market value through access to grant, funding or community share issues. Despite these options land remains a major barrier source for CLT development. Financing and accessing land requires the utilisation of creative avenues, sometimes outside the traditional routes easily accessible to mainstream providers such as the HAs. For start-up CLTs, one of the most accessible sources of grant funding include; regional, national (HCA) and European bodies. For example, CLTs such as Bishops Castle Community Land Trust (BCCLT) largely benefited from the Homes and Communities Agency (HCA) and additional grants from Shropshire council. Further examples include Foundation East, although rare is supported by the European Union and the East of England Development Agency. NCLTN (2012) suggests that this funding might have come at a cost, as CLTs such as High Bickington have found this relationship challenging. This is another indication that the nature of collaboration might not be entirely beneficial, but largely restricting, not just on the SEHM model itself, but also on the niche the CLT practitioners occupy in the affordable housing supply chain. This is evident in the High Bickington CPT experience, which revealed contradicting or sometime contrasting approach within top down regional or national governmental agencies and bottom up community movements.

Besides the HCA and charitable sources, other possible funding stakeholders include Ecological Building Society, Triodos Bank or Charity Banks and most importantly the large high street banks. Unfortunately there is hardly any evidence to suggest any level of support from the latter. Other crucial institutional partnership arrangements with CLTs are in the area of management, due to the lack of skilled technical staff versed in the day to day management activities and HCA pre-qualification arrangements. HAs have been known to help with the running of CLT housing stocks, but again they risk losing control to this associations in the absence of very strong boards and community support. The local authorities have also been known to partner with CLTs as part of the

national rental allocation policies, through the local planning authorities S106 approvals, but this kind of strategic institutionalised arrangements are still rare.

2.3.5 THE COMMUNITY LAND TRUST STAKEHOLDER NETWORK

The research proposed CLT stakeholder consists of top down, intermediate and bottom up organisation. This connotes a hypothetical policy implementation approach within top down government policy implementation agencies, planning authorities, local authorities and bottom-up and intermediate organisations like community development networks like (NCLTN, Community Finance Solutions, libraries, skills awareness centres and social networks), rural housing enablers, community development groups. Other stakeholders include Housing associations and private developers, and its target population, the research focused FTBs. The categorisations are not however fixed, but interconnected as shown in (Table 2.5), in essence, a traditionally top down organisation could be adopting a bottom up approach for strategic reasons, and likewise an intermediary organisation asserting a top down approach to assert control over planning decisions, and so on.



Key

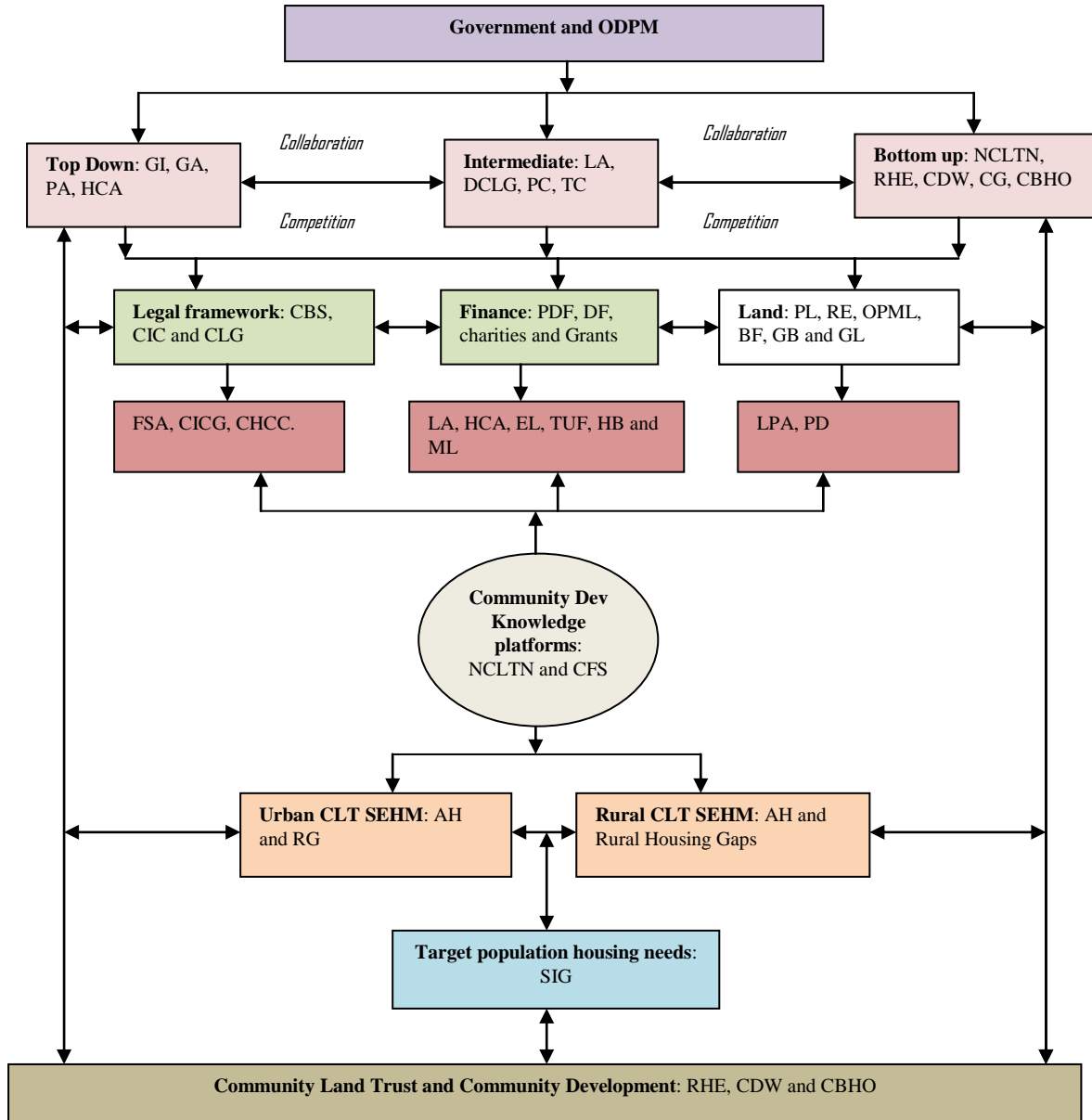
Blue	Completed
Green	On site
Yellow	Significant progress working up scheme. Planning permission pending or granted
Purple	Formally constituted as a CLT and working up scheme
Red	Ambition for CLT but not yet formally constituted
Pink	Stage unknown
Light Blue	These shade represents umbrella CLTs

Fig 2.4: CLT distribution in the England (Paterson and Dayson, 2011).

Overall, the stakeholders involved in the AH delivery, range between top down, intermediate and bottom up organisations, and their role in the aspect of CLT development do range from that of enablers, mediators, competitors and some seemingly restrictive. It appears these counteracting networks might be responsible for a substantial degree of isolation of the CLT (SHEM) from the mainstream. Insights into this issue by Paterson and Dayson (2011) suggested that most of the existing schemes are located at urban fringes of the nation (Fig 2.4), such as Cornwall, Northern England, or small villages where housing affordability is a pressing issue. Furthermore, they proposed that this isolation nurtures a culture of self-help and determination. Perhaps, this situation might just be the effect of barriers that are acting as containing restrictions to the CLT SEHM influence in mainstream affordable housing supply. Research points out the middle class as the leading proponents of most established CLTs. Apparently the middle class/age group do face housing problems, however the FTBs face greater

challenges in the housing ownership circuit. The HAs however dominate this arena with the LCHOS (Low Cost Housing Ownership Schemes). However research derides its overall performance. This further necessitates a debate on the possible role of CLT SEHM in addressing FTB problems as a special interest group. In this capacity might lay the potential of reinventing and making the model more mainstream, enabled with government investment and increased utilisation of the model in regeneration and affordable housing delivery in both the urban and rural sphere.

CLT DEVELOPMENT AND THE STAKEHOLDER NETWORK



KEY

AH - Affordable Housing	CG -Community Group	HCA -Homes Community Agency
BF -Brown field land	CG -Community Groups	LA -Local Authorities
CBS -Community Benefit Society	DCLG -Department of Community Local Government	LPA -Local Planning Authorities
CIC -Community Interest Company	DF -Development Fund	ML -Mortgage lenders
CLG -Community Limited by Guarantee	EL -Ethical Lenders	NCLTN -National Community Land Trust Network
CHCC -Company House and Charity Commission	FSA - Financial Service Authority	RG -Regeneration Goals
CICR -Community Interest Company regulator	GI -Government Institutions	PD -Private Developers
CBHO -Community Based Housing Organisation	GA -Government Agencies	PDF -Public Development Fund
CDW -Community Development Worker	GB -Green belt	RHE -Rural Housing Enablers
	GL -Green Land	SIG -Special Interest Groups (FTB, Minority Ethnic Groups, Low income earners).
	HB -High street banks	TUF -Top up fund

Fig 2.5: The CLT SEHM Stakeholder Network.

2.4 AFFORDABLE HOUSING PROBLEMS AND INSTITUTIONAL IMPLICATIONS ON THE CLT SHARED EQUITY HOUSING MODEL (SEHM).

As earlier mentioned, according to Best (2003) policy plays a major role on the state of housing in any given community or country. He was of the view that; housing policies can make an immense difference to tackling disadvantage, and also ensures that households even on the lowest incomes live in decent homes and engaging communities; in contrast, if policy fails, this could result in the lack of satisfactory homes, and a reduced quality of life. Despite continual government effort, existing research still clearly confirms a continual shortfall of homes in the United Kingdom. Analysis of figures from the Government Actuary's Department and past trends in household formation suggest that between 1996 and 2021, England will need to accommodate an extra 4.3 million households (Local Government Association 2002). Also, at least 200,000 homes are needed each year in England alone (Joseph Rowntree foundation 2003, pp. 131) see Fig 2.5 for dwindling dwelling stock estimates. The level of home ownership is predicted to also fall drastically in the coming years as a National Housing Federation (2011) forecast indicates that home ownership in England is expected to also slump by about 63.8% over the next decade, a figure which represents the lowest since the mid-1980s.

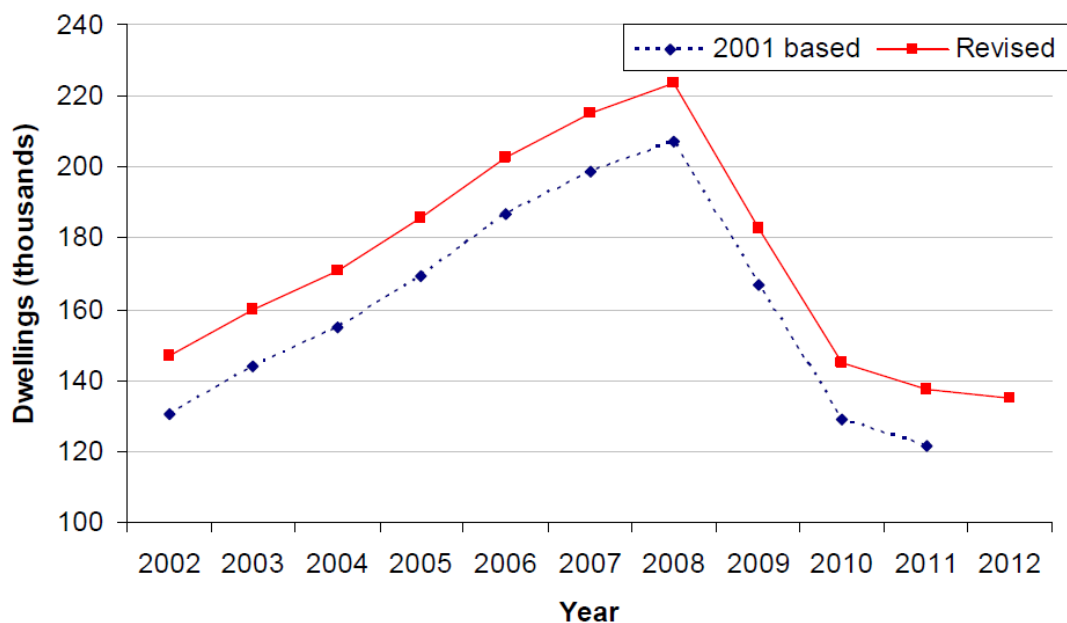


Fig 2.6: Dwelling stock estimates in England (DCLG, 2013).

The forecast further suggests that huge deposits, inflationary house prices and strenuous lending conditions could be responsible for this phenomenon. This supports the long existing trend that the supply of homes has failed to keep pace with demand hence creating a lingering housing deficit over the years. So, what are the root causes of this housing shortage? Perhaps, these trends could be just mere symptoms of more deep rooted problems associated with policy and approach to alternatives. Literature has consistently touted the CLT SEHM as a viable alternative for affordable housing, what are the connections between major players in the affordable housing sector and the prevailing shortfalls in housing supply? And, do these connections, if there are any, affect or hamper the growth of the CLT option as institutional sources of barriers to their development and acceptability in mainstream affordable housing provision, if justifiable. The subsequent sections will explore these issues further.

2.4.1 A CRITICAL OVERVIEW OF KEY STAKEHOLDERS AND AFFORDABLE HOUSING PROBLEMS IN THE UK

From the research carried out by Latham (1994) on the obtainable difficulties within the UK housing industry, it was able to deduce that problems stemming from structural, technical and cultural deficiencies have resulted into a sector unable to respond to pressing housing demands. These problems are directly reflected through policy clashes seemingly associated with the HCA (Home and Communities Agency) and its pivotal subsidiaries. The situation influences authorities and organisations directly involved with housing supply such as the Housing Associations (HA) and LA (Local Authorities). The Homes and Communities Agency is the national housing and regeneration agency for England. According to HCA (2011, pp. 4) the sole purpose of the HCA is to contribute to economic growth by helping communities to realise their aspirations for prosperity and to deliver quality housing that people can afford. As earlier mentioned, recently, the role of the HCA in affordable housing has undergone substantial changes with the introduction of regulatory powers formerly held by the now abolished Tenant Services Authority (TSA) which saw the transfer of most of its key functions of (economic regulation and consumer backstop regulation of social housing) to the HCA. The activities of the HCA has not been without its own problems, particularly in the area of procurement for affordable housing delivery, despite the HCA's focus to reduce the number of partners through policies that aims to match resources with the right

skills to deliver on time and to budget, this process is however marred by high grant rates and development cost complications (Community Land Trust Fund, 2011).

Housing Associations (HA) on the other hand are non-profit bodies that offer housing to local people, often to people on a low income or people who need extra support. They often work closely with local councils to offer flats and houses to local people. Many housing associations own and manage properties transferred to them by a local council. They vary in size, some own and manage just a few properties and some own thousands of properties. Since, Housing Associations are non-profit, all remaining monies after collecting rent and other charges from tenants are used to maintain properties or buy and build new ones. In addition, Housing Associations may also get financial help from the government to build new homes (Directgov, 2011). Pretty and Hackett (2009, pp. 23) points out that in 2009/2010, Housing Associations (HA) were given a 40 per cent government subsidy to build some 50,000 homes. This figure represents nearly half of the entire stock of new homes for that year. This is an indication that the affordable housing provision chain is heavily dependent on government funding and the HAs. A situation which Blake *et al* (2004) suggested encourages the development of an oligopolistic affordable housing sector, leading to unfair competition against less mainstream providers. Due to the 2010/2011 government cuts in housing subsidies, industry analysts suggest a drastic reduction in affordable housing provision despite an increasing UK population, see (Fig 2.6) showing an increasing UK population with an estimated increase to 67.5m by 2025 (Oxford, 2011).

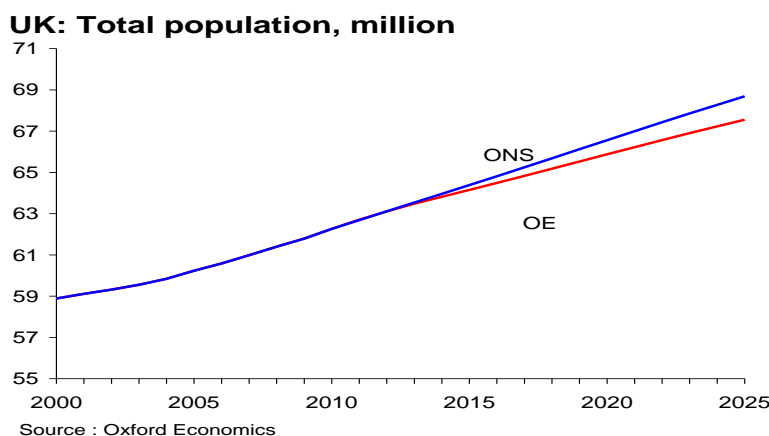


Fig 2.7: Office of National Statistics population forecast (Oxford, 2011).

Economic principles would instinctively propose the immediate building of new homes when there is shortage, but with most housing provision mechanisms apparently depending a lot on traditional providers and government funding (Pretty and Hackett; 2009, pp. 23). It is necessary to take a second look at both the performance and approach of the affordable housing delivery mechanisms. Furthermore, traditional affordable housing provision models have thrived on a centrally planned top down approach to housing. Research statistics however derides the performance of this system, as indicators continue to reveal a consistent fall in homeownership rates, number of households on waiting lists have risen substantially and the number of people stranded in temporary accommodation have also seen a continuous rise (DCLG, 2007; Halifax, 2007), see Fig 2.8 for an update, showing a drastic reduction in owner occupiers against a drastic increase in privately rented homes, which also reflects an increasing rate of mobility among population groups. Alternatively, this change in tenure can be attributed mainly to the ever increasing difficulty in securing mortgage finance and the high deposits required by lenders does lead many people to rent rather than buy (DCLG, 2010b).

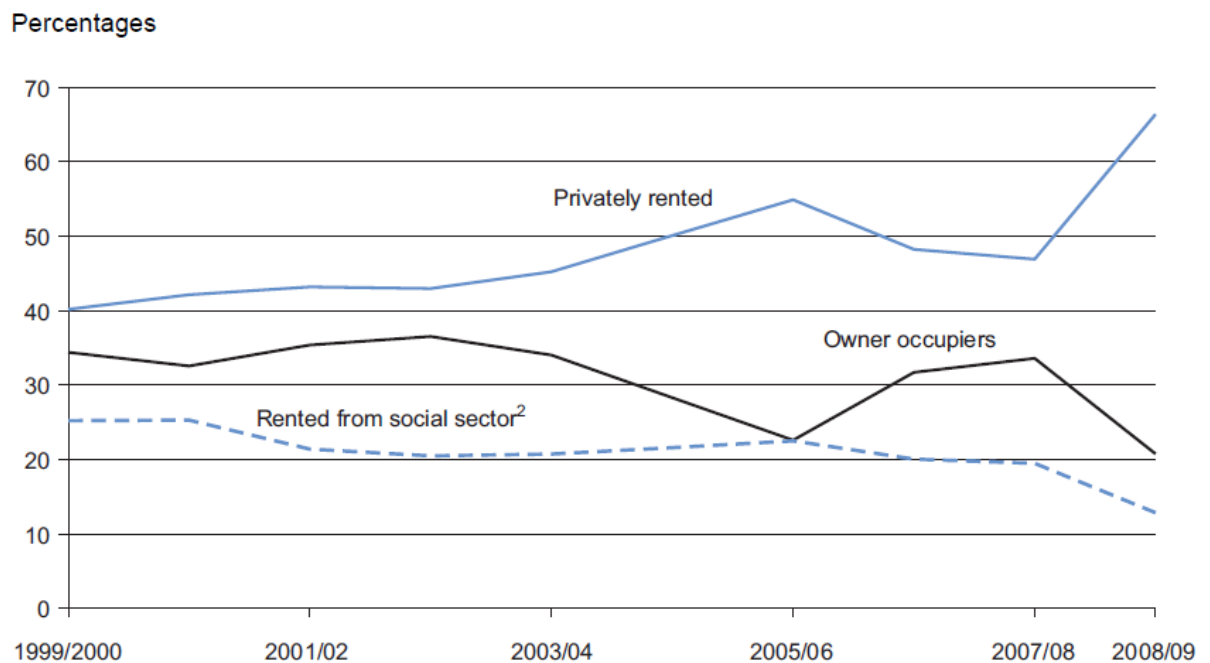


Fig 2.8: Trends in tenure changes in England (DCLG, 2010b; Randall and ONS, 2011).

According to Community Land Trust Fund (2011, pp. 2), the Local Authority or group of local authorities working together at a sub-regional housing market level are

responsible for the production of Strategic Housing Market Assessments (SHMA) and housing needs studies. This brings into play the roles of another vital stakeholder in the affordable housing delivery chain. This is a major role that determines the range of housing and planning activity within local authority areas. The level of efficiency achieved in this context are however debateable. According to a research by Monk and Burgess (2007, pp. 2) appear to suggest that increasing complexities and uncertainties about policy formation and implementation does hamper their capacity to attain affordable housing provision targets. Moreover, Pretty and Hackett (2009, pp. 22) buttressed this suggestion by highlighting the shortage of funding (due to government cuts/ underperformance of the section 106) and the limitation in the scale of prudential borrowing that LAs can access to help fund construction costs not covered by grants. In the case of private large scale new developments embarked upon to fulfil housing targets, problems that might arise include planning complexities and situations where projects a times fail to take off. This could cause an eventual failure to meet targets, hence resulting to a housing supply less responsive and volatility in housing prices (Bramley, 2007). This situation is further compounded by the lack of necessary planning and development expertise (Monk and Burgess 2007). Furthermore, a planning control based on a restrictive policy of restraining urban extensions does affect housing affordability considerably (Cheshire and Sheppard, 1989, 1997; Evans, 1991; Monk *et al.*, 1996) as earlier elaborated.

The Registered Social Landlords (RSLs) according to Local Government (2011) are; *'Government funded not-for-profit organisations that provide affordable housing. They include housing associations, trusts and cooperatives'*. Research suggests that funding for England's affordable housing provision seems to favour the Housing Associations over other RSLs, an indication of the state of overdependence on the Housing Association which certainly does not favour other providers (Smyth, 1997). It is also worth noting that other RSLs besides the Housing Association currently accounts for a mere 0.5% of the United Kingdom's housing stock (Confederation of Co-operative Housing, 2000). This happens to be another reference point for the underrepresentation for mutual and community based SEHMs. On this premise that funding appears to favour the HAs, in 2002, only 37% of new households in England could afford to buy a house compared to 46% in the late 1980s (Barker 2004). Furthermore, a National Housing Federation (2011) forecast also indicates that home ownership in England is

expected to slump to about 63.8% over the next decade. Best (2003) then noted that the constraints of affordability for purchasers or tenants is most felt when the market cannot cater for those without any (or sufficient) resources to pay their way. On the issue of the RSLs, literature reiterates the potential of the Community based SEHMs to help with affordable housing problems employing the CLT route. Other community based systems comprises of different models each with their own strengths and weaknesses, however the defining element between the CLT SEHM and the others (development trusts, housing cooperatives and other mutual affordable housing models) is that the CLT does have an edge with its stronger cooperative approach as practised in US, which the CLT SEHM model epitomises in the forms of local community membership, empowerment, democratic stewardship of assets and evidence that the it effectively combats foreclosures (Mayor of London 2004; Varady 2012).

This section has examined literature on the state of affordable housing problems in the UK, identifying possible causes of the shortage in affordable housing and the potential role of the CLT SEHM amidst HA failings. The next section addressed the connections between these problems and the underrepresentation of the CLT SEHM.

2.5 A STUDY OF THE NEXUS BETWEEN AFFORDABLE HOUSING PROBLEMS AND SOURCE OF BARRIERS TO CLT SHARED EQUITY MODEL DEVELOPMENT

As reiterated in the previous section, the CLT alongside other trusts and cooperative systems are largely underrepresented in the UK's housing stock (Birchall, 2004; Clark, 2012). There are indications that key players involved with primary affordable housing supply problems are somewhat linked with the plight of the CLTs. The HCA pre-qualification processes (PQP) and Housing Quality Indicators (HQI) for example are suggested to be inappropriate for new and small organisations such as the CLTs (CLG, 2011). Despite best practices going against prescriptive selection of affordable housing providers, CLTs are already being side-lined in access to grant, alongside other requirements such as such as land subsidies, rejections from local authorities, regardless of the comparative advantage they might have in these communities due to their peculiar attributes (CLG, 2009). Lambert (2011) also observed that the CLTs might be facing procurement problems as investors tend to favour Housing Associations over

CLTs. Suggested reasons include that investors see the HAs as low risk attractive investments due to their structure which is regulated, therefore benefits from a wider overwhelming government support with stable cash flow sustained by the Housing Benefit system and the Rent Influencing Regime. Housing Associations have a well-grounded knowledge base aided by professionals well equipped to manage their portfolios and influence government policies, unlike the start-up CLTs who appear to lack the expertise, capacity and the capability to work through the legal and practical difficulties involved in turning community initiatives to successful projects. Moreover, CLTs are rarely favoured by strategic housing market assessments, because they are often beyond the reach of local needs and demand of small communities deemed most suitable for the CLT SEHM which hampers development on the long run (CLG, 2008).

Undoubtedly the CLT SEHM remains quite unpopular in the mainstream of UK's housing sector. It appears this situation could be linked to supposed unfair competition with major affordable housing providers. Research examining the effect of competition on specialised non-profit providers found out that competition becomes unfair to service providers that are not motivated by profits. They are mostly muscled out by their limited ability to advertise and manage knowledge, as well as competing profit-seeking agencies in a value driven market (Deakin, 1994; Miles and Huberman, 1994; Smyth, 1997). Furthermore, these researchers went further on the effects of level playing for competing providers, concentrating on the benefits that competition is best maximised on a level playing field among competing providers. Therefore, it is obligatory for project implementation processes to take into consideration capital and revenue constraints in order to be more constructively decisive about peculiarities of housing delivery models that target localities for project execution. This consideration does favour the CLT SEHM as what it appears to lack in revenue advantage can be made up for with its strong research ascertainment and localism ideals.

Recent studies, suggests the existence of positive cooperation between the Local Authorities and CLTs formed towards achieve housing goals. One of such is the case of the Chipping and Cornwall CLT with clear evidence of housing delivery partnerships. Also, there are a number of skills and support that the housing associations possess that the CLTs can benefit from. This includes the aspect of management services and making it easier to access subsidies through the forging of better relationships with the

Local Authorities. However, majority of local authorities rarely participate in such relationships despite them possessing the means to act otherwise. In addition, parish councils also have peculiar capacities to raise funds from Public Works Loans Board (PWLB) that the CLTs could benefit from, but meeting up with the quality status proves difficult on the long run. The possibility of securing funding through the charitable trusts has also proved immensely difficult as the capital outlay required for development usually surpasses existing limits (NCLTN, 2011). In buttressing the existence of these shortcomings Stoker (2011) observed that, at times partnerships/collaboration on the long run seem to favour the most powerful stakeholders, as evidence suggests that despite a decade of efforts to assess partnership outcomes in the housing sector, the evidence of its effectiveness remains insubstantial (Rees *et al*; 2012a).

Despite trends seemingly favouring the growth of large housing association and Low Cost Housing Ownership Schemes (LCHOS) at the expense of alternatives, literature has proven them to be hardly efficient in affordable housing provision. Housing provision is said to be not enough to meet housing aspirations because they are not likely to empower the individual or the communities that they are operating from. Also, social capital can hardly be generated or sustained unlike the CLT SEHM which builds social capital (Bleatherton and Pleace 2008).

In the UK, the CLT's peculiar traits, like keeping housing affordable in perpetuity, appears to be under constant threat from government policies, such as the stair casing demands and the right to leaseholder enfranchisement, these are platforms that give legal rights to CLT residents to buy free-hold land. This provision ultimately sets the property back on the open market and probably the unaffordable lane.

Other issues include availability of grants and funding, the possibility of start-up CLTs assessing HCA funding through the National Affordable Housing Programme 2008-2011 (*a route by which the Housing Corporation, now HCA, will deliver a significantly increased supply of affordable homes, along with the necessary efficiencies in grant use*) was dependent on their ability to be registered in mutual partnership with a registered provider (Housing Corporation, 2007, pp. 8). This bureaucratic dependent structure seems to represent an imposed 'top down' hold on the potentials of the CLT SEHM,

which in turn is detrimental to the overall growth of innovation in the affordable housing delivery system (Housing Corporation, 2007; Carnis, 2009). In an attempt to identify possible limitations of the CLT SEHM, a US, report prepared by Weiss (2005, pp. 11) classified the following issues as supposed limitations; cultural perception, limitation on wealth creation, perceived 'competition' with non-profit house providers, market competition and tax avoidance by the wealthy. As this is a US/Texas case study, they however lack depth in the UK context. It appears these sources of barriers are more inclined towards the model itself than the deeply entrenched policies and political weaknesses.

2.6 CHAPTER SUMMARY AND KEY FINDINGS

In regards to the 1st research objective which was to develop an understanding of affordable housing problems and the underrepresentation of the CLT as a Shared Equity Housing Model.

- This chapter found out that countries with a relatively well developed Community Based Housing (CBH) tend to outperform the UK in median multiple ratios. It is worth pointing out that these trends are neither absolute nor validated, but this research deems it to be in line with the ideological potential viability of the role of CBHs in affordable housing.
- This chapter also found the CLT (SEHM) to be an effective affordable housing delivery option as attested to by the international experiences of countries with better affordability ratings; however the CLT has underperformed in the UK, amidst inefficient asset transfer routes, undefined land policy limitations and contradicting policy approaches among UK affordable housing stakeholders that amount into restrictive land use sources of barriers to the CLT (SEHM) development.
- This chapter also examined literature on the state of affordable housing problems in the UK, identifying possible causes of the shortage in affordable housing and the potential role of the CLT (SEHM) amidst HA failing. The chapter found out that there are links between the affordable housing problems and the CLT (SEHM) problems. These links also appear to be deeply entrenched in institutional policies

and political weaknesses, hence the need for more vigour in identifying the institutional sources of barriers causing the underrepresentation of CLTs pristinely and how they can be tackled practically from the perspective of concerned stakeholders.

In summary this chapter was able to review limitations of land use policy and its role in CLT housing development. Literature also revealed key affordable housing institutions and their possible links with affordable housing problems and how they impact the development of the CLT (SEHM). The outcome of this objective accentuated the need to define and tackle inherent institutional barrier sources to the SEHM, from a CLT perspective. Also, this chapter justified the research focus on the CLT as a SEHM vehicle in comparison to all other affordable housing provision models.

CHAPTER 3

THE FIRST TIME BUYER DILEMMA AND THE ROLE OF A VIABLE CLT SHARED EQUITY HOUSING MODEL

3.1 INTRODUCTION

This chapter involved a comprehensive study of the possible role and limitations of the CLT SEHM as an employable vehicle to alleviate affordable housing ownership deficit among FTBs (First Time Buyer). This involved a thorough review of FTB dilemma in affordable housing and the possible ‘roles and requirement’ of the SEHM from a viable CLT perspective.

3.2 AN ASSESSMENT OF THE LCHOS AND THE FIRST TIME BUYER (FTB) IN RETROSPECT

Traditional affordable housing ownership schemes have gone through several phases. The most notable is the Right to Buy (RTB) scheme and its many variants. Generally, the RTB is a scheme which helps social tenants in England and Wales buy their council home at a discount. The scheme is open to people who are secure tenants (usually someone who has been a council tenant for more than 12 months) (Directgov, 2011b). The hallmark of these schemes was the transfer of public affordable housing investments into private hands through the selling off of council housing at heavily discounted prices (Mayor of London, 2004). With over 270,000 completed RTB sales in London alone since 1980, the report concluded that; RTB sales were and are still detrimental to affordable housing supply. In recent times a lot of changes have been introduced to combat inherent problems of these schemes. These changes targeted FTBs with a household income of £60,000 a year or less who are unable to buy a home on the open market. Critics of these changes include the CLG (2008) report that once a purchaser staircases to full ownership, the property is lost to the open market. Staircasing to full ownership however is not as easy as it appeared, because a survey conducted by Bleatherton and Pleace (2008) on the residents of 8 of these LCHO

schemes concluded that most of them reportedly found it difficult meeting up with housing costs.

This research however focuses on affordable housing accessibility for First Time Buyers (FTBs), who are underrepresented in housing ownership, due to huge deposits involved in securing LCHOS options (Poon and Garratt, 2012). Likewise, FTBs are not considered as priority when it comes to housing needs, hence are less likely to be able to access public or social housing (CLT, 2008; Coughlan *et al*, 2011). Due to the faster growing house prices compared to income, the LCHOS is not living up to expectations for the FTB demography, therefore there are opportunities for new approaches that would rely less on direct traditional public subsidy to help people into home ownership (Monk and Whitehead, 2010). One of such is the CLT (SEHM) model. Research shows that one of the most adaptable groups for this model is the FTBs (CFS, 2009). However, the CLT (SEHM) is underperforming in affordable housing supply to this demographic group, despite research suggesting that alternatives such as the CLT and cooperative housing model are outperforming traditional LCHOS options in affordability and housing satisfaction surveys.

On this note, this chapter assessed the potential sources of barriers to both the engagement and advancement of the CLT SEHM model as a viable route to improving the affordable housing problems of First Time Buyers (FTB) as a Special Interest Group (SIG). This process involved the reviewing of FTB housing ownership problems by comparing the viability of traditional LCHOS to the CLT (SEHM) model. Also, existing routes available to FTBs in accessing or employing the CLT (SEHM) to ease affordable housing ownership problems were also explored alongside barriers sources that might be preventing this engagement. Findings were then further investigated through semi-structured interviews to identify these barriers.

3.2.1 AN OVERVIEW OF THE STATE OF 'FIRST TIME BUYER' HOUSING OWNERSHIP

FTBs are seen as crucial facilitators in the housing market (Smith *et al.*, 2005; Andrew, 2004). However, the issue of unclear pathways into homeownership creates a hazy understanding of who FTBs actually are. Cases like households moving into homeownership or people returning to homeownership after renting for awhile are examples of the existing ambiguity in defining FTBs (Wallace and Jones, 2009). In the context of this research, FTBs refer to members of the age category that are most likely to have not owned a house or are about to. A study found out that around a fifth of buyers classed as first-time buyers are in fact households returning to homeownership (Tatch, 2006). Faced with a lack of consensus in defining who potential FTBs are statistically, research seems to point in the direction of the 'under 25' age group, as those most likely not to have attained homeownership, hence most likely to represent FTBs (Wallace and Jones, 2009, pp. 36).

On the FTB predicament, research by the Chartered Institute of Housing (2009) suggests that only 37% of people in this category, presently think that homeownership is attainable (the samples include homeowners, people renting their accommodation privately and residents of social housing) as opposed to only 14% of respondents that think renting was a cheaper and safer option than homeownership. If these findings are valid, this implies and further buttresses the disillusionment faced by these population group in regards to housing. Some schemes have been designed in line with FTB needs like the following:

- Open Market HomeBuy: This Government backed scheme enables you to get a loan alongside a regular mortgage even without a deposit. There are two options to choose from: 'MyChoiceHomeBuy' and 'Ownhome'.
- New Build HomeBuy: You can get help to own part or all of a newly built home on the open market.
- First Time Buyers Initiative: Buyers must be able to obtain a mortgage for at least 50% of the property purchase price with the English Partnerships helping with the remainder (AACLT 2010, pp. 8).

However, these schemes have all been essentially scrapped and replaced with the FirstBuy. This was designed specifically to support FTB’s employment of government and lender assistance with an offer of a 20% equity loan along with a 5% deposit from the buyer to aid the acquisition of a 75% mortgage on the rest of the property. These loans are expected to be repaid on resale of the property with the government's share available for reinvestment in more affordable housing. This is based on the premise that typical FTB schemes demand a deposit of 25%, although now reduced to an initial 5% under this new scheme. However, it is for just a limited amount of applicants (HCA, 2011), hence does not seem sustainable. Critics of the scheme such as Jones (2011) seem to disagree on its prospect, arguing that the scheme would have an insignificant impact on problems faced by the vast majority of the FTBs, partly because it is exclusively for new-build properties and only around 11,000 buyers will benefit. Moreover, mortgages are still required, hence lending would favour only a select group of FTBs which represents a little fraction of the overall number of the most at risk groups.

A lot of interest is being generated by the CLT SEHM of recent as an effective mechanism to help tackle home ownership problems in areas where traditional routes are struggling. However as earlier mentioned in the previous chapter, its adoption is mostly limited to small scale rural developments. In consideration of the potential role of this model in FTB homeownership, particularly among the focus income group: *this includes those whose household incomes are below average, that is less than £21,000 and not more than £30,000* (see Fig 3.1).

Fig 3.1 Showing the FTB position in various the LCHCO schemes (<£22,000)

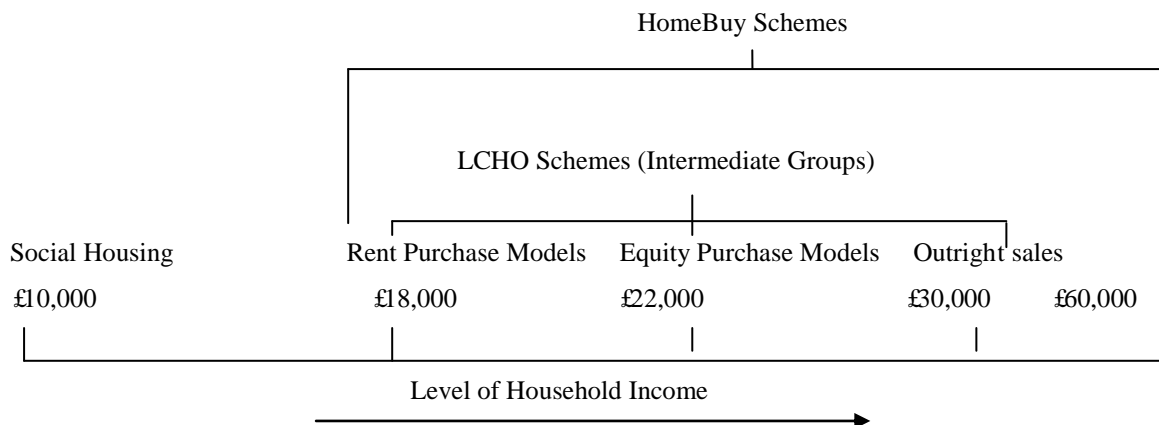
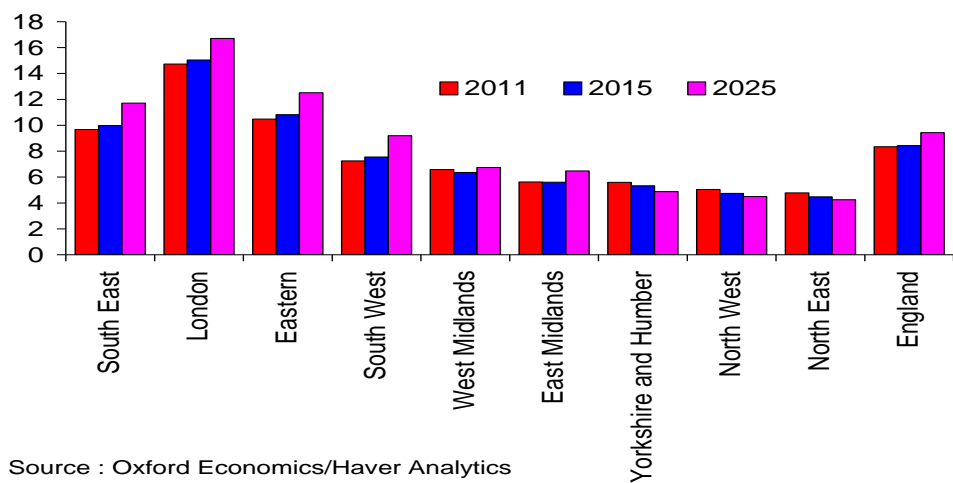


Fig 3.1: FTB Focus Income Group adapted from (Paterson and Dayson, 2010)

This group is usually affected by shortage of suitable affordable and secured housing because of the peculiarity of their income category, which is insufficient to raise large enough mortgages. This is due to the high mandatory deposit for purchasing desired typical adequate housing on the open market (Paterson, 2010). This stance is supported by statistics which reveal a steady increment in required average deposit on FTB targeted homes across the UK in terms of years of saving capacity* for both single and two person households, assuming an average rate of 25% deposit is required (see Fig 3.2 and Fig 3.3).

Deposit ratios

First time buyer deposits as years of saving capacity, one person household



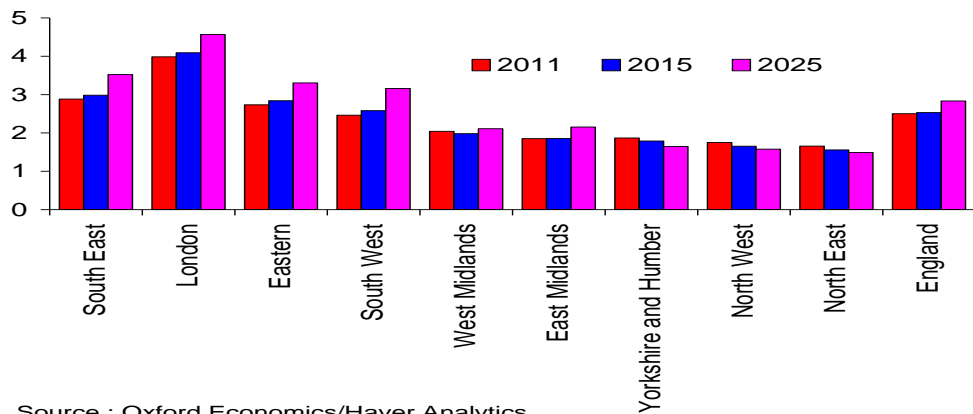
Source : Oxford Economics/Haver Analytics

Fig 3.2: FTB deposits/saving capacity for 1 person households (Oxford, 2011).

*“Saving capacity” is defined as the portion of post-tax income not spent on essentials such as food, fuel and housing (Oxford, 2011).

Deposit ratios

First time buyer deposits as years of saving capacity, two person household

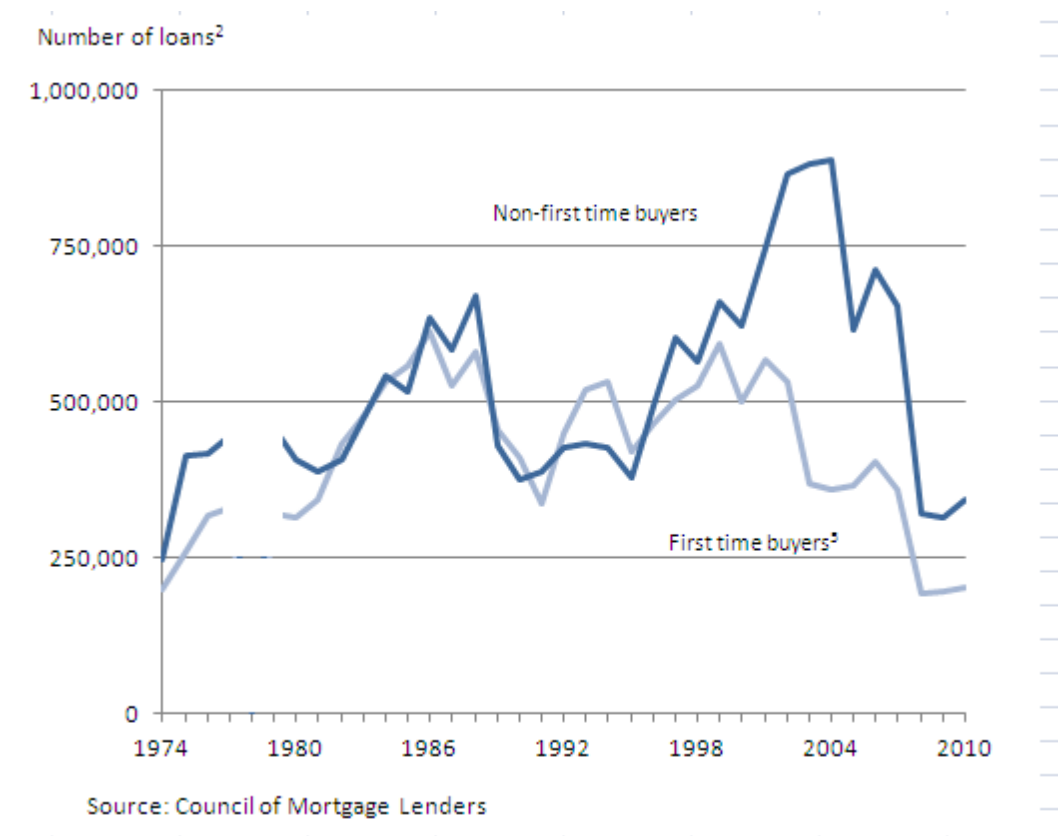


Source : Oxford Economics/Haver Analytics

Fig 3.3: FTB deposits/saving capacity for 2 person households (Oxford, 2011)

As earlier mentioned research indicates that one of the most adaptable groups for the CLT SEHM model is the FTBs (CFS 2009, pp .10), but could their inherent predispositions or peculiarities serve as a hindrance to the engagement of this model? Some of the peculiarities uncovered by research paint a dismal picture of their plight of, which includes the following:

- Almost a third of men and a fifth of women aged between 20 and 34 still live at home with their parents (Asthana and Dyer, 2011).
- The amount of mortgages approved in January 2011 for home buyers were 29% lower than a year ago (British Bankers Association). This is supported by statistics which shows that in 2010 there were around 25 million households in Great Britain. Of these, just less than 1 per cent represented people buying a house for the first time (CML, 2011; Asthana and Dyer 2011). Furthermore just 37 per cent of all mortgages were approved for FTBs (see Fig 3.4), showing a fluctuating decline on the number of loans approved from 2004 (Macrory and ONS, 2012).



2: Totals shown are estimates grossed up from the sample of lenders reporting to reflect total market size.

5: First time buyer numbers will include some buyers who have previously owned a property before, but are not in owner-occupation at the time of this purchase. Estimates from the Survey of English Housing suggest that that around 20% of stated first-time buyers may in fact fall into this category.

Fig 3.4: Number of mortgage loans (CML, 2011; Macrory and ONS, 2012).

Other peculiarities include the following:

- Most First-time buyers will need to secure a mortgage of 5.5-6.0x of the average salary to get on the property ladder (CML, 2008a).
- The proportion of first-time buyers purchasing property without any financial help from relatives or friends has plummeted from 63% in 2005 to just 17% in 2010. This means only one in six young people buying a home for the first time were able to do so by themselves (CML, 2008).

3.2.2.1 FTB PECULIARITIES AND MOBILITY ISSUES

Considering CLT's underperformance and its potential to ease FTB homeownership problems, there are opportunities for mutual dependency (Birchall, 2004; Clark, 2012). However, due to the aforementioned FTB peculiarities in the previous section, there are possible sources of barriers that could hinder engagement. Studies on FTBs reveal that they seldom see saving for affordable housing deposits as a necessity (CML, 2006). Further evidence also shows that these groups are more interested in lifestyle goods, such as clothes and gadgets than consider saving for a housing deposit (GMAC-RFC, 2005; Andrew, 2006a).

Other issues include the low retention rates of FTBs in their communities. The effect of this phenomenon is further elaborated by Monk *et al* (2006); they highlighted the impact as apparently turning rural areas into dormitories and retirement spaces. Further studies have suggested that the difficulty experienced in attaining home ownership results in the movement of aspiring home owners to lower cost areas with the hope of fulfilling their housing aspirations (CRC, 2006).

The debilitating effect of low retention rates among FTBs could hamper the employment of the CLT SEHM for these groups. Therefore developing an understanding on FTB engagement and other relocation factors like housing problems and needs were deemed necessary by this research as route towards FTB involvement in community housing affairs.

The previous two sections found out that FTBs are disadvantaged in homeownership due in part to the ineffectiveness of previous and present LCHOS and other outlined reasons which literature identified as a seeming state of a lack of consensus in defining who FTBs are statistically. Also, the inability to raise a large enough mortgage due to the high mandatory deposit for purchasing desired and adequate housing on the open market also militates against FTB homeownership. This is further compounded by the shortage of suitable affordable and secured housing and the peculiarity of their income category. These suggests that a lot more needs to be done on the part of the FTBs to enable the employment of alternatives such as CLT SEHMs as a route towards homeownership in their communities, which in turn increases CLT recognition with

mainstream lenders due to the strategic position occupied by FTBs in the dynamics of affordable housing in the UK.

The next section deals with existing platforms and legislation changes to the way communities approach housing and the implications on community involvement.

3.2.3 FTB ENGAGEMENT IN HOUSING INITIATIVES

The housing sector in the UK has experienced several changes in the way community housing affairs are run. What are the impacts of these changes on FTB housing ownership problems and CLT performance? This section answers this question and more.

Evidence suggests that FTB involvement in the affairs of parish and town councils can help influence suitable affordable housing decisions in local development plans. The raising of awareness among FTBs could be an avenue that the CLT movement can tap into to increase its influence in communities, which in turn increases its representation in the UK's housing stock (CLG, 2011). Legislative changes that can provide a platform for community based affordable housing initiatives include the Localism bill (now an act), which is supposed to enable the shifting of power from the central government back into the hands of individuals, communities and councils (CLG, 2011b). The act is supposed to implement measures that would enable decentralisation through community rights, neighbourhood planning, general empowering of city residents and other local areas (CLG, 2011). In essence, it should open a floodgate for initiatives that would build up communities based on bottom up principles.

Criticisms on this type of initiatives have argued that they usually end up being hijacked by costly bureaucratic interventions which fails to attract adequate level of involvement from target communities (Foot, 2009; Prendergast, 2008). Going by the democratic stewardship ideals of CLT SEHM model, there is undoubtedly a need for the communities to be involved and adequately informed. That is if the CLT/FTBs intend to capitalise on this localism routes. Issues raised that appear as potential obstacles to overall involvement include that of Paterson and Dayson (2011), they pointed out that

the CLT movement lacks enough diversity, suggesting that its major proponents appear to be mostly middle class population groups. This suggests a level of isolation of the age groups most likely to be in need of the benefits the CLT (SEHM) might be able to offer. On the contrary, Paterson and Dayson (2011) also highlighted the social capital benefits of this seeming homogeneity, pointing out that this group of middle class professionals represent a shallow network that is particularly useful in complex transactions involving many different professions, such as the purchase and development of land. Therefore, a successful CLT needs to either have a membership that has these skill sets or be able to access to source them, for this kind of initiatives to work in a bottom up basis. Szreter (2000, pp. 56-77) argued that these types of groupings and associations feed off a well-grounded social capital network, however it also carries the potential risk to exclude others.

In order to help combat the prospect of limited community involvement, which can now aid the viability of the localism act, the Department for Social Development (2006) suggests that the unequivocal active involvement and engagement of target population groups, through community capacity building is essential to bringing about social change in the wider context. This can help create a state of mutual interdependence between the CLT SEHM, the target population and community development network platforms operating through knowledge sharing avenues such as the (NCLTN, Social networks, and educational avenues such as libraries). Moreover, in support of the latter, literature identified the relevance of community educational hubs such as libraries as veritable vehicles for sustaining, sensitising and advancing community involvement initiatives in communities (MLA, 2011).

The difficulty involved in engaging groups in the community to participate is a well-researched area which focuses on the premise that these groups tend to perceive traditional top down (state led) statutory stakeholders as usually detached and out of touch to real issues in the target communities (Burns *et al*, 1994; Lowndes, 1995). These findings still appear relevant as research continue to show an increasing level of distrust in communities towards policy makers and public institutions (MORI, 2000; Curtice, 2005). Government efforts to improve this situation include the encouragement of community capacity and involvement initiatives. The ambiguity in the term community capacity is well documented in several research including Osborne and

McLaughlin (2004), in which they critically stressed ‘target of initiatives’ as a crucial element to defining CCB. In the case of FTBs capacity building, the most adaptable definition is a combination of the views of Diamond and Liddle (2005); Southern, (2002) which viewed community capacity building as the development of skills, structures and support through the employment of strategic management processes and local political awareness. These community building processes are usually employed by community based organisations acting as intermediaries (interfaces) between top down institutions and target communities (Piper, 2005). This research is however more concerned with the state of involvement in communities, particularly among FTBs.

Community engagement and participation refers to involvement of target community and service users in a collaborative approach to community development initiatives in a given period (Campbell, 2011). Faced with another ambiguity in this definition, Parfitt (2004) was more explicit as he saw participation as a networking vehicle adopted to drive efficiency and improvement of services, while community engagement is defined by Rogers and Robinson (2004, pp. 2) as ‘*the opportunity, capacity and willingness of individuals to work collectively to shape public life*’. Noticeably, these concepts are however strongly interdependent. According to Bailey (2010), for there to be participation there needs to be engagement (and vice versa) for the involvement of community based initiatives to thrive. In the context of this research, how feasible is involvement among the FTBs, taking into consideration their aforementioned peculiarities? The next section did shed a bit more light on this.

3.2.3.1 COMMUNITY INVOLVEMENT AND THE CLT SEHM

From a CLT perspective and its shared equity housing model structure, it appears that participants should be viewed as equal partners from a human resource context. The differences obtainable between participation and involvement lie in their varying depths. While participation fosters team approach, an unequal stake and commitment, involvement allows direct engagement with institutions and decision making (Farnham and Horton, 2003). The planning process is considered cumbersome for those not actively involved in decision making at local levels. Efforts to address this included the Planning & Compulsory Purchase Act. This is an act designed to involve communities

in the planning process through consultation with the community in planning decisions (TCPA, 2008). Collaborative steps between planning authorities and communities include the requirement of councils to produce Statements of Community Involvement (SCI). According to GBC (2011) the SCI should be a public process aimed at enabling the community to know how and when they will be involved in the preparation of local development documents and how they will be consulted on planning applications. This process is however disadvantaged due to lack of funding, management and lack of professionalised structures for effective engagement and involvement in community organisations, if Cochrane (2007)'s views are taken into consideration. Bids to tackle these barrier sources through the professionalising of community involvement initiatives are faced with the threat of prescribed management, which contradicts the need to loosen the grip of top-down bureaucracy on community development (Martin, 2004). Other interpretations of possible sources of barriers to involvement of special interest groups according to Housing Corporation (2008) include; the lack of information or knowledge, lack of precision in policy targets, racism/discrimination, cultural differences, inability to communicate, immigration status, lack of trust in the system, social acceptance, family commitment, work commitment and crime as elucidated in Ijasa and Ahmed (2013). These possible barrier sources were however generated for BME (Black and Minority Ethnic) special interest groups.

Existing studies suggest there might be more intricate underlying structures required for FTB involvement, specifically in the engagement of beneficial housing initiatives through the localism route in the form of support for SEHM CLT initiatives. A study carried out by the West Midlands Rural Community Action Network drew conclusion on the interdependence of the success of localism on the level of involvement and social capital development (McClean and Hindle, 2011). The importance of social capital was further reiterated by Portes (1998, pp. 6) strongly relating it to the benefits derived in relation to the ability of actors to secure and harvest benefits by virtue of membership in social networks or other social structures. Assessing the level of social capital in a community requires the knowledge of social cultural factors that determines the phenomenon. A study by Bullen and Onyx (2005) concluded on the following variables; which were built on themes such as participation in networks, reciprocity, trust, social norms and work place productivity and so on. However, some of these might not be applicable to FTB involvement due to the peculiarities of this particular group. To

better understand other impediments that might be relevant to CLT SEHM engagement, it is necessary to embark on deconstructing sustainability requirements, whether it is necessary for a viable CLT SEHM development or if the lack of it could pose as barriers on the long run.

In order to stimulate involvement in communities, the persistent relocation of FTBs does affect their ability to partake in community based housing initiatives the localism route appears to favour. Furthermore, there are key required components identified from literature to drive this involvement. One of such is that social capital benefits involvement. Also, disparities in sustainability requirements might pose as a barrier to a viable CLT (SEHM). To better understand the relevance of these supposed impediments to CLT (SEHM) engagement; it was deemed necessary to embark on deconstructing social capital and sustainability requirements, if they are necessary for a viable CLT SEHM development or if their limitations could pose as barriers on the long run. The next section attempted to deconstruct sustainability issues that could impact a viable CLT development.

3.3 SUSTAINABILITY AND THE VIABILITY OF THE CLT SEHM

Local government authorities in England are the implementation arm of the Local Authorities (LA), and hence they represent a conduit between LAs and the central government. According to (Community Land Trust Fund, 2011, pp. 2) the Local Authority or group of local authorities working together at a sub-regional housing market level are responsible for the production of Strategic Housing Market Assessments (SHMA) and housing needs studies. This is a major role that determines the range of housing and planning activity within local authority areas (Section 2.4.1). This dual function puts the local governments in a unique position to enable more efficient and sustainable affordable housing in both urban and rural communities. However, Gurran (2002) highlights that there are usually limitations to carrying out these objectives. Partnerships with local authorities are normally encouraged for start up CLTs in the UK (see section 2.5) (National CLT Network, 2011). Although these partnerships are quite limited, they are however considered vital to CLT development. Comparing an Australian case study to the UK, Monk and Burgess (2007), suggested

that the procurement process between applicable models of affordable and sustainable housing should be influenced by socio-economic sustainability. Precautions should also be taken on the issue of undue political support for invalidated models and stakeholders/contractors. This can ensure increased scrutiny of the accessibility to government concessions and funds towards affordable housing provision. In the UK, housing projects encouraged or partly funded by the government are usually implemented in the form of partnerships between the provider and the local authorities. However, housing delivered from these partnerships does have sustainability obligations and implications, particularly on eventual beneficiaries. In the case of the research focus FTBs, can these implications pose as barriers to their involvement as beneficiaries or the viability of the model they are engaging? The subsequent sections of the research attempted to explore these possible implications accordingly.

Sustainability according to Dresner (2002) in affordable housing development is largely viewed as a pursuit for equilibrium between the contesting factors of economic, environment and social implications. This approach is termed 'Triple Bottom Line' which relates to the process of actively seeking to integrate economic growth with social involvement/inclusion alongside environmental considerations. Other attempts to unify these concepts include the 'Russian Doll Model' which seemingly opposes unification. Therefore, it highlights the counteracting effect they have on each other, that is; the economic capital goals were considered paramount and central but perceived to be impeded or restrained by the social and environmental considerations (O'Riordan *et al*, 2001). This model however has been heavily criticised for its disregard of the impact of unregulated economic pursuits against social and environmental considerations. This situation seemingly relegates both sustainability concepts to the grey areas of the ethical and pragmatic discourse (McGregor, 2003; Dixon *et al*, 2007). Towing this line, the notion that environmental and social targets supposedly limits economic growth appears to continually prevail. Moreover, Reed and Wilkinson (2009) observes that most literature has centred on ironing out or setting boundaries for these two factors like (Economic: *Cost of housing, affordability, mortgage, loans and interest rates*; Environmental: *CO₂ emission controls and Climate change, global warming* and so on), with little or no attention being accorded to the social aspects of both models irrespective of their interactive approach or formula in affordable housing provision.

Sustainability has been addressed in multifarious perspectives; the Brundtland Report saw sustainability in the light of a development that connects the needs of the target population (generation) with that of a future or incoming population, that is *'development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs'* (World Commission on Environment and Development 1987, p. 43). On the other hand a commissioner for environmental sustainability report defines sustainability from an environmental perspective that centres on the efficacy of maintaining valuable qualities in a physical environment (Commissioner for Sustainability, 2006). Definitions such as the United Nation's (UN) sustainability indicators lack direct relationships with affordable housing development (such as this research focused community based models like the CLT) (UN Department of Economic and social Affairs, 1997). This bears connection with the lack of consensus on the ramifications of how affordable housing sustainability targets needs to be defined, approached or embedded in the policies of institutions such as local governments and planning authorities (Shiller, 2001; Emsley *et al*, 2008). This lends credence to an area with a progressive discourse which is the relevance of sustainability to real estate and housing. In the UK, the government's communities plan regarding housing supply ranged from sustainable building strategies like: (off-site fabrication, loans to supposed low income population to help with cost of housing (see section 3.2 and 3.2.1 on the performance of various LCHOS), which have not done much to help FTBs onto the ownership ladder (see 3.2.1 on FTB housing ownership problems). In summary ODPM (2003) viewed sustainable housing as a well-integrated mix of decent homes of different types and tenures to support a range of household sizes, ages and incomes. Views aligned with these positions appear similarly restrictive according to Wilson (2009). The necessity for community based housing options to be able to skirt around existing restrictions that currently defines sustainability requires the bespoke balancing of environmental, economic factors of sustainability with its social imperatives on targeted beneficiaries. For the CLT SEHM, this balancing should transcend beyond physical design considerations and other defined indicators, but should also encompass a holistic engagement of social imperatives, in the forms of diversity, housing need, relocation factors, acceptability of housing model, and the level of involvement or support generated within target communities.

3.3.1 CLT (SEHM) SUSTAINABILITY INDICATORS AND THE PREDISPOSITION OF BENEFICIARIES

This section reviewed the possible connection between barriers faced by CLT SEHM and disparities in sustainability requirements. This is aimed at identifying common grounds between involvement problems identified by literature and subsequent investigations on the state of FTBs and involvement in their local communities.

3.3.1.1 PHYSICAL SUSTAINABILITY AND CLT SHARED EQUITY MODEL ENGAGEMENT

According to James and Birkeland (2004) the need for equal considerations for social sustainability alongside similar factors such as the physical and environmental aspects does matter a great deal. Physically sustainable housing initiatives, design attributes and sustainable expectations such as adequate solar orientation, ventilation and passive heating/cooling systems; low water usage fixtures; high levels of insulation; water collection and reuse; high energy efficient fixtures; sustainable and durable materials sourcing; low toxicity and low volatile organic compound (VOC) finishes and materials are increasingly being accepted as development standards. The CLT SEHM is however no exception, as Commonwealth of Australia (2008) recommends the encouragements of projects which can be shown to aspire to these standards. However, post and pre developmental implications are sometimes neglected, such as particular issues of how beneficiaries respond to existing and planned developments. This on the long run does appear to affect mobility, retention, relocation factors impacted by unfulfilled housing needs.

Seminal works on mobility and transience among population groups include the European Union (EU) financed study on the building of sustainable communities. This study highlighted negative impact of mobility patterns observed between population groups at the dawn of their careers and the disadvantaged at the lower end of both the housing and income chain on physical sustainability (UrbAct, 2005). These negative impacts in effect can be identified as sources of barriers to the engagement of FTBs for the CLT SEHM. Negative impacts identified include the effects of housing

problems/shortages and increasing transience and outward movements of FTBs/younger population out of their communities.

This phenomenon was aptly described by Monk *et al* (2006) as apparently turning rural areas into dormitories and retirement spaces, also further impacts include the movement of aspiring home owners to lower cost areas with the hope of fulfilling their housing aspirations (CRC, 2006), (see Section 3.2.2.1). This impacts suggest the increased emphasis on housing needs that cater to the impacts of housing development location such as quality of neighbourhood, closeness to amenities, employment, security, size of home/garden, cost of heating and public transport networks in the context of beneficiaries (DCLG, 2010). These areas of housing needs however vary in terms of the housing provision model and its beneficiaries. Assuming a potential beneficiary household or individual considers one of these unfulfilled aspects as most important, coping strategies employed in most times include frequent moves by the households, which does contribute to a lack of involvement (Burke *et al*, 2007).

Research such as ALG (2004) highlighted a link between mobility, housing needs and deprivation in London, in which overcrowding was prevalent in 30% and 26% of Bangladeshi and black African households respectively. Housing satisfaction data also revealed that White British members of the population are more likely to have lived in their own homes all their lives, while other minority ethnic groups are more likely to be victims of constant home movement due to unfulfilled housing needs (Oxfam, 2013). Therefore these data lend credence to the position that relocation factors, mobility and transience are in fact crucial to sustainability ideals, which build a strong case for the increased representation of the most disadvantaged groups in affordable housing developments utilising the CLT SEHM (as a viable means towards combating the affordable housing deficit in the UK).

Wilkinson and Reed (2009) highlighted the debate about young families (a population group that represents a significant portion of FTBs) who opt for housing close to their place of employment, are less likely to opt for remote locations in outlying suburbs or rural areas. Moreover this might discourage mobility due to the developed relationships between the city and the young family. It can also be observed that a lower supply of adequate living space and associated higher housing prices force many families to

move. Moreover, there is a purported link between length of stay, mobility and vulnerability, characterised by a distorted but valid link between the affected population and proper involvement with local authorities and service providers (SEU 2002; Crisis 2002). Considering those experiencing housing ownership deprivation within a community, it has been noted that housing regeneration initiatives might not yield significant results due to population reshuffling, mobility and turnover. This hampers retention due to the outward migration of those whose status have improved, who are in turn replaced by even more deprived population groups (UrbAct, 2005). This is an area the CLT (SEHM) can be utilised particularly in urban areas through the provision of housing in 'gateway areas'. 'Gateway areas' are defined as 'stopping off points' like the boroughs of Camden, Haringey and Hounslow in London, characterised as being attractive to people at the beginning of their career or the lower end of the housing and income spectrum, whose transience are catalysed by employment reasons. These influxes can enable the transformation of concerned areas into sustainable affordable housing hubs (UrbAct, 2005), based on the premise of employing the CLT (SEHM) in 'gateway areas' which can enable the building of sustainable communities if additional funding support can be generated from local authorities. This has the potential to improve neighbourhood quality while the CLT (SEHM) ensures affordability and community involvement. However, the workability of this arrangement lacks empirical validation. Therefore, the research bids to shed more light on how factors responsible for mobility, relocation such as geographical location, housing satisfaction, housing ownership category and so on would serve as a reference point for potential CLT (SEHM) housing providers, in their bid to target housing shortage among special interest groups such as the FTBs. However, distinctions have to be made among FTB groups who comprise of key workers. This is defined and characterised as people engaged in job roles that are crucial to the infrastructure of the community. These roles include teaching, police officers and NHS (National Health Service) staff and so on. Their income grade apparently will not qualify for social housing, neither is it sufficient for outright housing ownership. Mobility for these groups is hampered because they are left with rather inconvenient options to either rent at exorbitant costs or get stuck with inherent transience. This could imply shuttling between long distances amidst inconvenient circumstances. These encumbrances notwithstanding provide an opportunity for CLT (SEHM) employment in the mitigating role of serving as a converging point in 'gateway areas' between urban/sub urban regions to correct housing

deficits among affected groups. This is buttressed by a research by Key Worker Housing Project (2008) which concluded on the existence of a huge affordable housing (deficit and demand) among key workers. For the CLT (SEHM) model to be effective in this capacity, the strategy would need to take into considerations other FTB groups to be effective. Lessons can be learnt from qualification rigidity (restrictions) of the 'Key Worker Living Scheme' (KWLS) which was launched in 2003 to develop 2,500 homes for London's keyworkers on HCA owned locations. Figures show that 33.3% of houses built within its £690 million budget were unoccupied prior to its termination (Carpenter, 2010). This situation has been attributed to the scheme's restrictions on eligibility, market conditions and also the trend of qualified public sector workers preferring to live in ordinary communities with mixed tenure options alongside private housing. This resulted in so many homes lying empty while over 5,000 people rather remained on waiting list for regular shared ownership homes (Cooper, 2008; Carpenter, 2010).

This section ends on the note that developing a greater understanding of housing needs of these disadvantaged groups and its implications on sustainability will help shed more light on applicable strategies for local councils in taking advantage of government legislation in the provision of affordable housing on a project by project basis. This is in regards to the fact that consideration is given to not only mainstream, but also effective providers who adopt models that best addresses the identified community concerns, in as much as being proximal to required infrastructure respectively as suggested by Centre of Affordable Housing (2008).

3.3.1.2 ECONOMIC SUSTAINABILITY AND FINANCIAL ISSUES ASSOCIATED WITH THE PREDISPOSITION OF BENEFICIARIES TO HOUSING INITIATIVES

Literature has long interpreted housing economic sustainability with a focus on providers/developers profit. These aspects lay emphasis on financial viability to guarantee an income stream. Strategies adopted to achieve this include physical attributes such as green roof top applications to insulate buildings, air-conditioning and so on (Wilkinson and Leeds, 2009). However, these aspects are devoid of the actual financial and economic implications on potential beneficiaries of the housing projects. Taking a cue from (World Commission on Environment and Development, 1987),

which strongly highlights meeting the needs of future generations or beneficiaries? The ability of affordable housing models to keep the developments affordable in perpetuity for future beneficiaries should be encouraged as epitomised by the research focused CLT (SEHM) model, see (section 2.2.6) for further insight from the perspective of potential beneficiaries such as the FTBs. Taking cues from the not so successful previous schemes to alleviate ownership deficits among these groups, this research deemed it necessary to investigate the existence of common grounds between their engagement and the economic sustainability implications of the structure which the CLT SEHM is based on i.e. forfeiting freehold on homeownership in lieu for a reduced housing cost. Whether this is much of a concern for potential home buyers compared to other encumbrances such as credit availability, mortgage financing, down payment and income identified by (CML, 2008a; CML, 2008; Asthana, and Dyer 2011) (section 3.2.1), it is yet to be found out. Other economic sustainability insights into the financial structure of keeping housing affordable in perpetuity include an Australian Parramatta case study on the need for local authorities to contribute towards the economic sustainability drive of community housing initiatives with a focus on beneficiaries. Recommendations include capitalising on their ability to attract subsidies from the government with little or no cost to the council besides the contribution of the land. This subject land would be made in exchange for a title to a fixed number of housing units and the development of the site would be undertaken by a not-for-profit housing provider/community housing practitioners in the case of this research that will imply utilising the CLT (SEHM). However, less than 50% of councils in England have a clear defined strategy or plan for suitable land available for new developments (Morton, 2010; Morton, 2012a; Morton, 2012b).

3.3.1.3 SOCIAL SUSTAINABILITY IMPLICATION ON CLT SEHM ENGAGEMENT

Social sustainability when considered holistically can be viewed from the design process, actual development (built form) and community connectedness and involvement. The physical design process of the actual buildings are centred more around visual, acoustic functionalities particularly in the physical design and construction process, while the aspect of community connectedness involves indicators like household form, age, mobility and so on (Emsley *et al*; 2008). On this premise

defining social sustainability has always been hinged on discipline specific criteria or study context, with emphasis/priority giving in varying degrees to respective dimensions of sustainability as necessitated by the phenomenon being researched. Debates against the relegation of social sustainability as a subordinate implication of the other two dimensions (economic and physical) as against the notion of their existence in equal integral dimensions is increasingly holding sway (OECD, 2001; Littig and Griesler, 2005). The focus on research criteria necessitates the need to identify social sustainability concepts informed by literature that bear significance on potential barrier sources to the efficient utilisation of the CLT (SEHM) model within both urban and rural classification. This is based on the premise that existing barriers that might be affecting the development of an otherwise proven effective housing model does questions the sustainability of the housing delivery system's readiness for the model's utilisation on a wider scale.

Going by literature suggesting low levels of community involvement and social capital as potential sources of barriers to FTB engagement of the CLT (SEHM) (see section 3.2.3), perspectives that best incorporates these factors in the social sustainability context include a more comprehensive definition by Polese and Stren (2000, pp. 15) who viewed social sustainability from a built form perspective, as a drive towards developments compatible with harmony in evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, alongside improvements in the quality of life for all segments of the population. Along this line, Baines and Morgan (2004); Sinner et al (2004) also viewed social sustainability thematically as the promotion of socially sustainable communities which are responsive to basic needs, social well-being, social capital, equity and social-cultural dynamism. This outlook was able to consolidate on the works of other authors, yet going a bit further by identifying social sustainability with driving factors that can improve involvement among resident population. This also appears to be more in line with the research focus, as it sheds more light on the association between community attributes and the viability of the CLT (SEHM) among various demographics and its implication on various ethnicities, social status and age groups. Other schools of thought include those adopting a more individual approach like Spangenberg (2002) who concentrated on the importance of personal assets/profile to social sustainability, education, skills, experience, income and

employment and a possible association with the propensity to actively support community initiatives. Sustainability trends have relied mostly on generalised perspectives that lack specificity, just as existing literatures have focused on attempts to identify elements that define social sustainability with little or no input on the association between these attributes and how they affect peculiar community housing developmental goals, particularly in the research focus CLT (SEHM).

Consolidating Polese and Stren (2000); Sinner; *et al* (2004); Baines and Morgan (2004); Spangenberg (2002); (Emsley, *et al*, 2008) in the study context, age, education, income and other demographical characteristics does play a role in involvement, also see section 3.2.1 on how age group and income defines housing ownership rates among FTBs. Moreover, literature also highlights the relevance of income range in this debate, citing income classification as equally important in determining how relevant an affordable housing model can be applicable within a defined community or population group (CFS, 2009; Paterson, 2010). Also, the relevance of employment location of a targeted population plays a role on the success of affordable housing in a subject area within an urban, suburban or rural context. This is further elaborated on by ODPM (2003) which suggests that young families would prefer a location proximal to their place of employment as previously cited in this section.

Other attributes like the need for diversity and social integration apparently influenced by the levels of social capital are further identified as important elements for achieving social sustainability (Pennington, 2000). Another perspective to demographic attributes and lack of cultural and ethnic dynamism can be related to spatial segregation, which manifests in the form of the gap between younger and older residents (Berlin Institut für Bevölkerung und Entwicklung, 2008) in (Reed and Wilkinson, 2009). On this premise social capital appears to be a vital vehicle to drive social sustainability in community housing projects, hence the need to further explore the concept of social capital in affordable housing development in the next section.

3.4 AN ASSESSMENT OF THE IMPACT OF THE NEED FOR SOCIAL CAPITAL ON THE CLT SEHM: IMPLICATION ON FIRST TIME BUYERS (FTB)

3.4.1 INTRODUCTION

For the FTBs to be able to employ the CLT SEHM for their housing needs, the previous section highlighted the need for a social capital binding factor. A study carried out by the West Midlands Rural Community Action Network drew conclusion on the interdependence of the success of housing delivery through the localism route on the level of involvement and social capital development in target communities (McLean and Hindle, 2011).

Recommendations made by (CCWA, 2011) also suggested that the possibility of Community development housing initiatives like the CLT's catering for the needs of special interest groups such as the FTB is dependent on 'social capital factors' which should provide the enabling environment for building relationships, trust, shared norms and networks necessary for successful community capacity building. Also, literature suggests that most of the existing CLTs in England lack diversity in class (see section 2.3.5). According to Paterson and Dayson (2011) most CLTs have been led by middle class professionals, albeit lacking representation from the demography most likely to be FTBs and the most disadvantaged. However, the positive impact of this middle class demography gives an insight into how social capital pursuits can be channelled towards engaging FTBs for CLT development. This includes the role of professional networks in development activities such as building, consulting and land supply affairs. Paterson and Dayson (2011) also suggest that a viable CLT membership profile needs to possess networks of skilled individuals or those that have access to them. This is however challenging for the FTB demography interested in engaging CLTs in either urban or rural and deprived communities, particularly among the disadvantaged. Therefore, social capital development is not solely limited to professional networks or organisations. Individual affiliations are also vital according to (Hall and Rafferty, 2007), thus being a real estate/ planning practitioner or belonging to the middle class demography should not be a prerequisite for social capital development. Furthermore,

people actively engaged in community initiatives like members of the general community, non-professional volunteers are also valid networks, which the FTBs can still fall within to pursue home ownership aspirations, hence these are presumed to be valid networks for social capital development (DiPasquale and Glaeser, 1999). So what defines social capital? The subsequent sections address this and more.

3.4.2 THE RELEVANCE OF SOCIAL CAPITAL

The social capital concept plays a recognisable role in policy build up. Organisations such as the OECD (The Organization for Economic Co-operation and Development), the World Bank, academics and also community groups do employ this concept in this regards (Thompson, 2011). Its significance however has always been subjected to academic debates irrespective of its wide embracement by the general polity. Positive opinions and research has stressed and highlighted the importance of social capital over the years, Cox (1995) drew favourable conclusions on its relevance in community building by highlighting its contribution to civil societal endeavours. Moreover, Portes (1998) based its relevance and impact on its high level of acceptability. Mayer (2003) viewed the relevance of the social capital concept from a different perspective, he was of the opinion that most economic principles surrounding community performance are largely inadequate, citing the social capital benchmark as a better approach, because it particularly addresses non-economic factors in community building initiatives. In the knowledge frontier, the social capital concept is seen as a novel vehicle for investigating socio-political trends, due to its more socialised approach in measuring active and willing engagement of citizens through community involvement (Bullen and Onyx, 1998; Lowndes, 2004).

Critiques of the social capital concept, such as Navarro (2002) identified the inconclusive certainty of the ability of social capital variables such as levels of trust, reciprocity or civic participation to influence isolation, outward migration, family and societal breakups. He opined that social problems of this nature are not community based, but rather they thrive due to the state of competitiveness prevalent in the modern society, which he feels depletes the build-up of collectivist ideals (Edwards and Foley, 1997). This however appears contradictory in the case of CLTs which actually thrive on

the ‘collective ideal’ component, which in turn feeds on the level of social capital for its development.

It appears that barriers to the CLT might not only be limited to land use and institutional sources, also this section suggest that the issue of the level of social capital is also worth exploring. Outcomes could help clarify the influence of the level of social capital on CLT (SEHM) development and support in both the urban and rural sphere.

3.4.3 SOCIAL CAPITAL AND COMMUNITY DEVELOPMENT

Arriving at a definition for social capital has been a long standing debate among academics due to lack of conceptual clarity (Harper, 2002). However, definitions based on social networks and civil norms enjoy a measure of consensus. This includes Scull (2001) who viewed social capital as involving social networks, support structures, community participation, civic involvement, trust and norms of reciprocity. Putman is viewed as an early proponent of the social capital concept. He saw it as ‘*networks, norms, and trust that enable participants to act together more effectively to pursue shared objectives*’ (Putnam 1996, pp.56; Harper, 2001). The World Bank on the other hand focused on the bonding capacity, suggesting that social capital could imply institutional relationships, norms that shape the quality and quantity of a society’s social interactions. In the UK, the OECD definition is most widely utilised across government departments. It views social capital in terms of networks, shared norms, values and understandings that facilitate cooperation within or among groups’ (Cote and Healy, 2001, pp. 41). This definition revolves around the development of the community networks, similar earlier definitions by Portes (1998, pp. 6) related social capital to the ability of actors to secure benefits by virtue of membership in social networks or other social structures. Considering this research context, Cote and Healy (2001) definition seems to unravel why social capital development is seen as essential for the CLT SEHM to thrive in community housing development and FTB engagement. Key crucial elements related to the research focus within these definitions are; Actors (FTBs), Benefits (Affordable Housing Ownership), Membership (Housing stakeholders) and a Social Structure (Communities) all existing in equilibrium within the social capital concept and ramifications.

On further exploration the CLT (SEHM) appears to be based on similar principles proposed by Motivalian (2005) which are self-reliance, self-financing and self-management through organised, empowered and actively involved communities supported through a coordinated network of actions. To achieve these principles, social networks and interpersonal interactions is deemed necessary to influence the operational capacity for such community led initiatives (Coleman, 1990). Based on this, there appears to be a connection between social capital building blocks and the success and support build up for community initiatives (Coleman, 1988; Grimsley *et al*, 2005). According to ABS (2004), the formation of networks is salient to the whole idea of social capital, these networks manifests as personal relationships which are accumulated when people interact with each other in families, workplaces, neighbourhoods, local associations and a range of informal and formal meeting places. Networks can be viewed from a social capital context as bonding, bridging and linking. This highlights a distinction between bridging and bonding social capital. In bridging social capital connections are made across diverse social groups that help, broaden social horizons and opens up opportunities for information dissemination across individuals from different backgrounds (Putnam, 2000). ‘Linking’ on the other hand is different from ‘bonding’ and ‘bridging’, as it is rather concerned with relations between people who are not on an equal footing (PIU, 2002). In regards to CLT SEHM support, ‘linking’ is equally as important as bridging and bonding, as it consolidates the crucial relationship between individual community members, the local authorities and other government intuitions that might not exactly be on equal footing laterally. Other recurring insight into the social capital concept includes its role in providing a platform for important social indicators for understanding outcomes across economic, social and environmental domains to be studied (Edwards, 2004). These platforms occur in the following social capital categories;

- Structural social capital: This is the physical network and interactive conduit within a group of people through which information is shared (Nahapiet and Ghoshal, 1998).
- Relational social capital: This dimension centres on trust and personal relationships in a local network (Bian, 1997).
- Cognitive social capital: According to Nahapiet and Ghoshal (1998), this is the resource for shared representation, interpretations and a system of meaning within a

social conduit, which represents associability, a common willingness and involvement to pursue collective goals (Leana and Van Buren, 1999).

Identified problems associated with communities as been traced to a lack of relative unison in beliefs and the need to embrace common goals (which can help proponents of the CLT SEHM) tackle uncertainty as well as market-related environmental risk at the network level (Krishnan et al., 2006). From the aforementioned indications the viability of the CLT SEHM for the FTBs in affordable housing provision partially revolves around the state of social capital in the targeted community at a network level which can help put in place the effective mobilisation of all other needed components. Therefore, there is a need to put into consideration the level of social capital in respective communities and its relevance in community development initiatives.

Research carried out by ABS (2004) appears to provide an interesting link between the urban and rural disparities in CLT acceptability and its supposed relegation to urban fringes in the UK. The research highlighted the positive role social capital brings to the table as it bears strong indicators for society bonding to build sustainable communities. This is backed by its capability to address individual isolation, outward migration, family and societal breakups. The variability of this capacity geographically, appears to be linked to the level of successes of the CLT SEHM model in rural communities. Furthermore, according to Harper (2002) 'social cohesion', or 'community spirit' are often seen as crucial in developing and encouraging involvement. Such level of involvement has been described in turn as a fundamental constituent of social capital. This involvement is crucial to accomplishing and managing CLT. Therefore, this premise informed the 2nd research hypothesis whether level of individual social capital has a causal relationship with the propensity to support the SEHM development.

3.5 CHAPTER SUMMARY AND FINDINGS

The chapter set out to comprehensively study the possible role and limitations of the CLT (SEHM) as an employable vehicle to alleviate affordable housing ownership deficit among FTBs. This involved a thorough review of FTB dilemma in affordable housing and the possible 'roles and requirement' of the SEHM from a viable CLT perspective.

- Literature confirmed that FTBs are disadvantaged in homeownership due in part to the ineffectiveness of previous and present LCHOS. Also, other outlined reasons include a supposed lack of consensus in defining who FTBs are statistically.
- Other problem areas for FTBs include the inability to raise a large enough mortgage due to the high mandatory deposit for purchasing desired and adequate housing on the open market. This is further compounded by the shortage of suitable affordable and secured housing due to the peculiarity of their income category.
- Findings from this chapter also identified that the debilitating effect of low retention rates among FTBs, which could hamper the employment of the CLT (SEHM) model for these groups. Also literature identified that there is a need to further investigate FTB involvement barriers and the prevailing effects of relocation factors on housing needs.
- On a lighter note there appears to be a theoretical background for CLT (SEHM) employment in gateway areas to mitigate physical sustainability issues for FTBs in the beginning of their career or at the lower end of the housing and income spectrum whose transience are catalysed by employment reasons, however the workability of this arrangement lacks empirical validation.
- Post and pre developmental implications on affordable housing are sometimes neglected, particular on issues of how beneficiaries respond to existing and planned affordable housing development models. This on the long run does appear to affect mobility, retention, relocation factors impacted by unfulfilled housing needs.

In summary, besides exploring FTB homeownership problems, the 1st half of this chapter laid the foundation for the identification of the most crucial physical factors responsible for outward migration among target populations in both the urban and rural sphere and how it relates to age group and other demographical indicators amidst other research focused variables. This is aimed at shedding lights on how factors responsible for mobility, relocation such as geographical location, housing satisfaction, housing ownership category and so on would serve as a reference point for potential CLT SEHM housing providers in their bid to resolve housing shortage among special interest groups such as the FTBs. Overall, findings from this investigation will help identify common grounds between sustainability issues identified by literature and subsequent investigations on the state of FTBs and involvement in their local communities in partial fulfilment of research objectives.

The 2nd half of this chapter focused on economic and social aspects of affordable housing. Economic impacts identified for further investigation included the predisposition of potential beneficiaries of this model to the peculiar mechanisms housing ownership without a freehold and other difficulties encountered in housing acquisition and there implications on economical sustainability. Furthermore, further information sought include the empirical enquiry on whether the concept of forfeiting freehold on homeownership in lieu for reduced housing costs is as much of a concern for home buyers as it is for other encumbrances such as credit availability, mortgage financing, down payment and income and so on, moreover can the inability to staircase to full freehold ownership (leasehold enfranchisement) also pose as a major barrier to CLT successes in both the urban and rural sphere?

The social aspects of sustainability explored in the latter parts found out that:

- In order to stimulate involvement in communities, the persistent relocation of FTBs does affect their ability to partake in community based housing initiatives. Furthermore, there are key required components identified from literature to drive this involvement. One of such is the concept of social capital.
- It appears that barriers to the CLT might not only be limited to land use and institutional sources, but also this section suggests that the issue of the impact of the level of social capital is also worth exploring. Outcomes could help clarify the

influence of the level of social capital on CLT SEHM development support in both the urban and rural sphere. The outcome of this helped clarify the 2nd research hypothesis on the impact of the level of individual social capital on CLT SEHM development.

In summary the 2nd half of this chapter identified the need to define common grounds between FTB involvement problems and aforementioned sustainability implications, both qualitatively and quantitatively. Furthermore, the research further investigated the link between the propensity to support the CLT SEHM and the levels of social capital among geographically classified CLT networks and community development practitioners, in order to establish the need for social capital within communities towards the pursuit of housing development initiatives.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

The previous chapters explored the extant literature, which instigated the need for further investigation, and also guided the development of the research aim and objectives. This chapter assesses the philosophical positioning and approach, justification of research methodology, elaboration of triangulation approach for data collection and analysis. The chapter then concludes on the process of developing the proposed framework for alleviating community barrier sources to CLT SEHM development.

4.1.1 DEFINING RESEARCH

According to Mouly (1978, pp. 12) research is as a process of arriving at dependable solution to problems through the planned and systematic collection, analysis, and interpretation of data. In essence there should be a problem before a research can be proposed, (Hay, 2002) elaborated that a research is supposed to fulfil a certain group of objectives in order to contribute to a discipline, inform policy or address a specific issue or problem. Essentially these set out objectives do determine the type of research that would be employed the following has been put forward by (Kumar, 1999).

The classifications were used to build up research objectives in which they were adapted as a combination. The rationale was based on recommendations by Kumar (1999, pp.10) suggested that: In practice, most studies are a combination of the first three; that is, they contain elements of descriptive, correlational and explanatory research.

TYPES OF RESEARCH	DESCRIPTION
DESCRIPTIVE	Attempts to systematically describe a situation, problem, phenomenon, service or programme, or provides information about, say, living condition of a community, or describes attitudes towards an issue.
CORRELATIONAL	Attempts to discover or establish the existence of a relationship/ interdependence between two or more aspects of a situation.
EXPLANATORY	Attempts to clarify why and how there is a relationship between two or more aspects of a situation or phenomenon.
EXPLORATORY	Is undertaken to explore an area where little is known or to investigate the possibilities of undertaking a particular research study.

Table 4.1: Types of research and description (Kumar, 1999)

RESEARCH TYPE AND OBJECTIVES	OBJ 1	OBJ 2	OBJ 3	OBJ 4
Descriptive	✓	✓		
Correlative			✓	
Explanatory	✓	✓	✓	✓
Exploratory	✓	✓	✓	✓

Table 4.2 Research type adapted to set out objectives

This study required methodological processes to accomplish research objectives, (Fig 4.1) shows an adoption of Hay (2002, pp. 64) depicting an interrelationship between research building blocks and methodological processes adapted from Grix (2002). He further suggested that these methods should follow a laid down ‘directional and logical sequence’ as shown in (Fig 4.1) using a ‘question led research’ approach.

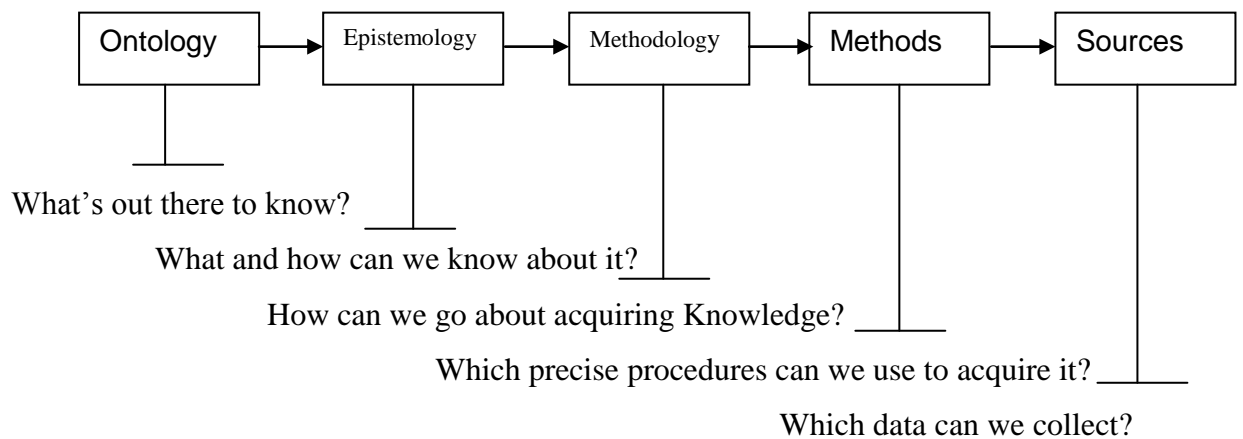


Fig 4.1: Methodological process (question led research led approach).

Adopting the ideas of (Crotty, 2004; Creswell, 2003; Hay, 2002), this section addressed the four methodological questions and their interpretation as adapted to from Hay (2002).

- What epistemology: What's out there to know i.e. the theory of knowledge is rooted in theoretical perspective? Moreover, "epistemology" and "theory of knowledge" are used interchangeably. For the purpose of this research epistemology is interpreted as the branch of philosophy that deals with questions concerning the nature, scope, and sources of knowledge, either subjective or objective.
- What theoretical perspective: What and how can we know about it, i.e. the philosophical position behind the adopted methodology, is it positivism/post-positivism, interpretive or critical enquiry.
- What methodology: How can we go about acquiring knowledge i.e. strategy or plan of action that links methods of outcome –governs the choice and use of methods e.g. experimental research, survey research, ethnography, action research etc.
- What methods: Which precise procedures can we use to acquire it i.e. techniques and procedure planned to use, e.g. questionnaires, interviews, literature review and so on.

4.2 RESEARCH PHILOSOPHY AND CLAIMS TO KNOWLEDGE

According to Saunders *et al* (2007) research can be classified into: philosophies, approaches, strategies, choices, time horizon, techniques and procedures in line with ‘the research onion’. Seeing this as cumbersome Crotty (2007) seemed to favour a more streamlined process which were; epistemology, theoretical perspective, methodology and methods. He opined that even when faced with the most difficult research decisions, this approach enables a clearer sense of direction. Other perspectives to knowledge that was considered for the methodology process includes: Axiology (what values goes into it value laden), Rhetoric (How the research is reported), Methodology (The process the research study is carried out).

In line with Grix (200, pp.178) a clear and transparent knowledge of ontological and epistemological assumptions is the most necessary requirement to underpin any research. It enables the researcher in:

- Developing an understanding of the interrelationship of research key components (including methodology and methods).
- Avoiding confusion when discussing theoretical debates and approach to social phenomena.
- Being able to recognise other opinions’ and defend the research’s position.

This direction did fit into the research scope which was further validated by further studies by Grix (2002, pp.177) who defined ontology as the starting point of all research, subsequently followed logically by epistemological and methodological positions. Blaikie (2008, pp. 8) also added more to this view suggesting that ontological claims are assumptions that are made about the nature of social reality, claims about what exists, what it looks like, what units make it up and how these units interact with each other in a social research perspective. Furthermore, Blaikie (2000); Bryman (2001); Grix (2002) summed this up by viewing ontological assumptions as what is believed to constitute social reality’. Therefore ‘*If ontology is about what we may know, then epistemology is about how we come to know what we know*’. In addition, a research’s ontological and epistemological positions can lead to different views of the same social

phenomena depending on what the subject of study demands and how the researcher makes such decisions?(Brix 2002, pp. 177). The use of derived methods of natural sciences to study social reality was suggested by Bryan (2001) to enable the research make significant decisions on the nature of social phenomena.

4.2.1 THE INTERPRETIVIST AND POSITIVIST APPROACH

Positivism and interpretivism are important epistemological positions in the understanding research philosophy. Positivists believe that reality is constant and can be observed and described by employing objectivity (Levin, 1988). The positivist paradigm on the other hand is constantly being critiqued as unsuitable for the social sciences as evident in Hirschheim (1985), who called for a more pluralistic attitude. This notion was also supported by Remenyi and Williams (1996). Interpretivism however, bases its own approach on the differences between people and the methods/objects of natural sciences to derive meanings **subjectively** into specific social phenomenon or actions. Based on these knowledge, findings from literature were able to identify that the underperformance and low representation of the CLT SEHM and FTBs in housing delivery, apparently caused by inherent barriers or factors. Underperformance and low representation is a relative term that operates in different contexts, particularly when individuals, community or the subject environmental components are taken into consideration. Also, barriers do range from institutional and sustainability sources as evident from literature. Consequently, from an interpretivist point of view the interplay between the ways these barriers affect stakeholders, communities, individuals and policy makers do vary as reflected in what the research has set out to unravel. On this premise the interpretivist point of view is deemed most applicable for the subject study according to research context.

RESEARCH ASSUMPTION	IMPLICATION
ONTOLOGY	What is out there to know? The CLT SEHM is underperforming a in housing delivery? Also FTBs have low representation in homeownership.
ONTOLOGICAL CLAIM	The social reality is evident in CLTs underperformance with a less 0.5% representation in the UK's affordable housing stock despite its much touted advantages over traditional housing routes. Also, 63% of FTBs think homeownership is unattainable.
ONTOLOGICAL ASSUMPTION	There are underlying sources of barriers responsible for CLTs and FTB underperformance and low representation in housing delivery and supply.

Table 4.3: Research assumptions and their implications

To investigate these assumptions, the following questions as adapted from Blaikie (2000) were applied.

- In what ways have the CLT (SEHM) and FTB been impacted?
- What are the measures that contribute to these impacts and how do they manifest from a social perspective?

The Epistemological position of this study is partly interpretivist which expects that the interacting roles and views of stakeholders, policy makers and community members might be contributing to the barriers causing CLT SEHM underperformance which prompts the need to investigate these sources of barriers, through semi-structured interviews.

The study thus is of the ontological assumption that that there is an underlying reason why CLTs have consistently underperformed while the epistemological assumption of the study is that the knowledge that answers the question of 'why and how' is through examining the role and views of individuals and community and stakeholders involved in CLT and other affordable housing related issues addressed in literature.

There is a transition between the interpretivist approach through the semi structured interview to attain an empirical interpretation or validation of interview data. Questionnaire items are often developed after the researcher has analysed a series of interviews, observations, and documents (Kaplan and Duchon, 1988). Researchers such

as Benbasat *et al* (1987); Kaplan and Duchon (1988); Wynekoop (1992) have recommended that both quantitative and qualitative data can be used in any study if at all possible. Furthermore, Eisenhardt (1989) highlighted that quantitative data ‘can prevent researchers from being carried away by non-vivid or false impressions collated from qualitative data. This can help bolster findings when quantitative validation corroborates those findings from qualitative evidence. Consequently, the active use of surveys/questionnaires for data collection and validation thus gives the positivism philosophy an equally dominant role in this research alongside the interpretivism.

According to Miller *et al* (2002), the positivist paradigm is attributed to the stages of identifying strategic abstract concepts of which its interpretation can be applied to research specific situations to help identify existing relationship in the real life applications. On this premise a hypothesis can be developed to identify its applicability in reality and practice. If the hypothesis is figured out to be positive through the process of generalisation, this implies validation in the real world. According to Johnson and Christensen (2008), positivist researchers have to make assumptions that operate within the auspices of accepted standards through the following scientific stages: observation and collecting data, looking for patterns and developing a theory, forming hypotheses to test the theory, conducting research to test the hypothesis and support or adjustment of the theory (Coolican, 2004). These stages are represented in the wheel as depicted in (Fig 4.2).

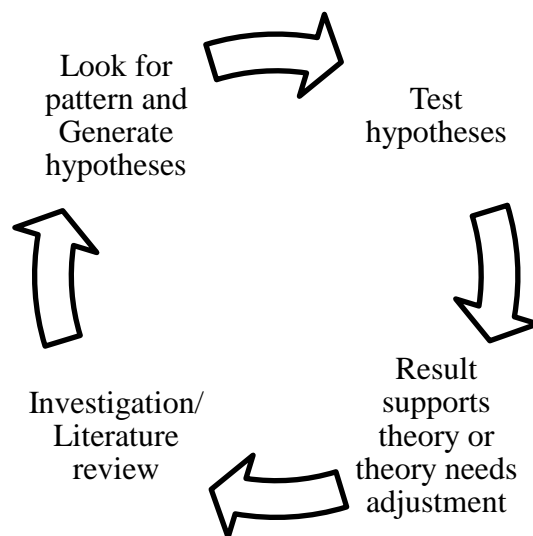


Fig 4.2: Hypotheses generation stages

In quantitative studies, investigators adopt research questions and hypothesis to structure and help streamline/focus the purpose of the study. Also, Quantitative research questions investigate the relationships between identified variables for which knowledge is sought. They are deemed to be particularly useful for survey studies. Quantitative hypotheses are predictions the investigation process generates about the expected relationships and associations among studied variables. Therefore they are numeric estimates of population values based on data collected from samples (Creswell, 1999). According to Kumar (2005), the general rule of thumb is that hypotheses should be simple, conceptually clear and capable of verification. Moreover, there should be parallel capable of being drawn should between hypotheses and existing knowledge, thus should be measurable. On this note a good hypothesis must be based on a good research questions (Hulley *et al.*, 2001).

For the purpose of testing statistical significance, hypotheses are classified by the way they describe the expected difference between the groups being investigated; hence this research has adopted the Null hypothesis because it is expected that there is no statistically significant difference among responses of the sample population (Kumar, 2005).

4.2.2 RESEARCH APPROACH

The research approach proceeded by identifying research problem. This was arrived at by the gap identified in literature. The main aim was then derived i.e. to build a framework that would enhance the performance/ effectiveness of the CLT (SEHM) in affordable housing provision. This aim was achieved through derived objectives which in turn led to unravelling two generated major hypotheses.

A report by (Matveev, 2002) on methods employed in research situations concerning opinions within different organisation by culture social researchers, he highlighted certain challenges faced due to disparities in cultural, linguistic, business practice, and the communication between research participants (questionnaire respondents and interviewees). Also, in investigating performance, the insights gained from Weiss (2005, pp.11) suggested that factors such as business practices, individual needs and perception might help overcome CLTs underperformance. One of the biggest challenges during the

investigation was being able to determine how these differences in perception contribute to the ‘phenomenon’ being investigated. To address this challenge, (Matveev, 2002) recommended the combination of quantitative and qualitative methods guided with a functional or positivist paradigm that guides the quantitative mode of inquiry i.e. the assumption that social reality has an objective ontological structure and that stakeholders are agents responsive to the objective (Morgan & Smircich, 1980). The research adopted the combination of these methods to help control the challenges inherent in the nature of investigation and most importantly to obtain robust results and conclusions. The methodological approach was a mixture of both quantitative and qualitative approaches. The qualitative part of the research was semi-structured interviews with stakeholders strategically identified, while the quantitative part was questionnaire survey research. The research approach involved 7 semi structured interviews. The intention of the interview was to target experienced professionals that are actively involved in housing provision as identified by literature through open ended enquiries. Due to specificity of sought data the questions are richly informed by literature findings guided by the gap in knowledge. According to Morse (1994); Creswell (1998), a phenomenological study should target 6-10 interviews as data saturation can easily be attained if information received is appropriately processed, moreover the interviews were conducted through a continuous consultation process till data saturation was attained.

In order to test the hypothesis, and then answer research questions, the research population was identified and research samples were then drawn from geographically classified CLT networks and community development practitioners. The generated data was subjected to the process of SEM (Structural Equation Modelling) using the AMOS software. This effectively tested the hypothesis, and also generated a robust empirical validation for both the quantitative and qualitative findings.

The research adopted triangulation for data collection and analysis, through literature review, semi-structure interviews and survey questionnaires. The resultant data were analysed using the content analysis software (Nvivo 9) and the SPSS accordingly, alongside the aforementioned SEM process. The resultant output from analysis formed the building blocks for the resultant framework accordingly.

4.2.3 RESEARCH METHODOLOGY

Travers (2002) proposed that methodology in research could be a combination of the study's theoretical standing and how methods have been adopted to solve the research problem. This research has adopted the mixed method of data collection which was used in the course in line with the aforementioned triangulation concept (Section 4.2.1). According to Bogdan and Biklen (2006) it was elaborated that a vital technique in methodology should ensure validation of data through cross verification from two or more sources. The justification of this method is further buttressed by Jogulu and Pansiri (2011) who suggested that the process of amalgamating statistics with thematic approaches that can help avoid over-reliance on the former and can also capture "soft-core views and experiences", in as much as the subjective factors necessary to elucidate complex social situations such as the study's focus of enhancing viability/underrepresentation. In the research's attempt to investigate the sources of barriers affecting the CLT SEHM, the choice of direction is very crucial as it could go a long way in determining how successful this undertaken would be. Several directions are available which includes the comparative, casual theory testing, exploratory and explanatory (Sarantakos, 2005). The research adopted the exploratory direction described by Stebbins (2001), which is concerned with discoveries and building theories or framework in a social science perspective. The exploration process is considered as a perspective representing the state of mind and a special personal orientation, this direction is far more in-depth than the descriptive because it pushes the study way into the realms of unravelling research specific phenomenon such as 'why and how are the CLTs are not performing', then maybe generate some robust recommendations that could significantly impact the explored field.

The action research was initially considered for this study, which according to ABL Group (1997) aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously. This would however require a concurrent active collaboration with all stakeholders, irrespective of ideology or approach inherent in the organisation. This actually comes with its own substantial disadvantages according to Walter (2009). Due to the possibility that involvement of conferencing and the stringent balance required to

achieve research goals might lead to competition among participants. Also, the lack of timeline characterised by this method can throw the research into a dilemma of how to know when the problem is resolved. Furthermore, categorising a group of stakeholders with common interest and problems does not imply that there will be consensus in how a problem can be solved or addressed, rather this situation could bring to the forefront politically sensitive issues like the case of the CLTs and the supposed bias towards it, hence leading to digressions and conflicting outputs (Bland, 2008).

The case study research was also considered as a suitable method for this study. The case study research was described by Yin (1984) as a method used to understand complex issues or object which can explain experience or add strength to what is already known through previous research. It can be defined 'as an empirical inquiry that investigates a contemporary phenomenon within its real-life context where boundaries are not clearly evident. However, this study has not used the case study due to the broad and transitional nature of the research problem. The sources of barrier to CLT viability and the low representation of FTBs in housing ownership is a problem that spreads across a complex mesh of interconnected stakeholders and groups who are still very much undefined to a large extent (NHPAU, 2009). A research of this nature will however require an investigation approach that can effectively refine generalisations in order to arrive at an all-encompassing performance framework. Based on these premise the case study research method has been deemed not suitable (Yin, 1984). The mixed method however was seen to be most appropriate as Creswell and Clark (2007, pp.5) saw it as methodology that involves philosophical assumptions that guide the direction of the data collection, analysis. Furthermore it employs the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. This rationale is based on the premise that the use of quantitative and qualitative approaches, in combination provides a better understanding of research problems that either of the approaches alone will fail to provide. The adopted mixed method involved semi-structured interviews and questionnaire survey administration.

In summary, the mixed method was deemed particularly appropriate for this research problem because it helped answer questions that either quantitative or qualitative

approaches could not answer alone. For example, in the case of counteracting roles of stakeholders in the affordable housing sector, ‘do views among stakeholder classifications converge or diverge? Addressing this required a two-step approach to obtain more reliable cross-validated findings. The triangulation of results further buttress the mixed method approach as shown in (Table 4.3), which shows the combination of the sources of data used in achieving the research objectives: objectives 1 and 2 focus on the build-up of knowledge to identify research gap through a robust literature review of the affordable housing provision system, the FTB housing problems and the need for alternatives such as the CLT (SEHM). Objectives 3 and 4 identified analysed data obtained from questionnaire surveys and semi-structured interviews confirming barrier sources. Then a consolidation of the triangulated data resulted in the viable CLT (SEHM) development framework.

OBJECTIVES	DATA SOURCES		
	Literature Review	Semi-Structured Interviews	Questionnaires Survey
Objective 1	✓		
Objective 2	✓		
Objective 3	✓	✓	✓
Objective 4	✓	✓	✓

Table 4.4: Showing combination of data sources to achieve triangulation

4.2.4 THE RESEARCH SAMPLES

For the semi-structured interviews, the factors that the selected organisations have in common were their respective roles in affordable housing provision and their scope of operation. This ranged from enabling communities in realising their housing aspirations to fostering a favourable operating environment in the UK housing markets. Strategies incorporated included a clear understanding of the objectives in order to define the range of stakeholder participation and the extraction of valid outcomes as suggested by Vallejo and Hauselmann (2004).

The methods adopted for the survey involved the collection of data according to research focus and a number of social capital and potential barrier variables among respondents, which are then analysed to discern patterns of association as part of the process to investigate the outcomes of semi-structured interview responses among geographically classified CLT networks and community development practitioners.

4.2.4 RESEARCH METHODS

As mentioned earlier the mixed method of data collection has been adapted for this research in line with the concept of triangulation which Bogdan and Biklen (2006) saw as a vital technique employed to ensure validation of data through cross verification from two or more sources. This research incorporated this to fit together insights provided by qualitative and quantitative research into a workable solution, this was seen as very adaptable to the phenomenon being studied (Onwuegbuzie 2004). In order to identify the research problem, literature was reviewed extensively over a period of 2yrs. seven semi structured interviews were carried out through continuous consultation with the aim of acquiring underlying themes which informed a questionnaire survey that added rigour to the data collated from the interviews. Semi-structured interviews were used because the method allows for the exploration of emergent themes. However, literature highlighted the proneness of interviews to bias, to address this flaw, the questionnaires survey was employed to validate findings, which in turn adds rigour and more substance to the data collected from the interview (Yin 2003).

A total of at least 120 questionnaires were expected from the targeted sample of over 430 members, 91 were completed and returned. A 75.8% response rate was achieved as a result of the purposive sampling technique which targeted a database where there is an established presence of obviously qualified participants as reflected from the network database of the National CLT Network members and Community of Practice with inherent variations and peculiarities. The questionnaires were anonymised, to increase response rate, the questionnaires were distributed electronically via email and through the network forum. To increase response rate, other measures embarked upon was the

provision of an alternative web based questionnaire link communicated to population targets electronically.

4.2.4.1 LITERATURE REVIEW

The literature review as a research method helped improve familiarity with the up to date information on the subject of research either informed the necessity to generate other research goals or the basis for justification for an entirely new research (Hart, 1998; Cronin *et al*, 2008). The quality of a good literature review includes adopting a process that focuses on the research subject, while gathering as much data with the littlest bias possible till research gap is identified. Furthermore, it should also contain a clear search and selection strategy (Carnwell and Daly, 2001). Other essential qualities include a strategic construct in flow and readability which adheres to the right terminologies, with the use of jargons avoided to the barest minimum (Cronin *et al*, 2008).

The primary scientific use of a literature review is to identify the research gap the study direction will be based upon (Eisenhardt, 2007). Following Gerrish (2006), the literature review of this research was adopted as a research method, to inspire research ideas stemming from the identification of inconsistencies in the body of knowledge, which helped generate the research questions and hypotheses accordingly. Past research studies and academic publication on the CLT SEHM and FTBs were reviewed effectively alongside all other adjoining concepts and interpretations in regards to underrepresentation and viability in the UK. This helped in identifying possible areas that required further investigation and the most suitable methodological approach for the research.

4.2.4.2 INTERVIEWS

The research interviews usually occur in two categories which are structured and unstructured interview. Midway between these two approaches is the semi-structured interview. The level of scope is the differentiating factor among these three types of interviews. The structured interviewed is characterised by the limited scope of its

questionnaire design, while the unstructured is to a large extent without boundaries i.e. in length and scope of response according to Kvale and Brinkmann Denzin (1970); (2000). Fellows and Liu (2003) seemed to imply that the structured interviews reflect more of private views unlike the more rounded approach that are made possible with the more relaxed environment created by semi-structured interviews through employing an enquiry format that operates through the use of open ended questions intended to derive a broad based data in which inferential deductions is applied to analyse and derive emerging themes as applicable to research goals.

Data is usually collected through face to face, and the telephone. The interview process usually includes generating a list of focus areas as identified from research gap and literature findings. Responses are then consequently tape recorded. Kvale and Brinkmann (2000) suggest having an interview guide to prevent digression which furnishes the investigation with direction and focus. This measure ensures the investigation is not only within the research boundaries, but also ensures flexibility in interviewee response and perspectives (Blumberg *et al*; 2005). The interview questions where designed to address specific topics centred on the research gap in literature i.e. the sources of barriers to CLT development (Gillham, 2000). Precautions taken during interview process include recommendations by Valenzuela and Shrivastawa (2008) on use of trial runs. This helped assess the level clarity and also ensure that there were no leading questions. This helped mitigate respondent bias. Furthermore, it helped readjust the level of fluidity and cumbersomeness to improve interview quality.

4.2.4.3 THE SURVEY

A survey is a means of obtaining large amounts of data from wide scope of respondents using statistical techniques to generate data about their characteristics, actions or opinions (McNeill and Chapman; 2005; Cargan, 2007). Questionnaire survey ranks among the most widely used tools to access and collect survey response. The questionnaire survey is usually administered in the forms of face to face, telephone or postal service (Bowling, 2005).

Questionnaire surveys are regarded as very efficient in saving time and effort, because they require minimum resources (staff, time, and cost). It is also better suited for extracting confidential information (Salant and Dillman, 1994). Sampling errors are also minimised due to its low cost per survey. Questionnaire surveys may be distributed using either postal or electronic mail. In some cases, written surveys are distributed in person to a group of respondents to evaluate a recent event. The biased nature of questionnaire surveys has been argued. This is mostly attributed to self-completion and the possibility of respondents deciding to give incorrect answers instead of the factual (Fellows and Liu, 2003). However, with the combination of qualitative and quantitative approach adopted by this research, it helped mitigate the possibility of low response rate, bias and distortion attributed to the survey approach. Besides, the aforementioned shortcomings does not out rightly imply diminished quality nor validity, if the results do bear a degree of conformity with literature and previous research findings (Visser *et al*, 1996; Krosnick, 1999).

In the case of this research the purpose of the questionnaires was to investigate implications of sustainability barriers and its association with the level of social capital among geographically classified urban and rural CLTs and community development practitioners in various capacities and locations. This was done to establish how these barriers associate or impact FTBs and the CLT (SEHM). Precautions taken to ensure success in the survey process as adapted from Trochim (2008) include:

- Population distribution: This involves ensuring the targeted population can be defined, questions put into consideration include whether they are they literate, is language a barrier, are there any geographic restrictions and would they cooperate?
- Sampling: This refers to data sourcing, accessibility of respondents and adequate response rate.
- Question and content: This refers to the nature of questions i.e. complexity and length.
- Content issues: This refers to the level of knowledge among targeted population networks about the questions surrounding the study's investigation.

In order to address the above precautions and capture the opinion of CLT networks and community development groups and practitioners, the questionnaire method was adopted by the research.

4.2.5 RELIABILITY AND VALIDITY

In reference to Joppe (2000) who sees reliability as the extent to which results of data/tests are consistent over time in an accurate representation of the phenomenon under study, coupled with the ability of the study to reproduce same results under similar methodology. If all these can be fulfilled, then the research instrument is considered to be reliable. In addition, Crocker and Algina (1986) were of the view that a researcher should assume the responsibility of demonstrating the reliability of data from their chosen methods. However, Stenbacka (2001) challenged the applicability of the reliability concept in qualitative research on the premise that, since reliability is hinged on measurements, it should have no relevance in qualitative research, hence should be considered irrelevant in judging the quality of qualitative research as there will be strong indications that the study lacks credibility. These objections raise the issue of the need for checks in qualitative research. Many researchers have adopted alternative measures that are deemed to be more suitable for qualitative research instead of the supposed rigid concepts like validity or reliability. Terms seen to be more appropriate include quality, rigor and trustworthiness. Researchers like Golafshani (2003) concluded that the idea of discovering truth through measures of reliability and validity should be replaced with the idea of trustworthiness in qualitative research. Thus reliability and validity should be conceptualized as trustworthiness, rigor and quality in the qualitative paradigm. This research has however adopted a mix of qualitative and quantitative methods, hence took into consideration the concepts of trustworthiness, rigour and quality (TRQ) alongside reliability and validity during the course of data collection and analysis. Making the use of mixed sources of data and methods were maximised. Johnson (1997) suggests that if these concepts can be utilized, a more credible and defensible result can be obtained from the study. To achieve these goals, Creswell (2003) suggested the following as adopted by this research for data collection (table 4.5).

PROCESS	PURPOSE
Member checking	This involves the sending of collated transcripts to those interviewed for vetting.
Use of rich thick descriptions to convey interpretations	This helps to rule the possibilities of invented findings.
Ensuring the Reporting of negative and discrepant information.	This helps to rule out bias or suggestive reporting, in the case of acquired data not conforming to general or popular trends.
Triangulation	According to Bogdan and Biklen (2006) this helps to ensure validation of data through cross verification from two or more sources.

Table 4.5 Maximising the concept of Validity and Reliability adapted from Creswell (2003)

4.2.5.1 TRIANGULATION

In the case of this research, triangulation is adopted because of its naturalistic and qualitative approach to evaluation, hence controlling bias and establishing valid propositions instead of traditional scientific techniques which are incompatible with other alternative epistemologies (Mathison, 1988). Thus, the probable lapses obtainable from the administration of a semi-structured interview can be made more robust if informed by the literature review and further validated through a questionnaire survey. According to Denzin (1970) types of triangulation include (Table 4.6)

TYPES OF TRIANGULATION	EXPLANATION
Data Triangulation	Entails gathering data through several sampling strategies, so that slices of data at different times and social situations, as well as on a variety of people, are gathered.
Investigator triangulation	Refers to the use of more than one researcher in the field to gather and interpret data.
Theoretical triangulation	Refers to the use of more than one theoretical position in interpreting data.
Methodological triangulation	Refers to the use of more than one method for gathering data.

Table 4.6: Types of triangulation (Denzin, 1970)

Methodological triangulation was most suitable for this research. As part qualitative research, the ability to acquire valid, reliable, multiple and diverse realities would require convergent methods to acquire valid data. Engaging multiple methods such as observation, interviews, recordings and surveys as required by data triangulation will also lead to a more valid, reliable and diverse construction of realities which on the long run reduce errors and biases significantly (Johnson 1997). For this research, methodical triangulation was most suitable and the sources of data were literature review, semi-structured interviews and the questionnaire survey.

4.3 THE CONCEPTUAL FRAMEWORK

Literature on conceptual framework designs have come in different facets and focus, works by Miles and Huberman (1984, p. 33) viewed it as a continuous schematic map guiding research targets. Other researchers have viewed conceptual frameworks in paradigmatic terms, like Barker (1992) who highlighted similarities between paradigms and conceptual frameworks in that, they both ‘establish or defines boundaries’ hence they manifest same dimensional characteristics. Implementing conceptual frameworks is tied basically to observe existing trends in a data set, of which the outcome is an elucidated group of concepts to inform further research and implications for additional studies (Rudestam and Newton, 1992). Furthermore, Rudestam and Newton also highlighted a more empirical foundation for conceptual frameworks based on a causal network consisting of independent and dependent variables. This fits into this study’s use of Structural Equation Modelling (SEM), with a causal network of observed and latent variables based on theoretical constructs (Rudestam and Newton, 1992). The philosophical basis that connects the development of a conceptual framework was best explained by Guba and Lincoln (1994) in which they explained how the conceptual framework relates to the methodological assumption i.e. the process of building the conceptual framework and then assessing how it relates to the ontological and epistemological assumptions in the form of information the framework projects in real world applications. This fuses into the research in a cyclical process that flows with the overall auditable research process as shown in (Fig 4.3).

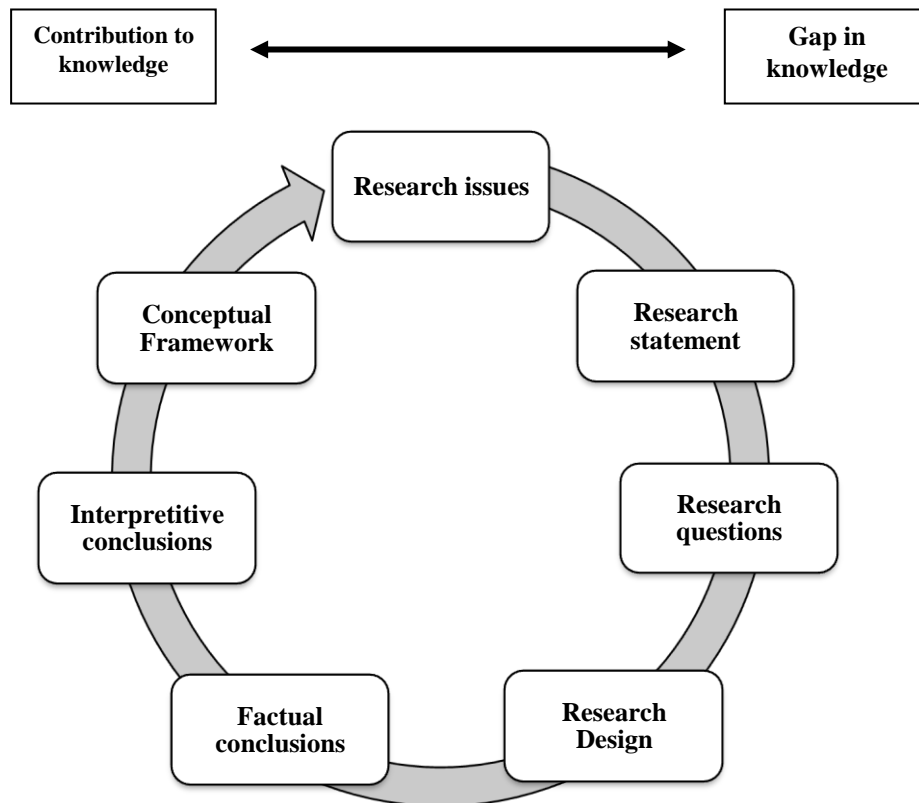


Fig 4.3: The conceptual framework and research process: Adapted from (Leshem and Trafford, 2007).

4.3.1 CONCEPTUAL FRAMEWORK DEVELOPMENT PROCESS: ANALYTICAL BUILD-UP

For this study the conceptual framework development feeds and benefits immensely from the triangulation and mixed method approach. This is required by a multi-faceted research in which qualitative and quantitative analytical methods were robustly employed to analyse data sourced from literature, semi-structured interviews and survey questionnaires. Usually conceptual analysis for framework inputs is normally done through quantifying and tallying (Finney & Corbett, 2007). (Patton, 2002 in Jabareen, 2009) proposed a methodology that utilises the interplay among induction, derivation of concepts from data, and deduction aimed at hypothesizing the relationship between concepts to build the conceptual framework. This is more in line with these research's conceptual build up, however hypothesis were confirmed empirically using SEM and

then deductively connected to the rest of the framework constructs. This study's framework development process was built in phases as adapted from guidelines proposed by Jabarren (2009).

- *Phase 1: Mapping the selected data sources*

This phase involves the identification and mapping of relevant literature, which facilitates mapping of findings and data collection (Morse and Mitcham, 2002).

- *Phase 2: Extensive reading and categorizing of the selected data*

This stage is informed by phase 1 to solidify understanding of researched disciplines.

- *Phase 3: Identifying and naming concepts*

This is the identification of emerging concepts from literature review process.

- *Phase 4: Deconstructing and categorizing the concepts*

The aim of this phase is to organize and categorize the concepts according to their features and ontological, epistemological, and methodological role as explained in (Section).

- *Phase 5: Integrating the concepts*

The aim in this phase is to integrate and group together concepts that have similarities to one new concept.

- *Phase 6: Synthesis, resynthesis, and making it all make sense*

The aim in this phase is to synthesize concepts into a theoretical framework, according to Miles and Huberman (1994) who highlighted the importance of this stage as it lays the foundation for data collection and analysis.

- *Phase 7: Integrating data analytical results*

This phase includes comparing analysis to theoretical framework to identify and reclassify results either as drivers or barriers in respect to research aims. Therefore hypothesized relationships between concepts are either confirmed or rejected.

- *Phase 8: Validating the conceptual framework*

The aim in this phase is to validate the conceptual framework. The question is whether the proposed framework and its concepts make sense not only to the researcher but also to other scholars and practitioners.

- *Phase 9: Rethinking the conceptual framework*

A theory or a theoretical framework representing a multidisciplinary phenomenon will always be dynamic and may be revised according to new insights, comments, literature, and so on.

4.4 CHAPTER SUMMARY

This section has been able to define research type and approach necessary to carry out the study's set out objectives. The research philosophy was developed in which respective positions were analysed and chosen to suit the nature of the research phenomenon. This chapter was able to propose that the study is of the ontological assumption that there are underlying reasons why CLTs have failed to attain their full potential and FTBs have low representation in homeownership. These situations thus imply the existence of inherent barriers. The epistemological assumption of the study resolves how we know more about the aforementioned social reality should be gathered by examining the role and views of individuals and stakeholder community involved with CLT concept. This chapter also addressed the study's approach which is to use a combination of these methods to help control the challenges inherent in the nature of investigation, which also helped in obtaining robust results and conclusions (see Table 4.5).

RESEARCH PHILOSOPHY AND CLAIMS TO KNOWLEDGE	APPLICATION AND RELEVANCE TO STUDY
ONTOLOGY	What is out there to know 'is why and how (realism) CLT and FTBs have failed to attain considerable?
ONTOLOGICAL CLAIM	The social reality is that CLTs are consistently failing to attain their full potential and FTBs are lowly represented in homeownership which answers the question of what is out there to know.
ONTOLOGICAL ASSUMPTION	The Ontological assumption is that; there is an underlying reason why the CLT SEHM has failed to attain its full potential and the FTBs are lowly represented in homeownership. The following questions are supposed to tackle this assumption as deduced from (Blaikie 2000): <ul style="list-style-type: none"> • In what ways have they failed? • What units constitute and contribute to this claim of failure and how do these units interact or manifest in a social research perspective?
THE EPISTEMOLOGICAL POSITION	The Epistemological position of this study is Interpretivism with an inclination towards the positivism philosophy. Both approaches focuses on unravelling interacting roles and views of social actors such as the stakeholders and community members that might be contributing to the barriers preventing CLT and FTBs from attaining performance targets and homeownership representation. Hence, it was necessary to derive meanings both subjectively and objectively into specific social phenomena through qualitative means and further empirical validation through quantitative means as informed from literature review to attain data triangulation.
AXIOLOGY	Value laden and Value free (Both quantitative and qualitative cross-validation of data employed).
METHODS	Triangulation (Literature review, interviews and questionnaire survey)

Table 4.7: Research philosophy and claims to knowledge

The methodological approach was decided to be a mixture of both quantitative and qualitative methods. The qualitative part is the semi structured interviews carried out in continuous consultation, while the quantitative part of it is the questionnaire survey. As a social research, laden with qualitative inklings, this research took into consideration the concepts of trustworthiness, rigour and quality (TRQ) as bench marks to support its reliability and validity. (Johnson, 1997) suggests that if these concepts can be

maximized, then more credible and defensible result can be obtained from the study. Processes employed are member checking, the use of thick descriptions to convey interpretations. Methodological triangulation was adopted for this research because of the need to acquire valid, reliable, multiple and diverse realities. Also, the framework build up was explored, and deemed suitable to accomplish research aim.

CHAPTER 5

QUALITATIVE DATA ANALYSIS

5.1 INTRODUCTION

This chapter focuses on qualitative data analysis as a partial fulfilment of data triangulation through semi-structure interviews as informed from the literature review findings about potential sources of barrier to CLT SEHM in affordable housing provision in the UK and also the low representation of FTBs in homeownership. In line with the main aim of the research that is to propose a framework for a viable CLT SEHM in affordable housing provision. This required capturing the intrinsic knowledge of existing knowledge across a representation of stakeholder networks as reviewed in literature. This research has adopted the semi-structured interview, which is expected to seek the story behind the participant's experiences to derive in-depth information around the topic (McNamara, 1999). Crang (2002) further explains the justification of interviews as a proven and very successful investigative tool for the study of tacit or local knowledge. The in-depth nature of the interviews is necessary to capture the respondents' perceptions in their own words, allowing the interviewer to present the meaningfulness of the opinions and experiences from the respondent's own perspective (Rubin and Rubin, 2005). Also, the semi-structured format of the interview helps the interviewer pace the interview and ensures a systematic comprehensive approach to research process (Seale *et al.*, 2004). The interview process focused on themes developed from literature, targeted at stakeholders involved in a broad based affordable housing, community ownership and management related organisations. The scope and relevance to literature has helped in deciding the choice of organisation type and the appropriate combination of stakeholders that should take part in the interview see (Fig 5.1).

The interview process was built on specific three broad problem areas as identified by literature in chapter 2 and 3. On this note this chapter sought to shed more light in the following areas 3 key areas:

- The of land use policy sources of barriers to Community Land Trust: Shared Equity Housing Model CLT (SEHM).
- Institutional affordable housing problems in England and how they impact the development of alternative housing models with emphasis on the CLT (SEHM).
- Define the potential sources of barriers to both the engagement and advancement of the CLT model and as a viable route to improving the affordable housing problems of First Time Buyers (FTB).

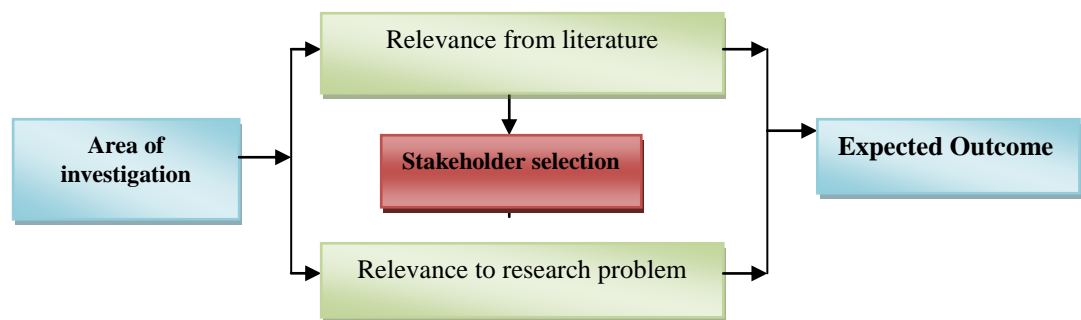


Fig 5.1 Stakeholder Selection Process

5.2 THE SAMPLE SET

In order to assess stakeholder’s perspectives on policy approach to affordable housing in the UK and the impact of prescriptive land use on CLT development, strategies incorporated into the research involved a clear understanding of the objectives in order to define the range of stakeholder/respondent participation and the extraction of valid outcomes as suggested by Vallejo and Hauselmann (2004). Due to low level of mutual housing knowledge among both housing experts and laymen alike (CCMH, 2009), the study’s enquiry process utilised key informants for its semi structured interviews. This is a technique that utilises rich research specific information sources. Due to the limited number of key informants, three representatives for each organisation were initially deemed suitable, but as new themes stopped emerging, thematic and theoretical saturation was reached at an average of two interviews for each of the organisations. The stringent selection criteria, alongside an enquiry framework that necessitated the ability to interpret stakeholder policies and its actual impact on CLT practitioners greatly accelerated thematic saturation. The participant informant’s selection criteria

included a robust practical experience database that has been garnered from actual active field presence involving day to day meetings and dealing with local CLT advocates and enthusiasts, coupled with an in depth involvement in CLT development from implementation stages to completion. In addition, operational scope cut across well over 10 local authorities, and even more for organisation representatives with national representations.

5.2.1 ORGANISATION CATEGORISATION

The organisations were classified strategically according to their mode of operation in affordable housing and community initiatives, that is the top-down and the bottom-up classification (which represents how decisions are made). This was informed by the existing international discrepancies on how CLTs are supposed to be operated in regards to either a bottom-up as against the top-down strategy, which could limit community asset ownership and involvement that the CLT structure thrives on (Bland, 2008), see (Fig 5.2) showing the top-down and bottom-up classification as literature suggests that there is a need for a buffer that will establish a comfort zone between their respective operational approaches to affordable housing in the research context. The top down organisation respondents due to the anonymous nature of interview respondents were identified with representative descriptors of: (TD1, TD2, TD3 and TD4) and (BU1, BU2 and BU3) which represents the few respondents that fulfilled key informant selection criteria earlier mentioned. The top down categorisation represents mostly agencies and institutions that usually derive their funding from the government to implement their affordable housing agenda such as (HCA and NHA), while the bottom-up categorisation are organisations whose activities centre on community ownership, voluntary and management initiatives when it comes to housing delivery and the growth of the CLT sector such as; NCLTN (National Community Land Trust Network), CFS (Community Finance Solutions) and CDW (Community Development Workers).

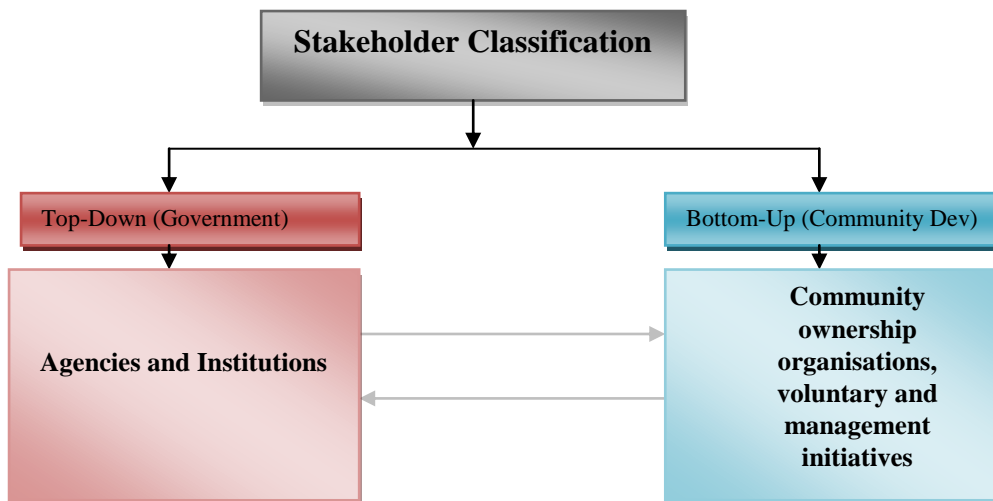


Fig 5.2: Stakeholder Classification

5.2.2 INTERVIEW PROCESS, DATA COLLECTION AND ANALYSIS

The question design for the interview process aimed at shedding more light on these areas was strategically structured with the purpose of deriving broad based information through an investigative pattern centred on the following guideline theme and sub themes as informed from the literature review. These question structures and underlying themes helped the research generate the findings subjected to empirical validation through questionnaire surveys targeted community housing development practitioners in various capacities and locations in a bid to fulfilling the third step towards data triangulation. The investigation process included phone interviews and tape recorded stakeholder responses to sample open ended questions focused on the following three major areas and themes and the applicable knowledge sought (see Table 5.1).

LITERATURE THEMES	SEMI-STRUCTURED INTERVIEW QUESTION FOCUS
<p>1. The of land use policy sources of barriers to CLT SEHM options in practice.</p>	<p>a. Policy approach to affordable housing in the UK, this includes:</p> <ul style="list-style-type: none"> -- How both categories of respondents view housing affordability? -- The approaches to housing affordability problems among respective stakeholders? <p>b. The impact of prescriptive land use on CLT development, that is:</p> <ul style="list-style-type: none"> -- How prescriptive land use policies affect housing prices in the UK? -- The effects of these restrictions on land supply for the CLTs? -- The sustainability of alternatives?
<p>2. Institutional affordable housing problems and how they impact the development of alternative housing models with emphasis on the CLT SEHM.</p>	<p>a. The ways qualifying and implementation processes impact affordable housing delivery and the enabling capacity of concerned stakeholders in regards to the CLT?</p> <p>b. The possible implications of the overdependence of the UK housing sector on traditional affordable housing providers and models?</p> <p>c. The state of collaboration opportunities and funding difficulties for aspiring or start up CLTs?</p>
<p>3. Potential sources of barriers to both the engagement and advancement of the CLT SEHM as a viable route towards improving the affordable housing problems of First Time Buyers (FTB).</p>	<p>a. Who are the FTBs, are they underrepresented in ownership?</p> <p>b. Why are the FTBs underrepresented in housing ownership?</p> <p>c. In what ways can CLTs help alleviate FTB's housing problems?</p> <p>d. What are the sources of barriers and enabling environment necessary to facilitate this relationship?</p> <p>e. Can social capital development play a role in FTBs retention and involvement in community development initiatives?</p>

Table 5.1: Questionnaire Design and Format

5.2.3 CONTENT ANALYSIS

The respondents from both classifications were recorded, transcribed, reviewed (analysed using Nvivo 9). During data collection and analysis, thematic and theoretical saturation was reached at 7 interviews overall. The coding process involved an initial list from the problem area and literature findings represented as the parent node (a host of varying data, all in distinct sentences, quotations and references), then re-coded as child nodes from themes extracted from the initial coding process. The resulting transcripts were then reviewed and analysed to establish major themes and patterns to deductively come to a consensus on meanings (Miles and Huberman, 1994).

For example ‘the need for equilibrium in stakeholder approaches’ was a child node to the parent node (Organisation Approach and the concept of housing affordability) in hierarchy. It had 5 sources and 8 references see (Table 5.2). This meant that 5 respondents were actively referenced within the context of this theme and 8 significant references (answers or key points) were identified. These nodes were further analysed by building relationships among the nodes and seeing how each attributes affects one another. This exercise was very useful in organising the data captured in the interviews and the rich consolidation of the contextual nature of information received, which interpreted the interdependency of the explored questions and also assisted in collating individual perspectives.

In this context the ‘existing difficulties in engaging FTBs as beneficial drivers for CLTs’ had the most references. Also see (Fig 5.3). The subsequent sections provide a detailed analysis and interpretations for the 6 identified patterns/themes to define an in-depth and collective understanding of barrier sources to a viable CLT SEHM development.

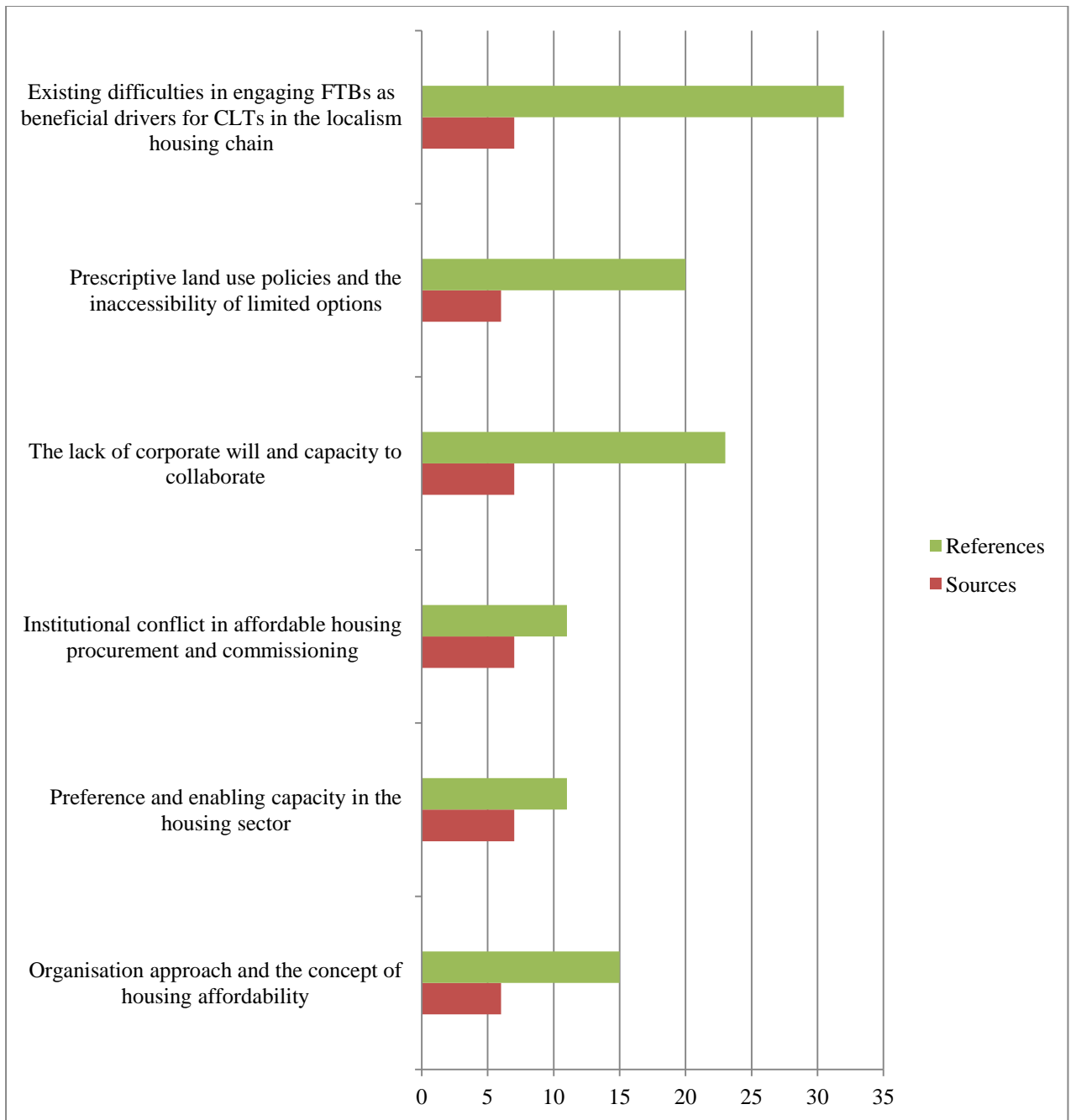


Fig 5.3: Patterns of CLT (SEHM) Development Barrier Sources

5.3 INTERVIEW FINDINGS AND ANALYSIS

This section analysed the responses to questions asked which centred on how categories of respondents view both approach to housing affordability and its problems among respective stakeholders. The Opinion of respondents varied considerably on what affordable housing is or should be.

5.3.1 ORGANISATION APPROACH AND THE CONCEPT OF HOUSING AFFORDABILITY

Nodes		Sources	References
Organisation approach and the concept of housing affordability		6	15
1	Housing supply	4	5
2	Indicators for affordability	3	4
3	Investment in alternative delivery options	3	3
4	Low income	2	2
5	Viability of perpetuity	5	5
6	The need for equilibrium in stakeholder approach	5	8

Table 5.2 Collation of the approach and the concept of housing affordability tree node

There was a general consensus among this category (top down respondents) which viewed affordable housing; *as either social rented options or intermediate housing* i.e. housing available to those whose housing needs cannot be met by the open market due to inadequate purchasing power. According to housing affordability guidelines, this represents those who spend an inordinate percentage of their income on housing expenditure (housing expenditure to income ratio) (Jones *et al*, 2010). A research specific view obtained from BU2's response in agreement with literature findings implied that affordable housing could connote housing for a population group with special needs. Moreover, in a situation where housing fails to cater sufficiently for these groups, housing then ceases to be affordable or rather accessible: *housing, targeted at a section of the population such as the low income earners, young people and those with peculiar rural professions such as farmers, labourers and industrial workers, because*

they are more likely to be in need, obviously due to having purchasing power that falls short of open market housing values. Corresponding views from respondents TD1 and BU3 appear to suggest that another factor connoting affordable housing is its ability to remain affordable in perpetuity which is in line with literature. These perspectives recur predominantly among most ‘bottom up’ respondents: *the (affordable housing’s) ability to sustain the affordability of housing in perpetuity is a crucial indicator for housing affordability.* The top down consensus on the classification of affordable housing as social rented options.....(that are targeted at those priced out of the market due to lack of purchasing power) are comparable to beneficiaries that fall below acceptable expenditure and income ratio (Hulchanski, 1995; Jones *et al*, 2010). However the other category of respondents (Bottom up) upheld the perpetuity stance, which again is subjective if housing expenditure to income ratio is applied due to the possibility of a future increase in beneficiaries’ income or even the overall average local income levels in the case of a CLTs. Moreover responses from TD3 appear to be contradictory on the perpetuity context, particularly on approach implying that; the relationship between affordability and perpetuity dances at the verge of economic impracticability (that is): *perpetuity as a determinant for housing affordability should be controlled so attention can be paid to addressing inherent housing supply deficit and the lack of purchasing power among disadvantaged groups rather than manipulating affordability price index (market forces) through social measures to induce perpetuity.* This view questions the whole basis of the CLT model, which opens an entirely new debate on the need to set boundaries, and also the socio-economic impact of a completely deregulated social housing system, the strategy proposed by TD3, suggesting an affordable housing system absolutely at the mercy of market forces, while awaiting social reforms is debatable.

When respondents were asked how they viewed affordable housing and the need for alternatives. From the responses, there exists a division in opinions on approach from both categories. One recurrent theme that cuts across ‘top down and bottom up’ organisations is the need for interdependence of approach to solve housing affordability problems. On the issue of the need for alternative options, BU3 respondents view the failings of the top down approach as a call for more effective affordable housing alternatives; while on the contrary, TD3 seem to favour investing on the improvement of traditional systems. It is evident from responses that there is a need to harmonize the role of top down stakeholders in policy implementation with the enabling role of the

bottom up. A TD3 respondent opined that the solution to housing affordability problems revolve around increasing housing supply, while the bottom-up believe in tackling affordability organically according to real needs that are determined by the community. The response of Bottom up respondents although slightly varied, reflected a general consensus on the negative impact of the top down approach on CLTs as BU1 (explained): *the bottom up approach to tackling affordability always seem to clash with bureaucracy from the top down...*The BU1 respondent was able to elaborate more on this, singling out the planning system as being responsible: *The top-down approach has not worked well, there should be policy resolutions targeted at giving more leeway to the bottom-up approach; this might require lesser focus on prescribed planning bureaucracy and more emphasis on the localised land use planning approach.* These views do not outrightly deride the top down approach, rather it recommends softening of its pedals as a housing implementation tool with more provision given to the bottom up. The counteracting responses also appear to show that both approaches could actually be justifiable; depending on the context or situation it is applied. Responses also point to the fact that approach is relatively determined by the housing delivery targets; from TD3 response, certain elements in affordable housing delivery require the top down approach (that is): *suppose the strategic distribution of housing output can be steady, without targets and some form of top-down pressure, housing may not be delivered where it is needed most.* In this case, the top down approach is justified due to the complexity involved in the delivery of large housing targets that would require a centralised operational mechanism. Also, in defence of existing systems, but also stressing the need for a combination of both approaches TD2 (stated): *The affordable housing problem might still appear daunting, but the homes built through existing systems [...] these have been of high quality and politically popular, it might not really be about either top down or bottom up, but by the amalgamation of the benefits of both approaches.* Also, BU1 and BU3 had significant inputs on this issue: *Housing should also be viewed as a local issue, where adequate housing supply should be controlled by policies that take the community and local populations as priorities in order to balance top down and bottom to meet up with both local and national goals.....*

An all-encompassing networked approach to affordable housing problems is the right... approach particularly for more novel forms of housing provision, a practical way to access multiple public and private sector funding as long as the projects are tailored to local needs.

These views in most parts favour a strategic combination of both approaches in policy implementation. Other crucial recurring recommendations among top down respondents include an ideological shift in approach from keeping houses permanently affordable to rather tackling the inherent housing supply deficit and the lack of purchasing power among the disadvantaged.

5.3.2 PRESCRIPTIVE LAND USE POLICIES AND THE INACCESSIBILITY OF LIMITED OPTIONS

This section analysed the responses to questions on the effects of restrictions on land supply for the CLTs, and also the sustainability of alternative land sources.

Nodes		Sources	References
Prescriptive land use policies and the inaccessibility of limited options		6	20
1	Alternative sources of land supply issues	1	2
2	Asset transfer issues	7	5
3	Community housing needs	2	3
4	Knowledge and Consultation between stakeholders	3	3
5	Opposition to development and NIMBYs	4	4

Table 5.3: collation of Prescriptive land use policies and the inaccessibility of limited options tree node

Literature highlighted a relationship between restrictive land use policies and higher housing prices. Respondents from TD1 do not see this as always true, although they do agree on limitations encountered by thousands of local householders, companies and community developers in processing planning applications. In addition, respondents from BU2 do agree with literature, suggesting that: *restrictive planning policies do play a role, but factors such as the general uncertainty of the economic situation, shortage of funding, do have greater impacts*. BU1 does agree on the limitations of the Section 106 citing its inflexibility (opining that): *if the planning authorities undermine housing supply with their own policies that far outweighs whatever benefits it might have, the restrictive prescriptive role happens to be winning the battle with only deficits in the*

housing supply to show and deal with. On the shortage of land and its impact on CLTs, respondent TD4 suggests that: *the CLT might need to adjust to the supposed rigidity in the planning system as they are often necessary regulations for the collective benefit of the housing sector.* This position corresponds with TD1 on the justification for S106 restrictions also. On how this restrictions manifest in CLT affairs, recurring themes during the interviews of TD1 and TD2 infers that there is a strong geographical trait that plays out in CLT land supply problems in an urban and rural context. TD1 respondent also suggests that; *the urban asset transfer route and rural exception sites remain available options for community ownership housing models, but it does have its own problems, such as finance.* Other options regarding Brownfield land in urban areas have also been refuted by TD1 as the respondent concluded that: *the brownfield land option for CLT rarely ever works as it is either the case that...it is sometimes too expensive or the process of securing it is usually out of the grasp of start-up CLTs, except the CLT probably owns land capable of securing planning permission which is rarely ever the case.*

On the case of rural exceptional sites, BU2 do agree that they are definitely likely sources CLTs could benefit from on a large scale but this pathway is usually arduous for most suggesting that: *developers seeking to secure such lands usually face obstacles from both the planning aspects and the targeted community in the form of NIMBY (Not In My Back Yard) agitations.* Other possible sources of land supply that was confirmed include; acquiring land at agricultural value, taking advantage of Section 106 obligation to provide affordable units in conjunction with a developer, issuance of community shares to acquire land. General responses from community organisations (BU1) did not give much credence to these options given the reason that: *the CLTs might stand no chance competing with both government and lender backed orthodox affordable housing options such as the HA in this aspects.* Opinions on the sustainability of both urban and rural asset transfer route for CLTs reveal an inefficient knowledge sharing process between concerned stakeholders, because aspiring CLTs usually find it difficult accessing information surrounding land supply, BU3: *There exists a downside to transfer of land assets to CLTs that require a deeper understanding on the lack of knowledge existing in councils on issues surrounding asset transfer to communities, as it is definitely a viable route CLTs can take advantage of [...].* Moreover, problems identified in this area besides the lack of knowledge and confusion, include the absence

of planning and local authority concessions and the initial purchasing power to obtain these assets also poses a tough challenge for interested communities. BU3 further surmised that the communities obviously have a role in this, hence the need to find out best practices needed to get communities sensitized coupled with a viable platform to share bespoke information on viable strategies and information on *'what does and does not work'* in regards to asset transfer and management. BU3: *'without losing focus on the possible limitations of the CLT in regards to maximising community asset ownership benefits* (like its documented ability to increase the revenue generating potential of run down properties (Aiken *et al.*, 2008). Furthermore, BU3 recommended that [...] *also mitigation strategies should be put in place to arrest problems that might arise due to either limitations or unforeseen circumstances'*. This is a pivotal response that highlights the deep seated challenges that lie in asset transfer to CLTs for affordable housing development. Despite this route being an avenue that can help limit CLTs dependence on grant funding through the generation/reinvestment of profits into the creation and management of more affordable housing. It can also be a pitfall for the community if the issue of the aforementioned limitations highlighted by BU3 earlier are not put into consideration should management problems arise. On this note knowledge accessibility and research should also include the provision for intervention strategies concerning the leasehold and freehold arrangement between the local councils and the CLTs concerned during unforeseen sustainability crisis. Mitigation strategies suggested include, pre drawn asset transfer reversal, innovative loan default and debt management strategies according to TD2.

In summary, indeed restrictive land use does affect CLT (SEHM) development. Other barrier sources include limited alternative land supply sources, asset transfer issues, community housing needs and NIMBYs, lack of knowledge and consultation between stakeholders and opposition to development are identified as the most recurrent themes among both categories. Relevant recommendations were also identified accordingly.

5.3.3 PREFERENCE AND THE ENABLING CAPACITY IN THE HOUSING SECTOR

This section analysed the responses to questions asked which centred on the ways qualifying and implementation processes impact affordable housing delivery and the enabling capacity of concerned stakeholders in regards to the CLT.

Nodes		Sources	References
Preference and enabling capacity in the housing sector		7	11
1	Qualification process difficulties	3	4
2	Affordable housing project bidding complications	2	4
3	Limitations in mainstream recognition for CLT strengths	4	4

Table 5.4: Collation of ‘the preference and enabling capacity in the housing sector’ tree node

In response to the link between affordable housing problems and CLT, TD1 revealed that, not all the problems associated with affordable housing can be ruled as having a negative impact or linked with the CLT directly, but this does not rule out the possibility that they might be connected on the long run should the CLT attain a more mainstream appeal. Furthermore, on the question of the impact of implementation policies on the CLT, the HCA pre-qualification process (PQP) was in constant reoccurrence from BU2 and BU3 officials respectively, but on the contrary, TD1 did not view this wholly as a problem, saying; *the function of the PQP is to create necessary checks and balances to regulate affordable housing quality and control land assets, it was not intended to harm anyone obviously*. That is the intention of the processes are justifiable, the BU3 respondent however disagreed, with a view that the PQP adopted by the HCA might be a bit rigorous or rather inappropriate for new, small organisations such as CLTs, a process that is presumably more beneficial to local authorities in retaining control of community development projects than it is to affordable housing provision, which should be its primary aim. Moreover, BU2 opined that most of the projects that do sail through PQP standards are likely well-funded and centrally supported, which muscles out competing alternatives: *there are practical cases of local planning authorities seemingly working against community housing*

development initiatives such as the CLT, due to the need to retain control of planning decisions.

On the question of enabling capacity of stakeholders, in as much as respondents from Top Down organisations try to present themselves in the light of enablers when it comes to CLTs, responses from BU2 suggests that problems are often encountered by CLTs trying to wade through top down tedious bureaucratic hurdles, therefore the research focused role of stakeholders are not pre-determined in regards to the CLT, as the role of traditionally top down institution as an enabler to a CLT can only be valid if it is involved in the funding of an on-going one, such as the case of the Holy Island of Lindisfarne community development trust a civil parish in north east England, which is the first CLT to win a bid for HCA funding, as highlighted by BU3: *as it is interdependent on the particular respective posture or interests they might assume or have in regards to the concerned project at hand, as long as it does not go against their own agenda at that point in time [...] Lindesfarne happen to have fitted into this role, despite the really difficult hurdles it had to cross in fulfilling a seemingly never ending grant conditions, the HCA might have however assisted in scaling; I don't think this processes are entirely enabling, particularly for upcoming grass root CLTs.* This response suggests that in the case of Lindesfarne the HCA might have served as an enabler, but the same cannot be entirely said for other start up CLTs who might have been weighed down or discouraged by the rigorous qualifying procedures. This posture was buttressed by responses from BU2 which concluded that there exists a turbulent engagement process between CLTs and the bureaucratic grip of the HCA, stating that; *aspiring CLTs will face a tough task in materialising due to the counteracting nature of their relationships with the HCA.* Also, it is worth adding that every concerned stakeholder is a potential enabler, and the need to tap into these potentials to increase CLT performance is undoubtedly crucial.

Recurrent responses that touch on the issue of procurement and bidding complications revolved around the fact that certain providers such as the HAs have an overwhelming influence in project allocation, TD1 on the contrary feels this is justifiable because of the HA's well-grounded knowledge base aided by professionals well equipped to manage their portfolios and influence government policies. Findings from BU1 on recommendations on this issue include the need for CLTs to transcend beyond

restrictions to roles that the effects of competition has imposed on them, this can be made possible by the redefinition of land use to give room for less prominent, but justifiable best suited models for affordable housing delivery, based on attributes rather than political dominance, this can be effectively utilised as a leverage by the CLT to favourably compete for affordable housing supply in both urban and rural context, BU1 further stated that the: *re-use of dormant properties, maybe earmarked for demolition to fulfil regeneration goals, should carve a dominant niche for [CLTs] in affordable housing delivery, to help ward off unfair competition from traditional providers less suited for this roles.*

Significant responses on recommendations regarding the limitations of mainstream recognition of CLTs suggested that, despite the proven capabilities of the CLT model, the current arrangements seems to limit its roles to the rural sphere; which is underwhelming compared to its potentials on a broader scale. In this regard BU3 suggests that; *[CLT] attributes should give it a competitive advantage over dominant providers in affordable housing supply, particularly with properties in areas subjected to foreclosures, regeneration initiatives or tenure systems that require flexible and low mortgage plan, usually below market rate.*

This section found out that the PQP process despite its rational intentions, ultimately muscle out competing alternative affordable housing models. Moreover, the role of Top down organisations as enablers is debateable due to tedious bureaucratic hurdles encountered by the CLTs. Also, there appears to be a limitation in the justifiable use of best suited housing provision models for affordable housing supply in both urban and rural context, regardless of attribute and suitability.

5.3.4 INSTITUTIONAL CONFLICT IN AFFORDABLE HOUSING PROJECT PROCUREMENT AND COMMISSIONING

This section analysed the responses to questions on the possible implications of the overdependence of the UK housing sector on traditional affordable housing providers and models.

Nodes		Sources	References
Institutional conflict in affordable housing project procurement and commissioning		7	11
1	Investor issues	2	2
2	CLT inadequacies	2	2
3	Clash of roles among providers	2	3

Table 5.4: Collation of ‘Institutional conflict in affordable housing project procurement and commissioning’ tree node

In response to issue of overdependence, both categories of stakeholders affirmed the existence of this problem, with the two categories of respondents bearing a clear distinction in perspective. TD1 for example feels this situation is due to CLT limitations, opining that: *this is more of a CLT limitation and investor problem than a case of preferential policy implementation [...] the reason why the model is restricted mainly to rural communities with huge variations in property prices and average local incomes.* For the majority of bottom up respondents, particularly those whose affairs centre on community development, they view this as a situation of unfair advantage that is rampant in the United Kingdom’s housing sector, particularly against community/cooperative base affordable housing provision options, with BU1 suggesting that; *there needs to be an encouragement of the smoothing of housing developments, asset management and transfer pathways for properties better suited for CLT peculiarities.*

When respondents were asked why this overdependence thrives in the affordable housing sector, there were recurring views among top down respondents in line questioning the extent of need for CLTs, like TD4’s who was of the opinion that; *the status of HA’s could be viewed as being a social business and the CLT is a movement*

that is attempting to fill up a role that the HAs and more orthodox social systems already occupy. This view appears not to have put into consideration that there is always room for alternatives due to the underperformance of the favoured HAs, recurrent responses such as that of BU2 suggesting: *[this situation]...restricts the roles/niche of the CLT model to a supplementary one, rather than a fairly competitive one based on model merits engaging enough to give room for innovation in affordable housing deliver.* This posture supports Deakin (1994), Miles and Huberman (1994) and Smyth (1997), that competition is best maximised on a level playing field among competing providers. Therefore it is obligatory for the project implementation processes to take into consideration peculiarities of target localities for project execution, because what the CLT lacks in revenue can be made up with its strong research ascertainment and localism ideals.

In summary Top down views centre around the structural and implementation limitation of the CLT (SEHM) as being responsible for the supposed advantage in the housing sector, also the issue of level playing ground in housing sector that appear biased to certain housing provision models can be attributed to the inability of the CLT (SEHM) making a headway in a competitive business environment by attempting to fill up a role that the HAs and more orthodox social systems already occupy. In contrary, a general consensus of Bottom up respondents feel that the polity ignores the reality of the underperformance of the HAs; regardless restricting the roles/niche of the CLT model to a supplementary one, rather than a fairly competitive one based on model merits that is engaging enough to give room for innovation in affordable housing delivery.

5.3.5 THE LACK OF CORPORATE WILL AND CAPACITY TO COLLABORATE

This section analysed responses to the questions on the state of collaboration opportunities with aspiring or start up CLTs and funding difficulties.

Nodes		Sources	References
The lack of corporate will and capacity to collaborate		7	23
1	Dominance of prescriptive policies	2	2
2	Weak collaborative platforms	4	4
3	Funding problems and the price of conformity	6	14

Table 5.5: Collation of ‘the lack of corporate will and capacity to collaborate’ tree node

Recurrent responses from the bottom up categories, propose that the HAs and LAs play a prescriptive dominant role that might not be efficient enough for housing provision to the communities, saying: *HAs and LA to an extent, as the implementation arm of government institutions whose operations are more or less imposed on the community rather than the other way around, in this situation alternatives with less clout such as the CLT suffer.* To remedy this situation recurring themes from both categories favours the continual encouragement of collaboration among stakeholders, with TD2 citing cases in which this as worked; *the collaboration between CLTs and HAs is already a major policy introduction, which is fundamental to the grant acquisition process for CLT implementation in respective localities.* BU1 also suggests further collaboration with Community Development Trusts (CDT) involved in affordable housing provision; *the strengths of organisations such as the CDTs in utilising asset/community based developments to implement a wide range of local initiatives, are strategic areas the CLTs can exploit to attain more relevance in the scheme of things [housing provision]...Presumably, this would require an arrangement to improve the identification of strategic areas for the implementation of collaborative opportunities.* These existing collaborative platforms might help the CLT fulfil certain limited functions, such as providing small scale rural housing, but cannot serve as an enabler to maximising the potential of the model employment in large scale affordable housing provision in both the urban and rural contexts. Despite the fact that there are clear cases of collaborations with the HAs and Local Authorities, they are still very limited, due to

unavailability of independent collaboration platforms, as existing ones as suggested by TD2, are subjective and fully under the regulation of the Housing Associations as a restricted means of actualising their own goals.

Recurrent responses on the issue of funding, clearly points out again that the structural weakness existing in the CLT model is not conforming with industry lending standards, as TD3 points out: *there is a limited possibility of the CLT to be taken seriously as an affordable housing option [among lenders], its capacity might only be limited to just areas that the local authorities and affordable housing stakeholders are yet to occupy.* Further revelations by TD1 and BU3 that commercial banks hardly saw a need to prioritise the funding of community based affordable housing provision in most of their agenda, with TD1 stating that; *there exists a funding source of barrier to CLTs that might not be institutional, it is more like an existing structural deficiency such as its staircasing restrictions and most importantly the disadvantage of the very unique attribute which deprives beneficiaries land ownership, this and more limits its acceptability among the mainstream funders, also making it less attractive to potential buyers that might be interested in the model.* This supposed structural deficiency is further elaborated upon a TD4 respondent suggesting that; *there is a need for CLTs to increase their flexibility on its 'staircasing restriction' as a key requirement to increase its acceptability among mainstream lenders.* BU3 however expressed certain reservations by highlighting that CLTs face the possibility of having to sacrifice its uniqueness in lieu of being taken more seriously by mainstream lenders, saying; *at the moment it appears that in order to benefit from any fund whatsoever from the HCA 'full staircasing rights' still apply to potential beneficiaries of the affordable housing supplied by most of its schemes.* This situation goes completely against what makes the CLT peculiar, as literature findings show that if housing beneficiaries are allowed to 'staircase' this would drastically result in the loss of affordability to the open market. TD2 elaborates on this situation that; *getting funding is a major barrier definitely, in the CLT situation; the sales of flats are completely fixed without negotiations at about 70% of the open market property rate. All things being equal the organisation is able to retain 30% of the flats fixed at perpetuity then retaining the mandate to control the resale price. This does not however encourage mainstream lenders, as it still restricts 'staircasing'.* This opinion appears to rule out mainstream lenders as reliable sources of finance for providers adopting the CLT model. In addition TD1 respondent ruled out

the reliance of land gifts and charity grants as sustainable sources for CLT funding, stating that: *these sources of funding are not sustainable on a large scale*. However, recurrent responses raise the need for the recognition of ethical banks as key financial stakeholders for CLTs suggesting that they can accommodate the limitations of the CLT model; *plusdane, traidos and charity bank have a greater role to play in all these as their mode of operation does cater for the supposed limited versatility in CLT operations*. On this premise there is a need to explore operational practices in ethical banks for innovation opportunities that can be adopted by mainstream lenders in the aspect of CLT funding.

This section identified that the creation of an all-encompassing collaboration platform between providers should be encouraged as a means of mitigating the effects of the domination of HAs in housing delivery, however this is not enough to serve as an enabler to maximising the potential of the model's employment in large scale affordable housing provision in both the urban and rural contexts, except more providers adopt the CLT model as a vehicle for affordable housing provision. On the issue of funding, findings indicate that the CLT might have to forgo its unique attributes like keeping houses affordable in perpetuity, in order to conform to industry standards, if mainstream lenders fail to explore operational practices in ethical banks for adaptable innovation opportunities to cater for affordable housing providers utilising the CLT model.

5.3.6 EXISTING DIFFICULTIES IN ENGAGING FTBS AS BENEFICIAL DRIVERS FOR CLTS THROUGH THE LOCALISM PLATFORM

Analysis done here include; what issues define FTBs and their underrepresentation in homeownership, moreover in what ways can CLTs help alleviate FTB’s housing problems, and what are the sources of barriers to an enabling environment necessary to facilitate this relationship. The Opinion of respondents across interviewed stakeholders varied considerably and this divide exists across stakeholder categories.

Nodes		Sources	References
Existing difficulties in engaging FTBs as beneficial drivers for CLTs through the localism platform		7	32
1	Conflicting ideals among stakeholders on FTB	4	7
2	Low retention of FTBs in their local communities	3	5
3	Personal and financial inadequacies	4	5
4	Low community capacity building	4	8
5	Lack of FTB involvement and the need for social capital development	4	10

Table 5.6: The ‘Existing difficulties in engaging FTBs as beneficial drivers for CLTs through the localism platform’ tree Node.

Inefficiency of Housing associations Low Cost Housing Ownership Schemes (LCHOS) such as the Home Buy Schemes (HBS) and its impact on the shortage of housing for the FTB/PFTBs has been widely addressed in literature, with findings indicating that the Housing Association schemes have not been able to efficiently cater for FTB’s housing aspirations and requirements, despite their potential as crucial facilitators in the housing chain (Community Local Government 2008) (see section 2.4). Literature also identifies FTBs as an adaptable group for the CLT model, which has been proven to be able to outperform LCHO models such as the FirstBuy in house price per earnings ratio for FTBs (CFS 2009), (Tatch 2006) also (see section 2.4.2). Literature highlights that the issue of unclear pathways into homeownership such as households moving into homeownership or people returning to homeownership after renting for awhile creates a hazy understanding of whom actual FTBs/FTPBs are (NHPAU 2009). Responses from the TD3 interviewee attempted to clarify the distinction between FTBs and the PFTBs,

the latter not being an operational term, he does agree on the validity and the peculiarity of this population group with a need for a more precise demographical representation in comparison to the broader and more encompassing FTBs, suggesting that, *'there is still a persistent ambiguity on how to define the demographical characteristics of who FTBs are, particularly when it comes to implementing policies to tackle inherent barriers'* This response elaborates on the need to define eligibility as identified by literature. Other responses from community organisations agree with literature on the demographical classification of 18-25yr olds as a sub-section of the population most likely to represent PFTBs (NHPAU 2009: 36), BU2 stipulates that; *FTBs are important housing need groups that are clearly underrepresented on the housing ladder, the age group 18-25yrs classification could represent a microcosm for conducting studies on the more wider yet undefined FTB sample, but might not be accurate for more practical purposes such as policy implementation.*

On the poor FTB performance in mortgage eligibility as identified by literature, responses from TD3 provides an insight that mostly attempts to attach the cause to solely funding problems associated with PFTB shortcomings, however an alternative view as elaborated by TD1 and BU3 blames the policies and qualification procedures of lenders for their predicament; with the BU3 citing; *the failure of new FTB schemes to accommodate the core section of the most in need FTBs (18-25yrs), which causes a 'ricochet effect' on non-benefiting FTBs who are compelled to jostle with inflated housing prices on the open market.*

Some responses from the TD3 and BU2 on FTB housing ownership problems provided an alternative but rather daunting view with the BU2 suggesting that; *alleviation of FTB housing problems is hinged on the availability of funding to would be lenders and that 'the difficulty of PFTBs obtaining mortgages could remain persistent'*. In earnest, if the roles of lenders are ruled out, BU2's view paints a situation that leaves open the question of what the FTBs can do for themselves, however literature points out those potential FTBs seldom see saving for affordable housing deposits as a necessity (CML 2006). Further evidence also show that potential FTBs (under 25s) are more interested in lifestyle goods, such as clothes and gadgets than consider saving for a housing deposit (GMAC-RFC, 2005; Andrew, 2006a). In this light, investigating literature findings on the possibility of increasing CLT representation in housing ownership

supply through focusing on and engaging PFTBs (CLG 2011) likewise tackling PFTB community retention housing and funding problems (CRC 2006) provided unique responses from the TD1, TD2 and BU2, on this issue most responses strongly agreed with literature on the need to engage the ‘young ones’ in the affairs of the parish and town councils, an active engagement amongst these groups was agreed upon as a strong driver that can help increase CLT representation in community development projects that does put PFTB ownership aspirations into consideration, furthermore the TD1 respondent stressed that; *there is the need for a strong level of awareness coupled with a strong support from both the local authorities and the PFTBs for this route to be feasible at all...* In agreement BU1 further elaborates; *Of course if the communities are vibrant and housing is affordable the FTBs will be encouraged to remain for the collective good of everybody, you don't do this through skyrocketing prices in a hostile isolated community, this can only work in a situation where people are adequately engaged and there is a sense of belonging that thrives all through, and these can be achieved through the CLT as evidence from successful CLT initiatives suggests....* Disagreeing on the ease of fulfilling these requirements portrayed by BU1, the TD1 respondent however gave more insight from field experience that it may not be quite as easy as it appears due to complications in the state of cohesiveness in communities; *there is a gross misconception about UK communities, they are not as cohesive as they seem to look, there exists huge divides when it comes to community activities, thus getting the potential FTBs involved in these measures does not guarantee affordable housing provision, taking into consideration the huge capital needed to initiate affordable housing schemes or even the cost and difficulty that might be involved in taking advantage of mortgage arrangements.*

Responses on literature findings concerning the movement of the FTBs out of their communities which is reportedly turning some towns and villages into dormitories and retirement spaces according to literature (CRC 2006); BU2 agrees with this development but also called into question the attitude of the younger segment of FTB population, citing the predisposition of FTBs towards community involvement, as the respondent deemed it crucial for these groups to be able to take advantage of the localism ladder towards housing ownership in their respective communities, this reaffirms literature finding. BU3 response approached this issue differently by viewing outward migration as sometimes a positive necessity and not always a predicament,

citing situations surrounding natural course of progression in the life of an average FTB; *most PFTBs often move away from their family and friends to seek education, career, raise their own families etc at one point or the other and still maintain contact either through social media or phones.*

Literature highlighted the supposed lack of interest in community initiatives among PFTBs. BU3 corroborated this finding, suggesting that [the]; *'I can't be bothered' attitude among the young ones negates the whole idea of engagement as it is detrimental to the role of community capacity building as an avenue to combat community ownership and management barriers, this notion is further accentuated in a broader perspective by TD1's notion that; there is a need to retain groups such as the PFTBs in the community in order to help smoothen their paths to home ownership as a gesture towards lessening the affordable housing ownership problems, but the interest and an enabling environment should be in place.*

But how do you get the PFTBs involved and effectively engaged in such issues? Responses from TD1 focuses on possible sources of barriers to engagement citing from experience on the negative roles of 'joiners' (a local term for a minority yet vocal residents in a community) that could hamper the PFTB/CLT movement as a usually less vocal segment of the communities; *'joiners' are usually quite active in community but they've been responsible for many a stalled affordable housing schemes undoubtedly needed by the community for apparently unjustifiable reasons. Moreover there will always be sceptics that might lead many to see the CLT as an avenue that can be hijacked by local community groups with questionable political affiliations and ideals.* Going by these views it is only imperative for communities to be able to discern between positive and negative participation. The BU3 respondent proposed areas of investigation that might afford solutions to these issues citing the employment of Community Led Plan (CLP) as an avenue that can be used to push forward FTB housing ideals appropriately through the localism ladder citing; *another area that does require a look into, is the need for CLTs to employ the CLP structure to push forward FTB housing engagement in an educative role to douse these fears; also the CLP needs to be used appropriately as an awareness tool in resolving opposition barriers to FTB housing needs.....moreover, should the FTBs intend to employ the localism bill to support the CLT, there are chances of NIMBY's taking advantage of the communities*

'Right to Block' as to prevent development as experience shows. A response from BU2 that; balance can only be achieved if the community involvement process is purely democratic and the population in need, take for example the FTBs (assuming them to be a special interest group) will have to be vocal and also actively involved, but are they? This response, besides elaborating some strong literature applicable points like the possible low level of involvement among FTBs, the democratic discourse might just be contradicting the very basis of involvement, as those in actual need might be minorities. BU3 highlighted the need to define democratic processes; *FTB involvement are not only dependent on a well-structured community involvement plan, also there is the need to adopt democratic processes that lack isolated bias and sentiments to cushion the effects of questionable oppositions, more of the case of involvement encompassing participation.* In this case, not only is there a necessity for local authorities and CLTs to facilitate a more proactive process of implementing their affordable housing plans in regards to disadvantage groups, of course with community support, but also there is a need for a laid out pragmatic criteria for discerning between negative and positive community involvement, to tackle situations such as the truncation of an otherwise justifiable housing programme by questionable political groups, without jeopardising the democratic process and principles the CLT itself should be built on. Due to asset ownership aims, trust needs to be built through actual hands on involvement in management and decision making from a resource management perspective. This can help prevent a situation that the shared equity model does not end up enabling what it initially intends to combat. Other areas cited as potential problem areas by BU2 is the issue of overselling, with a view that; *the process of getting FTBs involved in a community led plan can be hampered in the form of overselling. After instigating the community on so many lofty promises on CLT possibilities, should difficulties arise and things begin to fall apart due to the need to 'conform' to conflicting top down policies, then enthusiasm wanes....*In line with the seemingly low FTB involvement in community affairs, the CLT ownership route should be afforded adequate level of recognition by local authorities and the government, so as to assure potential FTB practitioners hoping to engage the CLT housing option of government support all the way.

On the issue of social capital, there was clearly a general consensus among interview respondents that suggests and does agree with literature on the interdependence between

social capital development, community involvement and retention in respective communities among PFTBs (CCWA 2011) with BU2 corroborating as follows; *social capital development in communities through efficient community capacity building provides the right environment for FTB engagement, which can at least provide an operational platform for government initiatives such as the community right to build and CIS in planning.* In connection with BU3's response on the disparities between viewing the rate of retention as sometimes being a positive necessity rather than a predicament, also likened some traditional determinants for social capital development to natural course of progression in people's lives. Like, *other factors such as work connections and value of life are seen; as shortcomings of everyday life, a state of mind that most young people need to contend with at one point or the other.....* However, certain determinants such as workplace performance cannot be viewed as always applicable due to the monetary returns involved, hence does not impact the level of involvement in the community, as this is usually a voluntary response, BU2: *work place performance might not have a significant impact on engagement in the community since there is the involvement of a monetary incentive which is against community capacity building tenets.* This does not however rule out low level of social capital development as a barrier to FTB involvement entirely, as most respondents overwhelmingly view most determinants as very much applicable.

Other possible sources of barriers to FTB engagement according to BU2; *Many a communities often experience delayed application for project executions disrupted by last minute parish polls that is not all involving or the existence of restrictions that are not well communicated to the local residents...* The role of parish polls as democratic tools, again could hamper community housing goals if the community and disadvantaged groups are not adequately carried along.

This section found out that amidst limited routes to homeownership, the FTBs are faced with multifaceted problems mostly caused by institutional failings raging from LCHOS and Mortgage lenders; one viable platform towards ownership is the localism ladder through the employment of the CLT SEHM, however this route is plagued with sustainability barrier sources that were further unravelled by the reconciliation of sustainability literature with identified barriers from the these interview findings.

5.4 PATTERNS OF CLT SEHM BARRIER SOURCES CONCEPTUAL MODEL

The qualitative analysis generated crucial revelations in regards to CLT SEHM barrier sources. Six key barrier sources were identified organisation approach and the concept of housing affordability, preference and enabling capacity in the housing sector, institutional conflict in affordable housing procurement and commissioning, the lack of corporate will and capacity to collaborate, prescriptive land use policies and the inaccessibility of limited options and existing difficulties in engaging FTBs as beneficial drivers for CLTs in the localism housing chain. Five out of these synthesised patterns are mainly institutional. Cross mapping findings on sustainability literature with the barrier sources generated from the sixth identified pattern on FTB involvement, strategic common grounds were identified for empirical further investigation and validation to identify drivers and barrier sources see (Fig 6.2) for questionnaire development process. From (Fig 5.4) showing the patterns of CLT SEHM barrier sources qualitative model, classifications of responses are simplified for reclassification in the conceptual framework to generate key survey declarative statements (variables) for quantitative validation of interview data, see (Fig 5.5).

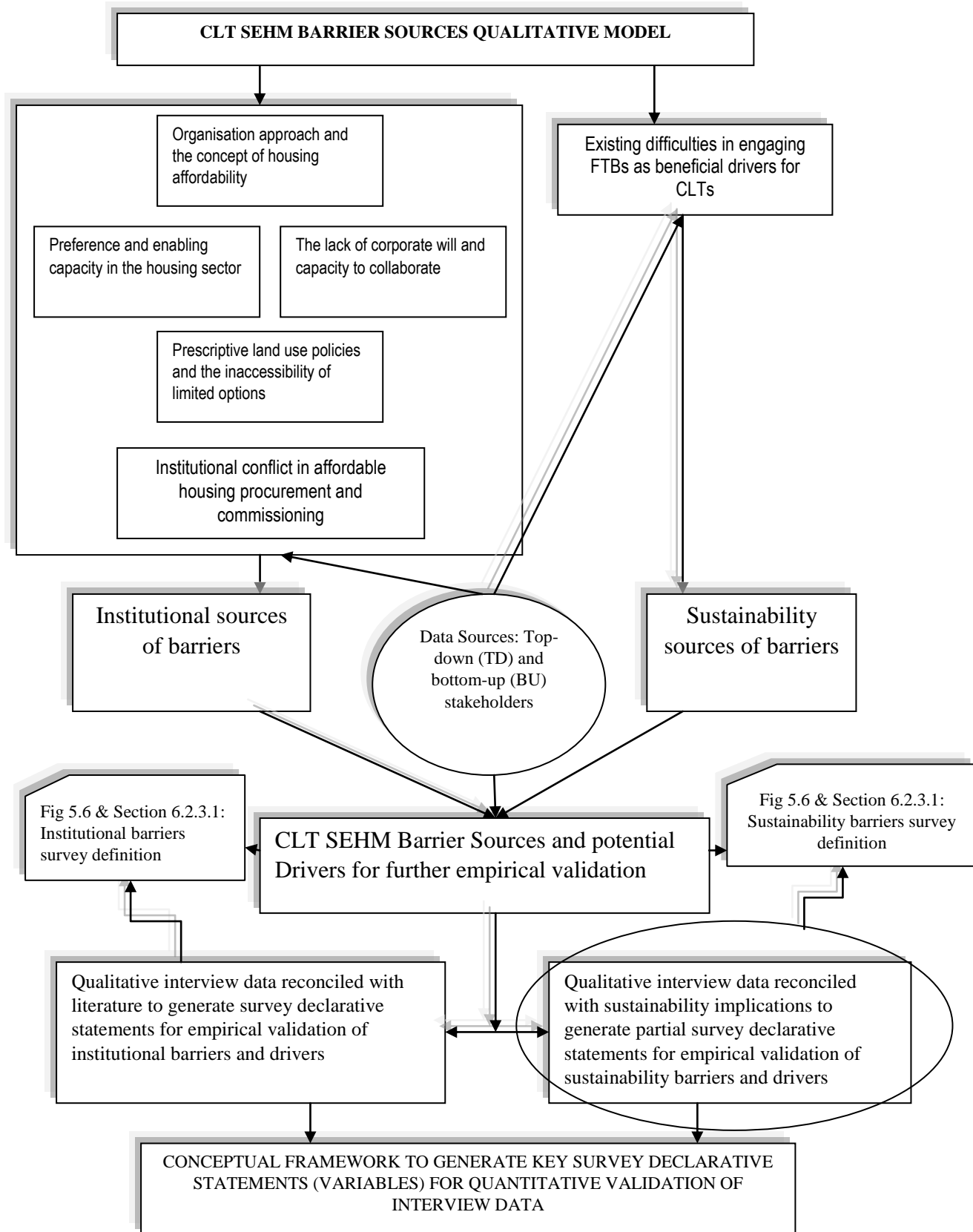


Fig 5.5: Conceptual framework development process to generate key survey declarative statements (variables) for quantitative validation of interview data

5.5 CHAPTER SUMMARY AND CONCLUSION

This chapter generated qualitative patterns of CLT SEHM barrier sources through the text analysis of semi-structured interviews with a strategic classification of concerned stakeholders. The result from this analysis helps infuse depth into the interview process and findings.

The interview identified six key barrier sources to the CLT SEHM development, including those limiting FTB viability for this housing delivery model. Pattern synthesis revealed a categorisation of barrier sources i.e. institutional and sustainability barrier sources please see (Fig 5.5 and 5.6). This process in a nutshell helped define survey declarative statements for the empirical validation of barrier sources and drivers through a questionnaire survey, also see (Fig 5.6) again for further insights. Qualitative contributions of this chapter revealed a structural basis for further empirical investigations.

For the institutional sources of barriers, findings reflected the following:

- There are conflicting perspectives on approach to housing affordability among both categories of respondent. This ranged from socio-economical determinants such as low income status of beneficiaries and ability to keep houses affordable in perpetuity (viability of perpetuity). Recurrent views expressed also differ in policy approach. Top down stakeholders highlighted the need for reliance and the improvement of traditional mechanisms, while the bottom up categories stressed the need for a shift to actively exploring alternative housing options in areas where the traditional institutions have failed to deliver.
- Both categories of respondents do favour an amelioration of both approaches to accomplish affordable housing goals. Other recurring recommendations among top down respondents include an ideological shift in approach to keeping houses permanently affordable to rather tackling the inherent housing supply deficit and the lack of purchasing power among the disadvantaged.

- This section has found out that indeed prescriptive land use does affect CLT development, also limited alternative sources of land supply issues, asset transfer issues, community housing needs and NIMBYs, lack of knowledge and consultation between stakeholders and opposition to development are identified as the most recurrent themes among both categories. The section also concluded that there is a need for better knowledge sharing avenues in the affordable housing sector to facilitate partnerships and community integration.
- Furthermore, the top down views centre around the structural and implementation limitation of the CLT model as being responsible for the supposed advantage in the housing sector, also the issue of level playing ground in housing sector that appear biased to certain housing provision models can be attributed to the inability of the CLT model making a headway in a competitive business environment by attempting to fill up a role that the HAs and more orthodox social systems already occupy. In contrary, a general consensus of Bottom up respondents feel that the polity ignores the reality of the underperformance of the HAs; regardless restricting the roles/niche of the CLT model to a supplementary one, rather than a fairly competitive one based on model merits that is engaging enough to give room for innovation in affordable housing delivery.
- On the issue of funding, findings indicate that the CLT might have to forgo its unique attributes like keeping houses affordable in perpetuity, in order to conform to industry standards, if mainstream lenders fail to explore operational practices in ethical banks for adaptable innovation opportunities to cater for affordable housing providers utilising the CLT model.

On the sustainability barriers, besides the confirmation of literature, other important findings include:

- Recurrent themes from stakeholder interviews revealed that embarking on the CLT SEHM route is plagued by sustainability barriers which include: conflicting ideals and communication strain among stakeholders, low retention of FTBs in their local communities, personal and financial inadequacies, low level of acceptability for

CLT (SEHM) probably due to its own personal limitations and finally there is a low level of social capital development.

These findings were further investigated and validated empirically through questionnaire surveys targeted at research specific populations to fulfil research objectives and clarity on proposed hypothesis. The next chapter addresses all of these and more, including the defining of measurement structures for social capital building blocks.

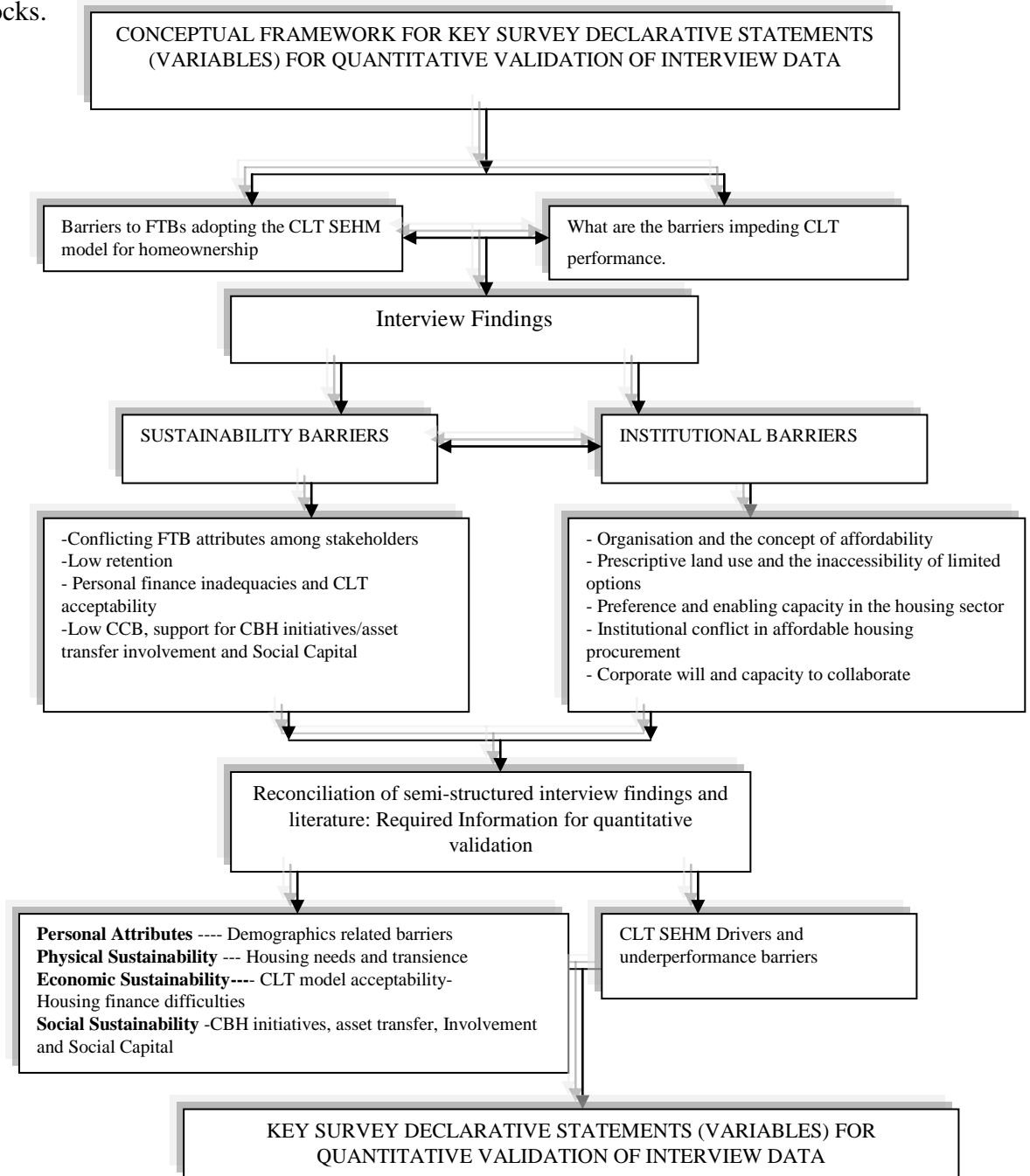


Fig 5.6: Conceptual framework for key survey declarative statements (variables for quantitative validation of interview data).

CHAPTER 6

QUANTITATIVE DATA COLLECTION AND ANALYSIS

6.1 INTRODUCTION

This chapter encompasses how the quantitative aspect of this research was carried out. This involves the selection of research samples, the questionnaire development and interpretation and the process/ steps employed for quantitative data analysis. This helped to further investigate institutional and sustainability barriers identified from the qualitative analysis section. Furthermore it helped in the reconciliation of FTB involvement barriers with the sustainability literature review (Chapter 3), towards data triangulation goals to fulfil research objectives. Also, propensity to support the CLT SEHM was hypothesised to be associated with level of social capital among targeted population. This validation process was targeted at classified urban and rural CLTs and community development practitioners in various capacities and locations, in order to establish barriers and drivers for CLT SEHM development. Similarly, validation was done to clarify hypothesised patterns of strategic institutional barriers and drivers accordingly.

6.2 QUANTITATIVE DATA ANALYSIS

Statistics is widely regarded as the process of data collection, interpretation and communication (Pallant, 2005). There are two types, namely: descriptive, which refers to the analytical process based on distribution and frequency patterns obtainable in a data set, and inferential which refers to a more robust analysis involving the measurement of relationships, associations and correlations of data sets to arrive at a conclusion or recommendation. Moreover, according to Nadim (2009) descriptive statistics involves summarizing, tabulating, organising and graphing data for the purpose of explaining or analysing a measured variable (NMS, 2007), while inferential statistics measures by correlations and relationships in an attempt to draw research specific conclusions (Field, 2005). Both methods are however adopted for this research; from which inferences are drawn from analysis. On this note statistical analysis can be

seen as the network and cross validation of experimentation and theoretical modelling of data interaction through a process of feedback loops which then results in the exploration and understanding of scientific data and analysis of a phenomenon (Byrne, 2007).

For this research, analysis was done via the SPSS platform. According to Pallant (2005), data i.e. variables were entered into SPSS, generated from responses to prior data collection through either questionnaires or interviews. Therefore, the data is only as good as the instrument utilised to analyse variables. Variables are attributes of characters in a study, they manifest across data sets and population targets, and hence they are subjected to continuous change. Types of variables are independent and dependent variables. The independent variable refers to fixed characteristics like ethnicity, while the dependent refers to expressive data attributes like subjective experience about a particular subject like professional views and perspectives. In order to measure variables there are 3 options, namely: nominal, ordinal and interval. Nominal variables refer to the numerical values existing uniquely i.e. there are no ordering of the cases implied e.g. age. Whereas, ordinal measurement can be ranked in an order, therefore distances between attributes do not have any meaning. Hence, the interval between values is not interpretable in an ordinal measure. However, considering the interval measurement the distance between attributes has meanings, therefore the values are interpretable. On this premise degrees of central tendencies like average and mean variable can always be computed (Trochim, 2006; Antonius, 2003).

In order to utilise the SPSS platform, a database has to be created according to a row/column format. The row represents the participants (case), while the column represents the respective variables attributed to each participant. These variables are coded exhaustively to ease data handling (Evans, 2006). Moreover, recoding might be necessary, which could require creating a new variable, for example single representative data being re-coded in categories.

Statistical analytical technique considered for this research where based on best practices obtainable across extant literature (Antonius, 2003; Field, 2005; Pallant, 2005). This includes the following:

- Generate deductive summaries for each variable

- Explore the descriptive statistics
- The variability was not based solely on observed differences between mean scores as this can be unreliable on the long run.
- Cross-tabulation where employed to examine the relationships between two variables.
- Chi-square test is a recommended non-parametric test for data which did not follow normal distributions, while the t-test and ANOVA is a recommended parametric test (Arif, *et al*, 2010). Besides, the chi square was adopted over the t-test because the chi square has no restrictions on the number of levels required of the categorical variables being tested in the context of this research (Field, 2009).
- Kruskal Wallis test to compare two or more groups, also The Kruskal-Wallis test was adopted over Mann-Whitney although they are both non-parametric methods, the Kruskal- Wallis can analyse medians of 3 or more categorical variables in the research context, hence more flexible (Field, 2013).
- Two-Way ANOVA was carried out because of its ability to test two independent variables involving different participants, because the data can be manipulated in all obtainable conditions (Field, 2013).
- Pearson's Correlation Coefficient which determines the relationship and strength between variables (Dancy and Reidy, 2007).
- Structural Equation Modelling (SEM) employed as a methodology for representing, estimating and testing a theoretical network of relations between variables (Rigdon, 1998), also the relationships can be either directional or non-directional, then analysed to test hypothesised patterns (MacCallum and Austin, 2000) in (Sejjaaka and Ntayi, 2013) through observed and unobserved variables to tests hypothesized patterns respectively.

6.2.1 CLT PRACTITIONERS, DEVELOPMENT ENTHUSIASTS AND FTB SET

The Community Development and Community Land Trust Practitioners set was targeted through purposive sampling, specifically the maximum variation sampling technique. This technique aims at investigating the central themes or implications that cut across sampled participants. This sampling helps solve the problem that might be encountered due to heterogeneity, the maximum sampling technique turns this

weakness into a strength based on the logic that common findings/data that might emerge from the inherent variations are of immense value in capturing key experiences, shared aspects or impacts required by the study (Patton, 1990; Teddlie and Yu, 2008). For example this study requires variations such as geographical (urban, rural and suburban), age group (as in the case of FTBs), and at least a minimal knowledge of the CLT SEHM (see Fig 6.1), this technique helped to ensure that the aforementioned variations are in fact represented/reflected in the study. Overall data sought then helped elucidate programmatic variations and significant common patterns which proved invaluable to the modelling process on the long run (Patton, 1990; Teddlie and Yu, 2008).

Invitations for voluntary participation were extended to all members of the National Community Land Trust Network database, which comprises of over 430 members. Furthermore affiliated networks (Community of Practice) of community developers, policymakers, regeneration practitioners and enthusiasts involved with activities concerning homes and assets that are held in perpetuity for community benefit across both urban and rural geographical classifications were also included. The rationale behind the selection of this platform was because it comprised of enthusiasts that have either owned or yet to own a house, hence they have either once faced, or currently facing home ownership problems. Furthermore there was additional research specific benefit derived from this platform which enabled the tapping into the inherent knowledge existing within these networks on the barriers facing affordable community based housing options in general with emphasis on the CLT (SEHM) (Fig 6.1) showing the sample set and the rationale behind adoption.

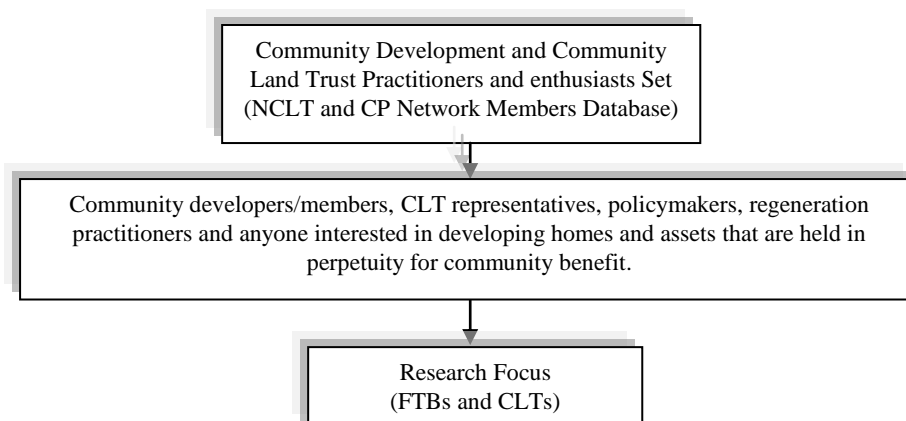


Fig 6.1: The relevance of sample set to research focus

6.2.2 DATA COLLECTION TOOLS AND DEVELOPMENT

This section deals with the data collection process and questionnaire development. The research questions/hypothesis guided the development and identification of required quantitative data to empirically complement/validate literature and interview findings. This enabled the research necessary avenue for data cross validation. Despite the fact that this research focuses on CLTs and FTBs, the questionnaire was designed to accommodate a broad range of stakeholders accordingly.

The questionnaire started by capturing general demographical data, literature highlighted that FTBs are seen as crucial facilitators in the housing market because of the contribution they are capable of in regards to the affordable housing chain (Smith *et al.*, 2005; Andrew, 2004), therefore FTBs as stakeholders in this context refer to members of the population that are most likely to have not owned a house before (Smith *et al.*, 2005). However the sample target of this research is of additional benefit as it comprises of a broad range of relevant stakeholders that covers those that are yet to own a house/homeowners, research focused concerned stakeholders and those that have either once faced, or currently facing home ownership problems irrespective of home ownership status. This profile is identifiable in almost every population sample in the UK above the age of 18, which the research aims to capture.

A brief description of the research focus was included in each questionnaire, having satisfied all research ethical requirements as ratified by the University's ethical committee. A total of at least 220 questionnaires were expected from the targeted sample of over 430 members of both NCLTN and Community in Practice network platforms. 91 questionnaires were completed and returned with a response rate of 75.8%. This response rate was achieved as a result of targeting the NCLTN membership database where there is an established presence of obviously qualified participants as reflected by NCLTN and Community in Practice members. The questionnaires were anonymised. To increase response rate, additional questionnaire were distributed electronically via email through online links within the network forum.

6. 2.3 MEASURING BARRIERS TO CLT SEHM DEVELOPMENT AND IMPLICATIONS ON SUSTAINABILITY

The strategy employed here was the use of questionnaires to investigate the implications of the common grounds between sustainability literature and semi structured interview findings on barriers sources to employing FTBs as drivers for mainstream acceptability of the CLT SEHM (see section 3.2.3). This implied that peculiarities between homeowners and FTBs has to be clarified in broad categorical aspects of (demographical profile, community perception/ housing needs, community development initiatives and the need for social capital) as targeted with the questionnaires.

6.2.3.1 QUESTIONNAIRE FORMAT

The questionnaire is divided into the following four sections:

Section 1: Demographic profile (Personal attributes):

The questions here sought knowledge informed from semi structured interview findings on conflicting ‘FTB attributes among stakeholders’ (section 5.3.6) and how it relates with sustainability literature on cultural diversity, age, marital status and education (Emsley, *et al*, 2008; Poles and Stren, 2000; Baines and Morgan, 2004).

Section 2: Community Perception and Housing Needs (Physical Sustainability and Economic Sustainability):

The investigation here involved questions informed from interview findings on ‘low retention of FTBs in the community’ and how it relates with physical sustainability literature on housing needs and transience (Poles and Stren, 2000; Spangenberg, 2002).

Section 3: Community initiatives, involvement and the need for Social Capital (Social Sustainability)

This section set out to help investigate the relationship between the level of support for affordable housing initiatives, asset transfer, housing ownership options, home

ownership problems, involvement in community development networks, barriers to community involvement and the level of individual social capital in an urban and rural context as informed by social sustainability and involvement literature findings as reconciled with semi structured interview findings on Involvement and social capital barriers (Section 5.3.6) (Baines and Morgan, 2004; Poles and Stren, 2000; Housing Corporation, 2008; Portes, 1998; Carol, 2008; Mclean and Hindle, 2011).

Section 4: Institutional Barriers on Community Based Housing

This part sought to confirm interview and literature review results on the institutional sources of barriers to CLT development including, organisation approach and the concept of affordability, prescriptive land use policies and the inaccessibility of limited options, preference and the enabling capacity in the housing sector, housing institutional conduct and CLT limitations and corporate will and capacity to collaborate.

The analysis, besides tackling research objective 3, it will additionally help verify the following research hypothesis:

H1: Perceptions in practice towards strategic drivers aimed at tackling barriers to shared equity housing development influence one another significantly.

H2: The level of individual social capital has a causal relationship with the propensity to support the CLT SEHM development.

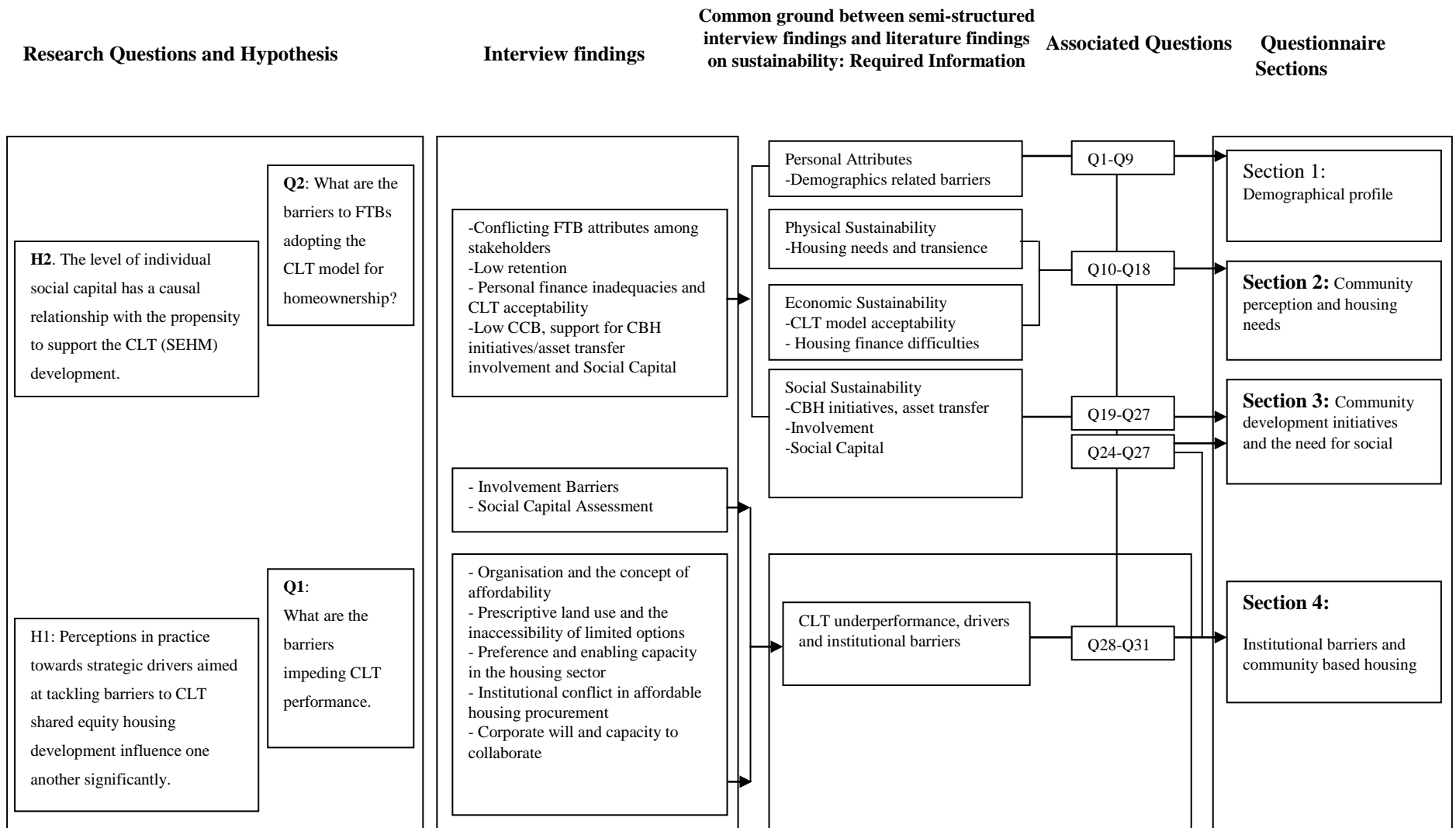


Fig 6.2a: Data Collection Tool Development process

6.2.4 MEASURING SOCIAL CAPITAL IN THE CONTEXT OF CLT SEHM DEVELOPMENT

According to a report by Centre for Regional Economic and Social Research Sheffield (CRESR), members of the community in deprived areas in the UK report lower levels of social capital, community involvement, and trust in local institutions (Grimsley *et al*, 2005). This suggests that social capital cannot be isolated from measuring the level of community involvement and trust in local institutions in regards to the CLT SEHM which relies on locally generated support and involvement. Therefore, this research deems it necessary to integrate the markers for poor community involvement in investigating social capital. Moreover, past frameworks in the UK have always focused squarely on measuring social capital without the integration of project specific variables to determine the connection of the propensity to support SEHM and the level of inherent social capital in the targeted community. This might help determine the disparities in the level of CLT prevalence in the urban and rural sphere.

The measurement indicators for social capital are built around dimensions as explored in the social sustainability section on social capital (section 3.4). However there are concerns about the interchangeable elements to measure social capital (Wu and Laws, 2003). These variations are noticeable with the different approach and frameworks employed by various schools of thought as shown in (Table 6.1). The reason for these variations can be traced to difficulties encountered with the peculiarities of the various investigated phenomenon at a point in time (Harper, 2002). Applying this to the study focus i.e. measuring social capital will require key interview inputs into the propensity to support the CLT SEHM development, like relocation factors, geographical location. These requirements have influenced the choice of the social capital assessment tool employed by this research. A study by Bullen and Onyx (2005) favoured variables which were built on the following themes; participation in networks, reciprocity, trust, social norms. However, they were deemed too complicated by APO (2006). Similarly, the World Bank questionnaires, the Social Capital Assessment Tool (SOCAT) is deemed too cumbersome since they come with too much questions that will greatly affect the length of administration. Furthermore, it can also be inflexible, particularly in a case where other types of information are being collected. As reflected in the case of the study's hypothesis on the impact of social capital on CLT SEHM development

support (APO, 2006). On this premise the study then considered the Harmonised Question Set (HQS) as a potential social capital measurement tool. This tool is designed according to pre-existing core factors developed by the Office for National Statistics (ONS). Elements incorporated include: contacts with neighbours, views about the area, social networks and support, trust in institutions, social participation. Along this line relevant questions and elements can be selected for use according to peculiarity of the study focus (Green and Fletcher, 2003; Carol, 2008). This provides a platform for flexibility and the required modification required to fit into the specific context of the study's objectives (APO, 2006).

GENERAL HOUSEHOLD SURVEY 2000-01	HOME OFFICE CITIZENSHIP SURVEY 2001	HEALTH SURVEY FOR ENGLAND 2000	MANAGEMENT ALTERNATIVES FROM HUMAN SERVICES
<ul style="list-style-type: none"> • Views of the local area e.g. perceptions of the physical environment, facilities in the area, feelings of safety • Civic engagement e.g. influence over events in the community, knowledge of local affairs, taking action, involvement in local organisations • Reciprocity and local trust e.g. how many people are known in the locality, can they be trusted, would people do favours • Social networks e.g. frequency of seeing and speaking to relatives, friends or neighbours; how many close friends or relatives live nearby • Social support e.g. who would provide help if needed 	<ul style="list-style-type: none"> • Social capital e.g. neighbourhood, sense of others in neighbourhood, informal socialising, helping others • Participation in civic affairs e.g. contact with public officials or political representatives; involvement with local action groups or rallies; frequency, perception of ability to influence political decisions; trust in institutions of the state. • Participation in groups & formal volunteering e.g. involvement with groups, clubs or organisations; frequency of participation, involvement in voluntary work; frequency and intensity of participation • Informal volunteering e.g. type of unpaid help provided; frequency and intensity of involvement, barriers and incentives. 	<p>This identified the following dimensions of social capital for analysis:</p> <ul style="list-style-type: none"> • <i>Perceived social support</i> • <i>Contact with friends</i> • <i>Trust</i> • <i>Participation in organised activities</i> • <i>Neighbourhood problems</i> • <i>Ease of access to services</i> 	<ul style="list-style-type: none"> • Participation in local community • Proactivity in a social context • Feeling of trust and safety • Neighbourhood connections • Family and friends connections • Tolerance to diversity • Value of life • Work connections

Table 6.1: various social capital measurement approaches. Adapted from (Harper, 2002; Bullen and Onyx, 2005)

The research incorporated the investigation of propensity to support the CLT SEHM and its association with the level of social capital among geographically classified urban and rural CLTs and community development practitioners in various capacities and locations, in order to establish how they associate or impact involvement in community based housing initiatives. The data analytical process involved structures and methods from adapted social capital questions assessed according to research context of low level of support for CLT SEHM as barriers sources to CLT SEHM development as identified from both literature and interview results.

In the midst of conflicting frameworks for social capital measurement, this study adopted an item generation process to streamline and fine tune measured variables according to research goals. This involved generating an initial pool from general household survey 2000-01, home office citizenship survey 2001, health survey for England 2000 and management alternatives from human services 2005 (Harper, 2002; Bullen and Onyx, 2005). The study then proceeded to reflect the evidence of face and content validity. Definitions of the primary construct, its underlying dimensions as well as descriptions of the underlying variables were administered to four experts that included top built environment academics and housing practitioners. The selection process was based on the criteria of experience in built environment, familiarity with the social capital concept and the understanding of community involvement strategies particularly in affordable housing delivery. The respondents were asked to refine items for simplicity and relevancy in a 'propensity to support CLT SEHM development' context. Items that were ambiguous, overly complex and irrelevant to involvement issues were either reconstructed or excised from the final list of items. In total, 13 items were retained, this were then categorised under 3 cardinal building blocks for simplicity and ease in enable research modelling objectives. The adopted final social capital questions used for analysis where in three dimensions namely:

- Social participation
- Social support network and trust
- Civil participation and tolerance to diversity

6.2.4.1 SOCIAL PARTICIPATION

This is based on the concept of the interlocking networks of relationships between individuals and groups. Social capital is grossly influenced by individuals acting on their own because it relies on the propensity for sociability and a capacity to form new associations and networks. This includes involvement with groups, clubs or organisations; frequency of participation, involvement in voluntary work; frequency and intensity of participation (Harper, 2002; Bullen and Onyx 2005).

6.2.4.2 SOCIAL SUPPORT NETWORK AND TRUST

This dimension combined reciprocity and trust elements. The approach here involved the notion that social capital is a combination of short term altruism and long term self-interest (Taylor, 1982). The individual voluntarily provides benefits to others at a personal cost with mutual level of subjective reciprocity. Therefore in an environment where reciprocity is valued, people look out for each other's interest. Trust on the other hand, includes a willingness to take risks in a social context based on a sense of confidence that others will respond as expected and will act in mutually supportive ways (Bullen and Onyx, 2005).

6.2.4.3 CIVIC PARTICIPATION AND TOLERANCE TO DIVERSITY

This block encompasses two elements, firstly civic participation which involves individual and collective interests involved in identifying and addressing issues of public concern. This can include individual voluntarism to organisational involvement and electoral participation. It can also include efforts to address an issue with collective actions to solve a problem or interact with the institutions of representative democracy (APA, 2012). Tolerance can be defined simply as having an open mind towards other cultures or identity, no matter what religion, race, ethnicity, sexual orientation, disability, gender, or age. According to UNESCO's Declaration on the Principles of Tolerance, tolerance is respect, acceptance and appreciation of the rich diversity of cultures, forms of expression and ways of being human. Therefore tolerance is harmony

in diversity (UNESCO, 2005). Also see (Table 6.2) for results of content validation i.e. adopted measures for social capital building blocks.

SOCIAL PARTICIPATION	SOCIAL SUPPORT NETWORK AND TRUST	CIVIC PARTICIPATION AND TOLERANCE TO DIVERSITY
<ul style="list-style-type: none"> • Level of involvement in community groups • Level of involvement in community led activity • Level of involvement with local authority activities 	<ul style="list-style-type: none"> • Level of help received from community members • Level of help received from friends • Level of visits to friends and neighbourhood networks • Level of general trust • Level of trust in institutions and authorities 	<ul style="list-style-type: none"> • Level of awareness of community awareness and information sources • Level of assertiveness during conflicts • Level of assertiveness during conflict with popular notions • Level of support for multiculturalism in the community • Level of support for lifestyle disparities in the community

Table 6.2: Adopted Measures for Social Capital Building Blocks

6.3 PILOTING THE QUESTIONNAIRES

The research adapted a simple and mixed format of multiple choices and a five point likert scale questions (mostly closed). Cover letters were attached to the questionnaires. This was done to brief the respondent about the background of the research and most importantly to share information concerning the confidentiality agreement. The questionnaire was piloted by four community development workers and three built environment research students to test the comprehensiveness, ambiguity, ease of answering and the average length of time for completion was also taken into consideration. The pilot session helped improve precision, hence reducing survey length and completion time. Furthermore, this process helped provide better explanation for certain technical terms to improve respondents understanding of the questions asked were necessary. The next section deals with the actual data analysis. Also see Fig 6.2b showing a flowchart of the rationale behind adopted statistical tests.

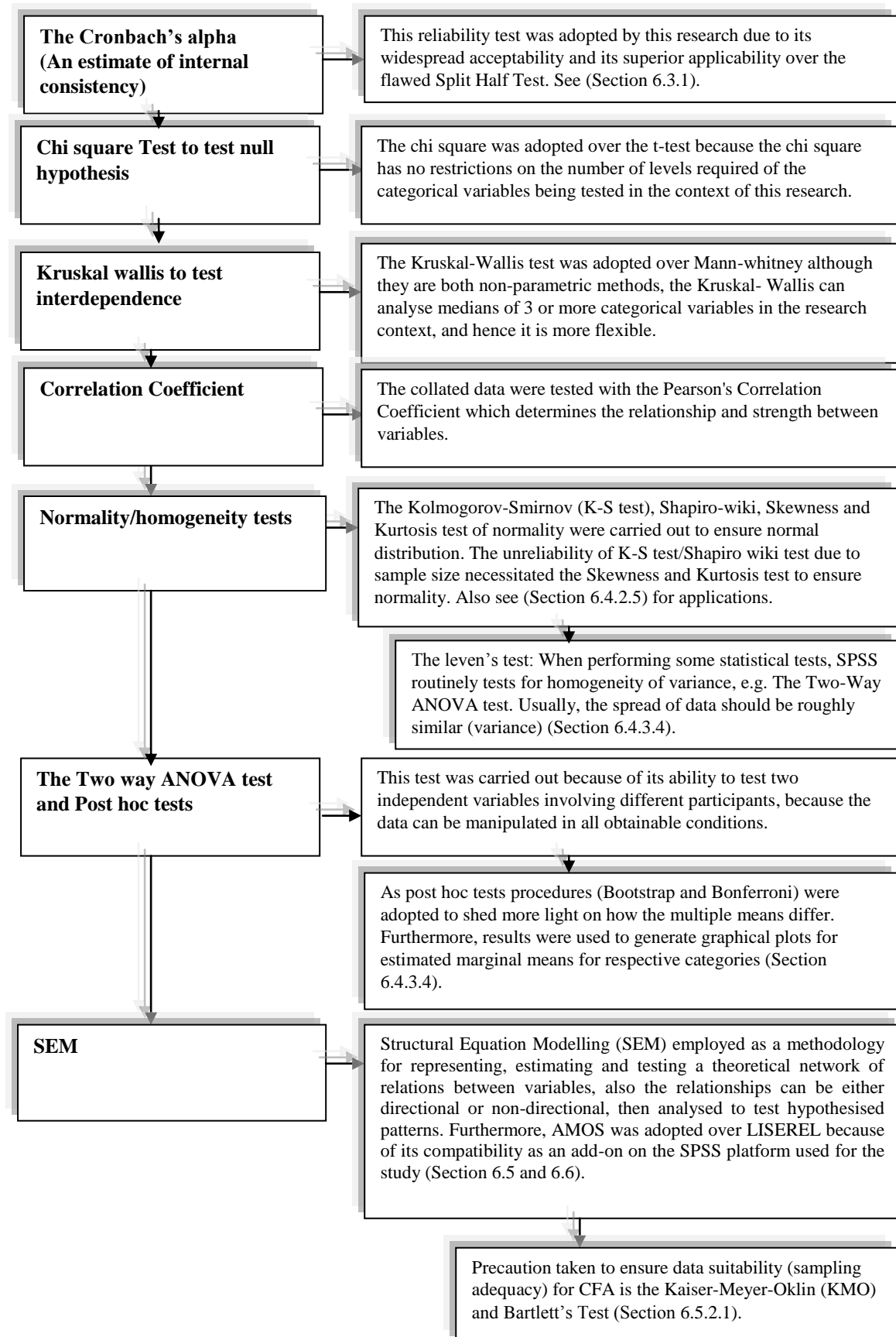


Fig 6.2b: Flow chart showing rationale behind statistical tests.

6.3.1 RELIABILITY ANALYTICAL TEST

Reliability was employed in this research in line with the requirement that a questionnaire result should consistently reflect the situation or construct that it intends to measure (Field, 2009). This is further elaborated by Golafshani (2003) in which he suggested that individual or groups of variables should produce results consistent with the overall questionnaire. The split half reliability test was first considered, which involves randomly dividing the data set in two, and then the correlation between these halves is determined, thus the larger the correlation the more the reliability (Field, 2009). However, Cronbach (1951) saw this method as flawed because of the almost limitless dimensions a data set can be split. This can produce inconsistent results that reflect the numerous possible patterns at that point in time. On this note a method that splits the data in two likewise, but in every possible way of which computing the average of the resultant correlation coefficient results in the Cronbach's alpha α was considered appropriate (Cronbach, 1951). This method was adopted by this research due to its widespread acceptability (Yu, 2005; Field, 2009). Normally, a value of .7 to .8 is deemed acceptable for the Cronbach's alpha α . Otherwise values substantially lower indicate an unreliable scale (Hilton *et al*, 2004; Field, 2009). Kline (1999) in Field (2009) noted that, although the generally accepted value of .8 is appropriate for cognitive tests such as intelligence tests. For ability tests a cut-off point of .7 even lesser especially when measuring diverse phenomena such as human behaviour within a physiological or social context is acceptable.

The Cronbach's Alpha coefficient of ($\alpha=0.733$) was the result of the reliability test for this survey which was within acceptable range see (Table 6.3). The reliability for the research variables were carried out based on a cut-off point range of .697 to 0.900. Variables with cronbach alpha that were not within this range where deemed unacceptable. These items were excluded (not considered during subsequent analytical processes that involved interrelatedness). This was done to increase reliability of the survey constructs (Nadim and Goulding, 2010). Items excluded include: social acceptance, level of education, language. Also excluded were immigration status, lack of trust, crime and fear.

Reliability Statistics

Cronbach's Alpha Cronbach's Alpha Based on Standardized Items N of Items

.733	.678	87
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The screenshot shows the IBM SPSS Statistics Data Editor interface. The main window displays a list of variables (var71 to var97) with columns for Name, Type, Width, Decimals, Label, Values, Missing, Columns, Align, Measure, and Role. Two dialog boxes are open over the main window:

- Reliability Analysis: Statistics**: This dialog box has several sections:
 - Descriptives for**: Includes checkboxes for Item, Scale, and Scale if item deleted.
 - Inter-Item**: Includes checkboxes for Correlations and Covariances.
 - Summaries**: Includes checkboxes for Means, Variances, Covariances, and Correlations.
 - ANOVA Table**: Includes radio buttons for None, F test, Friedman chi-square, and Cochran chi-square.
 - Hotelling's T-square**: Includes checkbox Hotelling's T-square.
 - Tukey's test of additivity**: Includes checkbox Tukey's test of additivity.
 - Intraclass correlation coefficient**: Includes checkbox Intraclass correlation coefficient.
 - Model**: Set to **Two-Way Mixed**.
 - Type**: Set to **Consistency**.
 - Confidence interval**: Set to **95 %**.
 - Test value**: Set to **0**.
- Statistics**: This dialog box shows a list of items selected for analysis:
 - Not applicable: [var30]
 - Propensity to save [var31]
 - Housing mobility radius [var32]
 - Level of support for CBH initiatives [var33]
 - Level of support for asset transfer [var34]
 - Level of support for conventional housing ownership model [v...
 - Level of support for CLT shared equity ownership model [var36]
 - Satisfaction with National Community Land Trust Network [var...
 - Satisfaction with community social networks [var38]

Table 6.3: The Cronbach's alpha (an estimate of internal consistency)

6.4 QUESTIONNAIRE ANALYSIS OF SUSTAINABILITY BARRIERS

The subsequent sections explored the following as generated from Fig (6.2) this was informed by the identification of common grounds between semi structured interview findings on FTB involvement barrier sources and sustainability literature.

- Diversity and conflicting FTB attribute among stakeholders
- Mobility and Low Retention
- Personal Finance inadequacies and CLT acceptability
- Low level of involvement and Social Capital

6.4.1 CONFLICTING FTB ATTRIBUTE AMONG STAKEHOLDERS AND IMPLICATION ON DEMOGRAPHICAL DIVERSITY

This section explored the ‘Conflicting FTB attributes among stakeholders and demographical diversity barriers’ as informed by interview findings (see sections 3.4.1 and 5.3.6). The section firstly analysed the general overview and the level of diversity in the surveyed sample if this could actually pose as a barrier to the long term sustainability of the CLT movement.

Secondly the study further investigated the conflicting FTB attributes as a barrier informed by interview findings, through the analysis of homeownership status, age group and income level. This was done to identify the most vulnerable segment of the sample population and where and how policy makers and CBH housing practitioners should deal with the affordable housing need of this crucial group.

In reference to literature (section 3.2.3), nearly all existing CLT networks have been led by middle class professionals (Dyson and Paterson, 2011). Although this trend has been attributed to the need for networks to possess relevant skill sets to cater for the professional benefits that might be required by the CLT implementation process. This however appears to have certain implications on the long-time sustainability of CLT growth and development.

6.4.1.1 AGE DIVERSITY

Survey responses of both current and potential proponents of the CLT SEHM reflect or rather corroborates the near homogeneity in age distribution of members of existing CLTs. These results reveal that there is a high representation of people in the middle age category and above (36 years and above) with a cumulative 55% representation. There is an obvious underrepresentation of the most at risk FTB age group of (18-24 years) with an 18.7% representation see (Table 6.4).

Age Category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	17	18.7	18.9	18.9
	25-35	23	25.3	25.6	44.4
	36-45	27	29.7	30.0	74.4
	46-55	13	14.3	14.4	88.9
	Above 55	10	11.0	11.1	100.0
	Total	90	98.9	100.0	
Missing	System	1	1.1		
Total		91	100.0		

Table 6.4: Age category

6.4.1.2 ETHNIC DIVERSITY

Although the CLT is yet to go fully mainstream particularly in UK urban regions, representation is majority white expectedly in rural areas with a 68.9% respondent describing their ethnicity as British, Irish and Other white backgrounds see (Table 6.5). Although this statistics represents a microcosm of community developers, it is in line with existing diversity patterns within the existing CLT housing beneficiaries. There is however a relative underrepresentation of the most in needs groups overall.

Ethnicity classification		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	British white	46	50.5	51.1	51.1
	Irish white	10	11.0	11.1	62.2
	Other White background	6	6.6	6.7	68.9
	White and Black Caribbean	2	2.2	2.2	71.1
	White and Black African	1	1.1	1.1	72.2
	Indian	5	5.5	5.6	77.8
	Pakistani	4	4.4	4.4	82.2
	Other Asian Background	3	3.3	3.3	85.6
	Caribbean	5	5.5	5.6	91.1
	African	6	6.6	6.7	97.8
	Other Black Background	1	1.1	1.1	98.9
	Chinese	1	1.1	1.1	100.0
	Total	90	98.9	100.0	
Missing	System	1	1.1		
Total		91	100.0		

Table 6.5: Ethnic Diversity

6.4.1.3 INDIVIDUAL INCOME DIVERSITY

This result represents individual income distributions among respondents of a wider sample range of existing and aspiring CBH and community development enthusiasts. From analytical indications, there is significant representation of 55.6% of the most at risk FTB income range that is ‘less than £19,000’ as recommended by literature (section 3.2.1), while other higher earning categories represent 44.4% see (Table 6.6). Although, this does not represent the at risk groups that already own or benefit from community housing, therefore this is not a validation of the sustainability of this model for this groups. This should however provide a foundation a further thorough investigation of how FTBs fare in general within the current community housing context, through cross tabulations and correlation with other crucial variables in subsequent sections.

Income		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than £5000	10	11.0	11.1	11.1
	£5,000-£9,999	10	11.0	11.1	22.2
	£10,000-£14,999	18	19.8	20.0	42.2
	£15,000-£19,999	12	13.2	13.3	55.6
	£20,000-£25,999	22	24.2	24.4	80.0
	More than £26,000	18	19.8	20.0	100.0
	Total	90	98.9	100.0	
Missing	System	1	1.1		
Total		91	100.0		

Table 6.6: Income classification

In reference to sustainability literature (section 3.3.1.3), the age, ethnic and income distribution of the sampled group represent crucial demographic benchmarks that illustrate community commitment and preparedness to respond to the continuous need for CLTs to be able access necessary skills for their development within its domicile locality. This is in response to future drastic changes in socio-economical dynamics. However, homogeneity in income classification could also render disadvantage segments of the community left out. Moreover, huge disparities in wealth distribution could also hamper community growth and development due to the lack of cohesion which results in the most vulnerable FTB age groups, minority ethnic groups being less represented in community development initiatives such as CBH and decision making networks.

6.4.1.4 DEFINING FTB ATTRIBUTES THROUGH AGE AND HOMEOWNERSHIP STATUS

This analysis is aimed at defining FTB identity according to age groups and the category most vulnerable to housing ownership problems. The survey takers were asked how they viewed their housing ownership status and level of annual income. Cross tabulation results which were generated by analysing homeownership status among the various respondents. Interview findings (section 5.3.6) have suggested the 18-24yrs age group as the most affected by the failures of both previous and new FTB

homeownership schemes. Consequently, this group are then compelled to jostle with inflated housing prices on the open rental and ownership markets.

Survey result verifies this phenomenon among the sampled population where FTBs are not restricted to any age category; in fact there is a representation of FTBs across all studied age groups (94.4%, 82%, 48%, 61.5% and 10% respectively). However, corroborating literature and interview findings, which suggests that only 37% of people in the 18 – 24 (FTB)s presently think that homeownership is attainable (the samples include homeowners, people renting their accommodation privately and residents of social housing) as opposed to only 14% of respondents that think renting was a cheaper and safer option than homeownership see (section 3.2.1).

Age Category * Housing ownership category Cross tabulation

		Housing ownership category			Total
		First time buyer	Home owner	Other	
Age Category	18-24	16	0	1	17
	25-35	19	3	1	23
	36-45	13	13	1	27
	46-55	8	5	0	13
	Above 55	1	9	0	10
Total		57	30	3	90

Table 6.7: Age Category * Housing ownership category Cross tabulation

Survey results of studied population further accentuated more precisely that homeownership rates increased marginally in line with age, as shown in (Table 6.7) which depicts that 0.0% respondents identified themselves as homeowners within 18-24yrs age group, while 90 % of respondents above 55yrs identified themselves as homeowners. As interview results found out that this could inherently be due to socio political and economic dictates the society is built upon, like study duration, employment, income levels and the political decisions that might have benefited certain generations such as the 1980s conservative ideology which supported increased home ownership as a means of achieving redistribution of wealth which the then RTB schemes epitomised (Boleat, 1997; Mayor of London, 2004; Livette, 2006) see (section 3.2). Despite the survey’s establishment of the low homeownership rate among the 18-24yrs FTB age group, this is not the purpose of this analysis, rather it is meant to establish a reference point for FTB age groups in CBH housing policies and all other

outreach programmes embarked upon by community development networks. This will help enhance the legitimacy of the CLT model as a viable tool to help tackle housing ownership problems among the most at risk groups in the society.

In order to determine how significant the premise these deductions were made, a chi-square test was carried out to either accept or reject the null hypothesis that homeownership categorisation is not associated with age group see (Table 6.8).

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.575 ^a	8	.000
Likelihood Ratio	36.613	8	.000
Linear-by-Linear Association	13.052	1	.000
N of Valid Cases	90		

Table 6.8: Chi square test for homeownership association with age group

Null Hypothesis

(H₀): Housing ownership category (FTB/Homeowner) is not associated with age group.

Alternative Hypothesis

(H₁): Housing ownership category (FTB/Homeowner) is associated with age group.

N.B: p<0.001 if SPSS gives .000 in the output for a p-value.

$$\chi^2(8, N = 90) = 30.574, p < .001.$$

Interpretation: The output indicated that the Pearson chi-squared statistic is 30.575. The p-value (.000) is <0.001 therefore the null hypothesis (H₀) of lack of association between housing ownership category and age group is rejected in favour of the alternative hypothesis (H₁) that there is a significant association between both variables.

The Pareto Chart (see Fig 6.3) depicts the cumulative impact of the variables with the tall bars representing a greater level of impact/significance than shorter bars in respect to age categories.

This chart depicts that the likelihood of being a FTB diminishes with age, while the reverse is the case for home owners expectedly (see Fig 6.3), however representation

peaks at ages 25-35yrs for FTBs and 36-45yrs for homeowners, then both starts to fall inversely with age. Although interview findings identified the 18-24yrs as the most representative sample for FTBs, however it is not an indication of the age group with the highest potential to obtain attain homeownership. On this premise CLT practitioners, government or private developers engaging the model stand less risk focusing on the 25-35yrs age category which represents when home ownership starts to peak see (Fig 6.3). Notwithstanding, this results do not indicate the need for a complete shift of focus from the 18-24yrs category, rather it suggests a need for heightened attention and involvement for early sensitisation on community housing initiatives and development ideals. As interview findings already highlighted low levels of involvement among these age groups: *'I can't be bothered' attitude among the young ones negates the whole idea of engagement as it is detrimental to the role of community capacity building as an avenue to combat community ownership and management barriers.* This angle was further explored in later sections.

Fig 6.3: Showing Pareto chart depicting a series of bars whose heights reflect the significance of compared variable (age category) against home ownership category (Home owners, FTB and other). Pareto charts are considered useful due to their ability to help depict trends and identify variables that have the greatest cumulative effect on the study context (Carver and Nash, 2011).

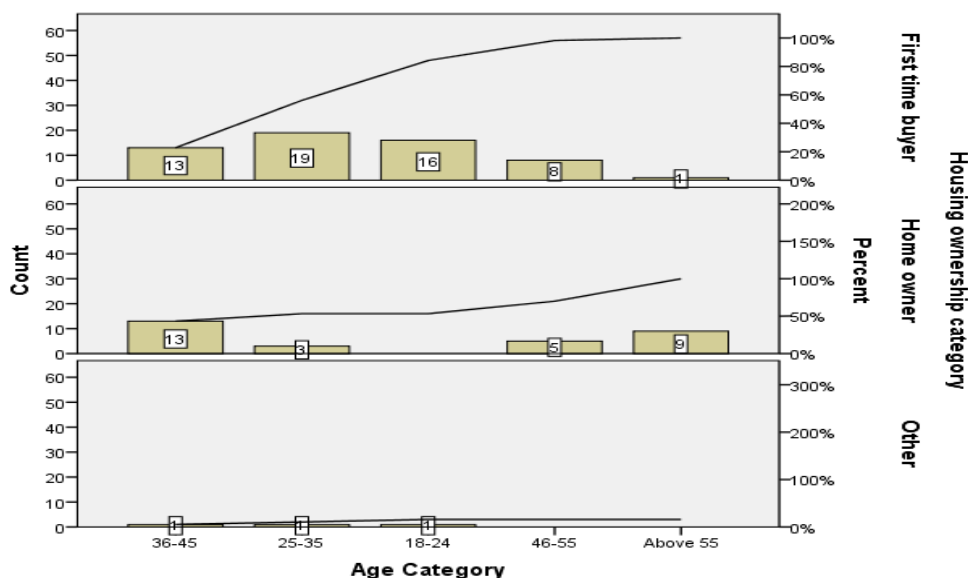


Fig 6.3 Pareto chart: cumulating age and homeownership category.

6.4.1.5 DEFINING FTB ATTRIBUTES THROUGH HOUSING OWNERSHIP CATEGORY AND INCOME

In order to determine the significance of the association of homeownership category with income through cross tabulation the following hypothesis was generated:

Null Hypothesis

(H₀): Housing ownership category (FTB/Homeowner) is not associated with level of income.

Alternative Hypothesis

(H₁): Housing ownership category (FTB/Homeowner) is associated with level of income.

N.B: $p < 0.001$ if SPSS gives .000 in the output for a p-value.

Income * Housing ownership category Cross tabulation					
		Housing ownership category			Total
		First time buyer	Home owner	Other	
Income	Less than £5000	8	1	1	10
	£5,000- £9,999	10	0	0	10
	£10,000-£14,999	15	2	1	18
	£15,000-£19,999	9	2	1	12
	£20,000-£25,999	13	9	0	22
	More than £26,000	2	16	0	18
Total		57	30	3	90

Table 6.9: Income * Housing ownership category Cross tabulation

Chi-Square Tests

Test	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41.615	10	.000
Likelihood Ratio	45.934	10	.000
Linear-by-Linear Association	13.708	1	.000
N of Valid Cases	90		

Table 6.10: Chi square test for homeownership association with income group

Interpretation: Table 6.10 indicates that Pearson chi-squared statistic is 41.615. The p-value (.000) is <0.001 therefore the null hypothesis (H_0) of lack of association between housing ownership category and income is rejected in favour of the alternative hypothesis that there is a significant association between both variables. $\chi^2(10, N = 90) = 41.615, p < .001$.

According to Pareto Chart (Fig 6.4) the most significant income categories in ascending order are (£10,000 - £14999), (£20000- £25999), (£5,000- £5,999), (£15,000- £15,999) and (Less than £5,000) respectively. The results within the sample population are much more specific than literature findings. According to survey results the most significant income group among FTBs is the (£10,000-£14999) category. This result pales in comparison to the broad range suggested by literature i.e. less than £19,000. Moreover, the next most significant income group among FTBs is the £20,000-£25,999 range which implies the erratic distribution of income representation among FTBs. However among homeowners the most significant income groups in descending order are: (More than £26000), (£20000-£25999), (£15000-£19999), (£10999-£14999) and (less than £5,000) the results suggest that the higher the corresponding income category the higher the representation of homeowners. The erratic distribution for FTBs however confirms interview findings on the very diverse makeup of the FTBs (section 5.36) *'there is still a persistent ambiguity on how to define the demographical characteristics of who FTBs are'*, i.e. income alone does not usually determine homeownership explicitly, and this is very much applicable among respondents. Therefore to a large extent, the result indicates that the higher the income category the less likelihood of the respondent being a FTB.

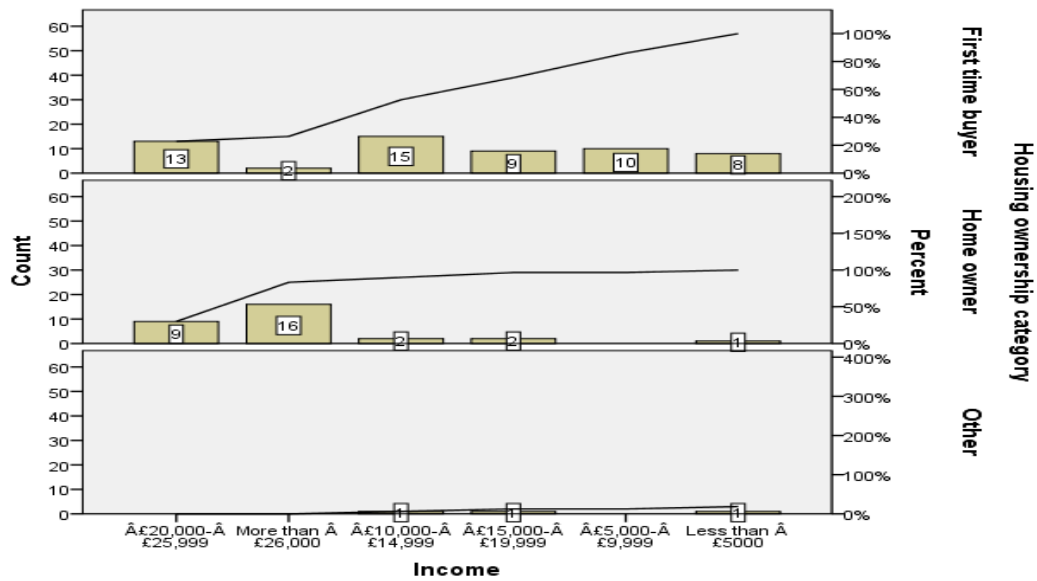


Fig 6.4: Pareto chart: cumulating income and homeownership category.

6.4.2 MOBILITY, RETENTION AND IMPLICATION ON PHYSICAL SUSTAINABILITY

This section further explored the common grounds between ‘mobility, retention and physical sustainability barrier’ informed by sustainability literature and interview findings on the support for CLT (SEHM) among FTBs. Interview findings identified that there are sustainability barriers that manifests from personal and community sources that do have impact on FTB ownership problems and their ability to employ community based platforms for homeownership. The investigation involved unravelling the community perception and housing aspiration variables and how this influences mobility, transience, community retention patterns.

From interview findings implementation of FTB affordable housing provision policies are faced with significant challenges (section 5.3.6) due to the very mobile characteristics of this demographic group which could as well result to low retention rates in their communities. Interview results also suggest that the natural progression in the life cycle of individual FTBs might be largely responsible. In order to generate a clearer picture on FTB mobility patterns, survey participants were asked about their length of stay in their community, CLT information, geographical location, their

housing arrangement/proprietor and their level of satisfaction with their current housing to ascertain significant associations and identify recurring patterns.

6.4.2.1 LEVEL OF CLT INFORMATION

In order to verify the suitability of the sampling used to capture relevant data on community development attributes in relation to the CLT model. The respondents were asked whether they are well informed about the CLT housing/model. From (Table 6.11) 77.8% of the respondents answered ‘Yes’ to being well informed about CLT/CBH, while 22.2% answered ‘No’, it is worth pointing out that answering ‘No’ does not indicate a complete state of obliviousness to CLT/CBH affairs. Rather it infers not being adequately informed about these issues. However it is expected of this sample to at least have a basic grasp of what the CLT SEHM concept is about. The 77.8% ‘Yes’ results are indicative of a sample size well informed about community development initiatives and CBH/CLT issues, while the 22.2% ‘No’ respondents, although not as informed, this helped mitigate bias in overall responses, particularly with questions that did not require stellar knowledge in CLT affairs.

CLT information					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	70	76.9	77.8	77.8
	No	20	22.0	22.2	100.0
	Total	90	98.9	100.0	
Missing	System	1	1.1		
Total		91	100.0		

Table 6.11: Level of CLT information

6.4.2.2 HOUSING OWNERSHIP CATEGORY AND LENGTH OF STAY IN THE COMMUNITY

Interview findings confirmed and elaborated on literature findings on the low level retention of FTBs in their local communities as a result of high degree of transience among these categories. The data analysis done here was to find out whether the state of belonging to a home ownership category i.e. home owner and FTB is a primary

indication of length of stay in the community. Analysis here employed the Crosstabs and the Chi-Squared Test of Independence.

Length of stay in community * Housing ownership category Cross tabulation					
		Housing ownership category			Total
		First time buyer	Home owner	Other	
Length of stay in community	Less than 1 year	4	0	1	5
	1-3 years	26	3	1	30
	3-6 years	15	5	1	21
	3-10 years	9	11	0	20
	more than 10 years	3	11	0	14
Total		57	30	3	90

Table 6.12: Length of stay in community * Housing ownership category Cross tabulation

Results from (Table 6.12) show an overrepresentation of respondents who classified themselves as FTBs irrespective of age. They were among those most likely to have stayed shortest in their current accommodation i.e. (a range of 0-3yrs). This result confirms the high degree of instability of FTBs as informed by interview findings. Inversely, there was an overrepresentation of respondents who classified themselves as homeowners among those that have stayed the longest in their current homes i.e. (3-10yrs). This representation informed further query to confirm the generated following hypothesis:

Null Hypothesis

(H₀): Housing ownership category (FTB/Homeowner) is not associated with length of stay

Alternative Hypothesis

(H₁): Housing ownership category (FTB/Homeowner) is associated with length of stay.

N.B: $p < 0.001$ if SPSS gives .000 in the output for a p-value.

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.937 ^a	8	.000
Likelihood Ratio	32.723	8	.000
Linear-by-Linear Association	11.135	1	.001
N of Valid Cases	90		

Table 6.13: Chi square test for homeownership association with length of stay

Interpretation: Table 6.13 indicates that the Pearson chi-squared statistic is 31.937. The p-value (.000) is <0.001 therefore the null hypothesis (H_0) of lack of association between housing ownership category and length of stay is rejected in favour of the alternative hypothesis that there is a significant association between both variables.

According to the Pareto chart (Fig 6.5), among FTBs there is a diminishing significance as length of stay increases (26, 15, 9, 3....) yrs.' while for homeowners there is an increasing significance as length of stay increasing respectively (3,5,11, 11...) yrs.

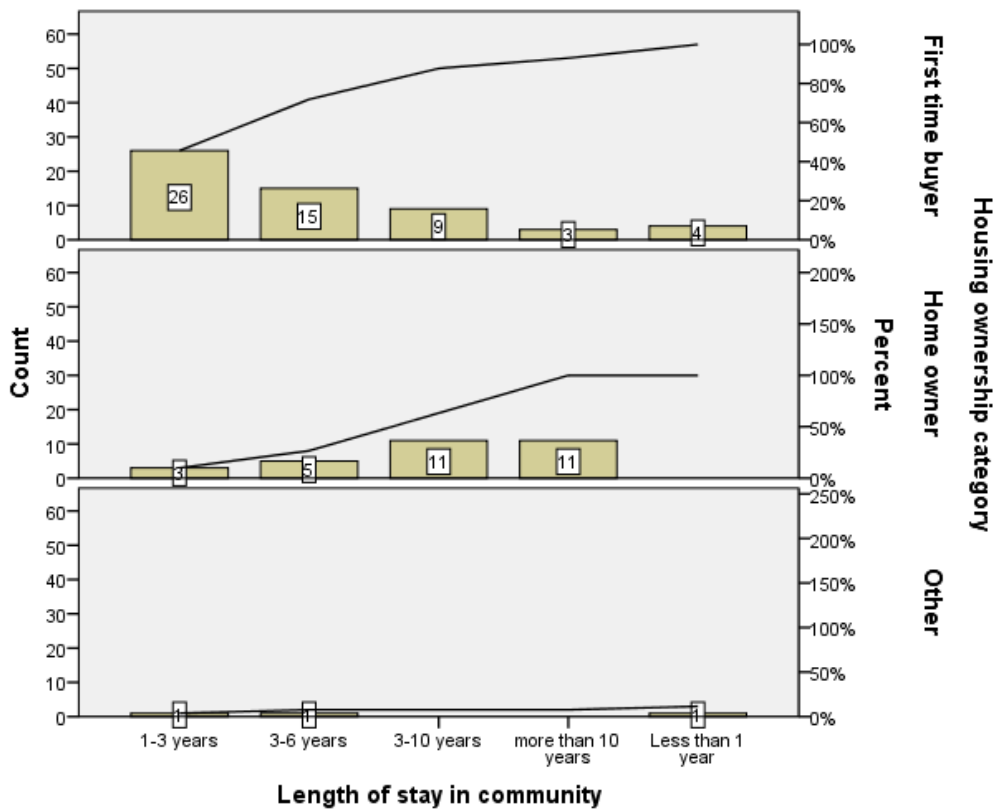


Fig 6.5: Pareto chart: cumulating length of stay and homeownership category.

6.4.2.3 GEOGRAPHICAL LOCATION AND HOUSING OWNERSHIP CATEGORY

The previous analysis concluded on the existing significant association between geographical location and Housing ownership categories, however literature and interview findings reflected a high level of retention problems among FTBs (CRC 2006), with Monk et al (2006) suggesting low level of FTBs in rural areas specifically (section 3.2.2.1). The results helped ascertain if where location (urban or rural) of CLT successes indicates or cater for where there is greater representation of FTBS. The analysis done here interpreted the frequency distribution of the geographical locations and housing ‘ownership category’ variable among the surveyed sample, the relation between these variables was significant, $X^2(4, N = 90) = 15.68, p = .003$.

Geographical location * Housing ownership category Cross tabulation					
		Housing ownership category			Total
		First time buyer	Home owner	Other	
Geographical location	Urban	30	7	1	38
	Suburban	19	7	1	27
	Rural	8	16	1	25
Total		57	30	3	90

Table 6.14: Geographical location * Housing ownership category Cross tabulation

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.683 ^a	4	.003
Likelihood Ratio	15.459	4	.004
Linear-by-Linear Association	10.638	1	.001
N of Valid Cases	90		

Table 6.15: Chi square test for association between geographical location and homeownership category

Null Hypothesis

(H₀): Housing ownership category (FTB/Homeowner) is not associated with geographical location.

Alternative Hypothesis

(H₁): Housing ownership category (FTB/Homeowner) is associated with geographical location.

Interpretation: (Table 6.15) indicates that the Pearson chi-squared statistic is 15.683. The p-value (.003) is <0.05 therefore the null hypothesis (H₀) of lack of association between housing ownership category and geographical location is rejected in favour of the alternative hypothesis that there is a significant association between both variables. The Pareto Chart (Fig 6.6) show the significance of FTBs representation in the rural areas is far less than that of urban or sub urban areas. While for homeowners the reverse is the case. This situation of homeowners showing significant representation in rural areas, appears to not only confirm literature and interview results of rural areas being retired dormitory spaces (section 5.3.6), it also highlights the weakness of the CLT SEHM in urban areas where there is a high representation of FTBs. Notably the CLT movement in the UK has experienced most of its significant successes in the rural areas to correct homeownership imbalance. This analysis has not put into consideration other underlying reasons that might be responsible like high level of transience among younger FTBs or the shuffling effect as described in section 3.2.2.1 and 5.3.6).

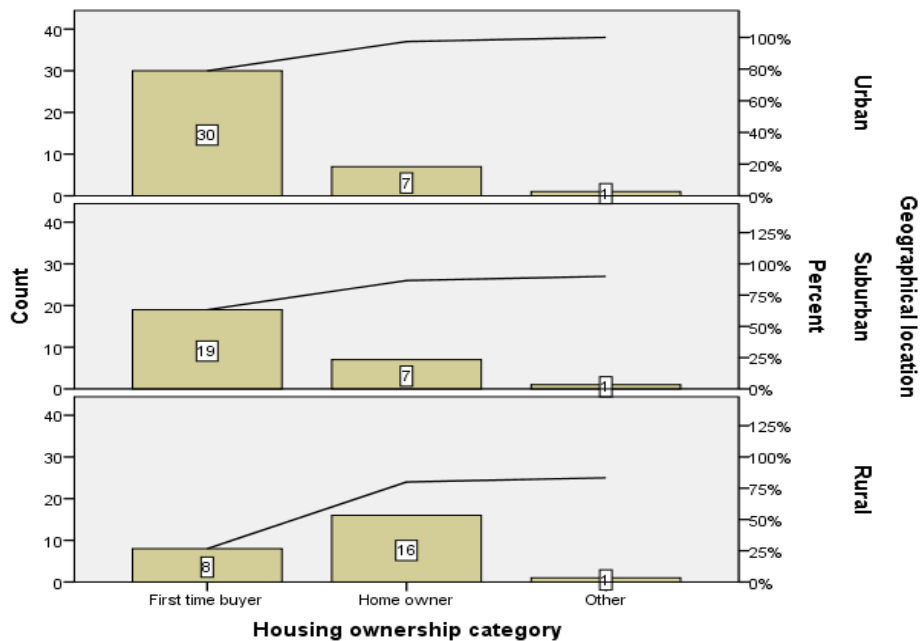


Fig 6.6: Pareto chart: cumulating geographical location with homeownership category.

6.4.2.4 HOUSING NEEDS

Literature and interview findings linked FTB’s retention problems to physical and environmental factors which results to increased transience and the outward movements of FTBs/younger population out of the rural/urban areas due to physical sustainability implications identified as common grounds between literature (section 3.3.1.1) and interview findings such as quality of neighbourhood, closeness to amenities, infrastructures and employment, security, size of home/garden, and public transport networks need to be prioritised in the context of beneficiaries. This section analysed how housing needs are impacted by key categorical variables such as geographical location, housing ownership category, length of stay, age and ethnicity.

6.4.2.5 HOUSING SATISFACTION AND HOME OWNERSHIP CATEGORY

Results to questions asked on whether respondents were satisfied with their housing or not indicated that 89.1% of FTBs answered ‘No’ to the housing satisfaction question in comparison to 4.3% of homeowners. According to these results homeowners were more likely to be satisfied with their housing than FTBs.

Housing satisfaction * Housing ownership category Cross tabulation						
			Housing ownership category			Total
			First time buyer	Home owner	Other	
Housing satisfaction	Yes	Count	16	28	0	44
		% within Housing satisfaction	36.4%	63.6%	0.0%	100.0%
	No	Count	41	2	3	46
		% within Housing satisfaction	89.1%	4.3%	6.5%	100.0%
Total		Count	57	30	3	90
		% within Housing satisfaction	63.3%	33.3%	3.3%	100.0%

Table 6.16: Housing satisfaction * Housing ownership category Cross tabulation

The Kolmogorov-Smirnov (K-S test) and Shapiro-wiki Test of normality were carried out to determine if the data for this variable is normally distributed, to prepare data for future tests. On this note assumptions that the data is sourced from a normal distributed

population have to be valid, otherwise the results of subsequent tests on population samples derived can be considered unreliable.

Tests of Normality						
Measures	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Housing satisfaction	.346	90	.000	.636	90	.000
Housing ownership category	.397	90	.000	.664	90	.000

a. Lilliefors Significance Correction

Table 6.17: Test of normality for housing satisfaction and homeownership category

Results

If $p < 0.001$, reject the H_0 because the test is significant

Due to sample size of < 2000 , Shapiro-Wilks test was conducted. The percentage of housing satisfaction, $D(90) = 0.000$, $p < 0.001$, and the housing ownership category, $D(90) = 0.000$, $p < 0.001$, were both not normal.

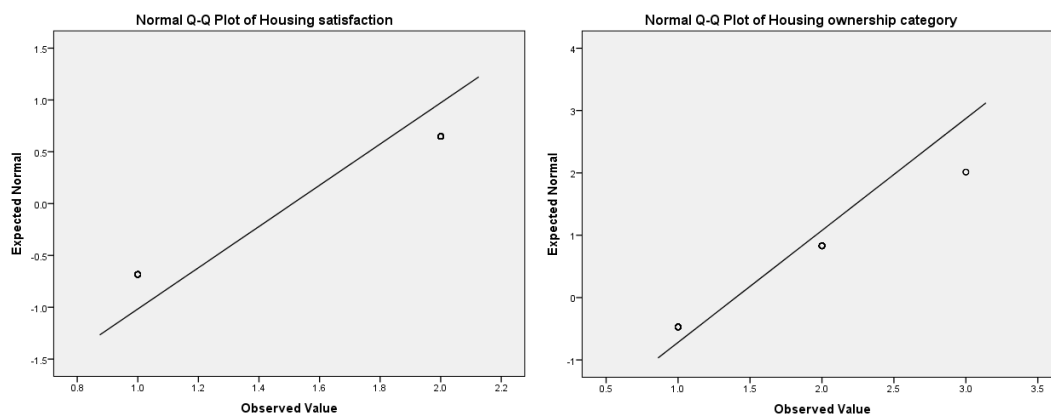


Fig 6.7: Normal Q-Q plot of housing satisfaction and homeownership category

In large samples like in the case of this sample size, the tests can be significant even when the scores are only slightly different from a normal distribution (Field, 2009). However to be certain, the data were further queried with both Q-Q plots, and the values of skew and kurtosis. Results shown in (Fig 6.7) showed an acceptable normality based on the positioning of observed values on the normality line. Also, the Skew and Kurtosis test indicate 1.006 and .022 for housing ownership category and -.045 and -1.944 for housing satisfaction respectively (Table 6.18), indicating normality based on

Cameron (2004) suggesting that skew and kurtosis should both fall in the range from +2 to -2 if data are normally distributed.

Statistics			
		Housing ownership category	Housing satisfaction
N	Valid	90	90
	Missing	1	1
Skewness		1.006	-.045
Std. Error of Skewness		.254	.254
Kurtosis		.022	-1.944
Std. Error of Kurtosis		.503	.503

Table 6.18: Housing ownership and satisfaction skewness and kurtosis test

6.4.2.5 INFLUENCE OF PHYSICAL AND ENVIRONMENTAL FACTORS ON TRANSIENCE/RELOCATION

With data indicating normality in distribution results of those that were not satisfied with their housing, were further analysed to identify the dependent variables of physical and environmental factors most likely to influence relocation. Results indicate that on the physical factors most likely to affect relocation, ‘closeness to employment’ is overwhelmingly represented with 53.8% of the respondents picking this option, followed by a 14.3% of representation for ‘neighbours/community spirit’ (Table 6.19). Also the Skew and Kurtosis test indicate normality for the data distribution of the responses with 1.521 and 1.962 satisfactions respectively (Table 6.19). The interdependence of responses to this enquiry will be further tested against other defined variables such as ‘housing mobility radius’ and ‘marital statuses, ‘housing ownership category’. This is crucial to defining location strategies for CLT housing initiatives that can cater for FTBs in regards to CLT development in ‘gateway areas’ as elaborated in literature. Moreover, questionnaire findings already identified CLT location barriers among FTBs (section 3.2.2.1), which highlights the weakness of CLTs in urban areas where there are high representation of FTBs. Bearing in mind that the CLT movement in the UK has experienced most of its significant successes in the rural areas to correct homeownership imbalance.

Housing problems (Relocation Factors)					
Options		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of neighbourhood	2	2.2	2.2	2.2
	Closeness to employment	47	51.6	51.6	53.8
	Quality of housing	7	7.7	7.7	61.5
	Neighbours/community spirit	13	14.3	14.3	75.8
	Security in homes	7	7.7	7.7	83.5
	Size of home/garden	3	3.3	3.3	86.8
	Closeness to relatives	5	5.5	5.5	92.3
	Safety in neighbourhood area	3	3.3	3.3	95.6
	Closeness to community/cultural facilities/religious	3	3.3	3.3	98.9
	Not applicable	1	1.1	1.1	100.0
	Total	91	100.0	100.0	

Table 6.19: Housing problems (Relocation Factors)

Housing problems (Relocation Factors)		
N	Valid	91
	Missing	0
Skewness		1.521
Std. Error of Skewness		.253
Kurtosis		1.962
Std. Error of Kurtosis		.500

Table 6.20: Housing problems (Relocation Factors) skewness and kurtosis test

6.4.2.6 IMPLICATION OF RESPONSE TO RELOCATION FACTORS ON DEMOGRAPHICAL AND PHYSICAL PARAMETERS: KRUSKAL-WALLIS TEST

This section analysed the interdependence of relocation factors on demographical and physical parameters. Firstly, Shapiro-wiki Test was carried out on responses on relocation factors to determine the normality of the distribution of demographical and physical parameters i.e. ('age category', 'sex', marital status, 'employment status', income, CLT information, length of stay in community, geographical location, housing arrangement, housing proprietor, housing ownership category, education, housing mobility radius and ethnicity). Then, categories that indicated normality were then queried with the Kruskal Wallis test which is a nonparametric test employed to compare

two or more groups. This statistical tool was used to test the level of dependence of the choice of relocation factors on the aforementioned demographical and physical parameters. The housing problem/relocation factors was the independent variable, while the analysis of responses to demographical and physical parameters analysed were the independent variables.

In reference to the frequency distribution of housing problems/relocation factors (Table 6.21). Results indicate that ‘closeness to employment’ has an overwhelming representation of 53.8%, followed by a 14.3% for ‘neighbours/community spirit’. Also kruskal wallis test revealed that the choice of relocation factors i.e. issues most likely to spur mobility where significantly affected by ‘age category’, ‘income, length of stay’, ‘housing arrangement’, ‘housing proprietor’, ‘housing ownership category’ and ‘mobility radius’ (Table 6.22).

Statistics: Skewness and kurtosis test						
Profile	N		Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
	Valid	Missing				
Age Category	90	1	.274	.254	-.802	.503
Sex	90	1	-.136	.254	-2.027	.503
Marital Status	90	1	-.090	.254	-2.038	.503
Employment status	90	1	.843	.254	-.481	.503
Income	90	1	-.314	.254	-1.092	.503
CLT information	90	1	1.359	.254	-.157	.503
Length of stay in community	90	1	.196	.254	-1.054	.503
Geographical location	90	1	.278	.254	-1.492	.503
Housing arrangement	90	1	-.151	.254	.614	.503
Housing proprietor	90	1	-.766	.254	-.819	.503
Housing ownership category	90	1	1.006	.254	.022	.503
Education	90	1	-.292	.254	-1.068	.503
Housing mobility radius	90	1	.403	.254	-.689	.503
Ethnicity	90	1	1.068	.254	-.534	.503

Table 6.21: Skewness and kurtosis normality test for demographical and physical parameters.

Measures/Profile	Chi-Square	Df	Asymp. Sig.
Age Category	21.809	8	.005
Sex	11.756	8	.162
Marital Status	6.718	8	.567
Employment status	12.705	8	.122
Income	19.194	8	.014
CLT information	14.557	8	.068
Length of stay in community	28.166	8	.000
Geographical location	15.328	8	.053
Housing arrangement	26.687	8	.001
Housing proprietor	19.268	8	.013
Housing ownership category	35.559	8	.000
Education	6.128	8	.633
Housing mobility radius	32.383	8	.000
Ethnicity	15.131	8	.057
a. Kruskal Wallis Test			
b. Grouping Variable: Housing problems (Relocation Factors)			

Table 6.22: Kuskal Wallis test dependence of relocation factors on demographical and physical parameters

6.4.2.7 CLT SEHM UTILITY IN GATEWAY AREAS

Inference drawn from literature (section 3.3.1.1) indicated that the CLT model can serve as a converging point between urban/sub urban regions like ‘gateway areas’ for a physically sustainable affordable housing provision. This insight buttressed Sultana (2002) who concluded that the distance operational between the location of jobs and housing is one of the most important determinants for housing affordability (section 2.2.3). In regards to the ‘gateway areas’, when questionnaire respondents were asked about relocation factors, geographical location (urban/rural/suburban) did not significantly affect their choice as much as ‘housing mobility radius’ i.e. how much distance they are willing to relocate to if given the opportunity (kruskal wallis analysis: Table 6.22 in section 6.4.2.7). Results show an overwhelming representation of 34.4% (67.4%) for those who would prefer to relocate by at least 5-10 miles to seek affordable housing out of the 51% who felt not satisfied with their current housing (these group answered ‘No’ when asked about ‘housing satisfaction’ the relationship between these variables was also significant at $X^2(3, N = 90) = 45.80, p < .01$ (Table 6.23). This result in addition to the ‘closeness to employment’ option being the most represented relocation factor, indicates the strategic importance of the 5-10 mile radius as a CLT location option in gateway areas between urban and rural areas. This is considered particularly important for population groups with high transience rates due employment

related (closeness to job) reasons. This serves as part of a CLT SEHM location or utilisation based solution to the high rate of outward movement of FTBs in rural areas.

Housing satisfaction * Housing mobility radius Crosstabulation							
			Housing mobility radius				Total
			0 miles	5-10 miles	10-20 miles	30-60 miles	
Housing satisfaction	Yes	Count	30	6	7	1	44
		% of Total	33.3%	6.7%	7.8%	1.1%	48.9%
	No	Count	1	31	13	1	46
		% of Total	1.1%	34.4%	14.4%	1.1%	51.1%
Total		Count	31	37	20	2	90
		% of Total	34.4%	41.1%	22.2%	2.2%	100.0%

Table 6.23: Housing satisfaction * Housing mobility radius Crosstabulation

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.799 ^a	3	.000
Likelihood Ratio	54.417	3	.000
Linear-by-Linear Association	20.918	1	.000
N of Valid Cases	90		

Table 6.24: Chi square test for association between housing satisfaction and housing mobility/relocation radius.

As crucial as the ‘housing mobility radius’ appears to be on the issue of CLT model utilisation in identified gateway areas, the following parameters (age category, level of income and length of stay) further buttresses inferences drawn from previous analysis (section 6.4.1.4) on the positive associations between the aforementioned parameters when defining FTB attributes/homeownership attributes. Chi square results of association revealed the following:

- Age category, $X^2 (8, N = 90) = 30.57, p < .01,$
- Level of income, $X^2 (10, N = 90) = 41.615, p < .01,$
- Length of stay in the community, $X^2 (8, N = 90) = 31.937, p < .01$ and,
- Geographical location, $X^2 (4, N = 90) = 15.683, p = .003,$ however this does not influence relocation factors significantly.

6.4.2.8 KRUSKAL WALLIS ANALYSIS OF THE DEPENDENCE OF PHYSICAL AND DEMOGRAPHICAL FACTORS ON HOUSING SATISFACTION

This section analysed the dependence of housing satisfaction on demographical and physical parameters that passed the skewness and kurtosis normality test (Table 6.2.1). On the issue of housing satisfaction respondent were asked to answer ‘yes’ or ‘no’ to whether they were satisfied with their current housing. The results from (Table 6.25) indicate that housing satisfaction among the studied population does not depend on employment status, level of CLT information and education. However there was a significant dependency on age category, income, length of stay, geographical location, housing arrangement, housing proprietor, housing ownership category, housing mobility radius and ethnicity.

On the premise that lack of housing satisfaction appears to motivate relocation, the comparison of Kruskal-Wallis test results for relocation factors and housing satisfaction on demographical and physical parameters showed that housing satisfaction is additionally dependent on geographical location and ethnicity. However, these two parameters did not significantly influence choice of relocation factors (Table 6.25). Therefore, it appears ethnicity and geographical location does influence housing satisfaction, but does not necessarily affect responses on relocation factors.

Test Statistics^{a,b}			
	Chi-Square	Df	Asymp. Sig.
Age Category	14.019	1	.000
Employment status	2.557	1	.110
Income	21.035	1	.000
CLT information	3.631	1	.057
Length of stay in community	27.643	1	.000
Geographical location	6.646	1	.010
Housing arrangement	35.190	1	.000
Housing proprietor	18.425	1	.000
Housing ownership category	22.245	1	.000
Education	1.526	1	.217
Housing mobility radius	25.199	1	.000
Ethnicity	13.554	1	.000
a. Kruskal Wallis Test			
b. Grouping Variable: Housing satisfaction			

Table 6.25: kruskal wallis analysis: interdependence of physical and demographical factors on housing satisfaction

6.4.3 DEFINING CLT SHARED EQUITY HOUSING MODEL ACCEPTABILITY AND THE IMPLICATION ON ECONOMIC SUSTAINABILITY

Literature identified low levels of emphasis on the actual financial and economic implications of affordable housing models on potential beneficiaries in respect to economical sustainability (section 3.3.1.2). This section investigated the ‘personal finance inadequacies and CLT acceptability’ as a common ground between interview findings and economic sustainability literature on CLT development. Investigations carried out here include:

- The low levels of savings among FTBs.
- Difficulties encountered in housing acquisition.
- The level of acceptability of housing ownership without a freehold (CLT SEHM)

Moreover, acquired data were also analysed to investigate the perspectives of potential beneficiaries such as the FTBs on issues that include whether (the concept of forfeiting freehold on homeownership in lieu for reduced housing costs) is as much of a concern for home buyers compared to other encumbrances such as credit availability, mortgage financing, down payment, income, propensity to save and inability to staircase to full freehold ownership (leasehold enfranchisement) as identified from literature and interview findings (section 3.3.1.2 and 5.3.6).

6.4.3.1 CLT SEHM STRUCTURAL IMPLICATION ON PERSONAL HOUSING FINANCE ISSUES

This section analysed housing finance problems and propensity to save variables to ascertain its significance as an economical sustainability barrier to FTB engagement in CLT SEHM utilisation.

6.4.3.2 PROPENSITY TO SAVE

Interview findings identified low levels of savings among FTBs (section 5.3.6), this section queried associations between age, homeownership category, housing arrangement, housing satisfaction and propensity to save among respondents. Respondents were asked whether they are planning or currently saving towards

homeownership, this helped clarify if propensity to save is determined by respondents housing situation. The collated data were tested with the Pearson's Correlation Coefficient which according to Dancy and Reidy (2007) determines the relationship and strength between variables. In statistical terms the relationship and strength determined by the Pearson's Correlation Coefficient (r) ranges between 0 and 1. Therefore, the higher the correlation coefficient value the stronger the relationship. The relationship and strength ranges from - 1 for perfectly negative relationships to +1 for a perfectly positive relationship. A value of 0 indicates that there is no linear relationship (Table 6.26).

VALUE OF CORRELATION COEFFICIENT	STRENGTH
1	Perfect
0.7-0.9	Strong
0.4-0.6	Moderate
0.1-0.3	Weak
0	No relationship

Table 6.26: Correlation coefficient relationship breakdown (Dancy and Reidy, 2007)

Results of the analysis indicated that there were no correlations between propensity to save and (age category, housing arrangement, housing satisfaction). However, there was a positive but weak correlation between propensity to save and housing ownership category. Pearson's $r(90) = .225, p = .033$ (Table 6.27).

Correlations						
		Propensity to save	Age Category	Housing ownership category	Housing arrangement	Housing satisfaction
Propensity to save	Pearson Correlation	1	-.048	.225*	-.063	.063
	Sig. (2-tailed)		.654	.033	.556	.556
	N	90	90	90	90	90
Age Category	Pearson Correlation	-.048	1	.383**	-.498**	-.391**
	Sig. (2-tailed)	.654		.000	.000	.000
	N	90	90	90	90	90
Housing ownership category	Pearson Correlation	.225*	.383**	1	-.372**	-.417**
	Sig. (2-tailed)	.033	.000		.000	.000
	N	90	90	90	90	90
Housing arrangement	Pearson Correlation	-.063	-.498**	-.372**	1	.539**
	Sig. (2-tailed)	.556	.000	.000		.000
	N	90	90	90	90	90
Housing satisfaction	Pearson Correlation	.063	-.391**	-.417**	.539**	1
	Sig. (2-tailed)	.556	.000	.000	.000	
	N	90	90	90	90	90
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 6.27: Correlation between propensity to save and housing condition

A follow up on the correlation results, resulted in a cross tabulated breakdown which indicated that 61.4% of FTBs are not saving for housing compared to 80% for homeowners who apparently might not be seeking housing (Table 6.28), with the exception of those with sufficient purchasing power to afford second homes. The low propensity to save among FTBs regardless is an economic sustainability barrier in engaging the CLT SEHM for housing among this group. With the exception of those who considered themselves homeowners, hence might not have a primary justification to be saving for housing, the likelihood of a poor saving habit increases if the respondent is FTB.

Housing ownership category * Propensity to save Crosstabulation						
			Propensity to save		Total	
			Yes	No		
Housing category	ownership	First time buyer	Count	22	35	57
			% within Housing ownership category	38.6%	61.4%	100.0%
			% within Propensity to save	78.6%	56.5%	63.3%
			% of Total	24.4%	38.9%	63.3%
	ownership	Home owner	Count	6	24	30
			% within Housing ownership category	20.0%	80.0%	100.0%
			% within Propensity to save	21.4%	38.7%	33.3%
			% of Total	6.7%	26.7%	33.3%
	ownership	Other	Count	0	3	3
			% within Housing ownership category	0.0%	100.0%	100.0%
			% within Propensity to save	0.0%	4.8%	3.3%
			% of Total	0.0%	3.3%	3.3%
Total			Count	28	62	90
			% within Housing ownership category	31.1%	68.9%	100.0%
			% within Propensity to save	100.0%	100.0%	100.0%
			% of Total	31.1%	68.9%	100.0%

Table 6.28: Housing ownership category * Propensity to save Crosstabulation

6.4.3.3 CLT (SEHM) STRUCTURE AS A HOUSING FINANCE PROBLEM

Information sought from the perspective of potential beneficiaries include whether the concept of forfeiting freehold on homeownership in lieu for reduced housing costs is as much of a concern for home buyers compared to other encumbrances such as credit availability, mortgage financing, down payment and income. In order to define the relevance of identified finance problems, the respondents were asked to indicate the relevance of each of the variables on a five point likert ranking scale, where 1= Very unimportant to 5 = Very important. A chi square test was conducted to verify the significance of each variable. Furthermore, descriptive statistics were generated to ascertain actual distribution of the relevance of each variable using the mean and standard deviation. Degrees of relevance were then tested if significant respondent's choices varied along geographical lines (urban, rural/suburban).

Results indicate that all tested variables were all significant (Table 6.29):

- Relevance of credit problems: $X^2(3, N = 91) = 94.27, p < .01$
- Relevance of mortgage finance: $X^2(3, N = 91) = 77.92, p < .01$

- Relevance of down payment problems: $X^2(3, N = 91) = 81.09, p < .01$
- Relevance of level of income: $X^2(2, N = 91) = 57.38, p < .01$
- Relevance of land equity problems: $X^2(4, N = 91) = 30.70, p < .01$

Test Statistics housing finance problems					
	Relevance of credit problems	Relevance of mortgage finance problems	Relevance of down payment problems	Relevance of level of income problems	Relevance of land equity problems
Chi-Square	94.275 ^a	77.923 ^a	81.088 ^a	57.385 ^b	30.703 ^c
Df	3	3	3	2	4
Asymp. Sig.	.000	.000	.000	.000	.000

Table 6.29: Chi square test of significance for housing finance problems

On closer scrutiny of the descriptive statistics table, results indicated that the relevance of land equity as a concern while buying a house was far lower compared to the others. The standard deviation was significantly higher than the rest, hence answers to responses tended towards the extreme away from the average i.e. relevance of land equity problems (Table 6.30): $M = 2.57, SD = 1.212$.

This result is crucial to the research as it indicates that land equity concerns in regards to the CLT shared equity model is not viewed as much as a concern compared to other variables. This partly nullifies the CLT shared equity model in itself as a barrier to CLT development/acceptability.

Descriptive Statistics				
Options	N	Mean		Std. Deviation
		Statistic	Std. Error	Statistic
Relevance of credit problems	91	4.29	.063	.602
Relevance of mortgage finance problems	91	4.46	.085	.807
Relevance of down payment problems	91	4.52	.072	.689
Relevance of level of income problems	91	4.63	.064	.608
Relevance of land equity problems	91	2.57	.127	1.212
Valid N (listwise)	91			

Table 6.30: Descriptive statistics for housing finance problems

When these variables were queried with the Pearson's (r) for correlation with their geographical location. This was done to investigate if the geographical location disparities identified by literature for the CLT SEHM could be traced to variations in housing finance problems experience along urban/rural locations. There were no significant positive correlations with geographical location (Table 6.31). Pearson's $r(90) = .376, p = -.095$.

These results indicated that concerns of respondents seeking affordable housing occurs irrespective of either urban/suburban or rural location, therefore there is no indication that the CLT SEHM (relevance of land equity problems) structure is responsible for the disparities of CLT performance in urban and rural areas in the UK.

Correlations						
	Geographical location	Relevance of credit problems	Relevance of mortgage finance problems	Relevance of down payment problems	Relevance of level of income problems	Relevance of land equity problems
Geographical location	1	-.050	.018	.133	.094	-.095
		.637	.867	.210	.376	.376
	90	90	90	90	90	90

Table 6.31: Correlation between geographical location and housing finance problems

6.4.3.4 HOUSING MODEL ACCEPTABILITY

This section investigates the impact of housing ownership category and geographical location on housing provision model acceptability i.e. between the conventional ownership model and the CLT SEHM. The rationale here is informed by literature and interview findings that model acceptability is influenced along geographical and probably homeownership categorical lines. This based on evidence which implies that the CLT movement in the UK has experienced most of its significant successes in the rural areas, unlike in the urban/suburban areas (Paterson and Dayson, 2011); Section 2.3.5). In order to further clarify these presumptions, the respondents were asked along

geographical and homeownership classifications the following questions as dependent variables:

- Whether owning both the land and house was a priority, even if they have to buy at market rate (survey declarative statement representing the traditional/conventional homeownership model).
- If owning just the house, but not the land is acceptable as long as it is affordable i.e. less than market rate (survey declarative statement representing the CLT shared equity model).

The Two-Way independent ANOVA was adopted for this test to lend vigour to the findings/associations. This test is deemed suitable because of its ability to test two independent variables involving different participants (groups) as data is manipulated in all obtainable conditions (Field, 2009; Arif *et al*, 2010).

6.4.3.4.1 CONVENTIONAL AFFORDABLE HOUSING OWNERSHIP MODEL

The distribution passed the skewness and kurtosis test for normality and the levene's test for homogeneity assumptions (Table 6.32 and 6.33).

- Housing ownership category is normally distributed, with skewness of 1.006 ($SE = .254$) and kurtosis of .022 ($SE = .503$).
- Geographical location is normally distributed, with skewness of .278 ($SE = .254$) and kurtosis of -1.412 ($SE = .503$).
- Level of support for conventional housing ownership model is normally distributed, with skewness of 1.006 ($SE = .254$) and kurtosis of -.197 ($SE = .500$).

Statistics				
Tests		Housing ownership category	Geographical location	Level of support for conventional housing ownership model
N	Valid	90	90	91
	Missing	1	1	0
Skewness		1.006	.278	-.197
Std. Error of Skewness		.254	.254	.253
Kurtosis		.022	-1.492	-1.052
Std. Error of Kurtosis		.503	.503	.500

Table 6.32: Skewness and kurtosis test for conventional housing ownership model acceptability constructs.

Leven's test indicated ($F = 4.839, p = 0.067$).

Levene's Test of Equality of Error Variances^a

Dependent Variable: Level of support for conventional housing ownership model

F	df1	df2	Sig.
4.839	8	81	.067

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + var10 + var11 + var10 * var11

Table 6.33: Leven's test for homogeneity assumptions for the conventional housing ownership model acceptability support constructs.

Results from the main ANOVA table (Table 6.34) indicate that there was a significant effect of housing ownership category on the level of support for the conventional ownership model, $F(2, 81) = 13.53, p < .001$. There was a non-significant effect of geographical location on level of support for conventional affordable housing ownership model, $F(2, 81) = .889, p = .415$. Finally the interaction between both independent variables is insignificant, $F(4, 81) = .659, p = .623$.

This implied that homeownership category of the respondents significantly influenced the level of support for conventional housing ownership model, however the p-value is insignificant for geographical location, therefore overall when you ignore geographical location (either urban/suburban or rural) of the respondents, the housing ownership category influenced the level of support for conventional housing ownership.

Tests of Between-Subjects Effects					
Dependent Variable: Level of support for conventional housing ownership model					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	29.981 ^a	8	3.748	3.995	.000
Intercept	180.252	1	180.252	192.175	.000
var10 (homeownership category)	25.377	2	12.689	13.528	.000
var11 (geographical location)	1.668	2	.834	.889	.415
var10 * var11	2.471	4	.618	.659	.623
Error	75.975	81	.938		
Total	904.000	90			
Corrected Total	105.956	89			

a. R Squared = .283 (Adjusted R Squared = .212)

Table 6.34: ANOVA Tests of Between-Subjects Effects Dependent Variable: Level of support for conventional housing ownership model.

Through further scrutiny using the Bonferroni and the bootstrap post hoc tests (Table 6.35 and 6.36), results show that homeowners are more likely to support conventional homeownership models than those who categorise themselves as either FTBs ($p < .001$) or other ($p = .823$). Also, FTBs are less likely to support the conventional models than both homeowners ($p < .001$) and others ($p = .823$). However, those who categorised themselves as others are almost unanimously far less likely to support conventional models than homeowners in an almost equal degree, due to the closeness of $p = .823$ to the maximum value of ($p = 1$) which indicates maximum similarities. This finding seem to indicate that for the FTBs there are diminished levels of preference when it comes to housing models, at least to a greater degree and less consistency than those who classified themselves as others.

Multiple Comparisons							
Dependent Variable: Level of support for conventional housing ownership model							
	(I) Housing ownership category	(J) Housing ownership category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Bonferroni	First time buyer	Home owner	-1.10	.218	.000	-1.64	-.57
		Other	.63	.574	.823	-.77	2.03
	Home owner	First time buyer	1.10	.218	.000	.57	1.64
		Other	1.73	.586	.012	.30	3.17
	Other	First time buyer	-.63	.574	.823	-2.03	.77
		Home owner	-1.73	.586	.012	-3.17	-.30
Based on observed means. The error term is Mean Square (Error) = .927.							
*. The mean difference is significant at the .05 level.							

Table 6.35: Bonferroni Post hoc test for multiple comparisons of dependent Variable: Level of support for conventional housing ownership model.

The result of the Bonferroni post hoc analysis indicates that the level of support for conventional ownership models are almost similar for those who categorised themselves as ‘other’ compared to FTBs, $M_{diff} = -.63$, 95% CI [-1.61, .31], $p = .823$. However, it is much higher for homeowners compared to FTBs, $M_{diff} = 1.10$, 95% CI [-7, 1.42], $p < .001$, and significantly lower for FTB compared to homeowners, $M_{diff} = -1.10$, 95% CI [-1.46, -.70].

Bootstrap for Multiple Comparisons							
Dependent Variable: Level of support for conventional housing ownership model							
	(I) Housing ownership category	(J) Housing ownership category	Mean Difference (I-J)	Bootstrap ^a			
				Bias	Std. Error	95% Confidence Interval	
						Lower	Upper
Bonferroni	First time buyer	Home owner	-1.10	.00 ^b	.19 ^b	-1.46 ^{b,c}	-.70 ^b
		Other	.63	.00 ^b	.47 ^b	-.31 ^{b,c}	1.61 ^b
	Home owner	First time buyer	1.10	.00 ^b	.19 ^b	.70 ^{b,c}	1.46 ^b
		Other	1.73	.01 ^b	.47 ^b	.74 ^{b,c}	2.72 ^b
	Other	First time buyer	-.63	.00 ^b	.47 ^b	-1.61 ^{b,c}	.31 ^b
		Home owner	-1.73	.01 ^b	.47 ^b	-2.72 ^{b,c}	-.74 ^b
a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples							
b. Based on 834 samples							
c. Some results could not be computed from jackknife samples, so this confidence interval is computed by the percentile method rather than the BCa method.							

Table 6.36: Bootstrap for Multiple Comparisons of Dependent Variable: Level of support for conventional housing ownership model.

The post hoc results are further verified by the estimated means plot for level of support for conventional ownership models (Fig 6.8). According to the depiction, homeowners recorded the highest marginal mean. Geographical location of respondents does not however have any significant relationship with levels of support for conventional housing, but results indicated that overall support for the conventional housing model is highest in urban areas (particularly among homeowners, but lowest among others). Followed by suburban areas (highest among homeowners, but lowest among FTBs), with the least support in rural areas (highest among homeowners, but lowest among others, then FTBs).

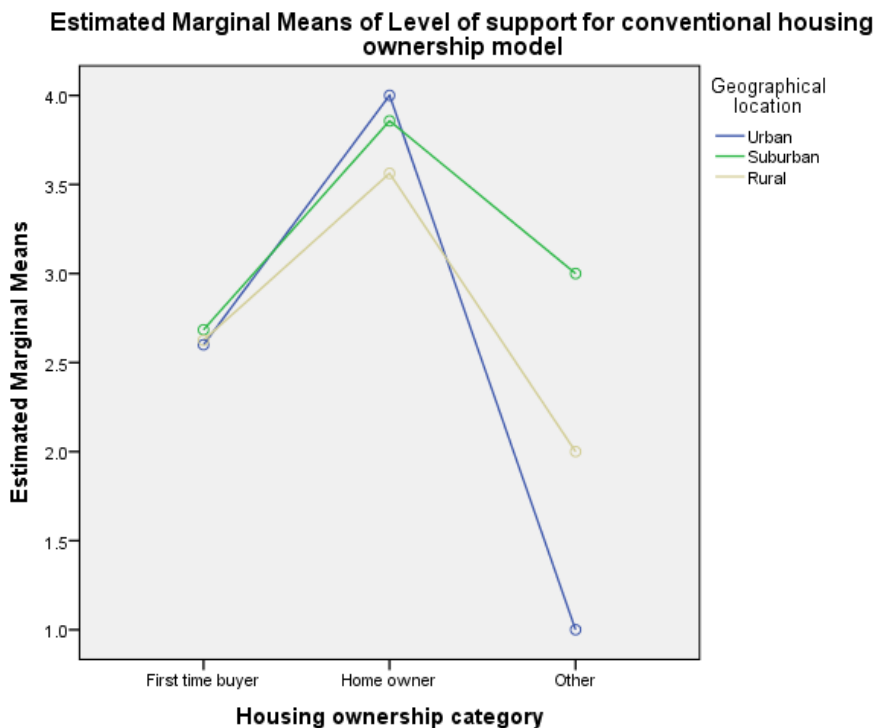


Fig 6.8: Plot for estimated marginal means of level of support for conventional housing ownership model.

6.4.3.4.2 LEVEL OF SUPPORT FOR CLT SHARED EQUITY OWNERSHIP MODEL

This section tests whether/how home ownership status or geographical location affects the level of support for the CLT shared equity ownership model. This analysis followed similar steps carried with the conventional model in the previous section. Again, the two-way ANOVA was employed for this task.

The distribution passed the skewness and kurtosis test for normality (Table 6.37) and the Levene's test for homogeneity assumptions (Table 6.38).

- Housing ownership category is normally distributed, with skewness of 1.006 ($SE = .254$) and kurtosis of .022 ($SE = .503$).
- Geographical location is normally distributed, with skewness of .278 ($SE = .254$) and kurtosis of -1.412 ($SE = .503$).
- Level of support for conventional housing ownership model is normally distributed, with skewness of -1.208 ($SE = .253$) and kurtosis of .420 ($SE = .500$).

Statistics				
Tests		Level of support for CLT shared equity ownership model	Housing ownership category	Geographical location
N	Valid	91	90	90
	Missing	0	1	1
Skewness		-1.208	1.006	.278
Std. Error of Skewness		.253	.254	.254
Kurtosis		.420	.022	-1.492
Std. Error of Kurtosis		.500	.503	.503

Table 6.37: Skewness and kurtosis test for the CLT SEHM acceptability constructs.

- The Levene's test indicated ($F = 1.179$, $p = 0.322$), hence the sample passed the homogeneity assumption.

Levene's Test of Equality of Error Variances^a

Dependent Variable: Level of support for CLT shared equity ownership model

F	df1	df2	Sig.
1.179	8	81	.322

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + var10 + var11 + var10 * var11

Table 6.38: Levene's test for homogeneity assumptions for the CLT SEHM acceptability support constructs.

Results from the main ANOVA table (Table 6.39) indicate that there was a non-significant effect of housing ownership category on the level of support for the conventional ownership model, $F(2, 81) = 1.855$, $p = .163$. There was also a non-

significant effect of geographical location on level of support for conventional affordable housing ownership model, $F(2, 81) = .461, p = .633$. Finally the interaction between both independent variables is also not significant, $F(4, 81) = .682, p = .606$. This implied that neither homeownership category nor the geographical location of the respondents significantly affected their level of support for the CLT shared equity model ownership model, therefore overall when you ignore geographical location (either urban/suburban or rural) of the respondents, the housing ownership category does not influence the level of support for the CLT shared equity ownership model and vice versa.

Tests of Between-Subjects Effects					
Dependent Variable: Level of support for CLT shared equity ownership model					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	15.161 ^a	8	1.895	1.318	.246
Intercept	417.860	1	417.860	290.680	.000
var10	5.334	2	2.667	1.855	.163
var11	1.324	2	.662	.461	.633
var10 * var11	3.924	4	.981	.682	.606
Error	116.439	81	1.438		
Total	1620.000	90			
Corrected Total	131.600	89			

a. R Squared = .115 (Adjusted R Squared = .028)

Table 6.39: ANOVA Tests of Between-Subjects Effects Dependent Variable: Level of support for CLT SEHM.

Through further scrutiny using the Bonferroni and the bootstrap post hoc tests (Table 6.40 and 6.41), results show that the level of support for the CLT shared equity model occurred in similar patterns among FTBs and homeowners ($p = 1$), this is the maximum value of p , (which indicates almost identical means). Furthermore, those who classified themselves as FTBs and others are more likely to support the CLT shared equity model, but not to statistical significant levels, ($p = .582$). Until further research is conducted on FTB preferred housing model, results from this analysis appear to suggest that FTBs show more flexibility in housing ownership choice or model among housing priority groups (second home hunters are of course an exception, hence not considered) in

regards to the CLT shared equity model. This could be due to its ability keep homes permanently affordable as elaborated in literature (section 2.2.6). It is also worth taking into consideration that the population sampled comprised of respondents that are at least reasonably informed in CLT matters; hence the high overall level of support. Perhaps these results could also be as a result of convenience rather than actual preference, particularly when considering the FTBs. Hence, the need for further research using a regular population sample.

Multiple Comparisons							
Dependent Variable: Level of support for CLT shared equity ownership model							
	(I) Housing ownership category	(J) Housing ownership category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Bonferroni	First time buyer	Home owner	.10	.270	1.000	-.56	.76
		Other	-.93	.710	.582	-2.67	.81
	Home owner	First time buyer	-.10	.270	1.000	-.76	.56
		Other	-1.03	.726	.475	-2.81	.74
	Other	First time buyer	.93	.710	.582	-.81	2.67
		Home owner	1.03	.726	.475	-.74	2.81
Based on observed means. The error term is Mean Square(Error) = 1.438.							

Table 6.40: Bonferroni Post hoc test for multiple comparisons of dependent Variable: Level of support for the CLT SEHM.

The result of the Bonferroni test (post hoc analysis) showed that the level of support for the CLT shared equity ownership models are almost similar for those who categorised themselves as FTBs compared to homeowners, $M\ diff = 0.1$, 95% CI [-.39, .64], $p = 1$; however support is much higher for others compared to FTBs, $M\ diff = .93$, 95% CI [.63, 1.24], $p = .582$.

Bootstrap for Multiple Comparisons							
Dependent Variable: Level of support for CLT shared equity ownership model							
	(I) Housing ownership category	(J) Housing ownership category	Mean Difference (I-J)	Bootstrap ^a			
				Bias	Std. Error	95% Confidence Interval	
						Lower	Upper
Bonferroni	First time buyer	Home owner	.10	.01 ^b	.27 ^b	-.39 ^{b,c}	.64 ^b
		Other	-.93	.01 ^b	.16 ^b	-1.24 ^{b,c}	-.63 ^b
	Home owner	First time buyer	-.10	.01 ^b	.27 ^b	-.64 ^{b,c}	.39 ^b
		Other	-1.03	.00 ^b	.23 ^b	-1.52 ^{b,c}	-.61 ^b
	Other	First time buyer	.93	.01 ^b	.16 ^b	.63 ^{b,c}	1.24 ^b
		Home owner	1.03	.00 ^b	.23 ^b	.61 ^{b,c}	1.52 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 791 samples

c. Some results could not be computed from jackknife samples, so this confidence interval is computed by the percentile method rather than the BCa method.

Table 6.41: Bootstrap for Multiple Comparisons of Dependent Variable: Level of support for the CLT SEHM.

The post hoc results are further verified by the estimated means plot for level of support for CLT shared equity models. This plots also shed more light on the pattern of support along geographical lines (Fig 6.9). Results indicate that those who classified themselves as others recorded the highest marginal mean. Along geographical lines, results indicated that the overall support for the CLT shared equity model is highest in rural areas among those who classified themselves as ‘other’. Furthermore, results indicate that support is higher among homeowners than FTBs in rural areas. On the contrary, in suburban and urban areas support is higher among FTBs than homeowners. This appears to suggest huge disparities in support for the CLT shared equity model among FTBs across geographical classifications, this could be attributed to the huge outward migration and mobility of FTBs to urban areas earlier validated in interview findings (section 5.3.6). This buttresses the need for increased CLT representation in urban areas, which as for now is still underrepresented. Although the CLT (SEHM) structure was found to be not much more an impediment to potential housing beneficiaries compared to other housing financial problems (section 6.4.3.3). This favours its economic

viability among respondents. However, this analysis suggests the model is macro economically unviable for FTBs, because the overall relevance of the model is strongest in rural areas. Where support for the model is remarkably low due to outward migration tendencies causing a low representation of the FTB groups, whose homeownership problems still remain largely unmet regardless.

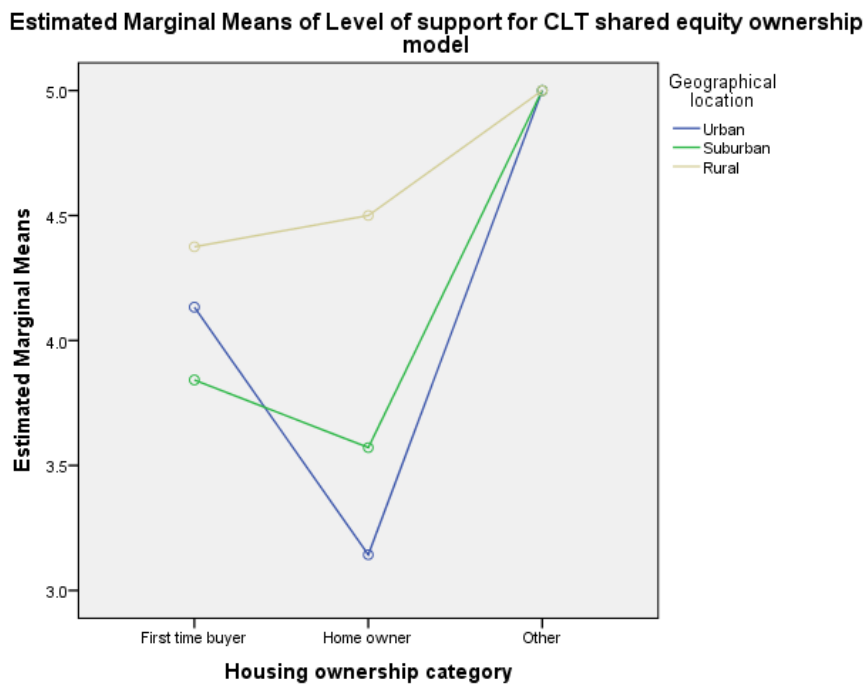


Fig 6.9: Plot for estimated marginal means of level of support for CLT (SEHM).

6.4.4 THE NEED FOR SOCIAL CAPITAL AND INVOLVEMENT AS SOCIAL SUSTAINABILITY BARRIER

This section investigated the inter relationship between the level of support for affordable housing initiatives and involvement in community development networks the level of individual social capital in an urban and rural context. Findings suggest that there are common grounds between interview findings on FTB involvement problems and social sustainability literature on social capital and community development (section 3.3.1.3, section 5.3.6 and Fig 6.2).

The investigation involved the analysis of responses to enquiries centred upon involvement and social capital variables addressing:

- Assessment of development networks
- Assessment of involvement barriers
- Social capital assessment

6.4.4.1 ASSESSMENT OF DEVELOPMENT NETWORKS AS KNOWLEDGE SHARING PLATFORMS

Interview findings identified the role of opposition to asset transfer and NIMBYs as sources of barriers to CLT growth. Also, findings identified the need for better knowledge sharing avenues in the affordable housing sector to facilitate partnerships and improved community integration in affordable housing initiatives (Section 5.5). To further consolidate or dispute these findings, it was deemed important to compare performance of available CLT related development networks identified by literature (Section 2.3.5 and 3.2.3) as knowledge sharing hubs and their impact on attitude to community development initiatives and asset transfer among population groups. This section therefore investigated the level of satisfaction with five key CLT related community development networks among targeted population which are the NCLTN, social networks, Education (libraries), affordable housing organisations (government, private and community based), Community awareness (skills and harnessing). This helped in identifying best performing network hubs in sustaining and advancing community involvement in relation to the CLTs. Furthermore, it provides a frontier for the need for replication/transfer of knowledge networking best practices to less performing avenues.

6.4.4.2 COMMUNITY DEVELOPMENT NETWORKS ASSESSMENT

In order to compare performance of available CLT related development networks identified by literature as knowledge sharing hubs and their impact on attitude to community development initiatives and asset transfer among population groups. The rationale here is that does satisfaction with community development networks correlate with the likelihood to support CBH (community based housing) initiatives among respondents.

- Respondents were asked to indicate their level of satisfaction with 5 key community development networks on a scale of 1 = (not satisfied) to 5 = (very satisfied) *.
- Respondents were asked to rate their level of support for the development of community owned affordable housing on a scale of 1 = (very low) to 5 = (very high) *.
- Likewise, respondents also rated their level of support for asset transfer (land and properties) to communities for community ownership, management and development purposes on a scale of 1 = (very low) to 5 = (very high) *

**data in likert scale*

Associations were sought between these variables to identify if level of satisfaction with community development network avenues impacted attitude to community housing initiatives and asset transfer through the use of the Pearson's correlation coefficient (r) see (Table 6.26) for breakdown of the value of correlation coefficient.

Results of descriptive statistics reveal a high level of overall support for CBH initiatives, $M = 3.8$, $SD = .542$ and asset transfer, $M = 3.89$, $SD = .640$. Also, respondents were largely satisfied with the NCLTN compared to the other four community development network platforms (Table 6.42).

Descriptive Statistics					
Survey perceptions (Variables)	Mean	Std. Deviation	N	Low/ Not Satisfied / Neutral	High/ Satisfied
Level of support for CBH initiatives	3.80	.542	91		*
Level of support for asset transfer	3.89	.640	91		*
Satisfaction with National Community Land Trust Network	4.03	.948	91		*
Satisfaction with community social networks	2.69	1.112	91	*	
Satisfaction with community educational networks (libraries)	2.71	.981	91	*	
Satisfaction with overall affordable housing networks	2.54	1.036	91	*	
Satisfaction with community awareness and skill harnessing networks	2.38	.975	91	*	

Table 6.42: Perception of community development networks

Results of the Pearson's (r) correlation between the level of satisfaction with development networks and support for CBH initiatives indicated that there was a significant positive correlation between respondents who supported development of CBH initiatives and those who expressed satisfaction with the NCLTN and community social networks in their local communities: Pearson's $r(91) = .337, p < .05$, community social networks, Pearson's $r(91) = .248, p = .018$. Although the primary functions of these community organisations besides the NCLTN are not specifically dedicated to CLT development, they however have significant inclinations to support community development initiatives, either through education, housing or skill acquisition and awareness. Regardless, the respondent's level of satisfaction in them pales in comparison to NCLTN, only rivalled by the community social network organisations.

Results of Results of the Pearson's (r) correlation between the level of satisfaction with development networks and support for CBH initiatives, indicated that there was a significant positive correlation between respondents who supported asset transfer and those who expressed satisfaction with only NCLTN, Pearson's $r(91) = .464, p < .001$. Also respondents who expressed support for CBH initiatives are more likely to also support asset transfer to their local communities for management/ownership, Pearson's $r(91) = .417, p < .001$.

Correlations								
Measures		Level of support for CBH initiative	Level of support for asset transfer	Satisfaction with National Community Land Trust Network	Satisfaction with community social networks	Satisfaction with community educational networks	Satisfaction with overall affordable housing networks	Satisfaction with community awareness and skill harnessing networks
Level of support for CBH initiative	Pearson Correlation	1	.417**	.337*	.248	.102	.033	-.002
	Sig. (2-tailed)		.000	.001	.018	.338	.753	.988
	N	91	91	91	91	91	91	91
Level of support for asset transfer	Pearson Correlation	.417**	1	.464**	.155	-.015	-.144	.068
	Sig. (2-tailed)	.000		.000	.143	.887	.172	.519
	N	91	91	91	91	91	91	91

Table 6.43: Correlation results between community development networks and support for CBH initiatives

Overall implications are:

- Those who expressed satisfaction with the NCLTN and Community social networks are more likely to support community based housing initiatives actively.
- Those who expressed satisfaction with the NCLTN are more likely to support asset transfer in to their communities for management.
- Also respondents who expressed support for CBH initiatives are more likely to support asset transfer to their local communities for management/ownership.
- Organisations perceived less satisfactorily, need to improve in their role in sustaining and advancing community involvement with more inclination towards the CLT. Of which best practices obtainable within the NCLTN can be replicated or engaged through collaboration and knowledge sharing through the utilisation of their mutually vast national representation in the UK to ensure that the right conditions are put in place for CLT development.
- In reference to interview findings on NIMBYs and opposition to development, respondents that viewed NCLTN satisfactorily are more likely to support affordable housing developments for community benefits, which again affirm the aforementioned recommendation on the replication of NCLTN best practices as knowledge sharing platforms on the benefits of Community Based Housing initiatives such as the CLTs. This could partly help address social sustainability barriers in the aspects of support for CBH and asset transfer in local communities.

6.4.4.3 INVOLVEMENT BARRIERS

This section analysed involvement barriers collated from literature (Ijasan and Ahmed, 2013) and additional information from semi-structured interview responses (Section 3.2.3.1 and 5.3.6). The conducting of the reliability test led to the excision of variables to increase reliability (Section 6.3.1). On the long run, nine involvement variables passed the reliability test (Table 6.44). Respondents were asked to rate barriers militating against their involvement on degree of importance; measured on a Likert five point scale ranging from ‘very unimportant’ = 1” to ‘very important’ = 5.

Results indicated that ‘Unawareness of Community Groups/Forums/organisations’ ($M = 3.66$, $SD = 1.185$), ‘Work and other Commitments’ ($M = 3.73$, $SD = .920$) and ‘Questionable affiliations of groups involved in the initiatives’ ($M = 3.57$, $SD = 1.137$) involvement barriers have the highest degree of impact on the questionnaire respondents (Table 6.44). After subjecting these variables to chi square scrutiny, it can be seen from (Table 6.45) that all identified involvement barriers are statistically significant: $\chi^2 (2) \geq 21.89 \leq 88.17$, $p < .0001$. Therefore, we can reject the null hypothesis and conclude that there are statistically significant differences in respondent’s perception of involvement barriers. This analysis was done as a pre-analytical measure for the further exploration of the impact of community development networks on involvement barriers.

Descriptive Statistics					
PERCEPTION OF INVOLVEMENT BARRIERS	Mean	Std. Deviation	N	Low: Unimportant/ Neutral	High: Important
Cultural Background/ Difference	1.77	.967	91	*	
Racism/Discrimination	1.77	.990	91	*	
Lack of Opportunity to Participate	3.47	1.163	90	*	
Unawareness of Community Groups/Forums/organisations	3.66	1.185	91		*
Family Commitments	3.12	1.114	91	*	
Work and other Commitments	3.73	.920	91		*
Lack of interest (I can't be bothered)	2.94	1.377	90	*	
Questionable affiliations of groups involved in the initiatives	3.57	1.137	91		*
Unreliable democratic processes/ polls	3.41	1.064	91	*	

Table 6.44: Perception of involvement barriers

Test Statistics			
INVOLVEMENT BARRIERS	Chi-Square	df	Asymp. Sig.
Cultural Background/ Difference	79.495 ^a	4	.000
Racism/Discrimination	76.967 ^a	4	.000
Lack of Opportunity to Participate	45.333 ^b	4	.000
Unawareness of Community Groups/Forums/organisations	35.209 ^a	4	.000
Family Commitments	36.418 ^a	4	.000
Work and other Commitments	88.176 ^a	4	.000
Lack of interest (I can't be bothered)	21.889 ^b	4	.000
Questionable affiliations of groups involved in the initiatives	25.758 ^a	4	.000
Unreliable democratic processes/ polls	35.758 ^a	4	.000

Table 6.45: Chi square test on involvement barriers

6.4.4.4 IMPACT OF COMMUNITY DEVELOPMENT NETWORKS ON INVOLVEMENT BARRIERS

Results of the analysis done here showed a negative correlation between satisfactions with high performing community development networks and the levels of involvement barriers among respondents (Table 6.46 for correlation analysis). Furthermore results of the Pearson's (r) correlation indicated that there were significant negative correlations between level of satisfaction with NCLTN and the perception of cultural background/difference [Pearson's $r(91) = -.258, p < .05$], family commitments [Pearson's $r(91) = -.291, p < .01$] and lack of interest (I can't be bothered) [Pearson's $r(91) = -.332, p < .01$] involvement barriers (Table 6.46).

Similarly, results of the Pearson's (r) indicated that there were significant negative correlations between level of satisfaction with community social networks and the perception of cultural background/ difference [Pearson's $r(91) = .346, p < .01$], Racism/Discrimination [Pearson's $r(91) = .237, p < .05$], Lack of Opportunity to Participate [Pearson's $r(91) = -.237, p < .05$] and Unawareness of Community Groups/Forums/organisations [Pearson's $r(91) = -.257, p < .05$] involvement barriers (Table 6.46).

Finally, results of the Pearson's (r) indicated that there was significant negative correlations between the level of satisfaction with community awareness and skill harnessing networks and the perception of Unawareness of Community Groups/Forums/organisations [Pearson's $r(91) = -.232, p < .05$] and family commitments [Pearson's $r(91) = -.248, p < .05$] involvement barriers (Table 6.46). This implies that the more satisfied respondents were with these networks e.g. NCLTN and Community Social Networks the less the perceived impact of significant involvement barriers.

Literature identified the relevance of community educational hubs such as the libraries as veritable vehicles for sustaining, sensitising and advancing community involvement initiatives in their local communities (MLA, 2011). However, there was no evidence in this study's findings that suggests a positive impact or performance of these networks/hubs as a viable platform towards tackling involvement barriers. This could

be attributed to the low level of perception of its performance among respondents (Table 6.43) ($M = 2.71, SD = .981$).

Correlations										
IMPACT OF COMMUNITY DEVELOPMENT NETWORKS ON INVOLVEMENT BARRIERS		Cultural Background/Difference	Discrimination/Racism	Lack of Opportunity to Participate	Unawareness of Community Groups/Forums /organisations	Family Commitments	Work and other Commitments	Lack of interest (I can't be bothered)	Questionable affiliations of groups involved in the initiatives	Unreliable democratic processes/polls
Satisfaction with National Community Land Trust Network	Pearson Correlation	-.258*	-.193	.011	-.089	.291**	.176	-.332**	.003	.086
	Sig. (2-tailed)	.013	.067	.919	.403	.005	.095	.001	.978	.419
	N	91	91	90	91	91	91	90	91	91
Satisfaction with community social networks	Pearson Correlation	-.346**	-.237*	-.237*	-.257*	.066	.166	-.201	-.053	-.071
	Sig. (2-tailed)	.001	.024	.024	.014	.533	.115	.057	.620	.501
	N	91	91	90	91	91	91	90	91	91
Satisfaction with community educational networks	Pearson Correlation	.105	.057	-.102	-.104	-.090	.146	-.153	.058	.113
	Sig. (2-tailed)	.320	.590	.341	.328	.396	.167	.151	.583	.288
	N	91	91	90	91	91	91	90	91	91
Satisfaction with overall affordable housing networks	Pearson Correlation	-.107	-.029	-.054	-.093	.116	-.088	-.143	-.104	.021
	Sig. (2-tailed)	.311	.784	.610	.379	.272	.407	.178	.328	.844
	N	91	91	90	91	91	91	90	91	91
Satisfaction with community awareness and skill harnessing networks	Pearson Correlation	-.117	-.080	-.171	-.232*	-.248*	-.030	-.159	-.110	-.099
	Sig. (2-tailed)	.270	.453	.107	.027	.018	.781	.133	.298	.351
	N	91	91	90	91	91	91	90	91	91

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 6.46: Correlation results between community development networks and involvement barriers

6.4.4.5 INTRODUCTION: SOCIAL CAPITAL BUILDING BLOCKS

According to Harper (2002) 'social cohesion', or 'community spirit' are often seen as crucial in developing and encouraging involvement. Such level of involvement has been described in turn as a fundamental constituent of social capital. This involvement is crucial to accomplishing and managing CBI/ CLTs (Section 3.4.3). This was corroborated by interview findings; *'social capital development in communities through efficient community capacity building provides the right environment for FTB engagement'*

This section involved defining consolidated social capital questions and inputs derived from the semi structured interviews and the face and content validation process (section 6.2.4). The adapted social capital questions used for analysis were in three dimensions namely:

- Social participation
- Social support network and trust
- Civil participation and tolerance to diversity

Each dimension contained questions on associated set of indicators for analytical purposes as relevant to the research. All the measures passed the reliability test within the cut off point of .7000 -0.900.

The next section explored the three key social capital building blocks and their respective measures. Kruskal Wallis was adopted to identify the relevance of homeownership category and individual social capital measures. This analysis was done to determine/investigate if the level of individual social capital among FTBs in comparison to homeowners can be a social sustainability barrier to CLT growth.

6.4.4.5.1 INTERDEPENDENCE OF SOCIAL PARTICIPATION: HOMEOWNERSHIP STATUS

For social participation measures, respondents were asked questions on social participation measures from scale 1 (Strongly disagree) to 5 (Strongly agree).

A breakdown of responses indicated low levels of all social participation measures, irrespective of categorisation (Table 6.47).

Descriptive Statistics							
Social Participation Measures	N	Mean	Std. Deviation	Minimum	Maximum	Low/Neutral	High
Level of involvement in community groups	91	2.70	1.287	1	5	*	
Level of involvement in community led activity	91	2.43	1.407	1	5	*	
Level of involvement with local authority activities	91	2.21	1.269	1	5	*	

Table 6.47: Perception on the level of social participation measures

Results of the kruskal wallis analysis indicate that there was a statistically significant implication of respondent's homeownership category on level of social participation measures for social capital (Table),

- Level of involvement in community groups: $H(2) = 15.57, p < 0.001$
- Level of involvement in community led activity: $H(2) = 22.646, p < 0.001$
- Level of involvement in local authority activities: $H(2) = 13.577, p < 0.05$

Test Statistics^a

Social Participation Measure	N	Median	Chi-Square	df	Asymp. Sig.
Level of involvement in community groups	90	2.00	15.570	2	.000
Level of involvement in community led activity	90	2.00	22.646	2	.000
Level of involvement with local authority activities	90	2.00	13.577	2	.001

a. Grouping Variable: Housing ownership category

Table 6.48: Kruskal wallis test of dependence of level of social participation on homeownership category.

6.4.4.5.2 INTERDEPENDENCE OF SOCIAL PARTICIPATION: GEOGRAPHICAL LOCATION

Results of the kruskal wallis analysis indicate that there was a strong statistically significant implication of respondent's geographical location on the level of social participation measures for social capital (Table 6.49):

- Level of involvement in community groups: $H(2) = 34.56, p < 0.001$
- Level of involvement in community led activity: $H(2) = 31.612, p < 0.001$
- Level of involvement in local authority activities: $H(2) = 13.720, p < 0.001$

Test Statistics ^{a,b}			
Social Participation Measure	Chi-Square	Df	Asymp. Sig.
Level of involvement in community groups	34.565	2	.000
Level of involvement in community led activity	31.612	2	.000
Level of involvement with local authority activities	19.720	2	.000

a. Kruskal Wallis Test

b. Grouping Variable: Geographical location

Table 6.49: Kruskal wallis test on the dependence of level of social participation on geographical location.

These results indicates that the level of social participation measures are affected by whether the respondent is located either in a rural or urban/suburban area, same for homeownership status i.e. FTB/Homeowner.

6.4.4.5.3 INTERDEPENDENCE OF SOCIAL SUPPORT NETWORK AND TRUST: HOME OWNERSHIP STATUS

A breakdown of response means indicated low levels help received from community, level of general trust, and high levels of help received from friends and visits to neighbourhood networks (Table 6.50).

Descriptive Statistics							
Social Support Network and Trust	N	Mean	Std. Deviation	Minimum	Maximum	Low/Neutral	High
Level of help received from community members	91	2.68	1.173	1	5	*	
Level of help received from friends	91	3.84	.847	1	5		*
Level of visits to friends and neighbourhood networks	91	3.52	1.099	1	5		*
Level of general trust	91	3.23	1.012	1	5	*	
Level of trust in institutions and authorities	91	3.56	.933	1	5		*

Table 6.50: Perceptions on the level of social support network and trust

Results of the kruskal wallis analysis indicate that there was a statistically significant implication of respondent's homeownership status on the level the level of help received from community members, help received from friends and level of trust in institutions and authorities, but has an insignificant implication on the level of visits to friends and the level of general trust (Table 6.51).

- Level of help received from community members: $H(2) = 21.482, p < 0.001$
- Level of help received from friends: $H(2) = 15.198, p < 0.05$
- Level of visits to friends and neighbourhood networks: $H(2) = 3.690, p = 0.158$
- Level of general trust: $H(2) = 2.293, p = .318$
- Level of trust in institutions and authorities: $H(2) = 6.246, p < .05$

Test Statistics ^{a,b}			
Social support network and trust measure	Chi-Square	df	Asymp. Sig.
Level of help received from community members	21.482	2	.000
Level of help received from friends	15.198	2	.001
Level of visits to friends and neighbourhood networks	3.690	2	.158
Level of general trust	2.293	2	.318
Level of trust in institutions and authorities	6.246	2	.012

a. Kruskal Wallis Test

b. Grouping Variable: Housing ownership category

Table 6.51: Kruskal wallis test on the development of the level of social participation and trust on homeownership category.

6.4.4.5.4 INTERDEPENDENCE OF SOCIAL SUPPORT NETWORK AND TRUST: GEOGRAPHICAL LOCATION

Results of the kruskal wallis analysis indicate that there was a strong statistically significant implication of respondent's geographical location on the responses to the level of social support network measures except for level of trust in institutions and authorities (Table 6.51). This measure however scores high among respondents irrespective of geographical location (Table 6.52).

- Level of help received from community members: $H(2) = 24.562, p < 0.001$
- Level of help received from friends: $H(2) = 13.367, p < 0.05$
- Level of visits to friends and neighbourhood networks: $H(2) = 6.475, p < .05$
- Level of general trust: $H(2) = 7.484, p < .05$
- Level of trust in institutions and authorities: $H(2) = .893, p = .345$

Test Statistics ^{a,b}			
Social Support Network and Trust	Chi-Square	df	Asymp. Sig.
Level of help received from community members	24.562	2	.000
Level of help received from friends	13.367	2	.001
Level of visits to friends and neighbourhood networks	6.475	2	.039
Level of general trust	7.484	2	.024
Level of trust in institutions and authorities	0.893	2	.345

a. Kruskal Wallis Test

b. Grouping Variable: Geographical location

Table 6.52: Kruskal wallis test of the dependence of level of social support network and trust on geographical location.

6.4.4.5.5 INTERDEPENDENCE OF CIVIL PARTICIPATION AND TOLERANCE TO DIVERSITY: HOMEOWNERSHIP STATUS

A breakdown of all response means indicated low levels for civil participation and tolerance to diversity measure except for level of awareness and information sources (Table 6.53).

Descriptive Statistics					
Civil Participation and Tolerance to Diversity	N	Mean	Std. Deviation	Low/ Neither	High
Knowledge of community awareness and information sources	91	3.57	1.045		*
Level of assertiveness during conflicts	91	2.90	1.300	*	
Level of assertiveness during conflict with popular notions	91	2.62	1.315	*	
Level of support for multiculturalism in the community	91	3.30	1.120	*	
Level of support for lifestyle disparities in the community	91	3.42	1.193	*	

Table 6.53: Perceptions on level of civil participation and tolerance to diversity

Results of the kruskal wallis analysis indicate that there was a strong statistically significant implication of respondent's homeownership status and geographical location on the responses civil participation and tolerance to diversity measures except for Level of support for multiculturalism and Level of support for lifestyle disparities in the community (Table 6.54 and 6.55).

- Knowledge of community awareness and information sources: $H(2) = 16.780, p < 0.001$
- Level of assertiveness during conflicts: $H(2) = 23.558, p < 0.001$
- Level of assertiveness during conflict with popular notions: $H(2) = 28.475, p < .05$
- Level of support for multiculturalism in the community: $H(2) = .828, p = .661$
- Level of support for lifestyle disparities in the community: $H(2) = 1.104, p = .576$

Test Statistics ^{a,b}			
Civil participation and tolerance to diversity measures	Chi-Square	Df	Asymp. Sig.
Knowledge of community awareness and information sources	16.780	2	.000
Level of assertiveness during conflicts	23.558	2	.000
Level of assertiveness during conflict with popular notions	28.606	2	.000
Level of support for multiculturalism in the community	.828	2	.661
Level of support for lifestyle disparities in the community	1.104	2	.576

a. Kruskal Wallis Test

b. Grouping Variable: Housing ownership category

Table 6.54: Kruskal wallis analysis on the dependence of civil participation and tolerance to diversity on homeownership category.

6.4.4.5.6 INTERDEPENDENCE OF CIVIL PARTICIPATION AND TOLERANCE TO DIVERSITY: GEOGRAPHICAL LOCATION

Results of the kruskal wallis analysis indicate that there was a strong statistical significant dependence of geographical location on knowledge of community awareness, level of assertiveness during neighbourhood conflicts and level of assertiveness during disagreement with popular notions in the community. Contrarily there was no significant dependence of level of support for multiculturalism and support for lifestyle disparities among respondents (Table 6.55).

- Knowledge of community awareness and information sources: $H(2) = 17.549, p < 0.001$
- Level of assertiveness during conflicts: $H(2) = 21.769, p < 0.001$
- Level of assertiveness during conflict with popular notions: $H(2) = 19.580, p < .001$
- Level of support for multiculturalism in the community: $H(2) = 3.295, p = .193$
- Level of support for lifestyle disparities in the community: $H(2) = 2.635, p = .268$

Test Statistics ^{a,b}			
Civic participation and tolerance to diversity measures	Chi-Square	df	Asymp. Sig.
Level of awareness of community awareness and information sources	17.549	2	.000
Level of assertiveness during conflicts	21.769	2	.000
Level of assertiveness during conflict with popular notions	19.580	2	.000
Level of support for multiculturalism in the community	3.295	2	.193
Level of support for lifestyle disparities in the community	2.635	2	.268

a. Kruskal Wallis Test

b. Grouping Variable: Geographical location

Table 6.55 Kruskal wallis analysis on the dependence of civil participation and tolerance to diversity on geographical location.

This section helped in analysing involvement sources of barriers, interdependence between social capital building blocks, homeownership status and geographical location (rural/urban classification). This analysis therefore led to the process of tackling the first research hypothesis i.e. the level of individual social capital has a causal relationship with the propensity to support CLT shared equity model housing development (CLT SEHM). This was embarked upon in the next chapter.

6.5 ANALYSIS OF THE RELATIONSHIPS AMONG SOCIAL CAPITAL BUILDING BLOCKS AND THE CLT SEHM DEVELOPMENT

The purpose of this section is to explore the causal relationship between the perception of respondents to social capital measures and support for the CLT (SEHM) as informed by literature such as Harper (2002), 'social cohesion', or 'community spirit' are often seen as crucial in developing and encouraging involvement in community initiated projects, which is deemed crucial to accomplishing and managing CLT SEHM developments. On this note the study examined and clarified the relationships between social capital building blocks as explored and analysed in previous sections (Section 6.4.4.5) social participation, support network and trust, civil participation, tolerance to diversity and shared equity housing model development by applying Structural Equation Modelling (SEM). SEM is seen as a methodology for representing, estimating and testing a theoretical network of relationships between variables Rigdon (1998), Also, the relationships can be either directional or non-directional as analysed to test hypothesised patterns (MacCallum and Austin, 2000) in (Sejjaaka and Ntayi, 2013) observed and unobserved variables and according to tests hypothesized in patterns.

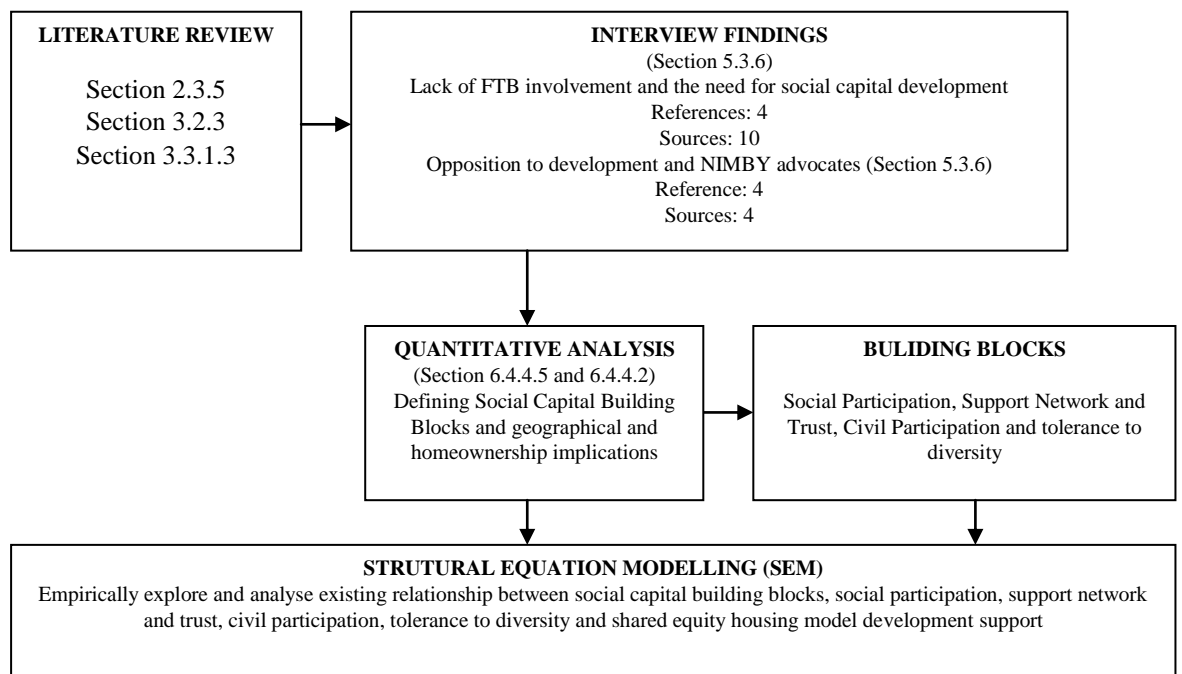


Fig 6.10: Model development framework for Social Capital and CLT SEHM development.

6.5.1 DESIGNING THE ANALYTICAL MODEL

In reference to (Fig 6.8) the study designed a proposed relationship between the social capital building blocks and predisposition to support shared equity housing model development as informed by literature. Incorporating previous empirical results indicating that respondents who expressed support for CBH initiatives are more likely to also support asset transfer to their local communities for management/ownership, Pearson's $r(91) = .417, p < .001$ (Section 6.4.4.2). This result lends itself to the process of modelling the relationships between the propensity to support shared equity housing models and the building blocks of social capital. In this context, this study hypothesised that social capital building blocks i.e. social participation, support network and trust, civil participation and tolerance to diversity has influential relationships with the propensity to support affordable housing delivered through the CLT shared equity model to help explore and better understand shared variations among sample population (Fig 6.11).

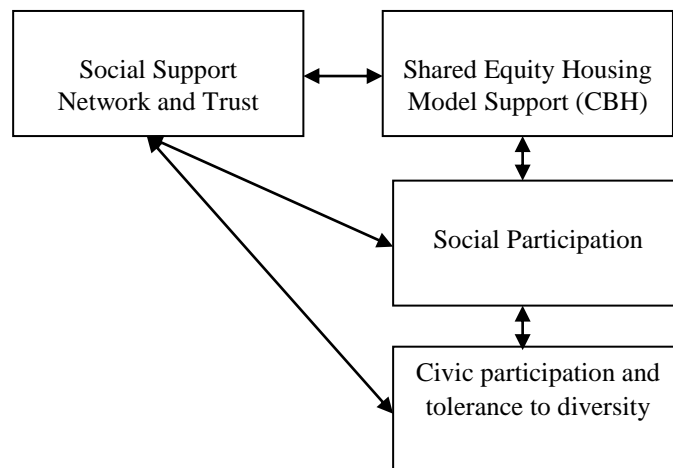


Fig 6.11: Study proposed model for Social Capital and CLT SEHM development

In the research proposed model, increased support for the CLT shared equity housing model increases the level of social support network and trust, which in turn yields greater social participation, civic participation and tolerance to diversity irrespectively. On the reversed pathway, increased levels of individual social participation, civic participation and tolerance to diversity yields greater levels of predisposition to support affordable housing development based on the shared equity model.

6.5.1.1 MODEL SPECIFICATION

In reference to Brown (2006) in Albright and Park (2009) the structure build up of the CFA (Confirmatory Factor Analysis) model is based on path diagrams in which squares are used to indicate observed variables while circles represent the latent variables. Observing (Figure 6.10) it has four latent variables all in circles/spheres;

- SHARED_EQUITY SUPPORT
- SOCIAL_PARTICIPATION
- SOCIAL_SUPPORT NETWORK_TRUST
- CIVIC_TOLERANCE TO DIVERSITY

There were 16 observed variables i.e. var33 through var64 represented with squares/rectangles. Single-headed arrows are used to imply a direction of assumed causal influence, while double-headed arrows represent covariance between either of the two aforementioned latent variables, see (Table 6.56) for the breakdown. Looking at (Figure 6.12), the latent variables represent common factors indicating a ‘cause’ effect, for example the SHARED_EQUITY SUPPORT causes 3 observed variables that are var33 through var35. Likewise SOCIAL_PARTICIPATION causes 3 observed variables, var62 to var64. These two latent variables are hypothesised to covary as indicated by the two headed arrows. *Factor loadings*, for example are represented by (1), in this case constrained on the regression slope of SHARED_EQUITY SUPPORT on var33. The circles for example indicated with e6 represent *unique factors* as they influence only a single observed variable, hence e6 incorporates all the variance in each v33 such as measurement errors not picked up by the factors. Finally, error in e6 can correlate with for example e8. This indicates variance not explained by theoretical constructs but permitted to covary across two measures referred to as a *correlated error*.

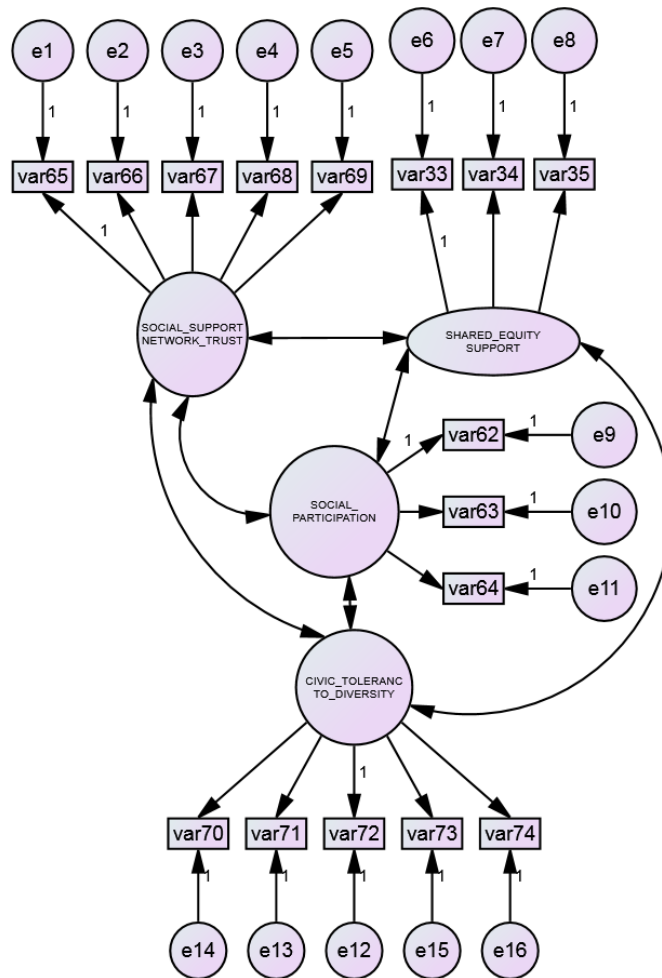


Fig 6.12: Model specification for Confirmatory Factor Analysis: Social Capital and CLT (SEHM) Development

6.5.1.2 THE STATISTICAL MODEL

As mentioned earlier, the study proposes that social capital building blocks and shared equity model development support are complex conceptual measures/variables that is impossible to directly observed or measured. This is in line with Bollen (1989)'s take on latent variables.

There were two methods considered for this analysis, which are Explorative Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The research adopted the CFA, because unlike the EFA which is employed to determine the number of latent variables essential to explore the correlations and variance in the statistical data. This method does not however pre-specify relationships between indicators and latent variables, rather it systematically searches for these relationships, which does not support the study's design as the relationships were already specified according to research context.

The CFA on the other hand is a measurement model based on proposed sets of exogenous latent variables to account for covariance among a set of observed indicator variables (Kline, 2011 in Hadrach and Olson, 2011). This helps the model design process as it enables the study to test for existing relationships between observed indicator variables and their underlying latent construct by requiring the researcher to pre-specify relationships between indicator and latent variables using theoretical and empirical justification (Bollen, 1989 in Hadrach and Olson, 2011).

The proposed model consists of 'CLT shared equity housing model' support and social capital factors both conceptualized as 4 exogenous latent variables. These were measured by 16 observed variables, consisting of 12 free parameters directly estimated from the data i.e. and all were permitted to correlate with one another (see Fig 6.10). All measures in the model are attitudinal and cognitive. The variables alongside their means, standard deviations and respective indicators are expressed in (Table 5.56). These were measured on a Likert five point scale ranging from 'strongly disagree' = 1 to 'strongly agree' = 5.

Item Statistics			
SHARED EQUITY MODEL SUPPORT AND SOCIAL CAPITAL BUILDING BLOCKS DESCRIPTION	Mean	Std. Deviation	N
Shared equity model support* (SHARED_EQUITY_SUPPORT)			
Level of support for CBH initiatives: (var33)	3.83	.546	80
Level of support for asset transfer: (var34)	3.95	.614	80
Level of support for conventional housing ownership model: (var35)	3.01	1.061	80
Social participation* (SOCIAL_PARTICIPATION)			
Level of involvement in community groups: (var62)	2.80	1.257	80
Level of involvement in community led activity: (var63)	2.53	1.405	80
Level of involvement with local authority activities: (var64)	2.30	1.287	80
Social support network and trust* (SOCIAL_SUPPORT_NETWORK_TRUST)			
Level of help received from community members: (var65)	2.74	1.199	80
Level of help received from friends: (var66)	3.86	.838	80
Level of visits to friends and neighbourhood networks: (var67)	3.59	1.040	80
Level of general trust: (var68)	3.28	.993	80
Level of trust in institutions and authorities: (var69)	3.64	.860	80
Civic participation and tolerance to diversity* (CIVIC_TOLERANCE TO DIVERSITY)			
Level of awareness of community awareness and information sources: (var70)	3.61	1.025	80
Level of assertiveness during conflicts: (var71)	3.00	1.283	80
Level of assertiveness during conflict with popular notions: (var72)	2.71	1.304	80
Level of support for multiculturalism in the community: (var73)	3.35	1.092	80
Level of support for lifestyle disparities in the community: (var74)	3.40	1.165	80

Table 6.56: Shared Equity Housing Model Support and Social Capital Building Blocks Scale Item and their indicative representations in the model structure Notes: * Exogenous latent Variables

6.5.2 DATA ANALYSIS

The analysis was conducted with SPSS 20.0 and with AMOS 21.0 (Analysis of Moment Structures) which is widely regarded as the most efficient statistical tool for SEM. The structural equation modelling (SEM) was utilized to test the hypotheses as explained earlier. As suggested by Anderson and Gerbing (1988) in (Kim *et al*; 2010), the two-step approach was employed. Prelude to the two-step analysis, some data adequacy test was carried out to clarify model suitability complexities which were explained later in the pre-analysis section. The two step approach involves model fit for

the constructs, which were tested through confirmatory factor analysis (CFA), then, the significance of the regression weights was subsequently examined to ascertain proposed hypothesis for associations within the model.

6.5.2.1 PRE-ANALYSIS

The previous measure of consistency was determined for the entire research’s variables, most of which are not considered for this section of the study, rather a new test was carried out just for the model constructs, to ensure greater accuracy and specificity. Therefore, all observed variables were subjected to fresh reliability tests. The intention here is to confirm that the tested items have high inter-item correlation, as a small correlation would be implying a low level of statistical relationship between the tested constructs. None of the construct reliability score fell below 0.8 for the 16 measured constructs. Therefore the overall Cronbach’s Alpha coefficients amounted to 0.867 (Table 6.57). This figure exceeded the 0.70 cut-off point suggested by Nunnally (1978).

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.867	.856	16

Table 6.57: Cronbach Alpha on Social Capital and CLT (SEHM) constructs

This is only one of the steps to ensure data adequacy. Other issues this study addressed included the suitability of the sample size for CFA. Recommended sample sizes (N) have ranged from 50 (Barrett and Kline, 1981), 100 (Gorsuch, 1983) and 250 (Cattell, 1978). This study however collated an initial (N=91) sample size, which were reduced to (N=80) after sorting out missing data. Problems associated with missing data can be magnified in SEM due to the complexity involved with the large number of measured variables employed (Ullman, 2006; Weiner *et al*, 2012). Consequently, no missing data was used for the CFA with AMOS.

To clarify the debate of sample size, Costello and Osborne (2005) suggested that the rigidity that once dictated sample size requirements for CFA are largely not significant if certain precautionary measures are observed to ascertain sample size adequacy.

Suggested measures include the Kaiser-Meyer-Oklin (KMO) and Bartlett's Test which is used to test suitability of data for CFA. The KMO value for these constructs was 0.796; this figure exceeds the 0.60 cut-off point suggested by Kaiser and Rice (1974). Also, study sample passed the Bartlett's test of sphericity significantly at ($p < 0.001$) suggesting that the data is suitable for CFA (Table 6.58).

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.796
Approx. Chi-Square		623.655
Bartlett's Test of Sphericity	Df	120
	Sig.	.000

Table 6.58: KMO and Bartlett's Test for the Social capital and CLT (SEHM) constructs

6.5.3 AMOS ANALYSIS CLT SEHM AND SOCIAL CAPITAL SEM: GOODNESS OF FIT TEST

Earlier mentioned precautions to ensure data adequacy has been about pre AMOS estimation of the proposed model. This section however deals with the actual fitness of the exploratory model to the data responses. This is the degree of consistency between the study proposed model and the practical data model employing the covariance interactions. Therefore, test of fitness in this context is consistency of characteristics of data with the theoretical concepts in the SEM analysis (Field, 2009). This can be tested by the likelihood-ratio (χ^2) test, however it is regarded as too sensitive to sample size, hence might not be deemed reliable (Bollen, 1989). To address this problem, Kline (1998) in Burli and Bagodi (2012) came up with an indirect measure of the (χ^2) value, proposing that if the ratio of χ^2 to degrees of freedom (df) is less than three (1:3), then it could be considered favourable. In this study the value of the (χ^2) test is 145.73 (where the degree of freedom is 92). This is estimated in AMOS with (CMIN/DF) which is the minimum discrepancy, \hat{C} divided by its degrees of freedom (see Appendix for further illustrations) following Kline (1998) proposal, CMIN/DF (df: χ^2) ratio amounts to (1: 1.6) which is far less than the widely accepted 1.3, hence the first measure of goodness of fit is deemed suitable (Table). However, the level of probabilistic level of

significance is 0.00, which should be ($p > .05$) hence deemed unsuitable, implying there is a significant difference between the benchmark saturated model and the proposed research model (Table 6.59). Although not always reliable, due to the level of sensitivities expected with sample size (Kline, 1998), other more stable goodness of fit indices have been employed for this study.

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	44	145.729	92	.000	1.584
Saturated model	136	.000	0		
Independence model	16	676.459	120	.000	5.637

Table 6.59: CMIN/DF Goodness of fit test

This goodness of fit indices is of two types: absolute and incremental. The absolute fit index (presumes that the best fitting model has a fit of 0, the measure of fit then determines how much disparity lie in comparison to the best fitting model, hence the bigger the disparity the worse the measure of goodness of fit. Whereas, the incremental measure of fit indicates on a range of 0 to 1 the worst possible model and the best possible fit.

The root mean square error of approximation (RMSEA) is an absolute fit index which is used by this study to measure goodness of fit based upon model misspecification and to provide a measure of this disparities per degree of freedom (see Appendix). This fit index ranges from 0 to 1 and values less than 0.08 indicate good fit but not higher than 0.1 cut-off point (Browne and Cudeck, 1993; MacCallum, Browne and Sugawara, 1996). The RMSEA for this study was estimated by AMOS as .086 which suggests a good fit (Table 6.60).

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.086	.058	.112	.019
Independence model	.242	.225	.260	.000

Table 6.60: The root mean square error of approximation (RMSEA) Goodness of fit test

Incremental fit indices are also highly recommended to ascertain model fitness to assess model fit (Hu and Bentler, 1999 in Miller, 2009). The comparative fit index (CFI) developed by Bentler (1990) is one such index and assesses the improvement on fit for the hypothesized model to the null model, according to (Fan, Thompson, and Wang, 1999), the CFI is rarely sensitive to sample size, hence less likely to exhibit bias. On this note this study has adopted the CFI measure of which AMOS estimates indicate an adequate score of 0.903, as suggested by Kline (1998) that values greater than 0.90 indicate a good fit (Table 6.61).

CFI: Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.785	.719	.908	.874	.903
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 6.61: The CFI and IFI goodness of fit test for social capital and CLT SEHM (SEM)

The goodness of fit measure NFI was also considered for this study however, Ullman (2001) suggests that its sensitivity to sample size frequently results to unreliable fitness. So, the Incremental Fit Index, also known as Bollen's IFI was adopted due to its more reliable sensitivity to sample size, and again values exceeding 0.90 are regarded as acceptable (Widaman and Thompson, 2003). With an IFI estimate of .908, this suggests adequate fitness for the proposed model in line with other goodness of fit test indices earlier elucidated (Table 6.61).

6.5.3.1 MODIFICATIONS

Six modifications were made to the initial model based upon estimated modification indices. Such modifications included correlated errors which is the variance that are not explained by theoretical constructs, hence may covary across two measures or more (Loehlin, 2004 in Hadrich, 2011). All error items correlated had displayed large modification indices suggesting that fit would improve if some error terms were allowed to covary. These were consistent with Hall; Snell and Foust, (1999); Loehlin, (2004)'s idea that the items might incorporate small, unmodelled secondary influences, with implications to the overall model. Precautions were taken to correlate only error terms generated from their respective latent variable (Hall, Snell and Faust, 1999).

Error items displaying large MI as estimated by AMOS, were covaried, this includes error terms for **SOCIAL_SUPPORT_NETWORK_TRUST** variables (Fig 6.13):

- 'Level of help received from community members' (var65) – (e1) and 'Level of visits to friends and neighbourhood networks' (var68) – (e4).
- 'Level of help received from friends' (var67) – (e2) and 'Level of visits to friends and neighbourhood networks' (e68) – (e3).
- 'Level of visits to friends and neighbourhood networks' (var68) – (e4) and 'Level of trust in institutions and authorities' (var69) – (e5).

Moreover, same process was carried out for error items generated from **CIVIC_TOLERANCE TO DIVERSITY** variables (Fig 6.11), which are:

- 'Level of awareness of community awareness and information sources' (var70) – (e14) and 'Level of assertiveness during conflicts' (var71) – (e13).
- 'Level of awareness of community awareness and information sources' (var70) – (e14) and 'Level of support for lifestyle disparities in the community' (var74) – (e16)
- 'Level of assertiveness during conflict with popular notions' (var72) – (e12) and 'Level of support for lifestyle disparities in the community' (var74) – (e16).

To account for this correlation in the estimation process, a correlation variable (double-headed arrow) was introduced between (e1 and e4), (e2 and e3), (e4 and e5), (e14 and

e13), (e14 and e16), (e12 and e16) (see Fig 6.13). These modifications were therefore added to the CFA model and tested with AMOS. This process resulted to the model fitness index results reported earlier. As earlier mentioned (section 6.5.3), overall the proposed model passed the CFI, IFI and RMSEA fitness test, suggesting goodness of fit for the model, as Fan, Thompson, and Wang (1999) concluded on their being much more reliable and stable in regards to bias due to sample size sensitivity. The overall fitness of the model is hereby substantiated by the following fit indices: RMSEA (.086), CFI (.903) and IFI (.908).

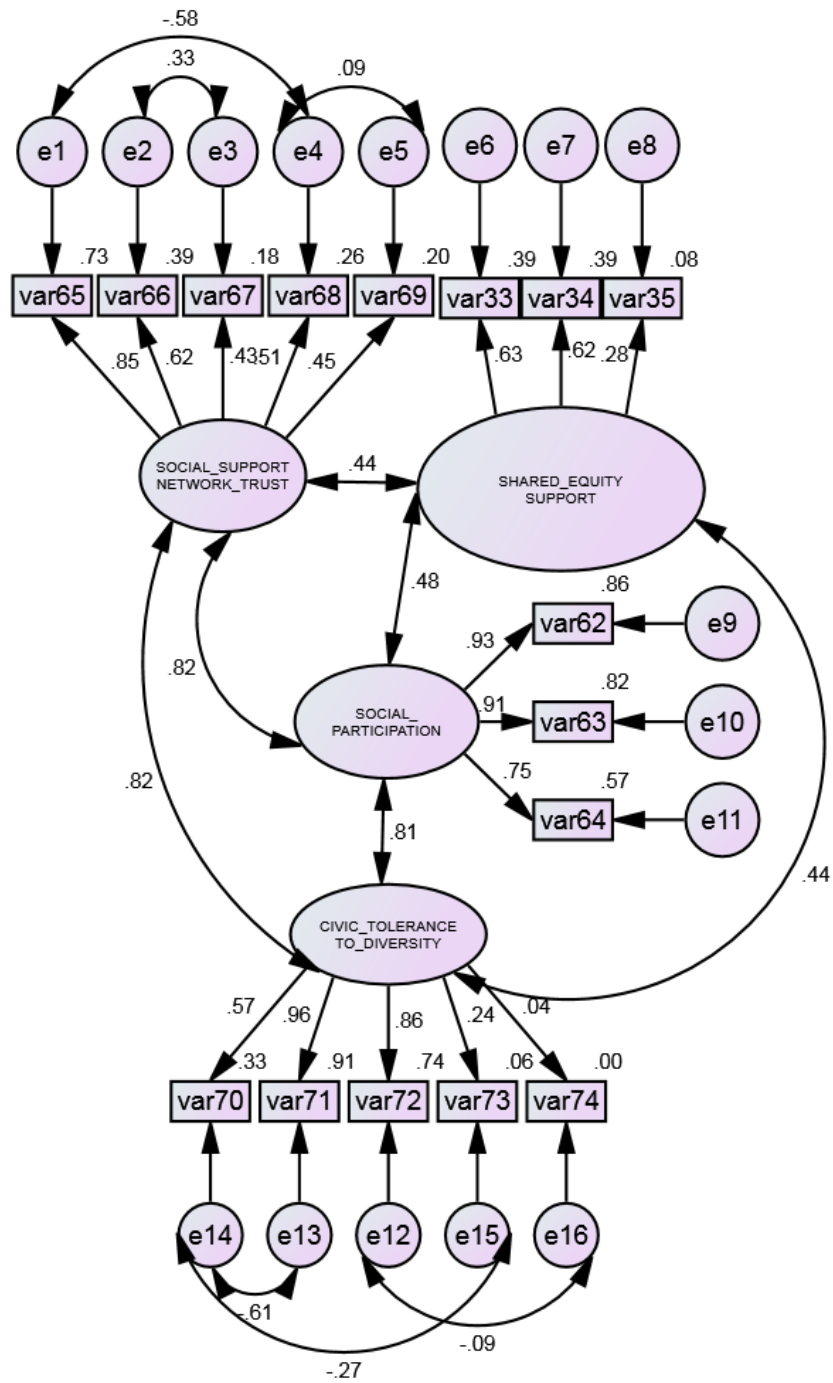


Fig 6.13: Initial Standardised Results for AMOS Analysis for Social Capital and CLT (SEHM) SEM.

6.5.3.2 COMMON LATENT FACTOR (CLF) INTRODUCTION INTO CFA MODEL

In reference to Hall, Snell and Faust, (1999); Loehlin, (2004)'s recommendation that correlated error items might incorporate small, unmodelled secondary influences, with implications to the overall model, further investigations were carried out to ascertain if there were other latent constructs that were responsible for these errors that covaried within both **SOCIAL_SUPPORT_NETWORK_TRUST** and **CIVIC_TOLERANCE TO DIVERSITY** latent variables. This is usually recommended for models that have failed goodness of fit indices, the subject model has however passed the fitness indices test: RMSEA (.086), CFI (.903) and IFI (.908) (Fig 6.13). Hence, proceeding with this query is therefore an exploratory one to enable this study further explain underlying dynamics that might be existing in the model construct connected to earlier investigated concepts with significant influence on the propensity to support the CLT SEHM.

- For the common errors identified on the **SOCIAL_SUPPORT_NETWORK_TRUST** latent variable, this study reconciled the earlier tested significant influence of 'relocation factors' and 'homeownership category', and 'housing satisfaction on level of support for shared equity model development (see Section 6.4.2.5) as a possible cause for the existence of covaried errors in the subject model. This process adopts a common latent factor (CLF) to capture the common variance among all observed variables in **SOCIAL_SUPPORT_NETWORK_TRUST** latent variable in the subject model. A latent variable hypothetically representing (*'relocation factors' and 'homeownership category', and 'housing satisfaction on level of support for CLT shared equity model development'*) [**RELOCATION_FACTORS_HOME_OWNERSHIP_CATEGORY_SATISFACTION**] was added to the AMOS CFA model (see Fig 6.14). This was then connected to all observed items in the model. If a substantial amount of variance is present due to the one general factor, as suggested by existing possibilities for error covariances suggested in the previous model (Hall, Snell and Faust, 1999; Loehlin, 2004). On that premise the created CLF will account for the majority of the covariance among the variables (Andersson and Bateman, 1997; Aulakh and Gencturk, 2000), hence the new model proposal should pass the goodness of fit tests (Korsgaard & Roberson, 1995).

- Same procedure was applied to the covaried errors identified on the **SOCIAL_SUPPORT_NETWORK_TRUST** latent variable, however the CLF introduced was reconciled with earlier tested significant influence of ‘geographical/urban and rural classification’ and ‘development platforms’, and ‘housing satisfaction on level of support for CLT shared equity model development (Section 6.4.4.2).

6.5.3.3 GENERATED EXPLORATIVE MODEL

The generated model from the CFA introduction process was put through the goodness of fit test using AMOS; overall the proposed model passed the CFI, IFI and RMSEA fitness test, suggesting goodness of fit for the model. The overall fitness of the model is hereby substantiated by the following fit indices: RMSEA (.086), CFI (.903) and IFI (.908).

However, some school of thought suggests the comparison of the standardized regression weights from the new model to the standardized regression weights of the model without the CLF. If there are large differences then it is advised to retain the new model with the CLF. As a post-hoc measure this study has however adopted the Akaike Information Criterion test to compare both models. The (AIC) is a comparative measure of fit and so it is meaningful only when two different models are estimated. Lower values indicate a better fit and so the model with the lowest AIC is the best fitting model (Burnham and Anderson, 2002; Kenny, 2012). In (Table 6.62) AIC results specify the initial model (Fig 6.13) as better fitted with its lower score of 233.73 compared to the proposed CLF model 234.826 (Fig 6.14).

AIC

Model	AIC	BCC	BIC	CAIC
Default model	233.729	257.858	338.538	382.538
Saturated model	272.000	346.581	595.956	731.956
Proposed CLF Model	234.826	263.343	358.692	410.692

Table 6.62: AIC comparative measure of fit between initial and CLF model

However, AIC scores have long faced reliability criticism, particularly due to its sensitivity to number of variables or measured constructs; hence the study subjected both models to the well tested goodness of fit indices earlier used, as Kline, (1998); Fan, Thompson, and Wang (1999) concluded on their being much more reliable and stable in regards to bias due to sample size or number of measured construct sensitivity. Results show the proposed CLF model (Fig 6.14) as better fitted than the previous default model (Fig 6.13) (Table 6.63 and 6.64) for fitness indices for the adopted model with CLF).

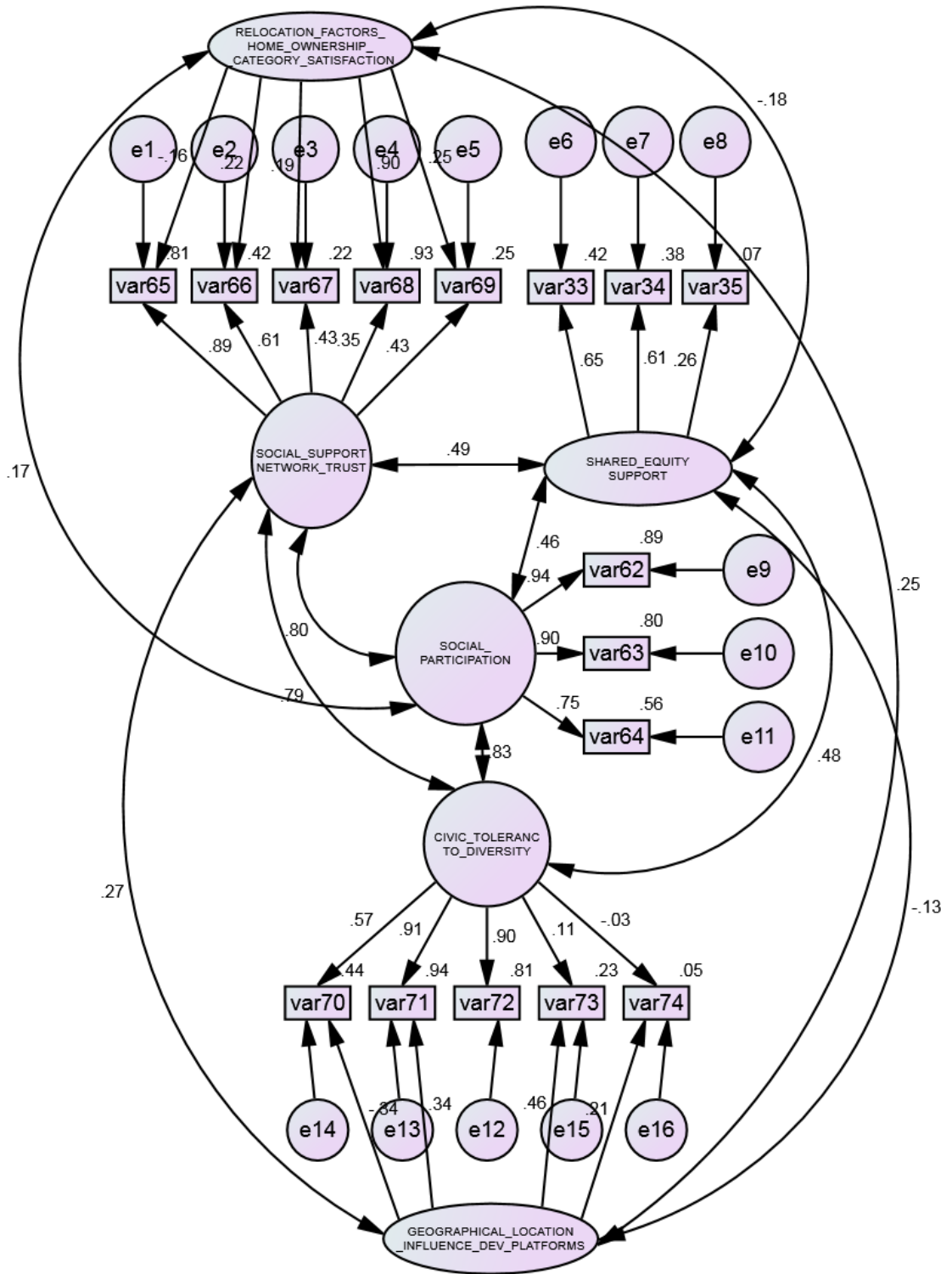


Fig 6.14: Final Standardised Results for AMOS Analysis for Social Capital and CLT SEHM SEM.

Results:

- Old Model: RMSEA (.086), CFI (.903) and IFI (.908)
- Final Model (Adopted): RMSEA (.084), CFI (.921) and IFI (.916).

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.807	.724	.921	.880	.916
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 6.63: The final CFI and IFI goodness of fit test for social capital and CLT SEHM (SEM)

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.084	.055	.111	.032
Independence model	.242	.225	.260	.000

Table 6.64: The final root mean square error of approximation (RMSEA) goodness of fit test

6.5.3.4 IMPLICATION ON MODEL ESTIMATES

As prelude to the testing of the study's hypothesis, the critical ratios were examined alongside their p-values of significance. The critical ratio (CR) is the statistic formed by dividing an estimate by its standard error. Therefore, a value of 1.96 or higher (-1.96 or lower), indicates a two-sided significance at 5% in SEM (Hox and Bechger, 2001; Seijaaka and Ntayi, 2013). In the p-value column, three asterisks (***) indicate significance smaller than .001 (see Table 6.65). The significance of estimated covariances between the latent variables is assessed in similar way as the

aforementioned, hence if $CR > 1.96$, the factor covariance is significant (see Table 6.65). Taking for example **var66** \leftarrow **SOCIAL_SUPPORT_NETWORK_TRUST** i.e. ('Level of help received from friends' \leftarrow **SOCIAL_SUPPORT_NETWORK_TRUST**), according to Koufteros (1999) in Seijaaka and Ntayi (2013) regression estimates of the relationship compared with their standard errors revealed evidence of an association between 'Level of help received from friends' and **SOCIAL_SUPPORT_NETWORK_TRUST** (Koufteros, 1999 in Seijaaka and Ntayi, 2013). Therefore, dividing the regression weight estimate by the estimate of its standard error gives $z/CR = .484/.095 = 5.117$. In other words $CR=5.117$ is 5.117 standard errors above zero, therefore if $CR > 1.96$, the relationship of these constructs is therefore significant (Table 6.65). Applying same interpretation to the other relationships in the explorative SEM model, results from (Table 6.65) indicate that the regression estimates for all the constructs of the latent variables have significant influence except for the following:

- **var74** \leftarrow **CIVIC_TOLERANCE_TO_DIVERSITY**: The Level of support for lifestyle disparities in the community did not significantly influence civic participation and tolerance to diversity.
- **var74** \leftarrow **GEOGRAPHICAL_LOCATION**: The level of support for lifestyle disparities in the community was not significantly influenced by both geographical location and the level of performance of community development platforms.
- **var65** \leftarrow **RELOCATION_FACTORS_HOME_OWNERSHIP_CAT...**: The level of help received from community members was not significantly influenced by relocation factors and home ownership category, rather correlation results suggests negative influences.
- **var66** \leftarrow **RELOCATION_FACTORS_HOME_OWNERSHIP_CAT...**: The Level of help received from friends was not significantly influenced by relocation factors and home ownership category, however results from correlation matrix suggests otherwise.
- **var67** \leftarrow **RELOCATION_FACTORS_HOME_OWNERSHIP_CAT...**: The level of visits to friends and neighbourhood networks is not significantly influenced by relocation factors and home ownership category.
- **var35** \leftarrow **SHARED_EQUITY_SUPPORT**: The Level of support for conventional housing ownership model does not significantly influence the propensity to support shared equity housing model development.

		REGRESSION WEIGHTS	Estimate	S.E.	C.R.	P
var65	<---	SOCIAL_SUPPORT_NETWORK_TRUST	1			
var66	<---	SOCIAL_SUPPORT_NETWORK_TRUST	0.484	0.095	5.117	***
var67	<---	SOCIAL_SUPPORT_NETWORK_TRUST	0.418	0.118	3.556	***
var68	<---	SOCIAL_SUPPORT_NETWORK_TRUST	0.332	0.143	2.316	0.021
var69	<---	SOCIAL_SUPPORT_NETWORK_TRUST	0.35	0.098	3.562	***
var33	<---	SHARED_EQUITY_SUPPORT	1			
var34	<---	SHARED_EQUITY_SUPPORT	1.058	0.364	2.906	0.004
var35	<---	SHARED_EQUITY_SUPPORT	0.779	0.447	1.741	0.082
var62	<---	SOCIAL__PARTICIPATION	1			
var63	<---	SOCIAL__PARTICIPATION	1.063	0.082	12.982	***
var64	<---	SOCIAL__PARTICIPATION	0.816	0.092	8.834	***
var72	<---	CIVIC_TOLERANC_TO_DIVERSITY	1			
var71	<---	CIVIC_TOLERANC_TO_DIVERSITY	0.991	0.087	11.372	***
var70	<---	CIVIC_TOLERANC_TO_DIVERSITY	0.499	0.091	5.469	***
var73	<---	CIVIC_TOLERANC_TO_DIVERSITY	0.104	0.111	0.936	0.349
var74	<---	CIVIC_TOLERANC_TO_DIVERSITY	-0.029	0.117	-0.25	0.802
var70	<---	GEOGRAPHICAL_LOCATION__INFLUENCE_DEV_PLAT	-0.349	0.136	-2.563	0.01
var71	<---	GEOGRAPHICAL_LOCATION__INFLUENCE_DEV_PLAT	0.439	0.113	3.877	***
var73	<---	GEOGRAPHICAL_LOCATION__INFLUENCE_DEV_PLAT	0.503	0.154	3.274	0.001
var74	<---	GEOGRAPHICAL_LOCATION__INFLUENCE_DEV_PLAT	0.245	0.165	1.484	0.138
var65	<---	RELOCATION_FACTORS__HOME_OWNERSHIP_CAT	-0.189	0.16	-1.181	0.237
var66	<---	RELOCATION_FACTORS__HOME_OWNERSHIP_CAT	0.184	0.1	1.835	0.067
var67	<---	RELOCATION_FACTORS__HOME_OWNERSHIP_CAT	0.192	0.125	1.533	0.125
var68	<---	RELOCATION_FACTORS__HOME_OWNERSHIP_CAT	0.89	0.245	3.629	***
var69	<---	RELOCATION_FACTORS__HOME_OWNERSHIP_CAT	0.211	0.107	1.965	0.049

Table 6.65: Regression weight estimates for observed constructs

After identifying the non-significant relationships within the explorative model construct, the study then sought to explore the hypothetical interaction between social capital building blocks and the possible impact of mobility, relocation factors, geographical location and development platforms. These were made possible by exploring the latent variables in the explorative model.

6.5.4 TESTING THE STUDY'S HYPOTHESIS

One of the main research hypotheses of this study is that there is a positive relationship between the level of social capital building blocks and the inherent propensity to

support shared equity housing model in the community. Sub-hypothesis has been formulated to test the partial influences among the latent variables, as they embody a more comprehensive interpretation of the explorative model.

6.5.4.1 TESTING THE SUB-HYPOTHESIS

As earlier mentioned the significance of estimated covariances between the latent variables is assessed in similar way in the previous analysis, hence if $CR > 1.96$, the factor covariance is significant. To define the relevance of the study's social capital building blocks, it was anticipated that all three will show strong interrelationships between their constructs. This will enable robust conclusions to be made on the study's hypothesis on the influence of social capital on the propensity to support shared equity model development among the sample population. Moreover other partial significant influences were also sought among the model construct.

Sub-hypothesis 1

Social participation (SOCIAL_PARTICIPATION) has an influence on civic tolerance to diversity (CIVIC_TOLERANCE_TO_DIVERSITY).

As shown in (Table 6.66), the estimate covariance suggests that the level of influence is 1.142, where Standard Error (SE) is .221 and $CR > 1.96$ at 5.169, $p < .001$ level of significance.

Therefore, the hypothesis is accepted.

Sub-hypothesis 2

Social support network and trust (SOCIAL_SUPPORT_NETWORK_TRUST...) has a positive influence on civic participation and tolerance to diversity (CIVIC_TOLERANCE_TO_DIVERSITY).

The covariance estimate suggests that the level of influence is 0.973, where (SE) is 0.203 and $CR > 1.96$ at 4.789, $p < .05$ level of significance.

Therefore, the hypothesis is accepted.

Sub-hypothesis 3

Social support network and trust (SOCIAL_SUPPORT_NETWORK_TRUST...) has a positive influence on Social participation (SOCIAL_PARTICIPATION).

The covariance estimate suggests that the level of influence is 0.997, where (SE) is 0.198 and $CR > 1.96$ at 5.041, $p < .05$ level of significance. Therefore, the hypothesis is accepted.

Sub-hypothesis 4

Social participation (SOCIAL_PARTICIPATION) has a positive influence on the propensity to support shared equity housing model (SHARED_EQUITY_SUPPORT).

The covariance estimate suggests that the level of influence is 0.189, where (SE) is 0.073 and $CR > 1.96$ at 2.58, $p < .05$ level of significance. Therefore, the hypothesis is accepted.

Sub-hypothesis 5

Social participation (SOCIAL_SUPPORT_NETWORK_TRUST) has a positive influence on the propensity to support shared equity housing model (SHARED_EQUITY_SUPPORT).

The covariance estimate suggests that the level of influence is 0.182, where (SE) is 0.071 and $CR > 1.96$ at 2.567, $p < .05$ level of significance. Therefore, the hypothesis is accepted.

All the indicators of a positive influence here are very much closely related to the relationship existing with propensity to support shared equity housing model in the ***Sub-hypothesis 3***, almost to an equal degree. Therefore these two social capital building blocks closely influence the support for shared equity model at almost equal levels.

Sub-hypothesis 6

Civic participation and tolerance to diversity (CIVIC_TOLERANCE_TO_DIVERSITY) has a positive influence on the propensity to support shared equity housing model (SHARED_EQUITY_SUPPORT).

According to (Fig) the covariance estimate suggests that the level of influence is 0.199, where (SE) is 0.075 and $CR > 1.96$ at 2.647, $p < .05$ level of significance. Therefore, the hypothesis is accepted.

COVARIANCE ESTIMATES			Estimate	S.E.	C.R.	P	Label
SOCIAL_PARTICIPATION	<->	CIVIC_TOLERANC_TO_DIVERSITY	1.142	0.222	5.141	***	par_13
SOCIAL_SUPPORT_NETWORK_TRUST	<->	SHARED_EQUITY_SUPPORT	0.182	0.068	2.683	0.007	par_14
SHARED_EQUITY_SUPPORT	<->	SOCIAL_PARTICIPATION	0.189	0.073	2.607	0.009	par_15
SOCIAL_SUPPORT_NETWORK_TRUST	<->	CIVIC_TOLERANC_TO_DIVERSITY	0.973	0.203	4.802	***	par_16
SOCIAL_SUPPORT_NETWORK_TRUST	<->	SOCIAL_PARTICIPATION	0.997	0.208	4.793	***	par_17
SHARED_EQUITY_SUPPORT	<->	CIVIC_TOLERANC_TO_DIVERSITY	0.199	0.084	2.374	0.018	par_18
SOCIAL_SUPPORT_NETWORK_TRUST	<->	GEOGRAPHICAL_LOCATION_DEV_PLAT	0.281	0.135	2.078	0.038	par_23
SHARED_EQUITY_SUPPORT	<->	GEOGRAPHICAL_LOCATION_DEV_PLAT	-0.046	0.073	-0.623	0.533	par_24
SHARED_EQUITY_SUPPORT	<->	RELOCATION_FACTORS_HOME_OWNER	-0.062	0.056	-1.107	0.268	par_30
SOCIAL_PARTICIPATION	<->	RELOCATION_FACTORS_HOME_OWNER	0.2	0.103	1.935	0.053	par_31
GEOGRAPHICAL_LOCATION_DEV_PLAT	<->	RELOCATION_FACTORS_HOME_OWNER	0.254	0.17	1.492	0.136	par_32

Table 6.66: Covariance regression weight estimates for the latent constructs

6.5.4.2 ORTHOGONAL RELATIONSHIPS IN THE EXPLORATIVE MODEL

Exploration of the covariance estimated revealed crucial influences existing in orthogonal dimensions within the explorative model. Orthogonal dimensions occur when latent variables affect a particular observed variable, despite not sharing significant covariance (Papoulis and Pillai, 2002).

Sub-hypothesis 1a

The performance of community development platforms (CDP) and geographical location (Urban/Rural/Suburban) (GEOGRAPHICAL_LOCATION) influences the propensity to support shared equity housing model (SHARED_EQUITY_SUPPORT).

According to (Fig) the covariance estimate for this two factors suggests that the level of influence is - 0.046, where (SE) is 0.066 and CR < 1.96 at - 0.691, $p > .05$ (.489)

Therefore, the hypothesis is rejected.

Sub-hypothesis 1b

The predominance of relocation factors and homeownership category (FTB/homeowner) influences the propensity to support shared equity housing model (SHARED_EQUITY_SUPPORT).

According to (Fig) the covariance estimate for this two factors suggests that the level of influence is - 0.062, where (SE) is 0.054 and CR < 1.96 at - 1.152, $p > .05$ (.249)

Therefore, the hypothesis is rejected.

As suggested by Albright and Park (2009), it appears that the conclusion from *sub-hypothesis 1a and 1b* is that orthogonal dimensions underlie both the predominance of relocation factors and homeownership category (FTB/homeowner) (RELOCATION_FACTORS_HOME_OWNER) and the performance of community development platforms (CDP) and geographical location (Urban/Rural/Suburban) (GEOGRAPHICAL_LOCATION) their influence on the propensity to support shared equity housing model (SHARED_EQUITY_SUPPORT).

Further investigation into both of these constructs revealed a slightly negative correlation between both factors and their influence on the propensity to support shared equity housing model (SHARED_EQUITY_SUPPORT) (Table 6.67). This implies that certain geographical locations and homeownership category (FTB/homeowner) and relocation factors alongside the effects of the performance of community development platforms (GEOGRAPHICAL_LOCATION), (RELOCATION_FACTORS_HOME_OWNER) negatively influence the level of support for shared equity housing model (SHARED_EQUITY_SUPPORT) with negative correlations of (-0.129), (-0.177) respectively (Table 6.67).

CORRELATION		ESTIMATE
SHARED_EQUITY_SUPPORT	<--> GEOGRAPHICAL_LOCATION_INFLUENCE_DEV_PLAT	-0.129
SHARED_EQUITY_SUPPORT	<--> RELOCATION_FACTORS_HOME_OWNER	-0.177

Table 6.67: Correlation Estimates

Again further investigations into observed variables attached to aforementioned latent variables (var33, var34, var35) <--> (var65, var66, var67, var68, var69) (var70, var71, var72, var73, var74) that seemingly have negative influences on the propensity to support shared equity housing model (SHARED_EQUITY_SUPPORT). Results from the correlation matrix (Table 6.68), show either very low or negative correlation between these observed variables. Hence, this lends more clarity into hypothesis 1a and 1b findings on the seemingly negative impact of these two latent factors on shared equity housing model support.

	var74	var73	var70	var71	var72	var64	var63	var62	var35	var34	var33	var69	var68	var67	var66	var65
var74	1															
var73	0.095	1														
var70	-0.089	-0.095	1													
var71	0.046	0.261	0.402	1												
var72	-0.027	0.101	0.516	0.819	1											
var64	-0.018	0.07	0.357	0.567	0.563	1										
var63	-0.022	0.083	0.426	0.676	0.671	0.671	1									
var62	-0.023	0.087	0.448	0.711	0.706	0.706	0.842	1								
var35	-0.011	-0.002	0.084	0.103	0.114	0.089	0.107	0.112	1							
var34	-0.025	-0.004	0.197	0.242	0.267	0.21	0.25	0.263	0.16	1						
var33	-0.027	-0.004	0.209	0.257	0.284	0.223	0.266	0.28	0.17	0.399	1					
var69	0.027	0.12	0.134	0.371	0.307	0.292	0.348	0.366	0.044	0.102	0.109	1				
var68	0.06	0.18	0.049	0.364	0.251	0.327	0.391	0.411	0.003	0.008	0.009	0.374	1			
var67	0.024	0.112	0.138	0.361	0.304	0.281	0.335	0.352	0.046	0.107	0.114	0.23	0.317	1		
var66	0.032	0.156	0.202	0.515	0.436	0.398	0.475	0.499	0.068	0.159	0.169	0.32	0.415	0.303	1	
var65	0.021	0.169	0.333	0.702	0.63	0.513	0.613	0.644	0.12	0.281	0.299	0.344	0.171	0.349	0.508	1

Table 6.68: Results from the correlation matrix

6.5.4.3 CONCLUSION ON STUDY'S HYPOTHESIS

All covariance estimates tested by the sub-hypothesis are positive and significant at either 1% or 5% level of significance, with $CR > 1.96$. Therefore there is substantial evidence of a positive relationship between the level of social capital building blocks and the inherent propensity to support shared equity housing model in the community.

Considering the orthogonal relationships: relocation factors, homeownership category/FTB/homeowner) (RELOCATION_FACTORS_HOME_OWNER) and the performance of community development platforms (CDP), geographical location (Urban/Rural/Suburban) (GEOGRAPHICAL_LOCATION) stemming from hypothesis 1a and 1b, introduced into the model as (CLF)s to mitigate unmodelled secondary influences, with implications on the overall model based on the proposition that these relationships influence the level of Social support network and trust* (SOCIAL_SUPPORT_NETWORK_TRUST) and Civic participation and tolerance to diversity* (CIVIC_TOLERANCE TO DIVERSITY).

Findings from the explorative model suggest a negative correlation (with a negative effect) on the levels of these two social capital building blocks. In order words, (RELOCATION_FACTORS_HOME_OWNER) & (GEOGRAPHICAL_LOCATION) antithetically largely influences the level of (CIVIC_TOLERANCE TO DIVERSITY) and (SOCIAL_SUPPORT_NETWORK_TRUST) among the sampled population. These seemingly antithetical relationships have also negatively affected the level of support for shared equity housing model (SHARED_EQUITY_SUPPORT) with negative correlations of (-0.129), (-0.177) respectively. On closer examination at the regression weight estimates of the concerned non-significant direct causal relationships (Table 6.65 in Section 6.5.3.5), the level of support for lifestyle disparities in the community (var74) measures low on a weighted scale to CIVIC_TOLERANCE TO DIVERSITY and GEOGRAPHICAL_LOCATION. Similarly, the regression weights of the level of help received from community members: (v65), level of help received from friends: (v66) and level of visits to friends and neighbourhood networks (v67) measures are low on weighted scale within both (SOCIAL_SUPPORT_NETWORK_TRUST, & the (RELOCATION_FACTORS_HOME_OWNER) constructs.

From all indications, it appears that externalities like the respondent's geographical location, homeownership category and relocation factors have significant influence on the overall model's social capital building blocks. Literature, suggested the possible role of social capital in culture of self-help and determination of existing CLTs utilising the SEHM, however these findings appear to suggest otherwise with the seeming state of isolation which goes against sustainability ideals in the aspects of diversity in income, race and age groups, particularly when trust issues and tolerance of culture diversity is concerned. This reflected in the insignificant regression weights of the level of support for lifestyle disparities in the community (var74) as influenced by geographical location of the respondents. This finding buttresses the possible downsides highlighted in literature where certain groupings and associations feeding off a well-grounded social capital network, also carry the potential to exclude others (Szreter, 2000). This situation on the long run might pose as containing restrictions to CLT influence in mainstream affordable supply, particularly in urban areas.

The impact of (RELOCATION_FACTORS_HOME_OWNER) on the level of help received from community members: (v65), level of help received from friends: (v66) and level of visits to friends and neighbourhood networks: (v67) reveal an underlying reduction in overall social capital, this apparently suggests that respondents are more willing to integrate into their communities if they own their properties than if they were just renting particularly among high transience population groups. Also, the willingness to relocate usually caused by housing dissatisfaction discourages integration, hence the insignificant regression weights of the relationship between v65, v66, v67 and (RELOCATION_FACTORS_HOME_OWNER).

Not surprisingly, the regression weights of the relationship between the levels of support for conventional housing ownership model and the propensity to support shared equity housing model development is insignificant, which suggests an antithetical relationship between these two affordable supply models.

6.6 ANALYSIS OF INSTITUTIONAL BARRIERS AND CLT SHARED EQUITY HOUSING MODEL DEVELOPMENT DRIVERS (SEHM)

The overarching purpose of this section is to explore the relationship between the perceptions of respondent towards strategies to improve Shared Equity Housing Model development within the UK's housing sector, thus verifying interview findings and recommendations. This section of the study is informed by literature findings on the low of representation of CLT shared equity housing model in the housing sector (Birchall 2004; Clark 2012) see (Section 2.2, 2.2.3, 2.2.6 and 2.3). Potential sources of barriers were then investigated through semi-structured interviews of key top down and bottom up organisations to identify barriers and recommendations towards SEHM development from a CLT perspective (Section 5.3.1, 5.3.2, 5.3.3, 5.3.4 and 5.3.5). Explored institutional barrier constructs as identified from semi-structured interviews include:

- Organisation approach and the concept of affordability
- Prescriptive land use policies and the inaccessibility of limited options
- Preference and the enabling capacity in the housing sector
- Institutional conflict in affordable housing procurement
- Corporate will and capacity to collaborate.

On this note the study examined and clarified the relationships within these findings by applying Structural Equation Modelling (SEM). The relationships between these constructs can be either directional or non-directional. The purpose here is to test hypothesised patterns (within observed and unobserved variables and how these strategies interact in practice MacCallum & Austin (2000) in Sejjaaka & Ntayi (2013).

6.6.1 MITIGATING BIAS IN RESPONSES

Information sought among respondents requires familiarity with the shared equity housing model from a CLT perspective. To ensure that perceptions are not influenced by the disparities in level of relevant information available to respondents at the time of survey, a kruskal wallis test was run on responses to ensure that there is to an extent a level of significant uniformity in responses sought from the survey.

Test Statistics^a

PERCEPTIONS	Chi-Square	df	Asymp. Sig.
Organisation approach and the concept of affordability			
Reconsideration of approach to keeping housing affordable in perpetuity	1.075	1	.300
Ameliorating approach to market indicators as determinants for AH	1.897	1	.168
Addressing Limited widespread accessibility of CBH housing models	1.709	1	.191
Resolving organisation conflicting relationships with CBH	10.774	1	.001
Accessibility to asset transfer and community development information	1.692	1	.193
Prescriptive land use policies and the inaccessibility of limited options			
Addressing unfavourable planning policy procedures for CBH	7.531	1	.006
Difficulties obtaining land below market value for CBH	7.092	1	.008
Low level of overall of support for urban CLTs	4.921	1	.027
AH development restrictions on exceptional sites	1.478	1	.224
Tackling Underutilisation of CBH model to tackle dereliction	8.355	1	.004
Preference and the enabling capacity in the housing sector			
Tackling CBH isolation in mainstream applicability	12.276	1	.000
Improving Low level of CBH support from housing agencies	2.426	1	.119
Prequalification difficulties accessing funding	1.092	1	.296
Recognition of CLT model strengths in housing sector	2.269	1	.132
Solving Low level of CLT model adoption by affordable housing developers	.135	1	.714
Institutional conflict in affordable housing procurement and commissioning			
Reviewing the dominance of housing association	4.226	1	.040
Tackling CBH limitation and Investor preference for housing association models	5.557	1	.018
Tackling Land acquisition financing difficulties	9.367	1	.002
Improving availability of mortgage finance for CBH homebuyers	8.219	1	.004
Tackling shortage of staff and necessary skills	4.175	1	.041
Corporate will and capacity to collaborate			
Improving level of collaboration with HA	1.137	1	.286
The problem of restrictive terms of collaboration with HAs and developers	.000	1	.994
Reducing the overdependence of CLTs on HAs	.011	1	.918
Improving the level of housing model diversification in housing sector	1.554	1	.213
The barrier to adoption of ethical loan structures by mainstream lenders	12.416	1	.000

a. Kruskal Wallis Test b. Grouping Variable: CLT information:

Table 6.69: Kruskal wallis test of dependence of responses/perception on level of CLT information.

Findings suggest answers are not grossly affected by available information. This was done to capture realistic perceptions based on actual experience, unhindered by the level

of available information bias i.e. there should be limited disparities between well informed and less informed respondents, to ensure perceptions are not affected by low level of information on the investigated concepts.

Results indicate that more than half (52%) of the perceptions sought were not influenced by the level of information available to respondents on the investigated concepts (Table 6.69). Due to the sampling technique employed to ensure respondents are at least generally informed on the shared equity model issues, these results show that perceptions captured are actual realities within their respective capacities.

6.6.2 DESIGNING THE ANALYTICAL MODEL

In reference to (Fig 6.15) the study designed a proposed relationship between the institutional strategies to improve the state of the shared equity model housing development as informed by literature. Distribution of the influence level of CLT information among respondents did not show overwhelming bias among all measured constructs.

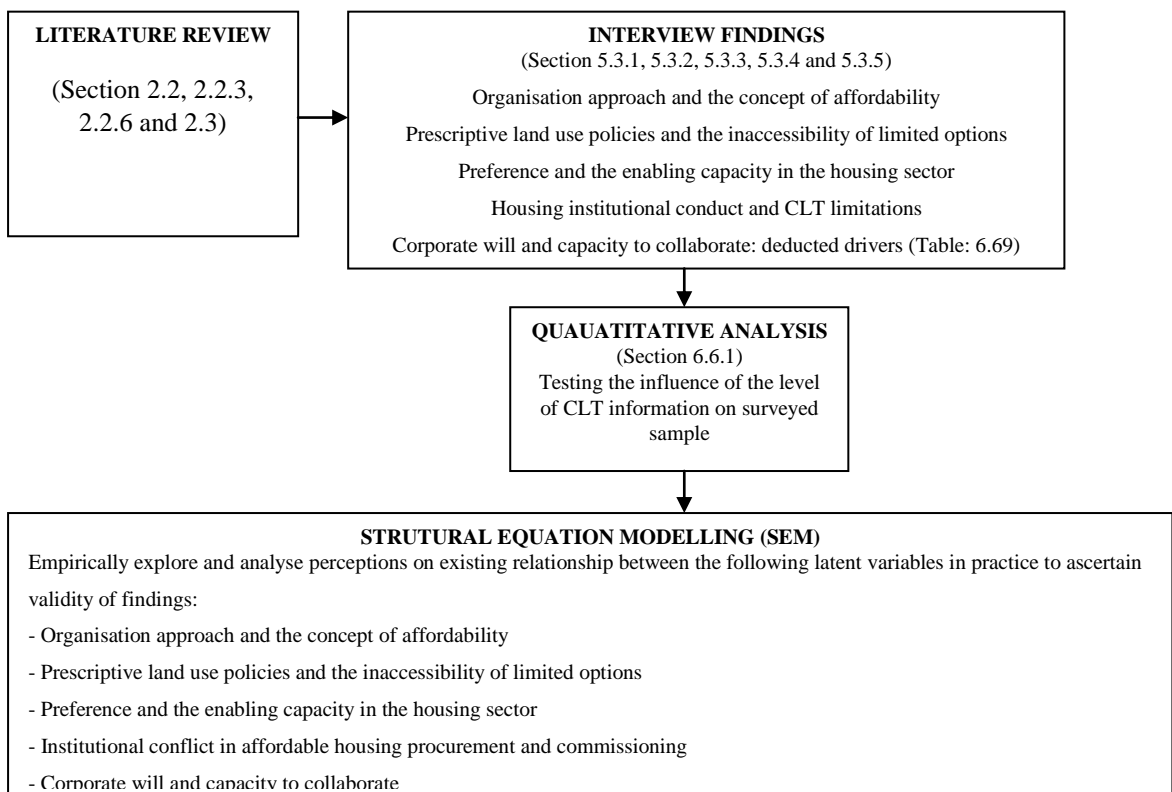


Fig 6.15: Model development framework for institutional drivers for CLT SEHM development

This result lends itself to the process of modelling the relationships between the 5 key conceptual strategies to improve the state of the shared equity model housing development. In this context, this study hypothesised that these strategies: Organisation approach and the concept of affordability, prescriptive land use policies and the inaccessibility of limited options, preference and the enabling capacity in the housing sector, Institutional conflict in affordable housing procurement, corporate will and capacity to collaborate have interrelated influential relationships (implicit and explicit) with the improvement on CLT shared equity model housing development (Fig 6.16). This hypothesised pathway is then explored by SEM accordingly in previous sections.

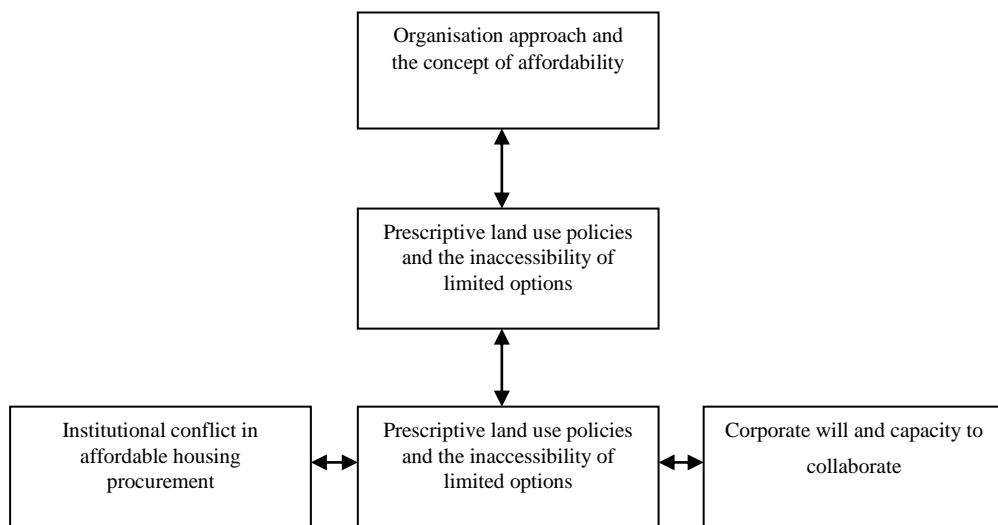


Fig 6.16: Study proposed model: Institutional drivers for CLT (SEHM) development

6.6.2.1 MODEL SPECIFICATION AND CONFIRMATORY FACTOR ANALYSIS

The structure build-up of the CFA model is based on path diagrams in which squares are used to indicate observed variables while circles represent the latent variables in the order of the proposed study model (Fig 6.16) which are the five latent variables. In the SEM model these latent variables are represented in circles/spheres with the following indicators:

- ORG_APPROACH
- LAND_USE_POLICY
- ENABLING_CAPACITY
- CLT_LIMITATIONS
- CAPACITY_TO_COLLABORATE

There were initial 25 observed variables i.e. var75 through var99 represented with squares/rectangles. Single-headed arrows are used to imply a direction of assumed causal influence, while double-headed arrows represent covariance between either of the two aforementioned latent variables, see (Table 6.70) for the breakdown. Looking at (Figure 6.17), the latent variables represent common factors indicating a ‘cause’ effect, for example the ORG_APPROACH latent variable causes 5 observed variables i.e. var75 through var79, likewise LAND_USE_POLICY causes 5 observed variables, var80 to var84. These two latent variables are hypothesised to covary as indicated by the two headed arrows. *Factor loadings*, for example are represented by (1) constrained to represent the regression slope of ORG_APPROACH on var75. The circles for example indicated with e1 represent *unique factors* as they influence only a single observed variable, hence e1 incorporates all the variance in v75 as measurement errors not picked up by the factors. Finally, error in e1 can correlate with for example e4, this indicates variance not explained by theoretical constructs but permitted to covary across two measures referred to as a *correlated error*. In the proposed model, each response perception on barrier (latent variable) is a weighted linear combination of mitigating strategic drivers on an opinion rating scale and a measurement error.

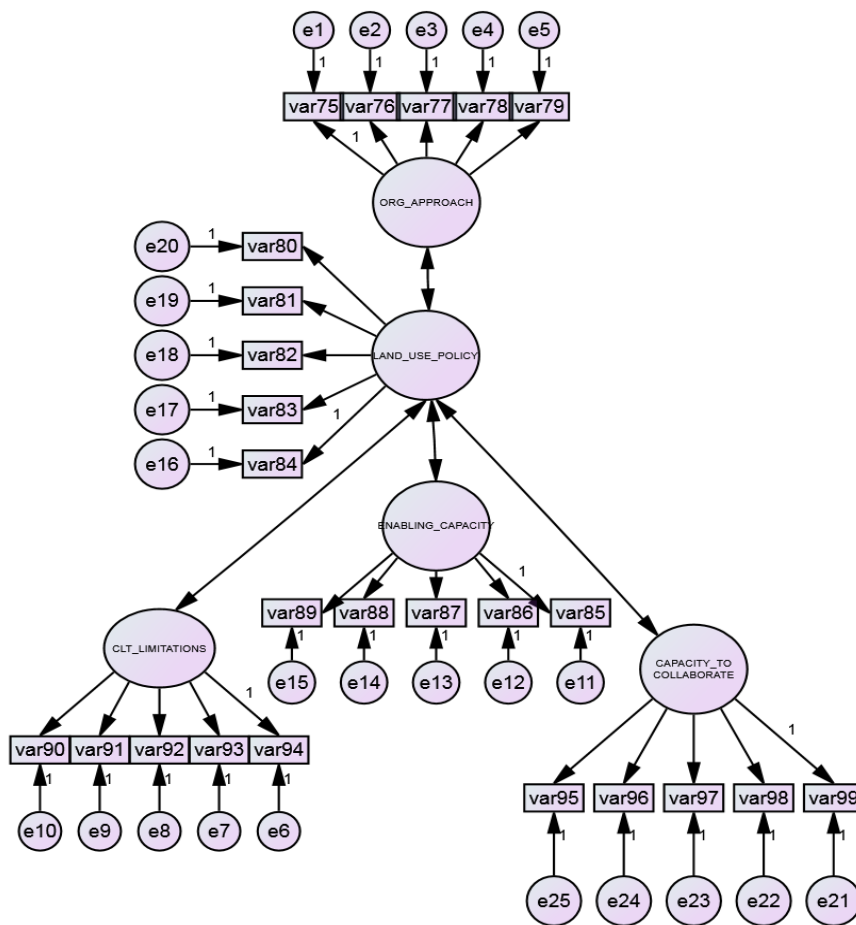


Fig 6.17: Model specification for Confirmatory Factor Analysis: Institutional drivers for CLT SEHM development.

6.6.2.2 THE STATISTICAL MODEL

The proposed model consists of relationship between the institutional strategically drivers to improve the state of the shared equity model housing development. These are conceptualized as 5 exogenous latent variables. These were measured by 25 observed variables, consisting of 20 free parameters directly estimated from the data i.e. and all were permitted to correlate with one another (Fig 6.15). All measures in the model are cognitive. The variables and alongside their means, standard deviations and respective indicators are expressed in (Table 6.70). These are measured on a Likert five point scale ranging from ‘strongly disagree’ = 1” to ‘strongly agree’ = 5.

Item Statistics

SHARED EQUITY MODEL DEVELOPMENT BARRIERS: STRATEGIC DRIVERS	Mean	Std. Deviation	N
Organisation approach and the concept of affordability* (ORG_APPROACH)			
<i>Approach to keeping housing affordable in perpetuity: (var75)</i>	4.04	.404	80
<i>Ameliorating approach to market indicators as determinants for AH: (var76)</i>	4.43	.823	80
<i>Addressing limited widespread accessibility of CBH housing models: (var77)</i>	4.25	.646	80
<i>Institutional conflicting relationship with CBH: (var78)</i>	4.16	.754	80
<i>Accessibility to asset transfer and community development information: (var79)</i>	4.10	.949	80
Prescriptive land use policies and the inaccessibility of limited options* (LAND_USE_POLICY)			
<i>Addressing unfavourable planning policy procedures for CBH: (var80)</i>	3.90	.805	80
<i>Easing difficulties obtaining land below market value for CBH: (var81)</i>	4.11	.827	80
<i>Improving Low level of overall of support for CBH model: (var82)</i>	3.93	.808	80
<i>AH development restrictions on exceptional sites: (var83)</i>	3.96	.878	80
<i>Tackling underutilisation of CBH model to tackle dereliction: (var84)</i>	4.36	.903	80
Preference and the enabling capacity in the housing sector* (ENABLING_CAPACITY)			
<i>Tackling CBH isolation in mainstream applicability: (var85)</i>	4.06	.623	80
<i>Improving the low level of CBH support from housing agencies: (var86)</i>	4.09	.917	80
<i>Easing prequalification difficulties and accessing funding: (var87)</i>	4.30	.624	80
<i>Recognition of CLT model strengths in housing sector: (var88)</i>	4.28	.711	80
<i>Solving low level of CLT model adoption by affordable housing developers: (var89)</i>	3.50	1.243	80
Institutional conflict in affordable housing procurement * (CLT_LIMITATIONS)			
<i>Diversifying dominance of housing association models: (var90)</i>	3.95	.745	80
<i>Tackling CBH limitation and investor preference for housing association models: (var91)</i>	4.23	.871	80
<i>Tackling land acquisition and financing difficulties: (var92)</i>	4.48	.729	80
<i>Improving availability of mortgage finance for CBH homebuyers: (var93)</i>	4.49	.693	80
<i>Tackling shortage of staff and necessary skills: (var94)</i>	4.33	.632	80
Corporate will and capacity to collaborate* (CAPACITY_TO_COLLABORATE)			
<i>Improving level of collaboration with HA: (var95)</i>	3.25	1.175	80
<i>Addressing restrictive terms of collaboration with HAs and developers: (var96)</i>	3.91	.970	80
<i>Reducing the overdependence of CLTs on HAs: (var97)</i>	4.04	.961	80
<i>Improving the level of housing model diversification in housing sector: (var98)</i>	4.36	.621	80
<i>Encouraging adoption of ethical loan structures by mainstream lenders: (var99)</i>	4.70	.560	80

Table 6.70: Shared equity model development: strategic drivers scale item and their indicative representations in the model structure Notes: * Exogenous latent Variables

6.6.3 DATA ANALYSIS

The analysis was conducted with SPSS 20.0 and with AMOS 21.0 (Analysis of Moment Structures) which is widely regarded as the most efficient statistical tool for SEM. The structural equation modelling (SEM) was utilized to test the hypotheses as explained earlier. The two step approach was employed again which involved model fit for the constructs, which were tested through confirmatory factor analysis (CFA), then, the significance of the coefficient was subsequently examined to ascertain proposed hypothesis for associations within the model (see Section) for further references.

6.6.3.1 PRE-ANALYSIS

Also in this part of the research the previous measure of consistency was determined for the entire research's variables, most of which are not considered for this section of the study, rather a new test was carried out just for the model constructs, to ensure greater accuracy and specificity. Therefore, all observed variables were subjected to fresh reliability tests. The intention here is to confirm that the tested items have high inter-item correlation, as a small correlation would be implying a low level of statistical relationship between the tested constructs. None of the construct reliability score fell below 0.7 for the 16 measured constructs, the overall Cronbach's Alpha coefficients amounted to 0.733 (Table 6.71). This figure exceeded the 0.70 cut-off point suggested by Nunnally (1978).

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.733	.777	25

Table 6.71: Cronbach Alpha for Institutional drivers for CLT SEHM development constructs

The measures employed to ensure sample size suitability is the Kaiser-Meyer-Oklin (KMO) and Bartlett's Test which is used to test suitability of data for CFA. The KMO value for these constructs was 0.613; this figure exceeds the 0.60 cut-off point

suggested by Kaiser and Rice (1974). Also, the study sample passed the Bartlett's test of sphericity significantly at ($p < 0.001$) suggesting that the data is suitable for CFA (Table 6.72).

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.613
Bartlett's Test of Sphericity	Approx. Chi-Square	550.024
	Df	276
	Sig.	.000

Table 6.72: KMO and Bartlett's Test for Institutional drivers for CLT SEHM development constructs

6.6.4 AMOS ANALYSIS: GOODNESS OF FIT TEST

This section deals with the actual fitness of the exploratory model to the data responses, which is the degree of consistency between the study proposed model and the practical data model employing the covariance interactions, therefore test of fitness in this context is consistency of characteristics of data with the theoretical concepts in the SEM analysis (Field, 2009).

CMIN/DF goodness of fit test

The initial goodness of fit test was estimated in AMOS with (CMIN/DF) which is the minimum discrepancy, \hat{C} divided by its degrees of freedom (see Appendix for further illustrations) following Kline (1998) proposal, CMIN/DF (df: χ^2) ratio amounts to (1: 1.146) which is far less than the widely accepted 1.3, hence the first measure of goodness of fit is deemed suitable (Table 6.73). Also, the probabilistic level of significance is 0.101, in line with ($p > .05$). Hence, this score is deemed suitable, implying there is no significant difference between the benchmark saturated model and the proposed research model. Moreover, other goodness of fit indices has been employed for this study to improve the robustness of the model.

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	53	179.986	157	.101	1.146
Saturated model	210	.000	0		
Independence model	20	445.763	190	.000	2.346

Table 6.73: CMIN/DF Test for goodness of fit

The root mean square error of approximation (RMSEA) goodness of fit test

This fit index ranges from 0 to 1, and values less than 0.08 indicate good fit but not higher than 0.1 cut-off point (Browne and Cudeck, 1993; MacCallum, Browne and Sugawara, 1996). The RMSEA for this study was estimated by AMOS as .043 which suggests a good fit (Table 6.74). Please see (section 6.53), (Appendix 4) for further elaboration of the process.

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.043	.000	.070	.638
Independence model	.131	.115	.146	.000

Table 6.74: The root mean square error of approximation (RMSEA) goodness of fit test

CFI goodness of fit test

The comparative fit index (CFI) developed by Bentler (1990) is one such index and assesses the improvement to fit of the hypothesized model to the null model, according to (Fan, Thompson, and Wang, 1999), the CFI is rarely sensitive to sample size, hence less likely to exhibit bias. On this note this study has adopted the CFI measure of which AMOS estimates indicate an adequate score of 0.910, as suggested by Kline (1998) values greater than 0.90 indicate a good fit.

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.596	.511	.920	.891	.910
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Fig 6.75: The CFI and IFI goodness of fit test: Institutional drivers for CLT SEHM development.

The goodness of fit measure NFI was also considered for this study however, Ullman (2001) suggests that its sensitivity to sample size frequently results to unreliable fitness. So, the Incremental Fit Index, also known as Bollen's IFI was adopted due to its more reliable sensitivity to sample size, and again values exceeding 0.90 are regarded as acceptable (Widaman and Thompson, 2003). With an IFI estimate of .920 (Fig 6.75), this suggests adequate fitness for the proposed model in line with other goodness of fit test indices earlier elucidated.

6.6.4.1 MODIFICATIONS

Six modifications were made to the initial model based upon estimated modification indices (Loehlin, 2004 in Hadrach, 2011), such modifications included correlated errors which is the variance that are not explained by theoretical constructs, hence may covary across two measures or more. All error items correlated had displayed large modification indices suggesting that fit would improve if some error terms were allowed to covary please see (section for further reference). Precautions were taken to correlate only error terms generated from their respective latent variable (Hall, Snell and Faust, 1999).

Error items displaying large MI (Modification Indices) as suggested by AMOS, were covaried, this includes error terms for **ORG_APPROACH** variables (Fig 6.16) i.e.:

- ‘Institutional conflicting relationship with CBH’ (var78) – (e4) and ‘Accessibility to asset transfer and community development information’ (var79) – (e5).

Moreover, same process was carried out for error items generated from **LAND_USE_POLICY** variables (Dig), which are:

- ‘Unfavourable planning policy procedures for CBH’ (var80) – (e20) and ‘Low level of overall of support for CBH model’ (e82) – (e18).
- ‘AH development restrictions on exceptional sites’ (var83) – (e17) and ‘Tackling underutilisation of CBH model to tackle dereliction’ (var84) – (e16).

To account for this covariance in the estimation process, a covariance variable (double-headed arrow) was introduced between (e4 and e5) and (e18 and e20), (e16 and e17) (Fig 6.18). In reference to Hall, Snell and Faust, (1999); Loehlin, (2004)’s recommendation that correlated error items might incorporate small, unmodelled secondary influences, with implications to the overall model, further investigations were carried out to ascertain if there were other latent constructs that were responsible for these errors that covaried within affected latent variables. There was no evidence of such constructs confirmed by this research. Therefore, introducing a Common Latent Variable into these affected constructs was not considered.

Other issues with the model include observed lack of invariance i.e. cases that certain items do not measure consistently. This is usually caused by the strength of the loading for one or more items differing significantly its group detected from regression weights of the explorative model. Resolving this problem implies that the overall fitness of the model might be improved if affected items were removed, which will improve the model fit. Implications are that the responses will better reflect the proposed model (Gallion and Scheperle, 2008; Gaskin, 2013).

The latent variables affected were ‘corporate will and capacity to collaborate’ (CAPACITY_TO_COLLABORATE), and ‘Institutional conflict in affordable housing procurement’ (CLT_LIMITATIONS) regression weights displaying invariance include the following observed variables:

- Improving level of collaboration with HA (var96)
- Addressing restrictive terms of collaboration with HAs and developers (var97)

- Reducing the overdependence of CLTs on HAs (var97)
- Diversifying dominance of housing association models (var90)

After removal of these variables, modifications were therefore added to the CFA model and tested with AMOS. The invariance issues were resolved; hence the model fitness was improved significantly. The modification process helped the study attain the earlier reported model fitness (Section 6.5.3.1).

Overall the proposed model passed the CFI, IFI and RMSEA fitness test, suggesting goodness of fit for the model, as Fan, Thompson, and Wang (1999) concluded on their being much more reliable and stable in regards to bias due to sample size sensitivity.

After modifications the overall fitness of the model is hereby substantiated by the following fit indices: The χ^2 test yields a statistic of 179.99 (df =157), which has a corresponding p-value of .101 ($p > .05$), RMSEA (.043), CFI (.910) and IFI (.920).

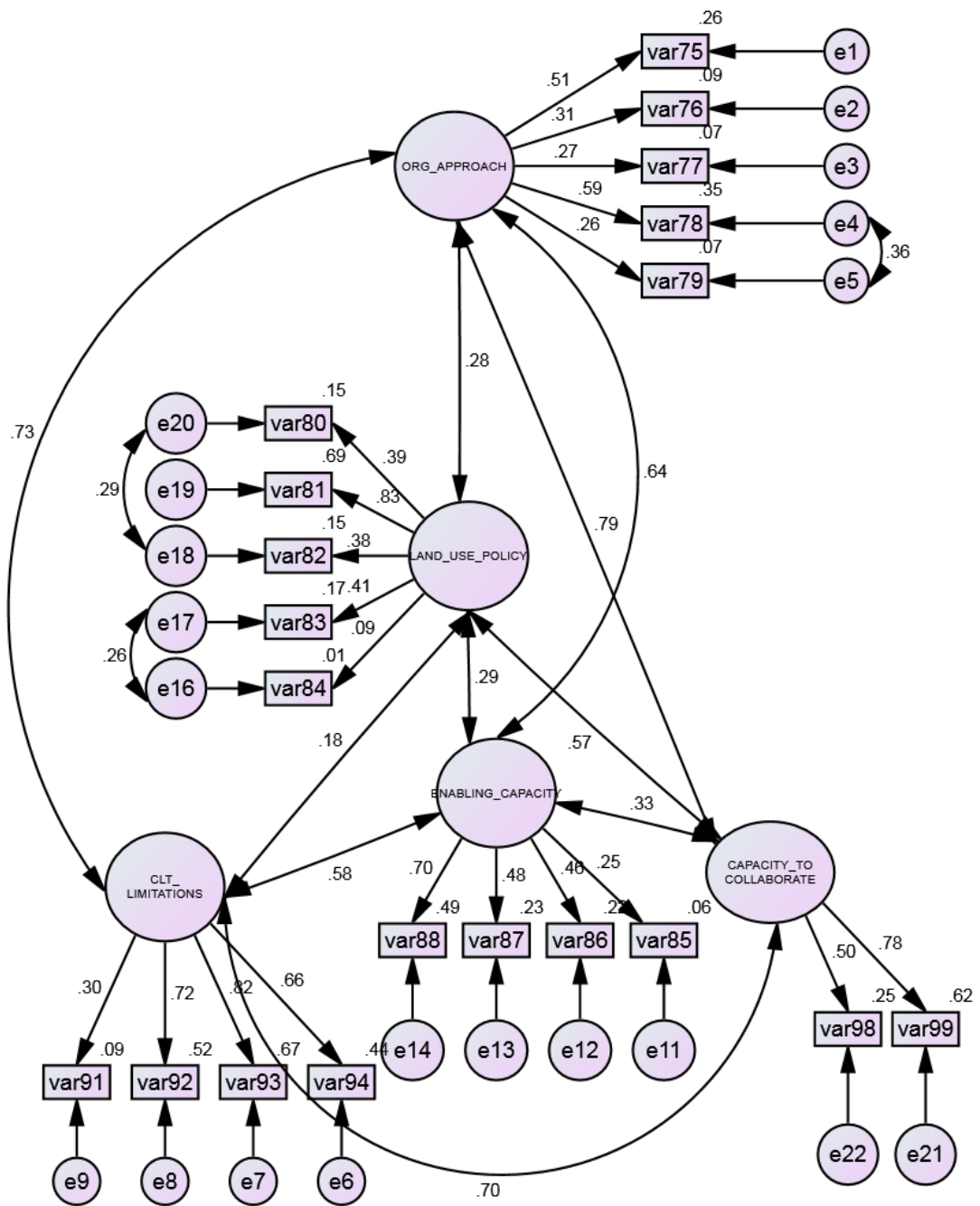


Fig 6.18: Standardised Results for AMOS Analysis: Institutional drivers for CLT SEHM development SEM.

6.6.4.2 IMPLICATION ON MODEL ESTIMATES

As prelude to testing of the study's hypothesis, the critical ratios were examined alongside their p-values of significance. Taking for example **var76 ← ORG_APPROACH** i.e. ('Ameliorating approach to market indicators as determinants for AH' ← **ORG_APPROACH**), according to Koufteros (1999) in Sejjaaka and Ntayi (2013) regression estimates of the relationship compared with their standard errors revealed evidence of an association between the two constructs. Therefore, dividing the regression weight estimate by the estimate of its standard error gives $z/CR = 1.233/.585 = 2.107$. In other words $CR=2.107$ is 2.107 standard errors above zero, therefore if $CR > 1.96$, the relationship of these constructs is therefore significant (see Table). From the explorative model of perceptions, applying same interpretation to the other relationships in the explorative SEM model, results indicate that the regression estimates for all the constructs of the latent variables have significant influence except for the following (Table 6.76):

- **var79 ← ORG_APPROACH**: ('improving accessibility to asset transfer and community development information') has a non-significant influence on organisation approach and the concept of affordability barrier.
- (**var86**) (**var87**) (**var88**) ← **ENABLING_CAPACITY**: ('Improving the low level of CBH support from housing agencies', 'Easing prequalification difficulties accessing funding', and improved recognition of CLT model strengths in housing sector' have a non-significant influence on the (Preference and enabling capacity in the housing sector) barrier.
- (**var83**, **var82**, **var81**, **var80**) ← **ENABLING_CAPACITY**: ('AH development restrictions on exceptional sites', 'Low level of overall of support for CBH model, 'Difficulties obtaining land below market value for CBH', 'Unfavourable planning policy procedures for CBH' have a non-significant influence on the (Prescriptive land use policies and the inaccessibility of limited options) barrier in the housing sector.

REGRESSION WEIGHTS		Estimate	S.E.	C.R.	P	Label
var75 ←	ORG_APPROACH	1.000				
var76 ←	ORG_APPROACH	1.233	.585	2.107	.035	
var77 ←	ORG_APPROACH	.857	.450	1.903	.047	
var78 ←	ORG_APPROACH	2.184	.664	3.290	.001	
var79 ←	ORG_APPROACH	1.200	.674	1.779	.075	
var94 ←	CLT_LIMITATIONS	1.000				
var93 ←	CLT_LIMITATIONS	1.353	.242	5.590	***	
var92 ←	CLT_LIMITATIONS	1.253	.240	5.216	***	
var91 ←	CLT_LIMITATIONS	.620	.261	2.374	.018	
var86 ←	ENABLING_CAPACITY	2.754	1.653	1.667	.096	
var87 ←	ENABLING_CAPACITY	1.920	1.146	1.675	.094	
var88 ←	ENABLING_CAPACITY	3.233	1.842	1.755	.079	
var84 ←	LAND_USE_POLICY	1.000				
var83 ←	LAND_USE_POLICY	4.621	6.684	.691	.489	
var82 ←	LAND_USE_POLICY	3.933	6.012	.654	.513	
var81 ←	LAND_USE_POLICY	8.762	13.277	.660	.509	
var80 ←	LAND_USE_POLICY	3.981	6.081	.655	.513	
var99 ←	CAPACITY_TO_COLLABORATE	1.000				
var98 ←	CAPACITY_TO_COLLABORATE	.701	.189	3.713	***	
var85 ←	ENABLING_CAPACITY	1.000				

Table 6.76: Regression weight estimates for observed constructs

After identifying the non-significant relationships, the study then explored the hypothetical interaction between strategic drivers aimed at tackling barriers to the CLT (SEHM) and the perceptions of survey respondents. This is to identify common grounds and conflicting approaches towards CLT (SEHM) development.

6.6.5 TESTING THE STUDY'S HYPOTHESIS

The main research hypotheses of this section's study stipulates that perceptions in practice towards strategic drivers to tackle barriers to CLT shared equity housing development influence one another significantly, therefore policies should address these issues holistically and not selectively. Selective measures to partially address barriers that are deemed convenient will only have an insignificant effect on the overall diversification of affordable housing delivery vehicles/models in the UK.

Sub-hypothesis has been formulated to test the partial influences among the latent variables, as they contribute to a more comprehensive interpretation of the explorative model.

6.6.5.1 TESTING THE SUB-HYPOTHESIS

The significance of estimated covariances between the latent variables is assessed in similar ways adopted in (Section 6.5.4.1), hence if $CR > 1.96$, the factor covariance is significant. To define the interactive influence the strategic drivers (to tackle barriers to the CLT shared equity housing development) have on one another. It was anticipated that perception of drivers to tackle the 5 main barriers will significantly influence each other. This will enable robust conclusions to be made on the study's hypothesis on perceptions in practice towards strategic drivers to tackle barriers to shared equity housing development.

Sub-hypothesis 1

The drivers to tackle 'Institutional conflict in affordable housing procurement' (CLT_LIMITATIONS) barriers influence the drivers to tackle corporate will and capacity to collaborate (CAPACITY_TO_COLLABORATE) barriers. As shown in (Table 6.77), the estimate covariance suggests that the level of influence is .128, where Standard Error (SE) is .036 and $CR > 1.96$ at 3.519, $p < .001$ level of significance. Therefore, the hypothesis is accepted.

Sub-hypothesis 2

Drivers targeted at organisation approach and the concept of affordability (ORG_APPROACH) influence drivers targeted at 'Institutional conflict in affordable housing procurement' (CLT_LIMITATIONS) barriers. The estimate covariance suggests that the level of influence is .062, where Standard Error (SE) is .022 and $CR > 1.96$ at 2.827, $p < .05$ level of significance. Therefore, the hypothesis is accepted.

Sub-hypothesis 3

Drivers targeted at the corporate will and capacity to collaborate (CAPACITY_TO_COLLABORATE) barriers is influenced by drivers targeted at addressing Organisation approach and the concept of affordability (ORG_APPROACH) barriers.

The covariance estimate of this construct suggests that the level of influence is .070, where Standard Error (SE) is .024 and CR > 1.96 at 2.993, $p < .05$ level of significance. Therefore, the hypothesis is accepted.

Sub-hypothesis 4

Drivers to tackle prescriptive land use policies and the inaccessibility of limited options (LAND_USE_POLICY) barriers are influenced by drivers to tackle the corporate will and capacity to collaborate (CAPACITY_TO_COLLABORATE).

The covariance estimate of this construct suggests that the level of influence is .020, where Standard Error (SE) is .030 and CR > 1.96 at .651, however, $p > .05$ level of significance. Therefore, the hypothesis is rejected.

Sub-hypothesis 5

The drivers to tackle preference and the enabling capacity barrier in the housing sector (ENABLING_CAPACITY) barriers are influenced by the drivers to tackle ‘Institutional conflict in affordable housing procurement’ (CLT_LIMITATIONS) barriers.

The covariance estimate of this construct suggests that the level of influence is .037, where Standard Error (SE) is .017 and CR > 1.96 at 1.606, however, $p > .05$ level of significance (Table 6.77). Therefore, the hypothesis is rejected.

COVARIANCES			Estimate	S.E.	C.R.	P	Label
ENABLING_CAPACITY	<-->	CAPACITY_TO_COLLABORATE	.022	.017	1.315	.188	
CLT_LIMITATIONS	<-->	ENABLING_CAPACITY	.037	.023	1.606	.108	
ORG_APPROACH	<-->	ENABLING_CAPACITY	.020	.013	1.527	.127	
ORG_APPROACH	<-->	CLT_LIMITATIONS	.062	.022	2.827	.005	
CLT_LIMITATIONS	<-->	CAPACITY_TO_COLLABORATE	.128	.036	3.519	***	
ORG_APPROACH	<-->	LAND_USE_POLICY	.004	.007	.604	.546	
LAND_USE_POLICY	<-->	CAPACITY_TO_COLLABORATE	.020	.030	.651	.515	
ENABLING_CAPACITY	<-->	LAND_USE_POLICY	.003	.006	.588	.556	
ORG_APPROACH	<-->	CAPACITY_TO_COLLABORATE	.070	.024	2.993	.003	
CLT_LIMITATIONS	<-->	LAND_USE_POLICY	.006	.010	.583	.560	

Table 6.77: Covariance regression weight estimates for the latent constructs

6.6.5.2 ORTHOGONAL RELATIONSHIPS IN THE EXPLORATIVE MODEL

Exploration of the covariance estimates revealed crucial influences existing in orthogonal dimensions within the explorative model. Orthogonal dimensions occur when latent variables affect a particular observed variable, despite not sharing significant covariance (Papoulis and Pillai, 2002).

As suggested by Albright and Park (2009), it appears that the conclusion from *sub-hypothesis 4 and 5* is that, orthogonal dimensions underlie both of these constructs.

Further investigation reveal a positive correlation between perceptions of respondents on drivers to tackle both of these barriers (Table 6.78), this suggests that respondents do agree on these drivers, however going by the interactive dynamics in the explorative model, they do not go together strategically.

CORRELATIONS		Estimate
ENABLING_CAPACITY	<--> CAPACITY_TO_COLLABORATE	.333
CLT_LIMITATIONS	<--> ENABLING_CAPACITY	.580
ORG_APPROACH	<--> ENABLING_CAPACITY	.639
ORG_APPROACH	<--> CLT_LIMITATIONS	.730
CLT_LIMITATIONS	<--> CAPACITY_TO_COLLABORATE	.705
ORG_APPROACH	<--> LAND_USE_POLICY	.281
LAND_USE_POLICY	<--> CAPACITY_TO_COLLABORATE	.574
ENABLING_CAPACITY	<--> LAND_USE_POLICY	.291
ORG_APPROACH	<--> CAPACITY_TO_COLLABORATE	.791
CLT_LIMITATIONS	<--> LAND_USE_POLICY	.183

Table 6.78: Correlation Estimates

6.6.5.3 CONCLUSION ON STUDY'S HYPOTHESIS

Covariance estimated and tested for the sub-hypothesis 1, 2 and 3 are positive and significant at either 1% or 5%, with $CR > 1.96$, whereas sub-hypothesis 4 and 5 were rejected.

Overall, the perception of respondents on the drivers to tackle the 5 identified barriers to shared equity model development to an extent can go together strategically according to the explorative model dynamics, hence can influence each other towards greater representation of the CLT shared equity model development. However going by the interactive dynamics in the explorative model the perceptions on drivers to tackle 'preference and the enabling capacity barrier (ENABLING_CAPACITY) and prescriptive land use policies and the inaccessibility of limited options (LAND_USE_POLICY)' barriers do not go together strategically, hence do not influence each other when all model constructs are tested simultaneously.

Out rightly conflicting approaches identified included:

- var79 ← ORG_APPROACH: (*'improving accessibility to asset transfer and community development information'*) has a non-significant influence on organisation approach and the concept of affordability barrier.
- (var86) (var87) (var88) ← ENABLING_CAPACITY: (*'Improving the low level of CBH support from housing agencies', 'Easing prequalification difficulties accessing funding', and improved recognition of CLT model strengths in housing sector'*) have a non-significant influence on the (Preference and enabling capacity in the housing sector) barrier.
- (var83, var82, var81, var80) ← ENABLING_CAPACITY: (*'AH development restrictions on exceptional sites', 'Low level of overall of support for CBH model, 'Difficulties obtaining land below market value for CBH', 'Unfavourable planning policy procedures for CBH'*) have a non-significant influence on the (Prescriptive land use policies and the inaccessibility of limited options) barrier in the housing sector.

These findings lean towards the need for a rethink/renewed of approach on existing practices on what stakeholders and prospective homeowners consider as strategic to improving CLT Shared Equity Housing Model development. The study findings identified workable and conflicting strategies that can help improve existing practices.

CHAPTER 7

DISCUSSIONS, RECOMMENDATIONS AND CONCLUSION

7.1 FINDINGS AND THE CLT SHARED EQUITY HOUSING DEVELOPMENT FRAMEWORK

This section gives a summary of quantitative findings on sustainability and institutional barriers and drivers and how they defined the elements for the CLT SEHM development framework.

7.1.1 INTRODUCTION: SUSTAINABILITY BARRIERS AND MITIGATING DRIVERS (PEOPLE DIVERSITY AND COMMUNITY BUILDING)

Reed and Wilkinson (2009) observed that most literature had centred on ironing out or setting boundaries for sustainability with little or no attention being accorded to the social aspects, particularly the impact on project beneficiaries of affordable housing projects. This study however concentrated on these aspects and how they manifest as sustainability barriers both physically, economically and socially from the CLT SEHM perspective.

7.1.2 CONFLICTING FTB ATTRIBUTE AMONG STAKEHOLDERS BARRIER AND IMPLICATION ON DEMOGRAPHICAL DIVERSITY

The ‘Conflicting FTB attributes among stakeholders and demographical diversity barrier was informed by interview findings. Survey findings show low levels of demographical diversity which could pose as a barrier to the long term sustainability of CLT (SEHM). This finding confirmed (Dyson and Paterson, 2011) that nearly all existing CLT networks have been led by middle class professionals. Moreover, Survey responses of both current and potential proponents of the CLT model reflect a near homogeneity in age distribution of members. There is an obvious underrepresentation

of the research focused FTB most vulnerable age group. Although these statistics represents a microcosm of community developers, it is in line with diversity patterns among existing CLT housing beneficiaries. Overall, other observable trends appeared to reflect a relative underrepresentation of minority groups overall. The analysis of homeownership status, age group and income level identified that most vulnerable segment of the sample population are the FTBs who can be identified by the aforementioned benchmarks. Therefore, can define how policy makers and CBH housing practitioners approach the affordable housing need of this crucial group.

7.1.2.1 AGE, HOMEOWNERSHIP AND INCOME STATUS AS A BENCHMARK FOR FTB/BENEFICIARY: MITIGATING DRIVERS

Survey results of studied population accentuated more precisely that homeownership rates increased marginally in line with age. This finding in reference to interview result suggest that, this could inherently be due to socio-political and economical dictates the society is built upon, like length of stay, employment, income levels and the political decisions that might have benefited certain generations such as the 1980s conservative ideology which supported increased home ownership as a means of achieving redistribution of wealth, which the earlier RTB schemes epitomised. Although interview findings identified the 18-24yrs as the most representative sample for FTBs, however it is not an indication of the age group with the highest potential to have attained homeownership. On this premise CLT practitioners, government or private developers engaging the model stand less risk focusing on the 25-35yrs age category which represents when home ownership starts to peak for this group. However, these results do not indicate the need for a complete shift of focus; rather it suggests a need for heightened attention and involvement for early sensitisation on community housing initiatives and development ideals for the 18-24yr age category.

According to survey results the most significant income group among FTBs is the (£10,000-£14999) category. This results suggest that the higher the corresponding income category the higher the representation among homeowners. See (Table 7.1) for framework elements for this section.

Barrier Elements A		Mitigating Drivers	Reference
Demographical Diversity	Conflicting FTB Attribute among Stakeholders	Age and homeownership status as a benchmark for FTB/Beneficiary housing	Section 6.4.1.1
	Low Levels of Demographical Diversity	Housing ownership status and Income category as a benchmark for FTB/Beneficiary housing issues.	Section 6.4.2.2 Section 6.4.1.5

Table 7.1: Framework elements for mitigating drivers: the age, homeownership and income status benchmark for FTB/Beneficiary.

7.1.4 MOBILITY, RETENTION AND IMPLICATION ON PHYSICAL SUSTAINABILITY

This barrier is informed by interview findings based on the notion that there are sustainability barriers that manifests from personal and community sources that do have impact on FTB ownership problems and their ability to employ community based platforms to attain homeownership.

7.1.4.1 HOUSING OWNERSHIP CATEGORY AND LENGTH OF STAY IN THE COMMUNITY DEFINING FACTOR

Survey result suggests that those who classified themselves as FTBs are most likely to have stayed shortest in their current accommodation (0-3yrs). This confirms the high degree of instability of FTBs as informed by interview findings. Also there was an overrepresentation of respondents who classified themselves as homeowners among those that have stayed the longest in their current homes (3-10yrs).

7.1.4.2 GEOGRAPHICAL LOCATION AND HOUSING OWNERSHIP CATEGORY DEFINING FACTOR

This defining factor suggests that the significance of FTB representation in the rural areas is far less than that of urban or sub urban areas. This finding did confirm literature and interview results on the notion of rural areas being retired dormitory spaces or for second home hunters. However, the weakness of CLTs in urban areas is far more obvious than literature suggested, with stark underrepresentation of FTBs in rural areas. This appeared to confirm the outward relocation trend common in the rural areas lately.

7.1.4.3 HOUSING SATISFACTION AND HOME OWNERSHIP CATEGORY (CLOSENESS TO EMPLOYMENT) DEFINING FACTOR

Results to questions asked on whether respondents were satisfied with their housing or not. According to the survey results, homeowners were more likely to be more satisfied with their housing, while FTBs were more likely to be unsatisfied. On the issue of relocation factors, results indicated that the physical factors most likely to affect relocation are the ‘closeness to employment’ factor. This confirms literature on mobility trends.

7.1.4.3 SEHM UTILITY IN GATEWAY AREAS: MITIGATING DRIVER

Inference drawn from literature indicated that the CLT model can serve as a converging point between urban/sub urban regions like ‘gateway areas’ for sustainable affordable housing provision. In regards to the ‘gateway areas’, when questionnaire respondents were asked about relocation factors, their geographical location (urban/rural/suburban) did not significantly affect their choice as much as ‘housing mobility radius’ i.e. how much distance they are willing to relocate to if given the opportunity. Results show an overwhelming representation of those who would prefer to relocate by at least 5-10 miles to seek affordable housing. This result in addition to the ‘closeness to employment’ option being the most represented relocation factor, suggested the strategic importance of the 5-10 mile radius. This radius has the potential serve as a buffer/transit zone new CLT development initiatives can target as gateway areas, possibly between urban and rural areas. This can be adequate for particularly active

population groups with high transience due to employment reasons. This result only suggests a guideline based on hypothetical utilisation of the CLT SEHM in a broader and effective capacity. Therefore, further feasibility assessments have to be conducted to suit bespoke planning implications and respective local authorities. (Table 7.2) depicts framework elements on the mitigating drivers for physical sustainability barriers: Homeownership category, length of stay, housing mobility radius and closeness to employment and so on. Overall the utilisation of the CLT SEHM in gateway areas appears to be a step in the right direction with the appropriate logistics in place.

Barrier Elements		Indicators	Mitigating Drivers	Reference
Physical Sustainability	Mobility	Impact of Housing ownership category (Home owner/FTB) and Length of stay in the community.	Shared Equity Housing Model (SEHM) utilisation in [Gateway area housing projects].	Section: 6.4.2.2 6.4.2.3 6.4.2.4 6.4.2.5 6.4.2.7
	Retention	Geographical location (Urban/Rural/Suburban) and housing ownership category (Home owner/First Time Buyer (FTB) –Relocation Factors/Housing Problems.		
		Housing satisfaction and home ownership category (closeness to employment) – Relocation Radius.		

Table 7.2: Framework elements for mitigating drivers: CLT utilisation to counter mobility issues

7.1.5 CLT SHARED EQUITY MODEL ACCEPTABILITY AND IMPLICATION ON ECONOMIC SUSTAINABILITY

This barrier revolves around ‘personal finance inadequacies and CLT acceptability’ as an economic sustainability barrier to CLT development. Literature identified low levels of emphasis on the actual financial and economic implications of affordable housing models on potential beneficiaries, which formed the rationale for the investigation of mitigating drivers.

7.1.5.1 LOW LEVEL OF PROPENSITY TO SAVE: DEFINING FACTOR

Findings indicated that there was no correlation between age category, housing arrangement, housing satisfaction and propensity to save. However, there was a positive but weak correlation between propensity to save and housing ownership category. Indications here reflect the low propensity to save among FTBs as an economic sustainability barrier to engaging CLTs for housing provision among this group. Homeowners, however have no primary justification to be saving for housing, except for those wealthy enough to afford second homes.

7.1.5.2 SEHM LIMITATIONS AS A HOUSING FINANCE PROBLEM: DEFINING FACTOR

Result here indicates that the structure of the SEHM model adopted by the CLT is not viewed as much of a concern compared to other variables. This partly nullifies the notion of the CLT shared equity model's structure sabotaging its own prospects as a barrier.

7.1.5.3 HOUSING MODEL ACCEPTABILITY

The rationale here was to draw a comparison between the level of support for community housing initiatives with comparatives drawn between the conventional housing ownership models and the CLT SEHM. Findings here suggested that homeownership category of respondents significantly influences the level of support for the conventional housing ownership model. Overall when geographical location (either urban/suburban or rural) is ignored, the housing ownership category influences the level of support for conventional housing ownership models. Geographical location of respondents does not have any significant relationship with levels of support for conventional housing, but results indicated that overall support for the conventional housing model is highest in urban areas (particularly among homeowners). For the CLT SEHM model, respondents who classified themselves as FTBs are more likely to support the CLT shared equity model (SEHM). Until further research is conducted on FTB's preferred housing model, results from this analysis appear to suggest that they

show more flexibility in the choice of housing ownership models when the CLT (SEHM) is concerned. This could be due to its many documented positive attributes.

Tackling these barriers share common drivers with the roles of community development networks in propagation of the CLT (SEHM). This includes aspects like finance structure, the encouragement of saving ideals and the sharing of knowledge regarding the CLT (SEHM) merits and its acceptability.

7.1.6 LOW LEVELS OF SOCIAL CAPITAL AS A SOCIAL SUSTAINABILITY BARRIER

Results here indicate that perceptions of respondents on social capital building blocks are significantly influenced by geographical location and homeownership category.

7.1.6.1 ENGAGING COMMUNITY DEVELOPMENT NETWORKS AS DRIVERS FOR SEHM ACCEPTABILITY: MITIGATING DRIVERS

Overall findings on this aspect reveal a high level of support for CBH initiatives. At the same time respondents were also largely satisfied with the NCLTN compared to the other four community development network platforms, of which there was a positive correlation between the level of satisfaction with development networks and support for CBH initiatives. This corroborates similar positive correlation between respondents who supported asset transfer and those who expressed satisfaction with only NCLTN.

7.1.6.2 ENGAGING COMMUNITY DEVELOPMENT NETWORKS TO MITIGATE INVOLVEMENT BARRIERS: MITIGATING DRIVERS

Findings here show a negative correlation between the level of satisfaction with high performing community development networks and the levels of involvement barriers. This implies that the more satisfied respondents were with the NCLTN and community social networks the less the ratings for involvement barrier variables. This finding does highlight the pivotal role of the NCLTN in ensuring an enabling environment for the CLT SEHM and community involvement in general. Therefore organisations perceived less satisfactorily by respondents might have to improve in their role in sustaining and

advancing community involvement with more inclination towards the CLT initiatives. Best practices obtainable within the NCLTN can be replicated or employed through collaboration and knowledge conduits enabled with the vast national representation of the NCLTN.

Barrier Elements		Indicators	Mitigating Drivers	Reference
Socio-economic sustainability	CLT Shared Equity Model acceptability	Low level of propensity to save factor	Engaging Community development networks as drivers for SEHM acceptability	Section 6.4.3.1
		SEHM limitations as a Housing finance problem		6.4.3.2
		Housing model acceptability		6.4.3.3 6.4.3.4.1 6.4.3.4.2
	Low levels of social capital	Geographical location and housing ownership category		Engaging Community development networks to mitigate involvement barriers
				Section 6.4.4.2
				Section 6.4.4.3
				Section 6.4.4.4

Table 7.3: Framework elements and mitigating drivers: the role of community development networks as drivers for SEHM acceptability.

7.1.7 SOCIAL CAPITAL BUILDING BLOCKS AND SHARED EQUITY HOUSING MODEL DEVELOPMENT

The rationale here was to explore the causal relationship between the perception of respondents to social capital measures and support for the shared equity model involvement in their community as informed by literature such as Harper (2002): 'social cohesion', or 'community spirit' are often seen as a necessity in developing and encouraging involvement in community initiated projects, which is deemed crucial to accomplishing and managing Shared Equity Model developments like the CLTs as elaborated by interview findings. On this note the study examined and clarified the

relationships between the level of social capital building blocks among respondents and the propensity to support CLT (SEHM) development by applying Structural Equation Modelling (SEM).

The explorative model generated covariance estimates of which results indicated that there were positive and significant association within the model constructs. Thus, there is substantial empirical evidence of a positive relationship between the level of social capital building blocks and the inherent propensity to support the CLT shared equity housing model development.

7.1.8 ANALYSIS OF INSTITUTIONAL BARRIERS AND CLT SHARED EQUITY HOUSING MODEL (SEHM) DEVELOPMENT DRIVERS (COLLABORATION AND DIVERSIFICATION)

The rationale here was to explore the relationship between the perceptions of respondents towards strategies to improve Shared Equity Housing Model development within the UK's housing sector, thus quantitatively/empirically verifying interview findings and recommendations. This section of the study is informed by literature findings on the low level representation of the CLT shared equity housing model in the housing sector. Potential sources of barriers were then investigated through semi-structured interviews of key top down and bottom up organisations to identify barriers and recommendations towards SEHM development from a CLT perspective (section 5.3). These results were then further confirmed and validated through questionnaire surveys targeted at research specific populations: Community developers/members, CLT representatives, policymakers, regeneration practitioners (section 6.4.4). The study then tested hypothesised patterns (within observed and unobserved variables and how these strategies interact in practice. Covariance estimated and tested for the sub-hypothesis 1, 2 and 3 are positive and significant at either 1% or 5%, with CR > 1.96, whereas sub-hypothesis 4 and 5 were rejected.

Overall, the perception of respondents on the drivers to tackle the 5 identified barriers to shared equity model development to an extent can go together strategically according to the explorative model, hence can influence each other towards greater representation of

the shared equity model development. However going by the interactive dynamics in the explorative model the perceptions on drivers to tackle ‘preference and the enabling capacity barrier (ENABLING_CAPACITY) and prescriptive land use policies and the inaccessibility of limited options (LAND_USE_POLICY)’ barriers do not go together strategically, hence do not influence each other. Please see (Section 6.6) for the modelling process.

7.2 CONSOLIDATION OF THE ELEMENTS FOR THE CLT SHARED EQUITY HOUSING MODEL DEVELOPMENT FRAMEWORK

The build up towards the SEHM development frameworks comprises of the consolidated elements elaborated in the previous section. This process has benefited from the outcomes of the triangulated investigations as shown in (Fig 7.1). Then, (Fig 7.2) depicts an overall schematic consolidation model of framework elements towards developing the framework.

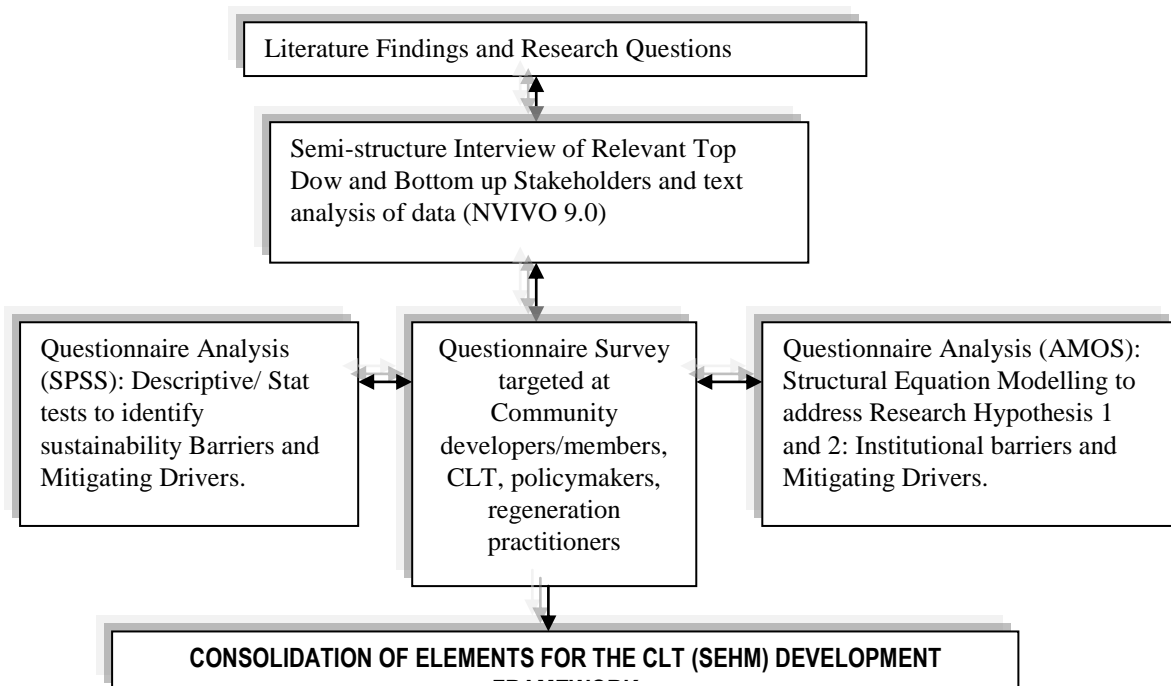


Fig 7.1: Process of consolidating elements for the CLT SEHM Development Framework

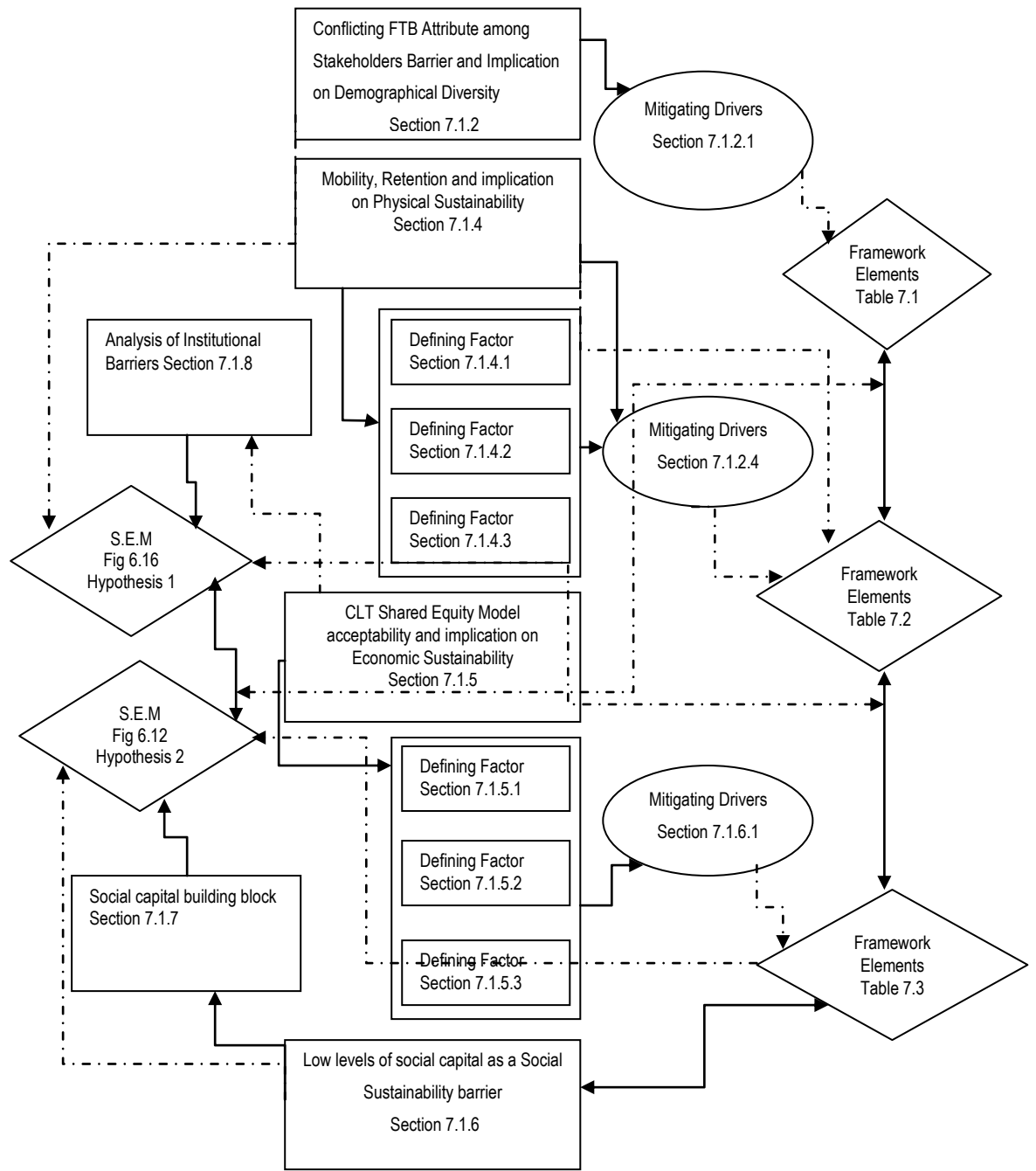
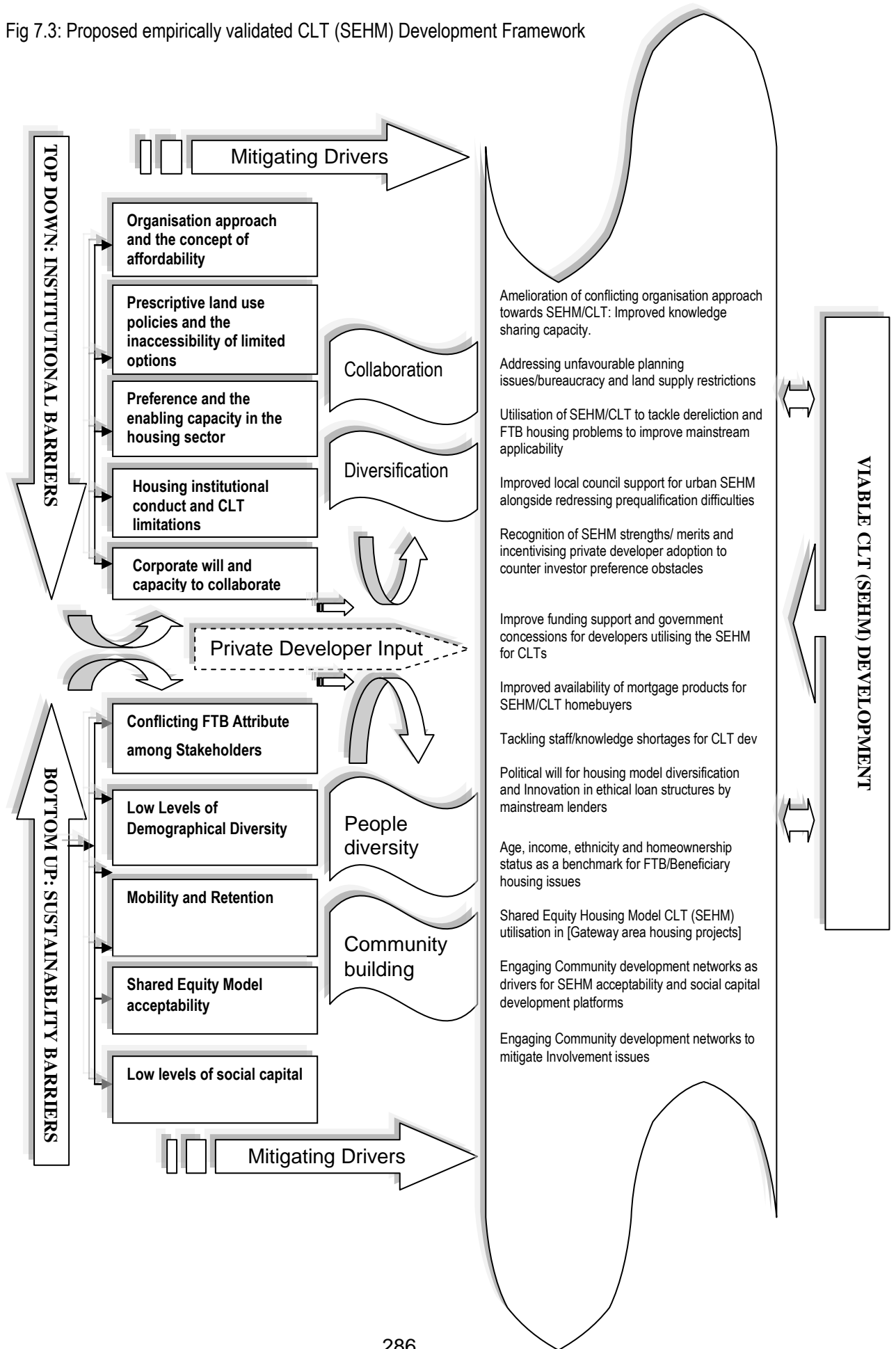


Fig 7.2: Overall schematic consolidation model of framework elements

Fig 7.3: Proposed empirically validated CLT (SEHM) Development Framework



7.3 DISCUSSION

The aim of this research was to develop a viable CLT (SEHM) development framework. The framework (Fig7.3) was informed by the schematic consolidation model of the research findings (Fig7.2). According to the framework, collaboration and diversification entails the recognition of the CLT (SEHM) as not just a housing development route restricted to existing trusts in rural communities, but a viable model that does have the capacity for full engagement in urban areas most faced with depleting community networks and housing problems. However this will require collaboration with existing traditional affordable housing providers both as a trust driven locally in areas with already existing networks and as a model for full utilisation in creating missing networks through the development of permanently affordable housing initiatives in urban areas. The diversification aspect suggests the need for more variety in model adoption during procurement, particular where the viable attributes can be put to much needed use in urban areas. This can be effectively driven by ‘private developer input’, the introduction of bespoke CLT (SEHM) planning concessions in new and regenerative housing development initiatives alongside other mitigating driver elements proposed in the framework.

On the sustainability elements ‘people diversity and community building’ identifies the need for the inclusiveness of at risk homeownership categories in CLT (SEHM) development initiatives. This however requires consideration of the need for ethnic, income and age representation necessary to counter the effects of negative social capital in housing communities. The support of community development networks like the NCLTN is however vital to accomplishing positive results in these aspects. This support should come in form of replication of best practices obtainable in high performing networks supported by government outsourcing in areas with little or no social capital. In regards to the community development element benefiting from the predisposition to support housing development initiatives. Findings suggest this is easier accomplished with a housing model driven by locality attributes, which in turn generates necessary social capital dynamics. The CLT (SEHM) does fit this bill if mitigating drivers can be pursued aggressively. Please see research contributions and recommendations for a more detailed elaboration on these issues (section 7.4.3).

7.3.1 THE ACHIEVEMENTS PROCESS OF RESEARCH AIM AND OBJECTIVES

The subsequent sections revealed the extent to which the research aim and objectives were met. In reference to (Section 7.1), this summarised the outcomes of the quantitative investigation process from which the consolidation of elements were generated to achieve the research aim i.e. to develop a framework for viable CLT SEHM development. However several other research processes have contributed to this aim, like the research questions developed and the two generated hypotheses. The outcomes have guided the fulfilment of the four research objectives which ultimately led to achieving the research aim. This section consequently explains achievements of these processes.

7.3.1.2 OBJECTIVE ONE

To develop an understanding of affordable housing problems and the underrepresentation of the CLT as a Shared Equity Housing Model for affordable housing delivery

This objective was primarily tackled with the intensive literature review. This involved developing a contextual understanding of housing affordability, affordable housing problems and their links to SEHM performance, with a focus on the Community Land Trust (Chapter). This section was able to review limitations of the land use policy and its role in housing development. Moreover, key affordable housing institutions and their possible links with affordable housing problems and how they impact the development of the CLT SEHM was also rigorously reviewed. The outcome of this objective accentuated the need to define and tackle inherent institutional barrier sources to the SEHM, from a CLT perspective. Also, this section justified the research focus on the CLT as a SEHM vehicle through both theoretical and empirical comparison with other key affordable housing provision models in both the UK and internationally.

Qualitative enquiries were then later carried out to confirm and shed more light on these barrier sources and how they might manifest. This involved the practical

identification and interpretation of various key stakeholder perspectives on sources of CLT barriers and an idealised strategy to tackling them accordingly. This contributed to the housing affordability debate on the viability of community based housing options, and how it could be invariably hampered by direct and indirect effects of planning and restrictive land use policies in practice (Chapter 5, section 5.3). Furthermore, accomplishments of this objective also included the critical assessment of affordable housing problems with more vigour from the point of view of alternative community based housing systems and how these problems manifests practically through institutional network of major players in the affordable housing sector. This contributed to the debate on the downsides of the current arrangement and the need for an improved capacity for innovation through tested alternatives in a sector dominated by the profit driven mainstream housing options in both the urban and rural affordable housing development sphere.

7.3.1.3 OBJECTIVE TWO

To develop an understanding of sustainability and FTB engagement as potential SEHM beneficiaries

The rationale behind this objective was to study the possible role of the CLT SEHM as an employable vehicle to alleviate the well documented pressing affordable housing ownership deficit among FTBs. Actualising this objective involved a thorough review of FTB dilemma in affordable housing and the possible ‘roles and requirement’ of the SEHM from the CLT perspective. Literature suggested that there were sustainability problems surrounding affordable housing beneficiaries from engaging the CLT SEHM which relies strongly on its localised structure (Chapter 3). Hence further enquiries were carried out to identify and clarify key problem areas, through qualitative semi-structured interviews to identify the possible sources of sustainability barriers and the enabling communal structural concepts necessary to overcome them.

7.3.1.4 RESEARCH QUESTION ONE

What are the barriers causing CLT Shared Equity Housing Model underrepresentation in the UK?

Informed by objective one, literature suggested there were inherent barriers to CLT SEHM development. As previously elaborated, this question led to an investigation of this rather vague premise from extant literature. Findings confirmed there are barriers certainly and they occurred in the form of institutional barriers concerning affordable housing institutions and community development organisations. Differentiating factors among both categories is their operational approach i.e. Top-down and Bottom-up respectively. Complexities involved in how these barriers manifest led to the first hypothesis which sought to not only investigate and define these barriers, but also the dynamics of how they interact with their drivers. This were investigated and validated empirically by employing quantitative tools and respective methodologies.

7.3.1.5 HYPOTHESIS ONE

Perceptions in practice towards strategic drivers aimed at tackling barriers to CLT shared equity housing development influence one another significantly.

As informed by the outcomes of the research objective one and research question one. The rationale here was to explore the relationship between the perceptions of respondent towards strategies to improve CLT Shared Equity Housing Model development within the UK's housing sector. Consequently verified interview findings and recommendations were then further confirmed and validated through questionnaire surveys targeted at research specific populations (Community developers/members, CLT representatives, policymakers, regeneration practitioners) (Section 6.6). The results of the survey were then subjected to further scrutiny including a modelling process of identified constructs to establish causal relationships among identified drivers of CLT (SEHM) development.

7.3.1.6 RESEARCH QUESTION TWO

What are the barriers to FTBs adopting the CLT Shared Equity Housing Model for homeownership?

Informed by objective two, literature suggested that there were sustainability problems surrounding affordable housing beneficiaries from engaging the SEHM in the form of the CLT which relies strongly on its localised structure (Chapter 3). These barriers were then investigated among relevant key stakeholders. The investigation found out that FTBs are faced with multifaceted problems manifesting as sustainability barriers. These barriers militate against the engagement the CLT (SEHM) as a viable avenue for homeownership for this group. However, findings suggested that sustainability barriers such as identity and demographical diversity issues, mobility and retention and propensity to save for affordable housing are obstacles to these goals. Overall, there was a suggested link between low levels of social capital and the propensity to support the CLT (SEHM). This led to the formation of a hypothesis which helped in answering the conceptual aspects of these sustainable barriers. Other aspects were resolved through investigations carried out on the research sample population to identify how these barriers manifest, like the issue of identity, diversity and mobility, retention and housing satisfaction (Section 6.4).

7.3.1.7 HYPOTHESIS TWO

The level of individual social capital has a causal relationship with the propensity to support the CLT SEHM development.

This hypothesis was informed by segments of both research question two and objective two. The rationale here was to explore the causal relationship between the perception of respondents to social capital measures and CLT shared equity model involvement barriers in their community as informed by literature such as Harper (2002), 'community spirit' are often seen as crucial in developing and encouraging involvement in community initiated projects. This is deemed crucial to accomplishing and managing CLT Shared Equity Model developments like the CLTs as elaborated by interview findings. Multiple statistical tools were employed to clarify this hypothesis. Ultimately,

a S.E.M modelling of empirically identified constructs was carried to resolve this hypothesis.

7.3.1.8 RESEARCH OBJECTIVES THREE

To identify barriers to the CLT Shared Equity Housing Model development and their mitigating drivers

This was achieved by the outcomes of the combination research question and hypothesis one and two. For the sustainability barriers and the role of social capital building blocks in SEHM support. The rationale here was to explore the causal relationship between the perception of respondents to social capital measures and shared equity model involvement barriers in their community. This is deemed crucial to accomplishing and managing Shared Equity Model developments like the CLTs as elaborated by interview findings. On this note, the study examined and clarified the relationships between social capital building blocks as explored and analysed in previous sections. Enabled by additional statistical analysis stemming from research question two, findings here indicated that the explorative model generated covariance estimates tested by the sub-hypothesis. The results indicated that there is substantial empirical evidence of a positive relationship between the level of social capital building blocks and the inherent propensity to support shared equity housing model in the community. Also, survey responses of both current and potential proponents of the CLT enabled the research map out sustainability barriers and their respective drivers both empirically and comprehensively.

For the institutional barriers, identified through the combination of research question one and hypothesis one, the study tested hypothesised patterns (within observed and unobserved variables and how these strategies interact in practice employing the Confirmatory Factor Analysis (CFA) through the SEM (Structural Equation Modelling). Results of hypothesis validated mitigating drivers and nullified non applicable ones. Furthermore findings also indicated that the perception of respondents on the drivers to tackle the five identified barriers to the CLT shared equity housing model development to an extent can go together strategically for most of the tested

associations according to the explorative model dynamics, hence can influence each other towards the goal of a viable shared equity model development see (section 6.6.5.3) for interactions.

7.3.1.9 RESEARCH OBJECTIVE FOUR

To propose a framework for viable Shared Equity Housing Model development from the CLT perspective

Achieving this objective involved the consolidation of the outcomes of the triangulated investigations carried out to accomplish objectives three and research hypothesis one and two. Thus a deductive combination of empirically generated and validated elements made up the final proposed framework for a viable CLT (SEHM) development in fulfilment of the overarching research aim (Section 7.2).

7.4 CONCLUSIONS AND FUTURE RESEARCH

This section highlights the overview of the research and the findings. Moreover, the chapter also demonstrates the novelty of the research and contributions to existing knowledge and practice. This is then capped with the research limitations and recommendations for future research.

7.4.1 THE NEED FOR THE RESEARCH

From the introduction and background it can be seen that the state of affordable housing is plagued with limitations that are interrelated by complex networks of problems which in most times have a negative impact on affordable housing delivery. The background also shed light on the potential role of CLTs in affordable housing provision and probably solving some of the highlighted problems. It then concluded that, there is an urgent need for alternative housing products with simpler, more attractive structures

that can encourage ownership coupled with good value for money such as the CLT shared equity housing model.

Existing knowledge has concluded on the potential of the CLT as an alternative vehicle that can correct affordable housing deficits and possibly the social and economic exclusion problem in the United Kingdom's housing sphere (Paterson and Dunn 2009). Currently pilot CLTs have been initiated as part of the UK affordable housing strategy, yet its growth is essentially below par compared to other traditional affordable housing platforms. In essence, the research strategy was informed by the need to identify the gap in knowledge on how the housing delivery performance of CLTs can be improved. Before this could be done, barriers preventing the CLT from attaining its set targets needed to be identified in order for the research to build a framework that would enhance the overall effectiveness of CLTs in this aspect. Semi-structured interviews and questionnaire surveys were targeted at concerned identified stakeholders in the affordable housing sector to achieve set research goals.

Furthermore, a comprehensive literature review was undertaken to justify the need for this research (Chapter 2 and Chapter 3). A triangulated and mixed methodological approach was employed to unequivocally fulfil research objectives as a route to ultimately accomplish the overarching research aim. The next section discusses finding generated from the triangulated approach to accomplish research aim and objectives.

7.4.2 METHODOLOGICAL APPROACH AND TRIANGULATED RESULTS

The literature review enabled the research to identity contextual understanding of housing affordability, affordable housing problems and their links to CLT performance. Amidst the competitive housing provision sphere, a viable model should be able to compete effectively by providing a service that actually solves a problem. The state of FTB housing ownership has been an enduring aspect of housing research, yet with no significant improvement in their plight. Therefore, with modest goals, this research focused on the potential strategic role of the CLT Shared Equity Housing Model in alleviating the underrepresentation of FTBs in housing ownership. The quest of

engaging FTBs for the CLT (SEHM) was however found to have its problems manifesting as barriers to home ownership. Also, the supposed panacea in the form of the CLT a shared equity housing model (SEHM) was also found to have underperformed consistently, due to barrier sources possibly linked with inherent affordable housing problems. Apparently, these are also part of the problems that have relegated the FTBs to a disadvantaged position on the housing ownership ladder. Consequently, literature findings proposed the CLT as a potential option for alleviating FTBs ownership problems through the localism platform, but this would require an active engagement and an enabling environment for social capital for this to be feasible. The Semi-Structured interview process was also an integral part of the investigation areas synthesised from extant literature and research questions. Nvivo 9 was employed for text analysis of interview responses. Findings from this process yielded the identification of potential barrier, and partial sources of mitigation drivers. Results from the text analytical process found out that barriers occurred in top down and bottom up categorisation among concerned and investigated stakeholders. The cross-validation process of literature with text analytical findings identified a two tier classification of barriers to SEHM i.e. Sustainability Barriers and Institutional Barriers alongside the foundations for their mitigating drivers.

The empirical validation of the identified constructs enabled the research achieve data triangulation objectives which aided empirical mapping of the framework constructs. This process occurred in two key dimensions. Firstly, the research employed questionnaires targeted at the research sample population to investigate the ramifications of these two tier barriers i.e. sustainability and institutional barriers, thus validating mitigating drivers through descriptive and statistical tests carried out. Secondly, strategic data findings were subjected to Structural Equation Modelling (SEM) with AMOS to address the research hypotheses. A combination of these triangulated findings makes up the schematic consolidation model of framework elements that constituted the CLT (SEHM) development framework. Also see (Section 7.2) for further insight.

7.4.3 CONTRIBUTIONS OF RESEARCH AND RECOMMENDATIONS

This research examined affordable housing problems critically with more vigour from the point of view of alternative community based housing systems with emphasis on the Community Land Trust (Shared Equity Housing Model) as a delivery vehicle. The research direction revealed that these problems manifested practically from an institutional network of major players in the affordable housing sector. This stoked further debates on the downsides of the current arrangement and the need for an improved capacity for innovation, through tested alternatives in a sector dominated by the profit driven mainstream housing options in both the urban and rural affordable housing development sphere.

Furthermore, this research also added to literature through the practical identification and interpretation of various key stakeholder perspectives on sources of CLT (SEHM) barriers. Also, empirically derived strategies were identified and assessed as drivers to improve CLT SEHM performance in the housing sector. This overall contributes to the housing affordability debate on the viability of the CLT (SEHM), and how it could be invariably hampered by direct and indirect effects of planning and restrictive land use policies in practice.

On the issue of FTBs as special interest groups, this research proffered a novel outlook towards FTB housing problems, from an involvement and social capital point of view. This was deemed relevant to improving the employment of the CLT (SEHM) as a viable towards relieving identified housing ownership problems among in need groups. Sustainability implications were thoroughly investigated empirically and crucial benchmarks for assessment were established.

In summary, the research has identified barriers militating against CLT (SEHM) model in the housing sector. Also, crucial benchmarks have been defined to help position the model in a more competitive position within the UK housing sector. These measures include bespoke institutional and sustainability benchmarks needed to improve the understanding of key requirements necessary to create a viable niche for the model among policy makers, investors and potential beneficiaries in the housing ownership

sphere. Therefore the direct impact these findings will have on key stakeholders and research institutions include the following:

- The housing industry will have a robust understanding of both the barriers and limitations of the CLT SEHM among available housing development options.
- The housing industry and policy makers can improve their understanding of the necessary drivers needed to help intensify CLT SEHM utilisation in urban affordable housing development, well beyond its current capacity in the rural areas.
- There is now a renewed justification for an ideological shift from the use of the CLT SEHM for small scale rural affordable housing provision to more widespread utilisation as a model available for adoption by private developers to deliver large scale affordable housing, if identified drivers and recommendations are adopted.
- The housing provision polity can benefit from the recognition/understanding of the huge potential of the CLT SEHM to help improve FTB homeownership through the research's bespoke benchmarks and sustainable best practices to improve and measure the housing model's viability for this peculiar group.
- Methodologically, researchers will benefit from novel ways to analyse hidden relationships among professional perceptions on housing model delivery barriers and drivers through the study's adoption of the SEM to test complex, multidimensional relationships within stakeholder perceptions on CLT SEHM drivers and implementation strategies and operational efficiencies. This can help resolve conflicting interests and approach among concerned stakeholders, researchers, lobbyists and policymakers on other contentious issues regarding housing model choice targeted at defined geographical areas, class, ethnicities and communities irrespectively.
- The housing delivery industry as a whole can benefit from the modelled relationships between the perception of respondents to social capital building blocks and their level of support for the CLT shared equity model development. This

model can help in the assessment of the choice of housing development and regeneration initiatives aimed at attaining sustainability best practices. Adopting this research's SEM model can help planners, private developers in construction to test the composite impacts and the complex interactions of the level of social capital in targeted communities on the inherent level of support for their projects among potential beneficiaries.

- The research's proposed framework can be used as a strategic tool for CLT practitioners, local authorities, private developers, government housing agencies and other concerned stakeholders to serve as a reference point for the implementation of a more competitive and viable CLT SEHM role in housing development. Additionally, this framework has also generated benchmarks to improve its adoption by developers and policy formulations targeting the FTB population niche group.

7.4.3.1 PRACTICAL INSTITUTIONAL IMPLICATIONS OF FINDINGS

After a careful assessment of findings on institutional sources of barrier, there were clear indications that they impact the CLT in crucial bilateral dimensions i.e. as a model available for adoption by providers to deliver large scale affordable housing and as a trust in collaboration with local authorities for small scale rural affordable housing provision. Mitigating drivers to tackling these barriers in a practical context include the provision of a level playing ground to encourage merit in procurement processes and community based innovation in housing delivery, creation of independent effective collaborative platforms autonomous enough to regulate the top down grips of CLT dependency on housing association approval. This will not occur entirely without a degree of top down planning, but would also incorporate a bottom up community based localised approach. On the issue of funding, there is also the need to explore the potentials of replicating operationally strategic finance models and products of ethical banks among mainstream financial institutions to improve CLT representation in the funding network. This could potentially serve as a viable funding vehicle for regeneration goals and recession proof affordable housing on a broader scale. However, the potential of alternative models such as the CLT challenging the status quo has does manifest into institutional sources of barrier to its development, hence stifling fair

competition and sufficient room for innovative options in affordable housing provision. Therefore, the research identified the need for the expansion of CLT roles with due recognition of its attributes which can be used as a leverage against unfair competition. This improves the state of equal opportunity in procurement through the consideration of individual model merits, without compromising the duties of local authorities. In this light, local authorities should in turn encourage a robust approach to procurement, which will not only impact appointment of preferred bidders, but also the right delivery model for their affordable housing endeavours.

Overall, despite policy changes veering towards the localism ideal (which the CLT epitomises in its attributes), the CLT situation might not improve significantly because of the non-profit based shortcomings of the SEHM, this certainly hampers its ability to generate enough interest from investors and the government. In the aspects of its employment to deliver large levels of perpetually affordable housing in both the urban and rural sphere. This might explain why its utilisation has been much restricted to isolated small scale rural developments in the UK. Without a political will, addressing these sources of barriers might be tantamount to restructuring the CLT model's supposed structural shortcomings, which happens to be its distinctive strengths in comparison to traditional models.

On the issue of restrictive land use sources of barriers, as a model i.e. the CLT SEHM is faced with the threat of either abandoning its perpetuity attributes or risk an institutional takeover from the top down. The SEHM is not yet in a position to substantially impact the UK's median multiple ratio until barrier sources are essentially tackled. This task will require a steady flow of resources into a larger scale process that can positively impact macroeconomic indicators, with outcomes that can be comparable to the US experience in Burlington (Davis and Demetrowitz, 2003) and Chicago. Also, a degree of centrally coordinated top down driven strategies based on local needs, particularly at the implementation and policy formulation stages will be required. Moreover, a further revision of restrictive land use policies will be necessary to better accommodate distinction and innovation in the local council's selection process for affordable housing provision models.

The research also identified that restrictive land use sources of barriers to CLT's land supply problems occurred in both an urban and rural context. In the form of planning inadequacies and opposition to development (NIMBYs) issues. Also salient is a systemic inefficient network of knowledge transfer practices between stakeholders in the area of asset transfer and fulfilment of community's needs. Recommendations on these issues include the need to put into consideration possible CLT limitations in maximising community assets, through proactive intervention strategies, particularly in the handling of affordable housing leasehold and freehold arrangements between local councils. This is to help mitigate or better manage unforeseen sustainability crises through the employment of strategies such as pre drawn asset transfer reversal and other loan default/debt management strategies.

7.4.3.2 INSTITUTIONAL POLICY IMPLICATIONS AND RECOMMENDATIONS FOR CLT (SEHM) DEVELOPMENT

Further policy implications of this research considering the present arrangement include the need for the encouragement of the dissemination of successful best practices among a strong network of concerned stakeholders through the funding of proactive enabling platforms for information replication in areas where housing needs are established. This would require increased number of knowledge sharing avenues to help facilitate more partnerships, as well as the improved recognition of the CLT (SEHM) potentials on a broader scale. Furthermore, planning authority concessions like flexible zoning schemes, the facilitation of expedited planning reviews and approval processes for private and public affordable housing proposals utilising the CLT model (as exemplified by the Chicago inclusionary zoning policies) should be encouraged. This could potentially serve as an enabler for the model to complement or represent an alternative vehicle to sustainably achieving affordable housing goals based on its strengths and other viable attributes. This will however require drastic policy interventions and political willingness to address S106 and planning authority shortcomings in the choice and selection processes for affordable housing supply models. This includes the inaccessibility of land below market rates in an endogenous restrictive planning system. This highlights the subjective limitations of the CLT (SEHM) in regards to grey areas between setting boundaries to what is an acceptable

level of concessions to housing developments utilising the CLT (SEHM) and the socio-economic impact or benefits of a completely deregulated social housing system. These boundaries do vary along political and national terrains, hence the need for UK housing institutions to address inherent barrier sources and their reconciliation with international best practices. Therefore, greater roles can be accorded to the CLT model in the UK affordable housing dynamics based on its confirmed strengths and merits.

On the recommendations for stakeholders involved in lobbying at governmental levels, this research found out that there is an empirical justification of the need for a strong consensus among housing provision stakeholders in synchrony with what special interest groups (potential beneficiaries) and CLT shared equity model proponents perceive as drivers to tackle the institutional barriers to SEHM development. This raises the need for change in approach to lobbying efforts, from housing provision mechanism generated under stringent HCA criteria and funding, to a much more encompassing network of private developers and government institutions utilising the CLT SEHM in urban areas where support for the model pales in comparison to rural communities. Faced with the limited ability of HCA to fund backlogs of CBH housing proposals coupled with housing deficits that still persist at alarming rates in urban areas, lobbying efforts can be directed at incentivising focus on the versatility of the many merits of the CLT (SEHM) as vehicles for sustainable large scale affordable housing provision, however this will require novel drivers that can address the pressing barriers militating against SEHM development.

The study's finding on the significance of interactive influence of drivers to address CLT (SEHM) barriers shed light on the strategic importance of ameliorating approach to keeping housing affordable in perpetuity, which in turns highlights the hazy dependence of the current status quo on market indicators in defining affordability. With the ability of the CLT (SEHM) to keep housing affordable in perpetuity, findings suggest prioritising the widespread accessibility of the model. As it will help decentralise the model's dependence on the HCA, hence open up new opportunities in the role of local authorities and the government in public land availability at affordable cost beyond the present confines the model has been inadvertently relegated to. This does not however imply that the organic structure the present movement is building upon should be abandoned, as it has recorded significant successes in correcting home

ownership imbalance particularly in rural communities. These findings however provide a frontier towards a public-private driven adoption of the model as a vehicle towards CLT (SEHM) development on a wider scale particularly in urban communities among victims of persistent affordable housing deficits. The study's findings indicate that this will require tackling the issues of investor preference for conventional affordable housing provision models by addressing CLT (SEHM) limitations like the issue of leasehold enfranchisement among investors.

The need to open up the SEHM model more to the private sector could also provide opportunities in tackling the shortage of staff and necessary skills through collaboration and the vital contribution of CLT development platforms like the NCLTN. The corporate will and the capacity to collaborate barrier however should first be surmounted to guarantee investor confidence. Therefore a consistent approach towards development of mortgage facilities for potential beneficiaries of SEHM model like the CLT needs to be facilitated and sustained through the sharing of best practices between mainstream lenders and ethical banks like Traidos, in strategic areas like the widespread development and adoption of bespoke ethical loan structures where necessary.

7.4.3.3 PRACTICAL SUSTAINABILITY IMPLICATIONS OF FINDINGS AND RECOMMENDATIONS

In the aspect of sustainability barriers, the low underrepresentation of FTBs remains an indicator of the state of affordable housing in the UK, the current austerity measures and the constantly changing demographic characteristics of this group do not appear to be helping either. The research identified that there are sustainability barriers that manifests from physical, economic and social sources that do have impact on FTB ownership problems and their ability to employ community based platforms to homeownership. This includes: conflicting ideals among stakeholders on FTB identity. Due to the need for a classification that defines this very broad based demography, there was a need to identify relevant benchmarks that can be targeted with mitigating policies in a preventive capacity.

This research reflected or rather corroborates the near homogeneity in age distribution of members of existing CLTs. There was an obvious underrepresentation of the most at

risk FTB age group of (18-24 years) with an 18.7% representation. Although this statistics represents a microcosm of community developers, it is in line with diversity patterns among existing CLT housing beneficiaries. There is also a relative underrepresentation of minority groups overall. On FTB benchmarking, the status of being a FTB diminishes with age, while the reverse is the case for home owners expectedly. However representation peaks at ages 25-35yrs for FTBs and 36-45yrs for homeowners, then both starts to fall inversely with age.

Although interview findings identifies the 18-24yrs as the most representative sample for FTBs, however it is not an indication of the age group with the highest potential to have attained homeownership. On this premise CLT practitioners, government or private developers that intends or already engaging with this model stand less risk focusing on the 25-35yrs age category which represents when home ownership starts to peak for these groups. Notwithstanding, these results do not indicate a complete shift of focus from the 18-24yrs category, rather it suggests a need for heightened attention and involvement for early sensitisation on community housing initiatives and development ideals among these age groups.

Furthermore, this research concluded on strategic importance of the 'closeness to employment' relocation factor and importance of the 5-10 mile radius as a CLT location option in gateway areas. This can serve as a transit networking route between urban and rural residential housing projects, particularly for population groups with high transience due to employment reasons. This serves as part of an ideological CLT location based solution to the high rate of outward movement of FTBs in rural areas that can be looked into. Hence, it is recommended that further feasibility assessments have to be conducted to suit bespoke planning implications and respective local authorities in this aspect. The practical identification of other findings suggested that FTBs display a diminished level of preference when it comes to housing models, at least to a greater degree than other classifications. Also, the need to encourage saving culture among potential beneficiaries is paramount to ensuring economic sustainability of the CLT (SEHM). The low propensity to save among FTBs regardless has a pivotal influence on the engagement of the CLT (SEHM) for housing provision among this group. Therefore, more attractive saving plans can be looked into by financial institutions and mainstream lenders, as research indicated that the financial structure of the SEHM

model adopted by the CLT is not viewed as much of a concern compared to other housing finance obstacles studied. This partly nullifies the notion of the CLT shared equity model structure self-sabotaging its own prospects. This is further buttressed by research findings suggesting the FTBs are more likely to support the CLT shared equity model (SEHM). On a positive note, perhaps, until further research is conducted on FTB's, this research indicated that they show more flexibility in the choice of housing ownership models, particularly when the CLT (SEHM) is concerned.

7.4.3.4 SUSTAINABILITY POLICY IMPLICATIONS OF FINDINGS ON CLT (SEHM) DEVELOPMENT

From empirical indications, this research concluded on what appears to be externalities like the respondent's geographical location, homeownership category and relocation factors have significant influence on the overall model's social capital building blocks. Literature, suggested the possible role of social capital in the culture of self-help and determination of existing CLTs utilising the SEHM. However research findings suggest otherwise with an identified state of seeming isolation which goes against sustainability ideals in the aspects of diversity in income, race and age groups. This impact could be most pronounced particularly in the aspects of trust issues and tolerance of cultural diversity as reflected in the insignificant impact of the level of support for lifestyle disparities in the community as influenced by geographical location of the respondents. This finding buttresses the possible downsides highlighted in literature where certain groupings and associations feeding off a well-grounded social capital network, also carry the potential to exclude others (Szreter, 2000).

This situation on the long run might pose as containing restrictions to CLT influence in mainstream affordable supply, particularly in urban areas. The role of the NCLTN in ensuring an enabling environment for the CLT sector to grow is a crucial one. Therefore, organisations perceived less satisfactorily, need to improve on their role in sustaining and advancing community involvement, of which best practices obtainable within the NCLTN can be replicated or engaged through collaboration and knowledge sharing enabled with a mutually vast national representation in the UK. This should

ensure that the right conditions are put in place for CLTs using the SEHM to thrive and also serve as a viable spur to maximise legislations on localism opportunities.

7.4.5 RESEARCH LIMITATIONS AND RECOMMENDATION FOR FUTURE RESEARCH

Despite this research revealing reliable findings from its investigations on the housing industry, applicability of these findings particularly in the sustainability aspects should be subjected to further scrutiny with other population groups or settlements which could further shed light on its applicability within other socio cultural situations and population sample.

The research would have benefited from a broader survey with a longer duration. However, embarking on a survey of such length does not fall within the expected study duration. It is therefore recommended that further research may be embarked upon by employing the ramifications of the research on a broader scale among other research specific population groups using larger samples.

The relatively low response rate might limit the capacity to generalise results. However the triangulation methodology employed to source data eased the level of bias that might have occurred.

The modelling processes employed by this research laid down a structural basis for further research, in which the proposed models can be applied to other scenarios and other housing population samples within different professional capacities. Furthermore the research could have benefited from an outright model development rather than a proposed framework due to the quality of consolidated elements. This will however require the process of populating the generated Structural Equation Modelling outputs with relevant experts. Unfortunately, this will require far more time than is permitted for the allocated duration of this research, therefore the proposed framework could not be tested accordingly.

7.5 CHAPTER SUMMARY

This research argued for a renewed outlook towards affordable housing in the UK, through tackling the negative impacts stemming from institutional and sustainability constructs preventing a broader scale employment of the CLT Shared Equity Housing Model. This in earnest will propel its utilisation from a rather restricted one, to a large scale adoption by both government and private developers particularly in urban areas. Also, the viability of this model in improving the state of homeownership problems among FTBs was rigorously investigated with positive outcomes.

This chapter revealed the extent to which the research aim and objectives were met, highlighting the overview of the research and its findings. This included the justification for the research and the triangulation methodological approach undertaken to accomplish research aim, objectives, questions and the generated hypotheses. Moreover, the chapter also demonstrates the novelty of the research and contributions to existing knowledge and practice. This was then capped with the recommendations for future research alongside encountered limitations.

REFERENCES

- AACLT (2010) *Aberystwyth Area Community Land Trust: Project Report*, Aberystwyth: AACLT.
- ABL Group (1997) *Future Search Process Design*, Toronto: York University.
- ABS (2004) 'Measuring Social Capital, an Australian Framework and Indicators', Information Paper, No.1378
- Aiken, M., Cairns, B and Thake, S. (2008) *Community Ownership and Management of Assets*, London: Joseph Rowntree Foundation
- Aird, J and Community Finance Solutions (2009) *Evaluation of the National Community Land Trust Demonstration Programme 2006-2008*, Salford: CFS.
- Aird, J. (2009) *Lessons from the first 150 Homes: Evaluation of the National Community Land Trust Demonstration Programme*, Salford: CFS.
- Albright, J and Park, H. (2009) *Confirmatory Factor Analysis using Amos, LISREL, Mplus, SAS/STAT CALIS**, Indiana: Centre for Statistical and Mathematical Computing.
- Anderson, C and Gerbing, W. (1988), 'Structural equation modelling in practice: a review and recommended two-step approach', *Psychological Bulletin*, Vol. 103, pp. 411-23.
- Andersson, L and Bateman, T (1997) 'Cynicism in the workplace: Some causes and effects', *Journal of Organizational Behaviour*, Vol. 18, No. 5, pp.449-469.
- Andrew, M.(2005) *The Changing Route To Owner Occupation: The Impact Of Household Formation and Borrowing Constraints On Young Adult Homeownership In Britain*, London: Economic and Social Research Council.
- Antonius, R. (2003) *Interpreting Quantitative Data with SPSS*, New Delhi: Sage Publications.
- APA (2012) 'Civic Engagement', available at, <http://www.apa.org/education/undergrad/civic-engagement.aspx> (accessed 14th May, 2013).
- APO (2006) *Potential of Social Capital for Community Development*, Tokyo: Asian Productivity Organization.
- Arif, M; Aburas, H, Al Kuwaiti, A and Kulonda, D (2010) 'Suggestion Systems: A Usability-Based Evaluation Methodology', *JKAU: Eng. Science*, Vol. 21 No.2, pp: 61 79.

- Asthana, A and Dyer, E (2011) 'Horrendous' housing trends slam door on first-time buyers, *The Observer*, 2nd Jan, pp.8.
- Atterhog, M. (2005), 'Importance of government policies for home ownership rates: an international survey and analysis', Working Paper No. 54, Swedish Royal Institute of Technology.
- Aulakh, S and Gencturk, F (2000) 'International principal-agent relationships: Control, governance and performance', *Industrial Marketing Management*, Vol. 29, pp. 521– 538.
- Bailey, N. (2010) Understanding Community Empowerment in Urban Regeneration and Planning in England: Putting Policy and Practice in Context, *Planning Practice and Research*, Vol. 25, pp: 317-332.
- Baines, J. and Morgan, B (2004) *Sustainability Appraisal: A Social Perspective' In Sustainability Appraisal: A Review of International Experience and Practice*, London: International Institute for Environment and Development, London.
- Barker, A (1992) *Paradigms*, New York: Harper Collins
- Barker, K. (2004) *Review of Housing Supply: Delivering Stability: Securing Our Future Housing Needs: Final Report-Recommendations*, Norwich: Her Majesty's Stationery Office.
- Barker, K. (2006) *Review of Housing Supply: Delivering Stability: Securing Our Future Housing Needs: Final Report-Recommendations*, Norwich: Her Majesty's Stationery Office.
- Baxter, P and Jack, S. (2008) 'Qualitative case study methodology: Study design and implementation for novice researchers.' *The Qualitative Report*, Vol. 13, no. 4, pp. 544-559.
- Beider, H. (2007) *Neighbourhood renewal & housing markets: community engagement in the US & UK*, Sussex: Wiley-Blackwell.
- Benbasat, I., Goldstein, K. and Mead, M. 'The Case Research Strategy in Studies of Information Systems,' *MIS Quarterly* (11:3), September 1987, pp. 369-385.
- Bennett, J., Hetherington, D., Nathan, M. and Urwin C. (2006) *Would you live here?: making the growth areas communities of choice*, London. Institute for Public Policy Research.
- Berlin Institut für Bevölkerung und Entwicklung (Hrsg.): *Die demographische Zukunft von Europa*, Berlin 2008.
- Best, R. (2003) *Britain's housing in 2022: More shortages and homelessness?*, York: Joseph Rowntree Foundation/YPS.

- Bian, Y. (1997) 'Bringing strong ties back in: indirect ties, network bridges and job searches in China', *American Sociological Review*, Vol. 62 No. 3, pp. 366-85.
- Birchall, J. (2004) *Cooperatives and the Millennium Development Goals*, Geneva: International Labour Office.
- Blaikie, N. (2000), *Designing Social Research*, Cambridge: Polity.
- Blake, N., Croot, J and Hastings, J. (2004) *Measuring the Competitiveness of the UK Construction Industry*, DTI, Construction Economics and Statistics, London.
- Bland, R. (2008) *Community Land Trusts, the New Panacea? Delivering Affordable Housing in Rural Areas*, London: RTPI
- Blumberg, B., Cooper, R and Schindler, S. (2005) *Business Research Methods*, London: McGraw Hill.
- Bogdan, C and Biklen, K. (2006) *Qualitative research in education: An introduction to theory and methods*, Boston: Allyn and Bacon.
- Boleat, M. (1997), 'The politics of home ownership', in Williams, P. (Ed.), *Directions in Housing Policy: Towards Sustainable Housing Policies for the UK*, Paul Chapman Publishing Limited, London
- Bollen, K. (1989) *Structural Equations with Latent Variables*, New York: Wiley.
- Bowling, N. (2005) 'Mode of questionnaire administration can have serious effects on data quality', Vol. 27, No. 3, pp. 281-291.
- Bramley, G. (2007) 'The sudden rediscovery of housing supply as a key policy challenge', *Housing Studies*, Vol. 22 No. 2, pp. 221-41.
- Bratt, R. (2005) 'Dilemma of Community Based Housing', *Policy Studies Journal*, Vol. 16, No. 2.
- Bratt, R. (2009) *Should We Foster the Non-Profit Housing Sector as Developers and Owners of Subsidized Rental Housing*, Massachusetts: Joint Centre for Housing Studies Harvard University.
- Bretherton, J. and Pleace, N. (2008) *Residents views of new forms of high density affordable living*, York: Joseph Rowntree Foundation.
- Broadcasting Corporation', available at: <http://www.ldb.org/evacox.htm/> (accessed 12 November 2010).
- Brown, A. (2006) *Confirmatory Factor Analysis for Applied Research*. New York: Guilford Press.

Browne, W. and Cudeck, R. (1993) 'Alternative ways of assessing model fit', in Bollen, K.A. and Long, J.S. (Eds), *Testing Structural Equation Models*, Sage, Newbury Park, CA.

Brownfield Center (2011) *Glossary of Brownfields Terms*, [Online], Available: <http://www.brownfieldscenter.org/big/glossary.shtml> [12 Feb 2011].

Brunick, N. (2008) *Inclusionary housing: Lessons from the national experience*, Trenton: New Jersey Council

Bryman, A. (2001) *Social Research Methods*, Oxford: Oxford University Press.

Bryman, A. (2010) *Triangulation*, Loughborough: UL.

Brynne, A and Mallet, P. (2005) *Stakeholder Consultation Practices in Standards Development*, British Columbia: ISEAL Alliance.

Bullen, P. and Onyx, J. (1998) *Measuring social capital in five communities in NSW: overview of a study' Management Alternatives*, London: Neighbourhood and Community centres.

Burke T and Pinnegar S with Phibbs P, Neske C, Gabriel M, Ralston L and Ruming K. (2007) *Experiencing the housing affordability problem: blocked aspirations, trade-offs and financial hardships*, National Research Venture3: Housing affordability for lower income Australians. Research Paper No. 9. AHURI: Swinburne-Monash Research Centre and UNSW-UWS Research Centre.

Burli, S and Bagodi, V. (2012) 'TQM dimensions and their interrelationships in ISO certified engineering institutes of India', *International Journal of Benchmarking*, Vol. 19, No.2, pp. 177 – 192.

Burnham, P and Anderson, R. (2002), *Model Selection and Multimodel Inference: A Practical Information-Theoretic Approach*, Berlin: Springer-Verlag.

Burtseva, S. (2010) 'New Housing in Irvine Represents Focus on Integration, Accessibility', available at, <http://www.irvineclt.org/resources/news/> (accessed 14th May, 2013).

Byrne, G. (2007) 'A Statistical Primer: Understanding Descriptive and Inferential Statistics', *Evidence Based Library and Information Practice*, Vol. 2, No. 1, pp. 32-47.

Cameron, A. (2004) *The SAGE Encyclopaedia of Social Science Research Methods*, London: SAGE.

Campbell, P. (2011) *Community-Led Regeneration: A Review of Literature*, Edinburgh, Crown.

- Cargan, L. (2007). *Doing social research*, Manhattan: Rowman & Littlefield Publishers.
- Carnis, H. (2009) 'the economic theory of bureaucracy: insights from the niskanian model and the misesian approach', *Austrian Economics*, Vol. 12, No. 3, pp. 57-78.
- Carol Webb (2008) 'Measuring social capital and knowledge networks', *Journal of Knowledge Management*, Vol. 12, No. 5 pp. 65 – 78.
- Carpenter (2010) 'London housing scheme halted', available at, <http://www.planningresource.co.uk/news/997307/London-housing-scheme-halted/> (accessed 12th May, 2011).
- Carver and Nash, J (2011) *Doing Data Analysis with SPSS*, Kentucky: Cengage Learning.
- CCH (1999) *Joint response to the Institute for Public Policy Research consultation document Social Housing in the 21st Century*, [Online], Available: http://www.cch.coop/docus/social_housing.html#2 [12 Feb 2011].
- CCH (2000) *Submission by the UK Co-operative Council to the Co-operative Commission on the development of the housing co-operative sector*, [Online], Available: <http://www.cch.coop/docus/coopcomm.html> [14 Feb 2011]
- CCMH (2009) *Bringing democracy home*, West Bromwich: CCMH
- CCWA (2011) *what is community capacity building?* Belfast: CCWA.
- Centre for Affordable Housing (2006) *The Local Government Toolkit*, Ashfield: Housing NSW.
- CFS (2007) *Community Land Trusts: A Practitioner's Guide*, Salford: Community Finance Solutions.
- CFS (2009) *Engaging financial institutions in developing Community Land Trust mortgage*, Salford: Community Finance Solutions.
- Chambers, D. (1989) *Learning from Markets*, London: Office for Public Management
- Chancellor of the Exchequer (2007) *Planning-gain Supplement (Preparation) Bill*, London: Her Majesty's Treasury.
- Charlesworth, J., Clark, J. and Cochrane, A. (1994) 'Tangled webs? Managing local mixed economies of care', paper presented at ERU conference, Cardiff.
- Chattered Institute of Housing (2009) *Young People Move Away From Homeownership*, Coventry: CIH Press Office.

Cheshire, P and Sheppard, S. (1989), 'British planning policy and access to housing: some empirical estimates', *Urban Studies*, Vol. 26, pp. 469-85.

Cheshire, P. and Sheppard, S. (1997), 'The welfare economics of land use regulation', *Research Papers in Environmental and Spatial Analysis* No. 42, Department of Geography, London School of Economics, London.

Cho, S., Wu, J and Boggess, W. (2003) 'Measuring Interactions among Urbanization, Land Use Regulations, and Public Finance', *Journal of Agricultural Economics*, Vol. 85, No. 4, pp. 988-999

Clapham, D. and Kintrea, K. (2000) 'Community-Based Housing Organisations and the Local Governance Debate'. *Housing Studies*, Vol. 15, no. 4, pp. 533-559

Clapham, D., Kintrea, K. and Kay, H. (1996) 'Direct Democracy in Practice: the case of 'community ownership' housing associations'. *Policy and Politics*, Vol. 24, no. 4, pp 359-374.

Clark, M. (2012) *Housing Cooperatives: Are we better together?* [Online], Available: <http://www.guardian.co.uk/housing-network/2012/jan/13/housing-cooperatives-affordable-alternatives>, [13th Mach 2012].

Clarke, R. (2004) *Equity Sharing with Community Land Trusts: Delivering Sustainable Low Cost Home Ownership by Locking in Value in Perpetuity*, London: Shared Equity Task Force.

CLG (2007a) *Homes for the future: more affordable, more sustainable*, London: Crown.

CLG (2007b) *Social Mobility and Homeownership: A Risk Assessment*, London: CLG.

CLG (2008) *Community Land Trusts: A Consultation*, London: CLG.

CLG (2008b) *Facing the Housing Challenge, Action Today, Innovation Tomorrow*, London: Communities and Local Government

CLG (2009) *Community Land Trusts: Summary of Response*, London: CLG

CLG (2010) *Planning Policy Statement 3 (PPS3)*, London: CLG.

CLG (2010a) *Housing Statistics Live Table 600: Rents, lettings and tenancies: numbers of households on local authorities' housing waiting lists1, by district: England 1997-2009*, [Online], Available: <http://www.communities.gov.uk/documents/housing/xls/144458.xls> [2 July 2010].

CLG (2010b) *Planning Policy Statement 3 (PPS3): Housing*: CLG.

CLG (2011) *An introduction to neighbourhood planning*, London: CLG

- CLG (2011a) *An introduction to neighbourhood planning*, London: CLG.
- CLG (2011b) *The localism Act*, [Online], Available: <http://www.communities.gov.uk/localgovernment/decentralisation/localismbill/> [13th December 2011]
- CLG (2011c) *Community Right to Build*, [Online], Available <http://www.communities.gov.uk/localgovernment/decentralisation/localismbill/righttobuild/> [24th Jul 2011]
- CML (2008b) 'Lending declines further in August' Press Release 14 October 2008
- CML (2008c) 'The coming debate: lending, consumer choice, aspirations and risk.' *CML News and Views* Issue 20-21 October 2008.
- CML (2008d) *Community Land Trusts: Response by the Council of Mortgage Lenders to the Communities and Local Government Consultation Paper*, London: CML.
- CML (2011) *Number of mortgages*, London: Council of Mortgage Lenders.
- Cochrane, A. (2007), *Understanding Urban Policy: A Critical Introduction*, Blackwell, Oxford.
- Coleman, J. (1988) 'Social capital in the creation of human capital', *American Journal of Sociology*, Vol. 94, pp. S95-S12
- Coleman, J. (1990), *Foundations of Social Theory*, MA: Harvard University Press.
- Collins, T. (2011) *Comment: First-time buyers are the lifeblood of the housing market*, [Online], Available: <http://www.politics.co.uk/comment-analysis/2011/3/29/comment-first-time-buyers-are-the-lifeblood-o> [4th April 2011].
- Commissioner for Environmental Sustainability (2006) *What is environmental sustainability?*, Melbourne: CFES.
- Commonwealth of Australia (2008) *Housing Affordability Fund: Consultation Paper*, Canberra: Commonwealth of Australia.
- Community Finance Solutions (2008) *Placeshaping: A Toolkit for Urban Community Land Trusts*, Salford: Community Finance Solutions.
- Community Finance Solutions (2009) *Engaging financial institutions in developing Community Land Trust mortgage*, Salford: Community Finance Solutions.
- Community Finance Solutions (2011) *Engaging financial institutions in developing Community Land Trust mortgage*, Salford: Community Finance Solutions.

- Community Land Trust Fund (2011) *Policy Context: Affordable Housing*, London: CLTF.
- Conaty, P. (2004) *History of CLTs: the Scottish Experience and CLTs in the USA*, London: New Economics Foundation.
- Confederation of Cooperative Housing (2000) *Submission by the UK Co-operative Council to the Co-operative Commission on the development of the housing co-operative sector*, [Online], Available: <http://www.cch.coop/docus/coopcomm.html> [14 Feb 2011]
- Conference Board of Canada (2010) *Building from the Ground up Enhancing Affordable Housing in Canada*, Ottawa: CBOC.
- Construction Associate Programme/Built Environment Research Panel (2001) *Constructing the Future*, London: Department of Trade and Industry.
- Coolican, H. (2004) *Research Methods and Statistics in Psychology*, London: Hodder Arnold.
- Cooper, K. (2008) 'Unsold key worker homes lined up for general need', available at, <http://www.insidehousing.co.uk/unsold-key-worker-homes-lined-up-for-general-need/1446853.article> (accessed 12th May, 2011).
- Cox, E. (1995) 'A Truly Civil Society: The 1995 Boyer Lectures Sydney: The Australian
- Cox, W. and Pavletich, H. (2010) *6th Annual Demographia International Housing Affordability Survey*, Illinois: Demographia.
- Cox, W. and Pavletich, H. (2013) *96th Annual Demographia International Housing Affordability Survey*, Illinois: Demographia.
- Crang, M. (2002) 'Qualitative methods: the new orthodoxy?' *Progress in Human Geography*, Vol. 26, No. 5, pp. 647–655.
- CRC (2005) *State of the Countryside 2005*, London: Commission for Rural Communities.
- CRC (2006) *Rural Housing: A Place in the Countryside*, London: Commission for Rural Communities.
- Creswell, J. (2003) *Research Design: Qualitative, Quantitative, and Mixed Methods Approach*, London: Sage.
- Creswell, J. and Clark, P. (2007) *Mixed Methods Research*, CA: Sage Publications.

- Creswell, W. (1999) *Mixed-method research: Introduction and application, Handbook of educational policy*, San Diego: Academic Press.
- Crocker, L. and Algina, J. (1986) *Introduction to classical and modern test theory*, Toronto: Rinehart, and Winston Inc.
- Cronin, P, Ryan, F and Coughlan, M. (2008) ‘Undertaking a Literature Review: A Step-by-step approach’, *British Journal of Housing*, Vol. 17, No.1, pp. 38-43.
- Crook A, Henneberry J, Rowley S, Warkins C and the Halcrow Group (2006) *Valuing Planning Obligations in England*, London: Communities and Local Government.
- Crook A, Monk S, Rowley S and Whitehead C. (2006) ‘Planning gain and the supply of new affordable housing in England: Understanding the numbers’, *Town Planning Review*, Vol. 77 No. 3, pp. 353-373.
- Crook T and Whitehead C. (2002) Social housing and planning gain: is this an appropriate way of providing affordable housing? *Environment and Planning*, Vol. 34, No.7, pp. 1259-1279
- Crotty, M. (2004) *The Foundations of Social Research: Meaning and Perspective in the Research Process*, London: Sage.
- Curtice, J. (2005) *Turnout: electors stay home – again*, in Norris, P. and Wlezien, C. (Eds), *Britain Votes 2005*, Oxford: Oxford University Press.
- David, M and Lucas, J. (2011) *Workshops on affordable housing*, Bedfordshire: Bedfordshire Council
- Davies, D and Dodd, J. (2002) ‘Qualitative research and the question of rigor’ *Qualitative Health research*, Vol 12, No. 2, pp. 279-289
- Davis, E and Jacobus, R (2008) *The city-CLT partnership: Municipal support for community land trusts*, Cambridge: Lincoln Institute of Land Policy.
- Davis, J and Demetrowitz, A. (2003) *Permanently Affordable Homeownership: Does the Community Land Trust Deliver on Its Promises?*, Burlington: BCLT.
- DCLG (2006) *Community Assets: The Benefits and Costs of Community Management and Ownership*. London: DCLG
- DCLG (2007) *Housing in England 2005/06, 2007*, table 1.1: Trends in Tenure
- DCLG (2010) *Estimating housing needs*, London: Crown.
- DCLG (2010) *Housing and Planning Statistics 2010*, London: Crown.

DCLG (2010b) English Housing Survey, Household report 2008–09, available at www.communities.gov.uk/documents/statistics/pdf/1750765.pdf.

DCLG (2013) *Dwelling stock estimates: 2012 England*, London: Crown.

Deakin, N. (1994) 'Evolving relations between government and the third sector in Britain: the case of community care', unpublished paper for Conference of International Society for Third Sector Research, Pecs, Hungary, 4-7 July 1994.

Denzin, K. (1970) *The Research Act in Sociology*, Chicago: Aldine.

Department for Social Development (2006) *Voluntary and Community Sector: Community Capacity Building*, Belfast: DSD.

Department of Health (2001) *Care Homes for Older People: National Minimum Standards*, London: The Stationery Office.

Department of the Environment, Transport and the Regions/CCCIS (2000) *The State of the Construction Industry*, Issue 12, London: The Stationery Office.

DETR (1998) *Circular 6/98: Planning and Affordable Housing*, London: The Stationery Office.

Diamond, J. and Liddle, J (2005) *Management of Regeneration*, Routledge, London

DiPasquale, D., and E. Glaeser (1999) *Incentives and Social Capital: Are Homeowners Better Citizens?* *Journal of Urban Economics*, Vol. 45, No. 2, pp.354-384.

Directgov (2011a) *Buying your council home - the Right to Buy scheme*, [Online], Available:http://www.direct.gov.uk/en/HomeAndCommunity/BuyingAndSellingYourHome/HomeBuyingSchemes/DG_4001398 [14 Feb 2011].

Directgov (2011b) *First Time Buyers Urged to Register for First Buy*, [Online], Available: http://www.direct.gov.uk/en/N11/Newsroom/DG_197938 [23 Aug 2011].

Directgov (2011c) *Housing associations – what they are*, [Online], Available: http://www.direct.gov.uk/en/HomeAndCommunity/Councilandhousingassociationhomes/Housingassociationhomes/Applyingforahousingassociationhome/DG_188384 [12Feb 2011].

Directgov (2011d) *How your local housing works*, [Online], Available: http://www.direct.gov.uk/en/HomeAndCommunity/YourlocalcouncilandCouncilTax/YourCommunity/DG_4001648 [21 Sep 2011]

Dixon, T., Colantonio, A., Shiers, D., Gallimore, P., Reed, R and Wilkinson, S. (2007), 'A Greener Profession', RICS, London.

- Dreiera, P and Hulchanskib, D. (1983) 'The role of non-profit housing in Canada and the United States: Some comparisons', *Housing Policy Debate*, Vol. 4, Issue. 4, pp. 43-80.
- Dresner, S. (2002) *The Principles of Sustainability*, Earthscan, London.
- DTA (2010) *To have and to hold: The Development Trust Association Guide to Asset Development for Community and Social Enterprise*, London: DTA.
- DTLR (2000) *Planning Policy Guidance Note 3 (PPG3): Housing*, London: The Stationery Office.
- Dwelly, T. (ed.) (2001) *My Home, Not The Home: Residents' views on new care homes*, York: Joseph Rowntree Foundation.
- Eardley, A and Vincent, P. (2011) *Making the most of Community Led Planning: A best practice guide for local authorities*, Gloucestershire: ACRE.
- Edwards, B and Foley, M. (1997) 'Social capital and the political economy of our discontent' *American Behavioural Scientist*, Vol. 40, No. 5, pp. 669-78
- Edwards, M. (2000) 'Sacred Cow or Sacrificial Lamb? 'Will London's Green Belt have to go?', *City*, Vol. 4, no. 1, pp. 105-112.
- Egan, J. (1998) *Rethinking Construction: The report of the Construction Taskforce*, London: Department for Trade and Industry.
- Eisenhardt, M. (1989) 'Building Theories from Case Study Research', *Academy of Management Review*, Vol. 14, No. 4, pp.532-550.
- Eisenhardt, M. and Graebner, E (2007) 'Theory building from cases: opportunities and challenges', *Academy of Management Journal*, Vol. 50, No. 1, pp: 25-32.
- Emsley, S., Phibbs, P. and Crabtree, L. (2008) *Models of Sustainable and Affordable Housing for Local Government*, Sydney: Urban Research Centre.
- Ermisch, J., Findlay, J. and Gibb, K. (1996) 'The Price Elasticity of Housing Demand in Britain: Issues of Sample Selection', *Journal of Housing Economics*, Vol. 5, Issue. 1, pp. 64-86.
- Evans, W. (1991), 'Rabbit hutches on postage stamps: planning, development and political economy', *Urban Studies*, Vol. 28, pp. 853-70.
- Fan, X., Thompson, B and Wang, L. (1999) 'Effects of sample size, estimation method, and model specification on structural equation modelling fit indexes', *Structural Equation Modelling*, Vol. 6, pp. 56-83.

- Farnham, D. and Horton, S. (2003) 'Organisational change and staff participation and involvement in Britain's public services', *International Journal of Public Senior Management*, Vol. 16, No. 6, pp. 434 – 446.
- Fellows, R and Liu, A. (2003) *Research Methods for Construction*, Oxford: Blackwell Science.
- Field, A. (2009) *Discovering statistics using SPSS*, London: Sage publications.
- Field, A. (2013) *Discovering statistics using SPSS: and sex and drugs and rock 'n' roll*, London: Sage publications.
- Field, G (1997), 'Building consensus for affordable housing', *Housing Policy Debate*, Vol. 8, No. 4, pp. 801-32
- Finney, S and Corbett, M. (2007) 'ERP implementation: a compilation and analysis of critical success factors', *Business Process Management Journal*, Vol. 13, no. 3, pp. 329–347.
- Fisher, M and Jaffe, J. (2003), "Determinants of international home ownership rates", *Housing Finance International*, Vol. 18 No. 1, pp. 34-42
- Fitzmaurice, J. (2011) *Self-help housing: localism in action?*, Lincoln: ResPublica.
- Foot, J. (2009) *Citizen involvement in local governance*, York: JRF
- Frank, F and Smith, A. (1999) *The Community Development Handbook: A tool to build Community Capacity*, Canada: Human Resources Development.
- Future Communities (2011) *A review of urban Community Land Trusts in England Lessons and practical advice*, London: Future Communities
- Gallent, N. (1997) 'The alternative route to affordable housing provision: Experiences in rural Wales', *Journal of Rural Studies*, Vol. 13, Issue. 1, January, pp. 43-56.
- Gallion, T. and Scheperle, L. (2008) *Interpreting the Structural Equation Model*, Missouri: MODOT/ OSEDA.
- Gaskin, J. (2013) *Confirmatory Factor Analysis*, Utah: BYU.
- GBC (2011) *Community Involvement in Planning: Consultation Statement*, Guilford: GBC.
- Gerrish, K. and Lacey, A. (2006) *The Research Process in Nursing*, Philadelphia: Blackwell Publishing.

- Gibb, K. (2011) 'Delivering new affordable housing in the age of austerity: housing policy in Scotland', *International Journal of Housing Markets and Analysis*, Vol. 4, No. 4, pp. 357 – 368.
- Gillham, B. (2000) *The research Interview*, London: Continuum.
- Glaser, L. and Gyourko, J. (2002) *The Impact of Zoning on Housing: Affordability Discussion Paper, No. 1948*, Cambridge: Harvard Institute of Economic Research.
- GMAC-RFC (2005) *First-time buyers: understanding new trends*, London: GMAC-RFC
- Grace, G and Ludiman, A. (2008) 'Local asset backed vehicles: The potential for exponential growth as the delivery vehicle of choice for physical Regeneration', *Journal of Urban Regeneration and Renewal*, Vol. 1, No. 4, pp. 341–353.
- Green, H. and Fletcher, L. (2003) 'The development of Harmonised Questions on Social Capital', Office for National Statistics, Social and Vital Statistics Division, available at: www.statistics.gov.uk/socialcapital/downloads/Methodological_Report.pdf / (accessed 12 Nov 2011).
- Grigsby, G and Rosenburg, L. (1975) *Urban Housing Policy*, New York: APS Publications.
- Grimsley, M., Hickman, P. and Lawless, P. (2005) *Community Involvement and Social Capital*, Sheffield: Centre for Regional Economic and Social Research Sheffield Hallam University
- Grix, J (2006) 'Introducing Students to the Generic Terminology of Social Research' *Politics*, Vol. 22, no. 3, pp. 175-186.
- Guba, G and Lincoln, S. (1994) *Competing paradigms in qualitative research*, CA: Sage.
- Gurran N (2002) *Housing policy and sustainable urban development: evaluating the use of local housing strategies in Queensland, New South Wales and Victoria*. Positioning Paper No.41. AHURI, University of Sydney Research Centre.
- Gurran N (2003) *Housing policy and sustainable urban development: evaluating the use of local housing strategies in Queensland, New South Wales and Victoria*, Final Report No. 39. AHURI, University of Sydney Research Centre.
- Gurran N, Milligan V, Baker D and Bugg L. (2007) *International Practice in Planning for Affordable Housing: Lessons for Australia*. Positioning Paper, Australian Housing and Urban Research Institute, Sydney
- Gwin, R and Ong, S. (2004) 'Do we really understand home ownership rates? An international study', working paper series, Baylor University

Hadrich, J and Olson, F. (2011) 'Joint measurement of farmsize and farm performance: a confirmatory factor analyses', *Agricultural Finance Review*, Vol. 71, No.3, pp. 296 – 309.

Halifax press release, 30 December 2006; Halifax press release, 22 December 2007

Hall, C and Rafferty, A. (2007) 'Social Capital: Introductory User Guide', ESDS Government, Office for National Statistics and Economic & Social Data Service, available at: www.esds.ac.uk/government/docs/soccapguide.pdf

Hall, R; Snell, A and Foust, M. (1999) 'Item Parceling Strategies in SEM: Investigating the Subtle Effects of Unmodeled Secondary Constructs', *Organizational Research Methods*, Vol. 2, No. 3, pp. 233-25.

Hardy, C. (1992) *Community Land Trust for Affordable Housing: A Case Study of the Burlington Community Land Trust*, Ontario: Department of Geography.

Harper, R. (2002) *The measurement of Social Capital in the United Kingdom*, Office of National Statistics: London.

Harrison, B. and Marshall, A. (2008) *City Solutions: Delivering Local Growth – Local Asset Backed Vehicles*, London: PricewaterhouseCoopers and Centre for Cities.

Hart, C. (1998) *Doing a Literature Review*, London: Sage Publications.

Hay, C. (2002), *Political Analysis. A Critical Introduction*, Basingstoke: Palgrave.

HCA (2001) *HCA Corporate Plan 2011-15*, London: HCA.

HCA (2011) *Boost for First Time Buyers*, London, HCA

HCA (2011) *HCA Corporate Plan 2011-15*, London: HCA.

Hirschheim, R. (1985) Information Systems Epistemology: An Historical Perspective in Research Methods in Information Systems, in *proceedings of the IFIP International Federation for Information Processing*, September 1-3, 1984, Amsterdam,13-35. Colloquium Manchester Business School

Hodkinson, S. (2011) 'Housing regeneration and the private finance initiative in England: unstitching the neoliberal urban straitjacket', *Antipode*, Vol. 43, No. 2, pp. 358–383.

Home Office (2004) *Firm Foundations: The Government's Framework for Community Capacity Building*. London: Civil Renewal Unit, Home Office

Homes and Communities (2011) *Community Planning and Development: Affordable Housing*, Washington: Department of Housing and Urban Development.

- Housing Corporation (2007) National Affordable Housing Programme 2008-11 Prospectus, London: Housing Corporation.
- Housing Corporation (2008) *The residents panel summary report: Tenant Participation (RSL, local authority and ALMO tenants)*, London: Housing Corporation.
- Hox, J and Bechger, T. (2001) 'An introduction to structural equation modelling', *Family Science Review*, Vol. 11, pp. 354-373
- Hu, T and Bentler, M. (1999), 'Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives', *Structural Equation Modeling*, Vol. 6, pp. 1-55.
- Hughes, E and Isherwood, B. (2006) *Wales: Rural Housing Enablers, Report on the Current and Future Arrangements*, [Online], Available: <http://www.hughes-isherwood.com/pdf/RHE%20Whole%20%20Report.pdf> [12th Mar 2011].
- Hulley, B., Cummings, R., Browner, S. (2001) *Getting ready to estimate sample size: Hypothesis and underlying principles In: Designing Clinical Research-An epidemiologic approach*, Philadelphia: Newman.
- Jane, C., Robert, D and Patel, N. (2011) 'Understanding the consumption process through in-branch and e-mortgage service channels: A first-time buyer perspective', *International Journal of Bank Marketing*, Vol. 29, No.2, pp.148 - 167.
- Patton, M. (1990) *Qualitative evaluation and research methods*, CA: Sage.
- Poon, J and Garratt, D. (2012) 'Evaluating UK housing policies to tackle housing affordability', *International Journal of Housing Markets and Analysis*, Vol. 5 No. 3, pp. 253-271
- Jogulu, D and Pansiri, J. (2011), 'Mixed methods: a research design for management doctoral dissertations', *Management Research Review*, Vol. 34 No. 6, pp. 687-701.
- Johnson, B., and Christensen, L. (2008) *Educational research: Quantitative, qualitative, and mixed approaches*, CA: Sage Publications.
- Johnson, D. (1995) 'Will our research hold up under scrutiny?' *Journal of Industrial Teacher Education*, Vol 32, No. 3, pp. 3-6.
- Johnson, R. (1997) 'Examining the validity structure of qualitative research', *Education*, Vol 118, No. 3, pp. 282-292.
- Jones, C., Watkins, D and Watkins, C. (2010) *Affordability and Housing Market Areas*, Sheffield: University of Sheffield.

Jones, J. (2010) *Bringing affordable ownership home: How co-operatives could help people currently priced out of home ownership*, [Online], Available: <http://static.london.gov.uk/assembly/members/jones/docs/bringing-affordable-ownership-home.pdf> [12th Jan 2011].

Jones, R. (2011) First-time buyers face scramble for FirstBuy loans, [Online], Available: <http://www.guardian.co.uk/money/2011/mar/26/first-time-buyer-firstbuy> [28th March 2011].

Joppe, M. (2000) *The Research Process*, [Online], Available: <http://www.ryerson.ca/~mjoppe/rp.htm> [14th Mar 2011]

Joseph Rowntree Foundation (1994) *Inquiry into Planning for Housing*, York: JRF.

Joseph Rowntree Foundation (2003) *Tackling UK poverty and disadvantage in the twenty-first century: An exploration of the issues*, York: Joseph Rowntree Foundation.

Smyth, J (1997), "Competition as a means of procuring public services: Lessons for the UK from the US experience", *International Journal of Public Sector Management*, Vol. 10 Iss: 1 pp. 21 – 46.

Ijasan, K and Ahmed, V. (2013) 'Community engagement and social exclusion: the BME experience', *International Journal of Housing Markets and Analysis*, Vol. 6, No. 2, pp.163 -179.

Kaplan, B. and Maxwell, A. 'Qualitative Research Methods for Evaluating Computer Information Systems', in Anderson, J. G., Aydin, C. E. and Jay, S. J. (eds.), *Evaluating Health Care Information Systems, Methods and Applications*, Thousand Oaks: Sage, 1994, pp. 45-68.

Kemp, P. (2000) 'Images of Council Housing', pp. 137–54 in R. Jowell (ed.) *British Social Attitudes: The 17th Report*. London: SAGE.

Kenny, D (2012) 'Measuring Model Fit', available at: <http://davidakenny.net/cm/fit.htm> (accessed 15th June, 2013).

Kim, H., Kim, M and Ruetzler. (2010) 'An examination of festival attendees' behaviour using SEM', *International Journal of Event and Festival Management*, Vol. 1, No. 1, 2010, pp. 86-95.

Kline, B. (2005) *Principles and practice of structural equation modelling*, New York: Guilford.

Kline, R. (2011) *Principles and Practices of Structural Equation Modelling*, New York: Guilford Press.

- Korsgaard, M. A and Roberson, L. (1995) 'Procedural justice in performance evaluation: The role of instrumental and non-instrumental voice in performance appraisal discussions', *Journal of Management*, Vol. 21, No. 4, pp. 657-669.
- Koufteros, A. (1999), "Testing a model of pull production: a paradigm for manufacturing research using structural equation modeling", *Journal of Operations Management*, Vol. 17, No. 3, pp. 467-488.
- Krishnan, R., Martin, X. and Noorderhaven, G. (2006), 'When does trust matter to alliance performance?' *Academy of Management Journal*, Vol. 49, pp. 894-917.
- Krosnick, A. (1999) 'Survey Research, *Annual Review of psychology*', Vol. 1, pp. 78-87
- Kumar, R. (1999). *Research Methodology: A Step-by-Step Guide for Beginners*, London, Sage.
- Kumar, R. (2005) *Research Methodology: A step by step Guide for Beginners*, London: Sage Publications.
- Kvale, S. and Brinkmann, S. (2008) *Interviews: learning the craft of qualitative research interviewing*, London: Sage Publications.
- Lambert, B. (2011) *Financing Co-operative & Mutual Housing*, London: CCH
- Lambert, B. and Bliss, N. (2001) *Providing Services to Housing Co-operatives*, London: CCH.
- Latham, M. (1994) *Constructing the Team: Final report of the government/industry review of procurement and contractual arrangements in the UK construction industry*, London: The Stationery Office
- Le Grand, J. (1995) 'Quasi markets and community care', *Studies in Decentralization and Quasi Markets*, No. 17, School for Advanced Urban Studies, Bristol.
- Leana, R. and Van Buren, J. (1999), 'Organizational social capital and employment practices', *Academy of Management Review*, Vol. 24, pp. 538-55.
- Leshem, S and Trafford, V. (2007) 'Overlooking the conceptual framework', *Innovations in Education and Teaching International*, Vol. 44, No. 1, pp. 93–105.
- Levin, M. (1988) *The opening of vision: Nihilism and the postmodern situation*. London: Routledge.
- LG (2005) *Communities Taking Control: Final Report of the Cross-sector Work Group on Community Ownership and Management of Assets*, London: Queens.

- Linneman, P and Megbolugbe, F. (1992), 'Housing affordability: myth or reality?', *Urban Studies*, Vol. 29, No. 3, pp. 369-92.
- Littig, B. and Griesler, E., (2005) 'Social sustainability: a catchword between political pragmatism and social theory', *International Journal of Sustainable Development*, Vol. 8, No. 1/2, pp. 65-79.
- Livette, M. (2006) 'The importance of tenure to retirement housing purchasers and the impact of culture upon their attitudes to tenure', *Property Management*, Vol. 24 Iss: 5, pp.464 – 478.
- Local Government (2011) *Registered Social Landlords*, [Online], Available: <http://www.idea.gov.uk/idk/core/page.do?pageId=7175736> [12 Feb 2011].
- Local Government Association (2002) *Working Group for Personal Social Services*, London: LGA.
- Loehlin, C. (2004) *Latent Variable Models*, 4th ed., New Jersey: Lawrence Erlbaum Associates.
- Lowndes, V. (2004) 'Getting on or getting by? Women, social capital and political participation', *British Journal of Politics and International Relations*, Vol. 6, pp. 45-64
- MacCallum, R. and Austin, J. (2000), 'Applications of structural equation modelling in psychological research', *Annual Review of Psychology*, Vol. 51 pp. 201-226
- MacCallum, C., Browne, W and Sugawara, M. (1996) 'Power analysis and determination of sample size for covariance structure modeling', *Psychological Methods*, Vol. 1, pp.130-149
- Macrory, I and ONS (2012) *Measuring National Well-being-Households and Families*, London: Crown.
- Mathison, S. (1988) 'Why triangulate?' *Educational Researcher*, Vol 17, No. 2, pp. 13-17.
- Matveev, A. (2002) 'The Advantages of Employing Quantitative and Qualitative Methods in Intercultural Research' *Bulletin of RCA*, Vol. 168, no. 1, pp. 59-67.
- Mayer, M. (2003) 'The onward sweep of social capital: causes and consequences for understanding cities, communities and urban movements', *International Journal of Urban and Regional Research*, Vol. 27, No.1, pp. 110-32.
- Mayor of London (2004) *Community Land Trusts & Mutual Housing Models: A research report for the Mayor of London*, London: Greater London Authority.
- McGregor, I. (2003) 'Ecologically Sustainable Development and Ecologically Sustainable Business Models', *Paper prepared for Presentation at the New Zealand Sustainable Business Conference*, 17th –19th November.

- Mclean, A. and Hindle, R. (2011) *Community Led Planning – what role in Urban Areas?*, Gloucestershire: ACRE.
- McNamara, C. (1999) *General Guidelines for Conducting Interviews*, Minnesota: UM.
- Metropolitan Area (2008) *How U. S. Land Use Restrictions Exacerbated the International Finance Crisis*, Illinois: Demographia.
- Michael McCord, Stanley McGreal, Jim Berry, Martin Haran, Peadar Davis, (2011) ‘The implications of mortgage finance on housing market affordability’, *International Journal of Housing Markets and Analysis*, Vol. 4, Iss: 4 pp. 394 – 417
- Miles, .B and Huberman, M. (1994) *Making Good Sense Drawing and Verifying Conclusions, in Qualitative Data Analysis: An Expanded Source Book*, NJ: Wiley
- Miles, B and Huberman, M (1994) *Qualitative Data Analysis: an Expanded Sourcebook*, California: Sage.
- Miles, B. and Huberman, M. (1984) *Qualitative data analysis: a sourcebook of new methods*, London: Sage.
- Miles, B and Huberman, M. (1994) *Making Good Sense: Drawing and Verifying Conclusions, in Qualitative Data Analysis: An Expanded Source Book*, NJ: Wiley
- Miller, B (2009) ‘Confirmatory factor analysis of the equity preference questionnaire’, *Journal of Managerial Psychology*, Vol. 24, No. 4, pp. 328 – 347
- Miller, L., Acton, C., Fullerton, A. and Maltby, J. (2002) *SPSS for Social Scientist*. New York: Palgrave MacMillan.
- MLA (2011) *Community engagement in public libraries: an evaluation update of the Big Lottery Fund’s Community Libraries Programme*, Birmingham: MLA
- Monk, S. (2009), "Understanding the demand for social housing in the United Kingdom: Some implications for policy", *International Journal of Housing Markets and Analysis*, Vol. 2, No. 1 pp. 21 – 38
- Monk, S. and Burgess, G. (2007) *How Local Planning Authorities are Delivering Policies for Affordable Housing*, York: JRF
- Monk, S. and Whitehead, C. (Eds) (2010), *Housing More Affordable: The Role of Intermediate Tenures*, Chichester: Wiley.
- Monk, S and Whitehead, C. (1999), “Evaluating the economic impact of planning controls in the United Kingdom: some implications for housing”, *Land Economics*, Vol. 75, pp. 74-93.
- Monk, S., Pearce, B and Whitehead, C (1996), ‘Land-use planning, land supply, and house prices’, *Environment & Planning A*, Vol. 28, pp. 495-511.

- Monk, S., Whitehead, C. and Burgess, G. (2006) *Common Starting Points for Section 106 Affordable Housing Negotiations*, London: The Stationery Office.
- Monk, S., Whitehead, C. and Burgess, G. (2010) *How can the planning system deliver more housing?* York: Joseph Rowntree Foundation.
- Morgan, G and Smircich, L. (1980) 'The case for qualitative research' *Academy of Management Review*, Vol. 5, pp. 491-500.
- MORI (2003) *Trust in Public Institutions: Report for the Audit Commission*, London: MORI,
- Morse, M and Mitcham, C. (2002) 'Exploring qualitatively derived concepts: Inductive deductive pitfalls, *International Journal of Qualitative Methods*, Vol. 1, no. 4, pp. 28–35.
- Morton, A. (2010) *Making Housing Affordable: A new vision for housing policy*, London: Policy Exchange.
- Motivalian, A. (2005) *Proposal for Evaluation*, Tehran: World Health Organisation.
- Mouly, J. (1978) *Educational Research: The Art and Science of Investigation*. Boston, MA: Allyn and Bacon.
- Myburgh, S. (2003) 'Collaboration and competition: the paradox of knowledge management', *Innovation*, Vol. 27, No. 27, pp. 37-48.
- Nahapiet, J and Ghoshal, S. (1998), 'Social capital, intellectual capital, and the organizational advantage', *Academy of Management Review*, Vol. 23, pp. 242-66
- National CLT Network (2011) *Project Funding Sources*, [Online], Available: <http://www.communitylandtrusts.org.uk/step-by-step-guide/finance/funding-sources> [15th March 2011].
- National Housing Federation (2011) *Housing Market Analysis*, Oxford: NHF.
- Navarro, V. (2002) 'Politics, power, and quality of life: a critique of social capital' *International Journal of Health Services*, Vol. 32, Vol. 3, pp. 423-32.
- Nokelainen, P. (2009) *Structural Equation Modeling*, Tampere: University of Tampere.
- O' Riordan, T Kates, R.W., Clark, W.C., Corell, R., Hall, J.M., Jaeger, C., Lowe, I., McCarthy, J.J., Schellnhuber, H.-J., Bolin, B., Dickson, N.M., Facheux, S., Gallopin, G.C., Gruebler, A., Huntley, B., Jager, J., Jodha, N.S., Kasperson, R.E., Mabogunje, A., Matson, P., (2001) 'Environment and Development', *Sustainability Science*, Vol. 27, No. 292, pp. 641 - 642.

- ODPM (2003) *Sustainable Communities: Building for the future*, London: ODPM.
- OECD (2001) *Analytic Report on Sustainable Development*, Paris: OECD
- OECD (2005) *Recent house price developments: The role of fundamentals*, London: OECD.
- O'Keefe, L. (2013) 'Jamboree Housing Corporation Breaks Ground on Its Second Rental Property in Collaboration with Irvine Community Land Trust', available at, <http://www.prweb.com/releases/2013/3/prweb10481790.htm> (accessed 14th May, 2013).
- Olivier, J and Norberg, M. (2010) Positively Skewed Data: Revisiting the Box-Cox Power Transformation. *International Journal of Psychological Research*, Vol. 3, No.1, pp. 68-75.
- ONS (2013) *Official House Price Statistics Explained*, London: ONS.
- Onwuegbuzie, A and Johnson, R. (2004) *Validity issues in mixed methods research*, Paper presented at the annual meeting of the American Educational Research Association, California.
- O'Riordan, T and Stoll-Kleemann, S. (2001) *Biodiversity, Sustainability and Human Communities: Protecting Beyond the Protected*, Cambridge: Cambridge University Press.
- Osborne, J and Costello, A. (2005) 'Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis', *Practical Assessment Research & Evaluation*, Vol. 10, No. 7, Available online, <http://pareonline.net/getvn.asp?v=10&n=7> (accessed 12th June, 2013).
- Osborne, S and McLaughlin, K. (2004), 'The cross-cutting review of the voluntary sector: where next for local government-voluntary sector relationships?' *Regional Studies*, Vol. 38 No. 5, pp. 571-80.
- Oxfam (2013) *Poverty in the UK*, Oxford: Oxfam GB
- Oxford (2011) *Housing Market Analysis Report for National Housing Foundation*, Oxford: Oxford Economics.
- Pallant, J (2005) *Spss Survival Manual: A step by step guide to data analysis using SPSS for Windows*, Sydney: Allen & Unwin.
- Papoulis, A and S. Pillai. (2002) *Probability, Random Variables and Stochastic Processes*, India: McGraw-Hill Education
- Paterson, B. (2010) *How do you set up and run a successful CLT?* Salford: CFS.

Paterson, E and Dunn, M (2009) 'Perspectives on utilising Community Land Trusts as a vehicle for affordable housing provision' *Local Environment*, Vol. 14, No. 8, pp. 749–764.

Paterson, E and Dunn, M. (2009) 'Perspectives on utilising Community Land Trusts as a vehicle for affordable housing provision', *Local Environment*, Volume 14, Issue 8, September, pp. 749-764.

Patton, Q (2002). *Qualitative research and evaluation methods*, CA: Sage.

Pearson and Reidy (2007) *Statistics without Maths for Psychology*, Essex: Pearson Education Limited.

Performance and Innovation Unit (2002) *Social Capital, a draft discussion paper*, London: PIU.

Piper, M (2005) 'Partnership and participation in planning and management of river corridors', *Planning, Practice, & Research*, Vol. 20 No. 1, pp. 1-22

Portes, A (1998) 'Social capital: its origins and applications in modern sociology' *Annual Review of Sociology*, Vol. 24, no. 1, pp. 1-24.
pp. 74-93.

Prendergast, J (2008) *Disconnected citizens: is community empowerment the solution?*, London: SMF

Pretty, D and Hackett, P. (2009) *Mind the Gap: Housing Supply in a Cold Climate*, London: The Town and Country Planning Association.

Price Waterhouse (1995) *Tenants in Control: an Evaluation of Tenant-led Housing Management Organisations*, Delaware: Department of the Environment.

Proxenos, S. (2002), 'Homeownership rates: a global perspective', *Housing Finance International*, Vol. 17, No. 2, pp. 3-7.

Putnam, R. (1996) 'Who killed civic America?', *Prospect*, pp. 66-72.

Putnam, R. (2000), *Bowling Alone: The Collapse and Revival of American Community*, New York: Simon & Schuster.

Randall, C and ONS (2011) *Housing: Social Trends*, London: ONS

Reed, R. and Wilkinson, S. (2009) 'Affordable Housing in the Context of Social Sustainability', *paper presented at Glasgow ISA International Housing Conference*, 1st-14th September.

Rees, J., Mullins, D. and Bovaird, T. (2012) 'Third sector partnerships for public service delivery: an evidence review' Working Paper 60, Third Sector Research Centre.

- Remenyi, D. and Williams, B. (1996) 'The nature of research: qualitative or quantitative, narrative or paradigmatic?', *Information systems journal*, Vol.6, Issue 2, April, pp. 131-146.
- Richards, R. (1984) 'The Right to Buy provision reconsidered', *Property Management*, Vol. 2, No. 1, pp. 27- 32.
- RICS Economics (2010) *Owner-occupier rates set to fall further on both sides of the Atlantic*, London: RICS.
- Rigdon, E. (1998), "Structural equation modelling", in Marcoulides, G.A. (Ed.), *Modern Methods for Business Research*, Lawrence Erlbaum Associates, Mahwah, NJ, pp. 251-294.
- Rodgers, D. (2009) *New foundations Unlocking the potential for affordable homes*, London: Cooperative Party.
- Rubin, J and Rubin, S. (2005) *Qualitative interviewing*, London: Sage.
- Rydin Y and Pennington M. (2000), 'Public Participation and Local Environmental Planning: The Collective Action Problem and the Potential of Social Capital', *Local Environment*, Vol. 5, No. 2, pp. 153-169.
- Salant, P and Dillman, A. (1994) *How to conduct your own survey*, New York: John Wiley and Sons.
- Saphiere, H. (1996) 'Productive behaviors of global business teams' *International Journal of Intercultural Relations*, Vol. 20, no. 2, pp. 227-259.
- Sarantakos, S. (2005). *Social Research*, London: Palgrave Macmillan
- Saunders, M., Lewis, P and Thornhill, A. (2007) *Research Methods for Business Students*, London: Pitman.
- Seale, C. (2004) *Qualitative research practice*, London: Sage.
- Sejjaaka, S and Ntayi, J. (2013) 'A model for effective board governance in Uganda's services sector firms', *Journal of Accounting in Emerging Economies*, Vol. 3, No. 2, pp. 125-144.
- Shapely, P. (2007) *The politics of housing: power, consumers and urban culture*, Manchester: Manchester University Press.
- Shucksmith, M. and Henderson, M. (1995) *A Classification of Rural Housing Markets*, London: Department of the Environment.

- Sinner, J., Baines, J., Crengle, H., Salmon, G., Fenemor, A and Tipa, G. (2004) *Sustainable Development: A summary of key concepts*, New Zealand: Ecologic Research Report No. 2
- Smith, J. (2004a) *Understanding Demand for Homeownership: Aspirations, Risks And Rewards*, London: Housing Finance.
- Smith, J. (2004b) *Exploring Attitudes to Housing Wealth and Retirement*, London: Housing Finance.
- Smith, J. (2005) *Attitudes to Home-Ownership and Moving in 2004*, London: Housing Finance
- Smith, J., Pannell, B., Holmans, A. and Thom, A. (2005) *Understanding First-Time Buyers*, London: Council of Mortgage Lenders.
- Smith, M. (1988) *Contemporary communication research methods*, CA: Wadsworth Inc.
- Smith, S. (2005) *Banking on housing? Speculating on the role and relevance of housing wealth in Britain*, York: Joseph Rowntree Foundation.
- Smith, S. (2008) 'Owner-occupation: at home with a hybrid of money and materials' *Environment and Planning A*, Vol. 40, pp. 520 – 535.
- Smith, S. and Searle, B. (2006) 'Dematerialising Money? Observations on the Flow of Wealth from Housing to Other' Things Housing Studies', Vol. 23, no.1, pp. 21-43
- Smith, S., Easterlow, D and Munro, M. (2004) 'Housing for Health: Does the Market Work?' *Environment and Planning*, Vol. 36, pp. 579-600
- Smyth, J. (1992) 'An analysis of the strategic implications of increasing competition for a not for profit organization', unpublished thesis, Portsmouth University, 1992 *Sourcebook*, California: Sage.
- Smyth, J. (1997) 'Competition as a means of procuring public services: Lessons for the UK from the US experience', *International Journal of Public Sector Management*, Vol. 10 No. 1, pp. 21 – 46.
- Smyth, D (1992) 'An analysis of the strategic implications of increasing competition for a not for profit organization', unpublished thesis, Portsmouth University, 1992
- Southern, R. (2002), 'Understanding multi-sectoral regeneration partnerships as a form of local governance', *Local Government Studies*, Vol. 28 No. 2, pp. 16-32.
- Spangenberg, H and Valentine, A (1999) *Indicator for sustainable communities*, Wuppertal: Institute for Climate, Environment and Energy.

Stanley, M; McCord, M; Berry, J; Haran; M and Davis, P (2011) 'The implications of mortgage finance on housing market affordability', *International Journal of Housing Markets and Analysis*, Vol. 4 Iss: 4 pp. 394 – 417

Stebbins, R. (2001) *Exploratory research in the social sciences*, London: Sage.

Steele, A and Todd, S. (2004), 'New developments for key worker housing in the UK', *Structural Survey*, Vol. 22, No. 4, pp. 179 – 189

Stenbacka, C. (2001) 'Qualitative research requires quality concepts of its own' *Management Decision*, Vol. 39, No. 7, pp. 551-555.

Stephen, M. (ed) (2008) *Housing market recessions and sustainable homeownership*, York: Joseph Rowntree Foundation.

Stephens M, Whitehead C, Munro M (2005) *Lessons from the Past, Challenges for the Future for Housing Policy: An Evaluation of English Housing Policy 1975-2000*, London: Office of the Deputy Prime Minister.

Stoker, G. (2011) 'Was local governance such a good idea? A global comparative perspective' *Public Administration*, Vol. 89, no.1, pp.15-31

Stone, M (2006) 'What is housing affordability? The case for the residual income approach', *Housing Policy Debate*, Vol.17, No. 1

Stribling, D. (2013) 'Ground Broken on Affordable Housing in Irvine', available at, <http://www.multihousingnews.com/news/ground-broken-on-affordable-housing-in-irvine/1004075212.html> (accessed 14th May, 2013)

Sultana, M. (2002) 'Job/Housing Imbalance and Commuting Time in the Atlanta Metropolitan Area: Exploration of Causes of Longer Commuting Time' Vol. 23, no. 8, November, pp. 728-749.

Swan, R. (1972) *The Community Land Trust a Guide to a New Model for Land Tenure in America*, Vermont: Centre for Community Economic Development.

Szreter, S. (2000) *Social capital, the economy, and education in historical perspective Social: Capital: Critical Perspectives*, Oxford: Oxford University Press.

Tatch, J. (2006) *Will the Real First-Time Buyers Please Stand Up?* London: Housing Finance.

Tatch, J. (2007) *Affordability – Are Parents Helping?* London: Housing Finance

TCPA (2008) *Planning Community Needs*, London: Colin Buchanan.

Teddle, C and Yu, F. (2007) 'Mixed Methods Sampling: A Typology with Examples', *Journal of Mixed Methods Research*, Vol. 1, No. 1, pp. 77–100

Thaden, E. and Rosenberg, G. (2010) *'Outperforming the Market: Delinquency and Foreclosure Rates in Community Land Trusts'*, Massachusetts: Lincoln Institute of Land Policy.

Thompson, D (2011) 'Social Capital and its Popularity', *International Journal of Social Inquiry*, Vol. 4, No. 1, pp. 2-21.

Treese, C. (2006) *United States Community Associations: Condominiums, Cooperatives and Planned Communities*, London: Adrenaline Media Ltd

Trochim, W. (2006) *Research Methods Knowledge Base*, Ohio, Atomic Dog Publishing

Tym, R. (2003) *Cambridge Sub Region Key Worker Housing Research*, London: CSRAHG.

Ullman, J (2006) 'Structural Equation Modelling: Reviewing the Basics and Moving Forward', *Journal of Personality Assessment*, Vol. 87, No. 1, pp. 35-50.

UN Department of Economic and social Affairs (1997), *Working list of sustainable Development*, New York: UN.

UNESCO (1995) 'Declaration of Principles on Tolerance', available at, http://portal.unesco.org/en/ev.phpURL_ID=13175&URL_DO=DO_TOPIC&URL_SECTION=201.html (accessed 12th May, 2013).

UrbAct (2005) *Building Sustainable Urban Communities*, London: UrbAct.

Urban Research Centre (2008) *Housing Affordability Literature Review and Affordable Housing Program Audit*, Sydney: University of Western Sydney.

Vallejo., Nancy and Pierre, H. (2004) *Governance and Multi-stakeholder Processes*, Winnipeg: International Institute for Sustainable Development

Varady, D. (2012) 'A Review of 'The community land trust reader'', *Journal of the American Planning Association*, Vol. 78 No. 2, pp. 216-217

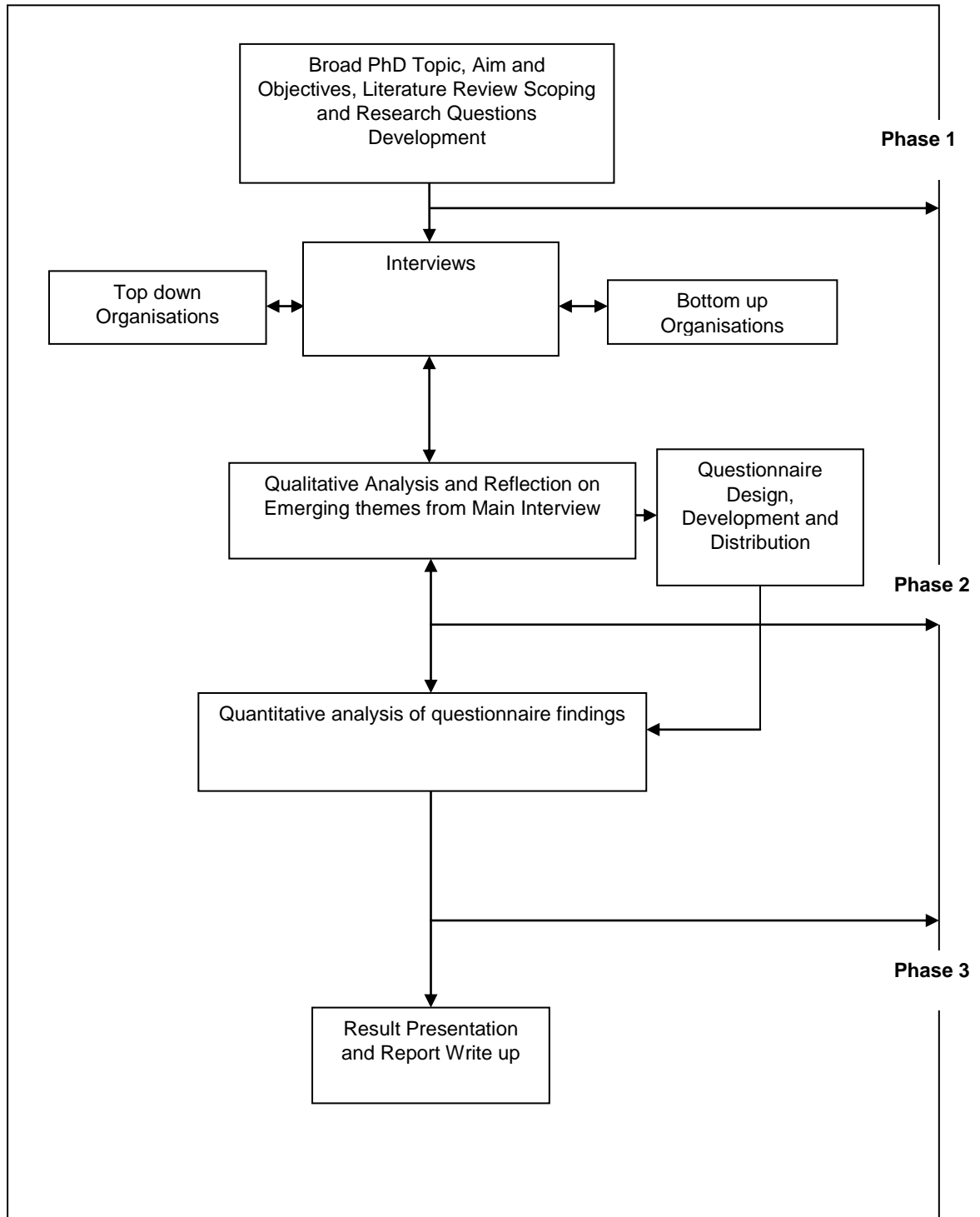
Visser, S., Krosnick, A, Marquette, J. and Curtin, M. (1996) 'Mail surveys for election forecasting? An Evaluation of the Columbus Dispatch Poll' *Public Opinion Quarterly*, Vol. 60, No. 2, pp. 181-227.

Wallace, A. (2009) *Rapid Evidence Assessment of the economic and social consequences of worsening housing affordability*, York: University of York.

Walter, M. (2009) *Social Research Methods*, London: Falmer Press

- Weiner, I., Schinka, J and Velicer, W (2012) *Handbook of Psychology, Research Methods in Psychology*, Oxford: John Wiley & Sons.
- Weiss, K. (2005) *The Community Land Trust report: creating permanent affordable homeownership opportunities in Austin, Texas*, Texas: Neighbourhood Housing & Community Development.
- White, K. (ed). (1982) *The Community Land Trust Handbook*, Pennsylvania: Rodale Press.
- Whitehead, C and Gaus, K. (2007) *At Any Cost? Access to Housing in a Changing Market Place*, London: Shelter.
- Widaman, K and Thompson, J (2003) 'On Specifying the Null Model for Incremental Fit Indices in Structural Equation Modelling', *Psychological Methods*, Vol. 8, No. 1, 16-37
- World Commission on Environment and Development (1987) *Our Common Future*, Oxford: University Press, Oxford.
- Wu, J and Cho, S. (2007) 'The effect of local land use regulations on urban development in the Western United States', *Journal of Regional Science and Urban Economics*, Vol. 37, pp. 69-87.
- Wu, J. and Laws, D. (2003), "Trust and other-anxiety in negotiations: dynamics across boundaries of self and culture", *Negotiation Journal*, Vol. 19 No. 4, pp. 329-67.
www.communities.gov.uk/documents/statistics/pdf/1750765.pdf.
- Wynekoop, L (1992) 'Strategies for Implementation Research: Combining Research Methods', *Pro-ceedings of the International Conference on Information Systems*, Dallas, December 1992, pp. 185-193.
- Yin, R. (1984) *Case Study Research: Design and Methods*, California: Sage.

APPENDIX 1: RESEARCH PLAN



APPENDIX 2: CONSENT INFORMATION SHEET



CONSENT/ INFORMATION SHEET

HOUSING RESEARCH SURVEY

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What is the purpose of the study?

The research is informed on the grounds that there are limitations in the effectiveness of traditional affordable housing system in the UK, particularly in ownership and community involvement. Literature has also revealed the CLT to be a potentially capable way of increasing affordable housing ownership however the CLT has underperformed in the UK's affordable housing stock. On this premise, the research aims to study the reason for the poor performance of the CLT amongst the UK's affordable housing stock and then find ways of improving its performance. To achieve this aim, the researcher will interview some members of the public particularly with respondents chosen from affordable housing and community ownership organisations. There will be some semi structured interviews with affordable housing related practitioners and community organisations. Questionnaire surveys would be targeted at members of the general community to ascertain research specific perceptions.

Why have I been invited to participate?

As mentioned earlier, some interviews will be held on a one-on-one basis with some research focused affordable housing practitioners in housing institutions (Top Down) and community based (Bottom Up) organisations, but to get a very wide view of the nature of the problem at hand so as to propose a broad scoping solution, there is a need for this semi-structured interview/questionnaire. Hence the reason why you have been chosen is because your opinion and personal experience is greatly valued and will possibly shape the ultimate outcome of this research.

Do I have to take part?

It is up to you to decide whether or not to take part, and if you do decide to take part you are still free to withdraw at any time and without giving a reason.

What are the possible disadvantages and risks of taking part?

This survey should not cost you anything more than your time.

What are the possible benefits of taking part?

The benefits of this study are many, some of them are; the results will further the understanding of why the CLT underperformed in the UK despite its relatively long history, its potential capability to improve affordable housing ownership and ways in which its representation in the UK's affordable housing stock can be improved upon. If the outcomes are translated into policies, it will go a long way in improving the current state of Community Land Trusts in affordable housing provision and ownership.

Will what I say in this study be kept confidential?

As all interview sessions will be audio recorded and notes will be taken as well. The data collected will be treated with strict confidentiality; hence data obtained will only be used for the above research, and will not be disclosed to any other person, or be used for other purposes. All data gathered during the interview will also be destroyed after the final results of the research has been approved and published.

What should I do if I want to take part?

To take part, all you have to do is to respond to questions asked as freely as possible.

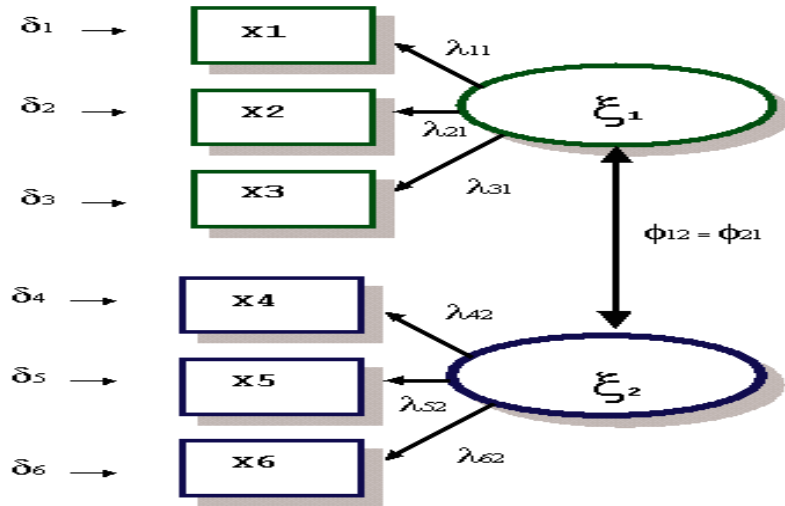
What will happen to the results of the research study?

The results of this survey will be used for a thesis and they will be published. A copy of the published thesis will be available at appropriate University of Salford libraries; also a summary can be made available on request. Thanks for taking time to read this information.

Researcher: Oladotun Ayoade, Research Student, School of the Built Environment, Maxwell Building, Room 413, University of Salford, Greater Manchester M5 4WT, United Kingdom.

APPENDIX 3: SEM FITNESS INDICES

Model Specification



The relationships for this part of the measurement model can now be specified in a set of *factor equations* in a scalar form:

$$\begin{aligned}
 x_1 &= \lambda_{11}\xi_1 + \delta_1 & x_2 &= \lambda_{21}\xi_1 + \delta_2 \\
 x_3 &= \lambda_{31}\xi_1 + \delta_3 & x_4 &= \lambda_{42}\xi_2 + \delta_4 \\
 x_5 &= \lambda_{52}\xi_2 + \delta_5 & x_6 &= \lambda_{62}\xi_2 + \delta_6
 \end{aligned} \quad (1)$$

δ_i is the residual variable (error) which is the unique factor affecting x_i . λ_{ij} is the loading of the observed variables x_i on the common factor ξ_j .

Mathematically, the relationship between the observed variables and the factors is expressed as matrix equation

$$x = \Lambda_x \xi + \delta \quad (2)$$

Most of the calculations are performed as matrix computations because SEM is based on covariance matrices.

To translate equation (1) into a more matrix friendly form, we write:

$$x_1 = \lambda_{11}\xi_1 + 0\xi_2 + \delta_1 \quad (3a)$$

$$x_2 = \lambda_{21}\xi_1 + 0\xi_2 + \delta_2 \quad (3b)$$

$$x_3 = \lambda_{31}\xi_1 + 0\xi_2 + \delta_3 \quad (3c)$$

$$x_4 = 0\xi_1 + \lambda_{42}\xi_2 + \delta_4 \quad (3d)$$

$$x_5 = 0\xi_1 + \lambda_{52}\xi_2 + \delta_5 \quad (3e)$$

$$x_6 = 0\xi_2 + \lambda_{62}\xi_2 + \delta_6 \quad (3f)$$

Mathematically, the relationship between the observed variables and the factors is expressed as matrix equation

$$x = \Lambda_x \xi + \delta \quad (4)$$

And the matrix form for the measurement model is now written in a matrix form:

$$\begin{bmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \\ x_5 \\ x_6 \end{bmatrix} = \begin{bmatrix} \lambda_{11} & 0 \\ \lambda_{21} & 0 \\ \lambda_{31} & 0 \\ 0 & \lambda_{42} \\ 0 & \lambda_{52} \\ 0 & \lambda_{62} \end{bmatrix} \begin{bmatrix} \xi_1 \\ \xi_2 \end{bmatrix} + \begin{bmatrix} \delta_1 \\ \delta_2 \\ \delta_3 \\ \delta_4 \\ \delta_5 \\ \delta_6 \end{bmatrix} \quad (5)$$

x_1 is defined as a linear combination of the latent variables ξ_1 , ξ_2 and δ_1 .

The coefficient for x_1 is λ_{11} indicating that a unit change in a latent variable ξ_1 results in an average change in x_1 of λ_{11} units.

The coefficient for ξ_2 is fixed to zero.

Each observed variable x_i has also residual factor δ_i which is the error of measurement in the x_i 's on the assumption that the factors do not fully account for the indicators.

The covariances between factors in Figure 5 are represented with arrows connecting ξ_1 and ξ_2 .

This covariance is labeled $\phi_{12} = \phi_{21}$ in Φ .

$$\Phi = \begin{bmatrix} \phi_{11} & \phi_{12} \\ \phi_{21} & \phi_{22} \end{bmatrix} \quad (6)$$

The diagonal elements of Φ are the variances of the common factors.

Variances and covariances among the error variances are contained in Θ .

In this model, error variances are assumed to be uncorrelated:

$$\Theta = \begin{bmatrix} \theta_{11} & 0 & 0 & 0 & 0 & 0 \\ 0 & \theta_{22} & 0 & 0 & 0 & 0 \\ 0 & 0 & \theta_{33} & 0 & 0 & 0 \\ 0 & 0 & 0 & \theta_{44} & 0 & 0 \\ 0 & 0 & 0 & 0 & \theta_{55} & 0 \\ 0 & 0 & 0 & 0 & 0 & \theta_{66} \end{bmatrix} \quad (7)$$

Because the factor equation (4) cannot be directly estimated, the covariance structure of the model is examined.

Matrix Σ contains the structure of covariances among the observed variables after multiplying equation (4) by its transpose

$$\Sigma = E(xx') \quad (8)$$

and taking expectations

$$\Sigma = E[(\Lambda\xi + \delta)(\Lambda\xi + \delta)'] \quad (9)$$

we apply the matrix algebraic information Next that the transpose of a sum matrices is equal to the sum of the transpose of the matrices, and the transpose of a product of matrices is the product of the transposes in reverse order (see Backhouse et al., 1989):

$$\Sigma = E[(\Lambda\xi + \delta)(\xi'\Lambda' + \delta')] \quad (10)$$

Applying the distributive property for matrices we get

$$\Sigma = E[\Lambda\xi\xi'\Lambda' + \Lambda\xi\delta' + \delta\xi'\Lambda' + \delta\delta'] \quad (11)$$

Next we take expectations

$$\Sigma = E[\Lambda\xi\xi'\Lambda'] + E[\Lambda\xi\delta'] + E[\delta\xi'\Lambda'] + E[\delta\delta'] \quad (12)$$

Since the values of the parameters in matrix Λ are constant, we can write

$$\Sigma = \Lambda E[\xi\xi'] \Lambda' + \Lambda E[\xi\delta'] + E[\delta\xi'] \Lambda' + E[\delta\delta'] \quad (13)$$

Since $E[\xi\xi'] = \Phi$, $E[\delta\delta'] = \Theta$, and δ and ξ are uncorrelated, previous equation can be simplified to *covariance equation*:

$$\Sigma = \Lambda\Phi\Lambda' + \Theta \quad (14)$$

The left side of the equation contains the number of unique elements $q(q+1)/2$ in matrix Σ .

The right side contains $qs + s(s+1)/2 + q(q+1)/2$ unknown parameters from the matrices Λ , Φ , and Θ .

Unknown parameters have been tied to the population variances and covariances among the observed variables which can be directly estimated with sample data.

Adapted from (Nokelainen, 2009)

FITNESS INDICES

CFI

The comparative fit index (**CFI**; Bentler, 1990) is given by.

$$CFI = 1 - \frac{\max(\hat{C} - d, 0)}{\max(\hat{C}_b - d_b, 0)} = 1 - \frac{NCP}{NCP_b}$$

where \hat{C} , d , and NCP are the discrepancy, the degrees of freedom and the noncentrality parameter estimate for the model being evaluated, and \hat{C}_b , d_b and NCP_b are the discrepancy, the degrees of freedom and the noncentrality parameter estimate for the baseline model.

The **CFI** is identical to the McDonald and Marsh (1990) relative noncentrality index (**RNI**),

$$RNI = 1 - \frac{\hat{C} - d}{\hat{C}_b - d_b}$$

CFI values close to 1 indicate a very good fit.

RMSEA

F_0 Incorporates no penalty for model complexity and will tend to favour models with many parameters. In comparing two nested models, F_0 will never favour the simpler model. Steiger and Lind (1980) suggested compensating for the effect of model complexity by dividing F_0 by the number of degrees of freedom for testing the model. Taking the square root of the resulting ratio gives the population "root mean square error of approximation", called RMS by Steiger and Lind, and RMSEA by Browne and Cudeck (1993).

Testing structural equation models Statistically-based tests for the number of common

factors.

$$\text{population RMSEA} = \sqrt{\frac{F_0}{d}}$$

$$\text{estimated RMSEA} = \sqrt{\frac{\hat{F}_0}{d}}$$

The columns labelled **LO 90** and **HI 90** contain the lower limit and upper limit of a 90% confidence interval for the population value of **RMSEA**. The limits are given by

$$\text{LO 90} = \sqrt{\frac{\delta_L/n}{d}}$$

$$\text{HI 90} = \sqrt{\frac{\delta_U/n}{d}}$$

Rule of thumb:

"Practical experience has made us feel that a value of the RMSEA of about .05 or less would indicate a close fit of the model in relation to the degrees of freedom. This figure is based on subjective judgment. It cannot be regarded as infallible or correct, but it is more reasonable than the requirement of exact fit with the RMSEA = 0.0. We are also of the opinion that a value of about 0.08 or less for the RMSEA would indicate a reasonable error of approximation and would not want to employ a model with a RMSEA greater than 0.1." (Browne and Cudeck, 1993).

Source: IBM AMOS.

APPENDIX 4: SAMPLE QUESTIONNAIRE

HOUSING MODEL SURVEY

New Page

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information.

What is the purpose of the study?

The research is informed on the grounds that there are limitations in the effectiveness of traditional affordable housing system in the UK, particularly in ownership and community involvement.

Why have I been invited to participate?

The questionnaire is targeted at tenants, homeowners and organisations involved in housing, including all other concerned members of the general public. Your opinion and personal experience is greatly valued.

What about confidentiality?

The data collected will be treated with strict confidentiality; hence data obtained will only be used for the above research, and will not be disclosed to any other person, or be used for other purposes. The questionnaire is estimated to take between 8-13 minutes to complete.

Do I have to take part?

It is up to you to decide whether or not to take part, also you are free to withdraw at any time and without giving a reason.

What should I do if I want to take part?

To take part, all you have to do is voluntarily answer the questions asked as freely as possible

SECTION 1

DEMOGRAPHY

To help us better understand and interpret your answers, this questionnaires begins with some questions about you and your basic background.

Personal Profile

1) Please what age category do you fall?

- 18-24
- 25-35
- 36-45
- 46-55
- Above 55

2) Sex

- Male
- Female

3) Marital Status

- Married
- Single

4) Please how would you describe your ethnicity?

- White British
- White Irish
- Other White background
- White and Black Caribbean
- White and Black African
- White and Asian
- Other mixed background
- Indian
- Pakistani
- Other Asian Background
- Caribbean
- African
- Other Black Background
- Chinese
- Other ethnic group

5) Please what level of education would you classify yourself

- Primary/Basic
- Secondary/College
- University

6) How would you describe your employment status?

- Employed in a full time job
- Employed in a part time job
- Self employed
- Unemployed

7) If employed, how would you describe your yearly income range?

- Less than £5000
- £5,000- £9,999
- £10,000- £14,999
- £15,000- £19,999
- £20,000- £25,999
- More than £26,000

8) Do you consider yourself well informed on issues regarding Community Based Housing (CBH) models like the Community Land Trust (CLT)?

- Yes
 - No
-

New Page

SECTION 2

COMMUNITY PERCEPTION AND HOUSING NEEDS

This section will help this study understand your perception of your community and housing needs

Please note: Community involvement in this research context refers to the opportunity, capacity and willingness of individuals to work collectively to shape public life.

Section 1: *This section helps understand the perception of your community and your housing plans and needs*

9) How long have you lived in your community?

- Less than 1 year
- 1-3 years
- 3-6 years
- 3-10 years
- more than 10 years

10) Do you consider yourself to fall in any of these categories?

Please Note: A First Time Buyer (FTB) refers to an individual who is yet to get on the property ownership ladder (buy a property), but does have the potential or rather intends to.

- First time buyer
- Home owner
- Other

11) How will you describe your current geographical location?

- Urban
- Suburban
- Rural

12) How would you describe your current housing arrangement?

Please Note: Community based housing could refer to affordable housing provided by any of Community Land Trust (CLT), Cooperative Housing, Development Trusts and other mutual affordable housing models.

- Own it outright
- Buying it with the help of mortgage
- Rent
- Live rent free
- Community Based Housing
- Other

13) How would you describe your proprietor?

- Local Authority/Council
- Housing Association
- Housing Cooperative
- Community land Trust
- Development Trust
- Private Landlord
- Other
- Not applicable

14) Are you satisfied with your current housing arrangement?

- Yes
- No

15) If your answer is 'No' to the above question, can you please identify the most important factors that might be responsible?

Please Note: Quality of neighbourhood and environment the context of this research could refer to any of the following: quality of shops, local facilities and condition/ design of houses around the neighbourhood and access networks to/ around homes.

- Quality of neighbourhood/ environment
- Closeness to employment
- Quality of housing
- Neighbours/ community spirit
- Security in homes
- Size of home/ Size of garden
- Closeness to relatives
- Cost of heating homes
- Safety of neighbourhood / area
- Closeness to place of worship
- Closeness to community/ cultural facilities
- Cost of housing (i.e. rent/ mortgage)
- Knowledge of neighbourhood/ area
- Public transport network
- Other
- Not applicable

16) Are you planning or currently saving towards home ownership?

- Yes
 No

17) By how many miles are you willing to relocate to secure affordable housing?

- 0 miles
 5-10 miles
 10-20 miles
 30-60 miles
 more than 60 miles

New Page
SECTION 3

COMMUNITY INITIATIVES, INVOLVEMENT AND THE NEED FOR SOCIAL CAPITAL

This section will help this study understand the lack of involvement in community initiatives and the need for social capital development

18) How will you rate your level of support for development of community owned affordable housing built to meet the needs of local people in your community?

- Very low
 Low
 Neutral
 High
 Very high

19) How will you rate your support for asset transfer (e.g land and properties) to communities to develop/manage affordable housing in your community?

- Very low
 Low
 Neutral
 High
 Very high

20) Here are some statements about housing ownership options, please indicate your level of agreement/ disagreement on the following issues

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Owning both the land (freehold) and house/property is a priority to me even if I have to buy at market rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Owning the house/property, but not the land (freehold) is okay as long as it is affordable i.e less than market rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21) Are you involved with any of the following community development networks? If no please indicate N/A and If yes, please rate your level of satisfaction with their activities accordingly

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	N/A
National Community Land Trust Network	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social networks (cultural events, sporting events)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education (libraries)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affordable housing organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community awareness, skill harnessing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22) The following are general individual concerns/problems when buying a house, Please rate on the level of importance

	Very unimportant	Unimportant	Neutral	Important	Very important
Credit	()	()	()	()	()
Mortgage Financing	()	()	()	()	()
Down payment	()	()	()	()	()
Income	()	()	()	()	()
Not being able to own the land (freehold)	()	()	()	()	()

23) The following are factors that might affect your level of involvement in community development initiatives? Please rate each one on a degree of importance accordingly

	Very unimportant	Unimportant	Neutral	Important	Very important
Social Acceptance/ Fear of Rejection	()	()	()	()	()
Level of Education	()	()	()	()	()
Language	()	()	()	()	()
Cultural Background/ Difference	()	()	()	()	()
Racism/Discrimination	()	()	()	()	()
Lack of Opportunity to Participate	()	()	()	()	()
Unawareness of Community Groups/Forums/organisations	()	()	()	()	()
Family Commitments	()	()	()	()	()
Work and other Commitments	()	()	()	()	()
Immigration Status	()	()	()	()	()
Lack of interest (I can't be bothered)	()	()	()	()	()
Lack of Trust in institutions/ involvement process	()	()	()	()	()
Crime/ Fear of Crime	()	()	()	()	()
Questionable affiliations of groups involved in the initiatives	()	()	()	()	()
Unreliable democratic processes/ polls	()	()	()	()	()

Social Participation

24) Here are some statements about your involvement in community activities, please rate your answers accordingly

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I currently help out or belong to a group in my community (Formal, Informal or religious)	()	()	()	()	()
I am involved in a Community Led Plan/activity in my local area	()	()	()	()	()
I get informed and carried along by the local authorities regarding community activities and led plans	()	()	()	()	()

Social Support network and Trust

25) Here are some statements about the level of support and trust received or given within your social network, please indicate your level of agreement or disagreement accordingly

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I do get help from people in my community	()	()	()	()	()
I do get help from friends when needed	()	()	()	()	()
I usually visit neighbours/friends/relatives/work colleagues	()	()	()	()	()
I feel most people can be trusted *	()	()	()	()	()
I have trust in government institutions and authorities *	()	()	()	()	()

Civic participation and tolerance to diversity

26) Here are some statements about how you get along in your community, please indicate your level of agreement or disagreement accordingly

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I know where to go when I do require information about my community	()	()	()	()	()
I do try to speak out if I am involved in a dispute in my neighbourhood	()	()	()	()	()
If I disagree with a popular notion in my community, I do feel free to speak out	()	()	()	()	()
I think multiculturalism improves the wellbeing of my local community?	()	()	()	()	()
I do not mind living among people with a different lifestyle? *	()	()	()	()	()

New Page
SECTION 4

IMPACT OF INSTITUTION BARRIERS ON COMMUNITY BASED HOUSING

This part helps to improve the understanding of the impact of institutional barriers on CBH (Community Based Housing)/CLT (Community Land Trust).

Please note: This section is optional if your answer is 'No' for question no.8.

Organisation approach and the concept of affordability

27) Here are some statements on approach to affordable community based housing, please indicate your level of agreement/ disagreement accordingly

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
It is important to keep affordable housing affordable (in perpetuity) for subsequent owners or tenants					
Market indicators only should not determine who can access housing *					
Community based housing ownership/rental models should be more accessible and widespread					
Government institutions have conflicting relationships with community housing organisations					
Asset transfer and community housing information is not readily accessible from local/planning authorities *					

Prescriptive land use policies and the inaccessibility of limited options

28) Here are some statements about land use and community assets, please indicate your level of agreement/disagreement

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Planning policies and procedures are not favourable towards CBH/CLT	()	()	()	()	()
There are difficulties obtaining land below market value for CBH/CLT	()	()	()	()	()
There is room for improvement on the overall level of support for Community Based Housing/CLT models from local/councils/planning authorities	()	()	()	()	()
Affordable housing should not be prohibited on exceptional sites such as agricultural land and green belt land *	()	()	()	()	()
CBH/CLT can help with the issue of empty and derelict homes	()	()	()	()	()

Preference and enabling capacity in the housing sector

29) Here are some statements about community based housing and the housing sector, please indicate your level of agreement/disagreement accordingly

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Community based housing models appear to be isolated from the mainstream in applicability	()	()	()	()	()
Community based housing development/model doesn't get enough support from government housing agencies *	()	()	()	()	()
Community based Housing/CLTs do face difficulties meeting up with prequalification procedures for government funding	()	()	()	()	()
There are limitations in mainstream recognition of CLT strengths in the housing sector	()	()	()	()	()
The CLT model is ready for mainstream adoption by major affordable housing developers in the housing sector	()	()	()	()	()

Housing Institutional conduct and CLT limitations

30) The following are statements about housing institutional dealings with CBH/CLT, please indicate your level of agreement/disagreement accordingly

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Policies favour housing associations models over CBH models for affordable housing development	()	()	()	()	()
Investors/mortgage lenders favour housing associations over CLTs for affordable housing development	()	()	()	()	()
CBH/CLT do face problems with financing acquisition of land, short term loans and credit availability	()	()	()	()	()
CBH/CLT do face problems with mortgage finance for their homebuyers	()	()	()	()	()
CBH/CLT face shortage of staff and necessary skills for both implementation and running	()	()	()	()	()

Please note: Leasehold enfranchisement in the context of this research refers to the right of CLT homeowners (leaseholders) to buy the freehold of the land.

Corporate will and capacity to collaborate

31) The following are statements on collaborative practices within the housing sector in regards to CBH, please indicate your level of agreement/disagreement accordingly

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The level of collaboration between housing associations and CBH/CLT practitioners is not satisfactory *	()	()	()	()	()
Terms of collaboration between CLTs and housing associations (e.g leasehold enfranchisement) could limit CLT potential	()	()	()	()	()
The fate of CLT success is too reliant on housing associations	()	()	()	()	()
The quality of affordable housing delivery can be improved if more emphasis is given to the CLT model	()	()	()	()	()
Ethical loan structures can help CLT growth if adopted more by mainstream lenders	()	()	()	()	()

All replies to this questionnaire survey are anonymized and will be treated with utmost confidentiality. Thank you for taking part. Your response is very important to us.
