

**HOME OWNERSHIP IN THE GAP-HOUSING MARKET IN SOUTH AFRICA**

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# **HOME OWNERSHIP IN THE GAP-HOUSING MARKET IN SOUTH AFRICA**

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## DECLARATION

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The data used in the compilation of this treatise were collected from both primary and secondary sources. Where secondary sources have been used, reference has been made to them.

This research document is my own work and it has not previously been submitted to any other institution.

April 2017

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Date

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## **ABSTRACT**

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The access to adequate housing is a constitutional right, in terms of Section 26 (1) of the Constitution of the Republic of South Africa, Act 108 of 1996. Access to housing in South Africa is still an ideal and not a reality. The increase in housing prices reduces affordability, which creates a barrier to the housing market for South Africans to fully participate. The South African housing market is divided, based on the affordability of households, with a gap within the property market. The gap-housing market is a market, which does not receive a government subsidy; and furthermore, it does not qualify for bond finance by the private financial institutions. The gap-housing market includes households that earn between R3,500 to R15,000 per month for residential properties valued between R116,703 to R483,481.

The problem is a lack of supply in the gap-housing market to meet the demand; and this is also affected by the poor performance of the subsidy-housing market. The gap-housing market is not traded adequately, due to a lack of supply caused by stricter lending criteria from the banks.

The study was conducted by means of reviewing the related literature and by an empirical study. A survey was conducted using the quantitative approach through a distribution of research questionnaires to different organizations within the judgement sample population. The objective of the study is to review the gap-housing market and to make recommendations. The descriptive survey was conducted among specialists that are participating in the South African housing market.

The findings of the study suggest that there is a relationship between incentive and participation, as well as a relationship between participation – with access, supply and trading in the gap-housing market. This study will contribute to the South African housing market body of knowledge – by addressing the problem of a gap within the housing market.

Keywords: gap-housing market, incentive, participation, subsidy, bond finance.

## TABLE OF CONTENTS

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|   | <b>Page</b> |
|---|-------------|
| ABSTRACT.....   | iii         |
| LIST OF FIGURES .....                                   | x           |
| LIST OF TABLES.....                                     | x           |
| ABBREVIATIONS .....                                     | x           |
| CHAPTER ONE: AN INTRODUCTION TO GAP-HOUSING .....       | 1           |
| 1.1 A Preliminary Review of the Related Literature..... | 2           |
| 1.1.1 Housing in South Africa .....                     | 2           |
| 1.1.2 Gap-housing finance .....                         | 4           |
| 1.1.3 The Gap-housing supply .....                      | 5           |
| 1.1.4 Gap-housing trading market.....                   | 6           |
| 1.1.5 Summary: Preliminary literature review .....      | 8           |
| 1.2 The Problem And Its Setting.....                    | 9           |
| 1.2.1 The statement of the problem.....                 | 9           |
| 1.2.2 The main problem .....                            | 9           |
| 1.2.3 The sub-problems.....                             | 9           |
| 1.3 The Hypotheses .....                                | 9           |
| 1.4 The Delimitations Of The Study .....                | 10          |
| 1.5 The Assumptions.....                                | 10          |
| 1.6 The Definition of Terms.....                        | 11          |
| 1.7 The Importance Of The Study.....                    | 11          |
| 1.8 The Aims And Objectives Of The Study .....          | 11          |
| CHAPTER TWO: A REVIEW OF THE RELATED LITERATURE .....   | 14          |
| 2.1 Introduction .....                                  | 14          |
| 2.2 Expectations .....                                  | 15          |
| 2.2.1 Residential-property finance .....                | 15          |
| 2.2.2 Residential-property development .....            | 15          |
| 2.2.3 Residential-property marketing and trading .....  | 16          |
| 2.2.4 Government-policy position .....                  | 16          |
| 2.2.5 Summary: government-policy position.....          | 20          |
| 2.3 Confirmed Performance .....                         | 20          |
| 2.3.1 Government participation.....                     | 20          |
| 2.3.2 The Gap-housing market finance .....              | 21          |
| 2.3.3 Private residential-property developers.....      | 27          |
| 2.3.4 Realtors in the gap-housing market .....          | 33          |
| 2.4 Conclusion of the related literature review .....   | 38          |

|  | <b>Page</b> |
|--|-------------|
| CHAPTER THREE: THE RESEARCH METHODOLOGY .....                    | 43          |
| 3.1 The Data .....   | 43          |
| 3.1.1 The Primary Data .....                                     | 43          |
| 3.1.2 The Secondary Data .....                                   | 43          |
| 3.1.3 The sampling method .....                                  | 43          |
| 3.2 The Criteria Governing The Admissibility Of The Data .....   | 43          |
| 3.2.1 Standards for data collection .....                        | 43          |
| 3.2.2 Measurement instrument .....                               | 43          |
| 3.2.3 The validity and reliability .....                         | 44          |
| 3.3 Research Design.....   | 44          |
| 3.4 The Research Method .....                                    | 45          |
| 3.4.1 The specific projected treatment of each sub-problem ..... | 46          |
| 3.5 Ethical Considerations .....                                 | 48          |
| 3.5.1 Research Ethics in General .....                           | 48          |
| 3.5.2 Confidentiality .....                                      | 48          |
| 3.5.3 Ethics in Internet Research Studies.....                   | 48          |
| 3.6 Closing Remarks – Ethical Considerations.....                | 48          |
| 3.7 The Qualifications Of The Researcher.....                    | 48          |
| 3.8 Theoretical Framework For The Study .....                    | 48          |
| 3.9 Theoretical Relationship .....                               | 50          |
| 3.9.1 Incentive.....   | 50          |
| 3.9.2 Participation .....  | 52          |
| CHAPTER FOUR: RESULTS, ANALYSIS AND INTERPRETATION.....          | 55          |
| 4.1 The Data Collection .....                                    | 55          |
| 4.2 Analysis Of The Data.....                                    | 56          |
| 4.3 The Empirical Results .....                                  | 56          |
| 4.3.1 Interpretation of the results .....                        | 56          |
| 4.3.2 Part 1: Personal information .....                         | 58          |
| 4.3.3 Part 2: Evaluation of the study .....                      | 62          |
| 4.3.3. Summary: Empirical study.....                             | 102         |
| CHAPTER FIVE: CONCLUSION OF THE EMPIRICAL FINDINGS .....         | 106         |
| 5.1 Introduction .....   | 106         |
| 5.2 The Testing Of The Hypotheses .....                          | 106         |
| 5.3 Hypothesis One .....   | 106         |
| 5.3.1 Conditional statement.....                                 | 106         |
| 5.3.2 Rules of inference .....                                   | 107         |
| 5.4 Hypothesis Two .....   | 108         |
| 5.4.1 Conditional statement.....                                 | 108         |
| 5.4.2 Rules of inference .....                                   | 108         |

|   | <b>Page</b> |
|---|-------------|
| 5.5 Hypothesis Three .....                                    | 109         |
| 5.5.1 Conditional statement.....                              | 109         |
| 5.5.2 Rules of inference .....                                | 109         |
| <br>CHAPTER SIX: CONCLUSION.....                              | <br>111     |
| 6.1 Recommendations for further research .....                | 112         |
| <br>REFERENCES .....  | <br>113     |
| <br>COVERING LETTER TO RESPONDENTS .....                      | <br>125     |
| <br>E-MAIL TO FINANCIAL INSTITUTION RESPONDENTS .....         | <br>127     |
| <br>RESEARCH QUESTIONNAIRE TO FINANCIAL INSTITUTIONS .....    | <br>129     |
| <br>E-MAIL TO PRIVATE-SECTOR DEVELOPERS' RESPONDENTS .....    | <br>133     |
| <br>RESEARCH QUESTIONNAIRE TO PRIVATE-SECTOR DEVELOPERS ..... | <br>135     |
| <br>E-MAIL TO REALTOR RESPONDENTS.....                        | <br>141     |
| <br>RESEARCH QUESTIONNAIRE TO REALTORS .....                  | <br>143     |



## LIST OF FIGURES

---

|             |   | <b>Page</b> |
|-------------|---|-------------|
| Figure 1    | South African housing market  | 22          |
| Figure 2    | Average property price growth   | 24          |
| Figure 3    | Building material price performance - y/y % Change                        | 30          |
| Figure 4    | Full title property replacement cost gap                                  | 31          |
| Figure 5    | Price performance for existing and new properties                         | 31          |
| Figure 6    | Validity and reliability of findings                                      | 44          |
| Figure 7    | Research theoretical framework  | 49          |
| Figure 8.1  | Respondent's level of residential property experience                     | 58          |
| Figure 8.2  | Respondent's gender from financial institution                            | 60          |
| Figure 8.3  | Respondent's age from financial institution                               | 60          |
| Figure 8.4  | Respondent's gender from property developers                              | 60          |
| Figure 8.5  | Respondent's age from property developers                                 | 60          |
| Figure 8.6  | Respondent's gender from realtors   | 61          |
| Figure 8.7  | Respondent's age group from realtors                                      | 61          |
| Figure 8.8  | Respondent's position in the organization                                 | 62          |
| Figure 8.9  | Mean (MS) of property developer's participation in the development scheme | 70          |
| Figure 8.10 | Mean (MS) in the extent of risk in property development                   | 77          |
| Figure 8.11 | Mean (MS) of realtor's participation in residential property              | 88          |
| Figure 9    | Expectation-Confirmation Theory   | 105         |

## LIST OF TABLES

---

|          | <b>Page</b>  |    |
|----------|--|----|
| Table 1  | The South African housing market   | 3  |
| Table 2  | South African statistics of monthly income groups from 15 to 65 years                                | 22 |
| Table 3  | Average normal housing price   | 23 |
| Table 4  | The highest Transfer counts  | 35 |
| Table 5  | The incentive or disincentives of South African gap-housing market                                   | 38 |
| Table 6  | Hypothesis 1: Data collection and interpretation   | 46 |
| Table 7  | Hypothesis 2: Data collection and interpretation   | 47 |
| Table 8  | Hypothesis 3: Data collection and interpretation   | 47 |
| Table 9  | Sample response rate   | 55 |
| Table 10 | The important incentives for financial institutions to participate in the gap-housing                | 63 |
| Table 11 | Non-parametric test of the important incentives for property finance                                 | 64 |
| Table 12 | The important incentives in a property as collateral for mortgage finance                            | 65 |
| Table 13 | Non-parametric test of important incentives for the property as collateral                           | 67 |
| Table 14 | The relationship between secured collateral and financial institution's participation in gap-housing | 68 |
| Table 15 | Non-parametric test of a relationship between collateral and property finance                        | 68 |
| Table 16 | The property developer's participation in the supply of housing                                      | 69 |
| Table 17 | Non-parametric test of property developer's participation  | 71 |
| Table 18 | The important incentives for property developers to supply gap-housing                               | 72 |
| Table 19 | Non-parametric test for important incentives of property developers' participation                   | 75 |
| Table 20 | The risks that affect property developers' supply of gap-housing                                     | 76 |
| Table 21 | Non-parametric test on the extent of risk on property developers' participation                      | 78 |
| Table 22 | The incentives that influence property developers in the supply of gap-housing                       | 79 |
| Table 23 | Non-parametric test of incentives that influence the participation of developers                     | 81 |

|          |  |     |
|----------|--|-----|
| Table 24 | The relationship between incentives and developer's participation in gap-housing                                   | 82  |
| Table 25 | Non-parametric test on the relationship between incentives and developers' participation                           | 83  |
| Table 26 | The relationship between risk and developer's participation in the gap-housing                                     | 83  |
| Table 27 | Non-parametric test of the relationship between risk and developer's participation                                 | 84  |
| Table 28 | The relationship between developers' participation and the supply of gap-housing                                   | 84  |
| Table 29 | Non-parametric test on the relationship between developers' participation and the supply of gap-housing            | 85  |
| Table 30 | Non-parametric test on the correlation between incentive and developers' participation                             | 86  |
| Table 31 | The involvement of the realtors in the marketing of residential property   | 87  |
| Table 32 | Non-parametric test on the participation of realtors in the housing market   | 89  |
| Table 33 | The important incentives for realtors to participate in the marketing of gap-housing                               | 90  |
| Table 34 | Non-parametric test on important incentives that motivate realtors' participation                                  | 92  |
| Table 35 | The incentives that influence realtors' participate in the gap-housing   | 93  |
| Table 36 | Non-parametric test on incentives that influence realtors' participate in the gap-housing market                   | 95  |
| Table 37 | The relationship between realtors' participation and trading of gap-housing  | 96  |
| Table 38 | Non-parametric test on the relationship between the realtors' participation and trading of gap-housing market      | 97  |
| Table 39 | The relationship between financial institutions' participation and access to home ownership                        | 98  |
| Table 40 | Non-parametric test on the relationship between financial institutions' participation and access to home ownership | 98  |
| Table 41 | The extent of the sales performance in the gap-housing market  | 99  |
| Table 42 | Non-parametric test on the extent of sales performance in the gap-housing market                                   | 99  |
| Table 43 | The extent of bond approval in the gap-housing market  | 100 |
| Table 44 | Non-parametric test on the extent of bond approval in the gap-housing market                                       | 100 |
| Table 45 | Non-parametric test on the correlation between incentive and participation of realtors                             | 102 |

## ABBREVIATIONS

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|           |  |
|-----------|--|
| RSA -     | Republic of South Africa                                     |
| NMBM -    | Nelson Mandela Bay Municipality                              |
| NMMU -    | Nelson Mandela Metropolitan University                       |
| DHS -     | Department of Human Settlements                              |
| PIMD SA - | Provincial Indices of Multiple Deprivation of South Africa   |
| UN -      | United Nations   |
| NPC -     | National Planning Commission                                 |
| CoCT -    | City of Cape Town  |
| NHFC -    | National Housing Finance Corporation                         |
| EAAB -    | Estate Agency Affairs Board                                  |
| NHBRC -   | National Home Builders Registration Council                  |
| NURCHA -  | National Urban Reconstruction and Housing Agency             |
| NHFC -    | National Housing Finance Corporation                         |
| RHLF -    | Rural Housing Loan Fund                                      |
| HDA -     | Housing Development Agency                                   |
| SHRA -    | Social Housing Regulatory Authority                          |
| HIP -     | Housing Investment Partners Proprietary Limited              |
| TUHF -    | Trust for Urban Housing Finance Holdings Proprietary Limited |
| CTCHC -   | Cape Town Community Housing Company Proprietary Limited      |
| IHS -     | International Housing Solutions                              |
| FLISP -   | Finance Linked Individual Subsidy Programme                  |
| IRDP -    | Integrated Residential Development Programme                 |
| CGT -     | Capital Gains Tax  |

## CHAPTER ONE: AN INTRODUCTION TO GAP-HOUSING

---

The Constitution of the Republic of South Africa Act 108 of 1996 in Section 26 (1), RSA (1999a: 1255) states that, “everyone has the right to have access to adequate housing.” The Constitution is the supreme law of the country, which makes access to housing an essential right for South Africans. This study focuses on the ideal of a home, rather than the materialism of a house. Sarah Charlton, from the School of Architecture and Planning at the University of the Witwatersrand defines, a “house” as generally taken to be synonymous with a dwelling, or a physical structure; while “home” implies particular social relations or activities within a physical structure (South African Property Owners Association - SAPOA, 2007: 19). Home ownership is registered at the Deeds office with legal rights attached to the title deed in terms of the Deeds registries Act 47 of 1937 (RSA, 1998: 4).

The absence of ownership or entitlement to property would lead to over-exploitation, as well as the absence of an incentive to manage investment or re-investment in the property market (Lai, 2013: 75).

The pre 1994 government of South Africa through various forms of legislation, highlighted by the Group Areas Act, sought to exercise a system of social control and discrimination of racial groups, based on the geographical separation of social spaces (Durrington, 2006: 149). The repeal of the Group Areas Act created an increased demand in historically well-serviced and located neighbourhoods – thus fuelling the demand, increasing prices and the sale of and investment in property (Department of Human Settlements - DHS, 2004: 4). Previously, women were also deprived of participating in the economy and could not afford to buy property (Kajimo-Shakantu & Evans, 2007: 81); and they, therefore, contributed to the number of people that did not have access to adequate housing.

The post 1994 government, by means of the housing policy and strategy, attempted to transform the extremely fragmented, complex and racially based South African human settlement environment and to establish new communities, in order to address the critical nationwide backlog (DHS, 2013: 18). The current social-economic status shows a growth in the South African population from 44. 8 Million People in 2001 to 51. 7 Million people in 2011 (Stats SA, 2012: 57). The assumption of migration patterns by Statistics South Africa implies that Gauteng and the Western Cape Province received the highest number of migrants. While Mpumalanga and the North West Province also received a positive net migration, the Eastern

Cape, the Free State and Limpopo Provinces, on the other hand, experienced a large outflow (Stats SA, 2014c: 12).

The greatest challenge facing the government is the increasing demand for housing, the desperation of the homeless, as well as the bureaucracy of the infrastructure (Othman & Mia, 2008: 239). The housing problems in South Africa have caused the establishment of informal settlements.

The informal settlements in South Africa have decreased from 16.2% in 1999 into 13.6% in 2011 (Stats SA, 2012: 57). In a study done on access to housing in South Africa, Pienaar (2011: 20) suggested that, “for many people in South Africa, access to housing is still an ideal and not a reality.” In general, most South Africans rely on government subsidies and financial institutions to access adequate housing. The financial sector plays a fundamental role in the development of the primary and secondary housing market through bond finance (DHS, 2004: 9). The South African gap-market is considered to be affordable housing from R150,000 to R550,000; while affordability relates to 30% of the gross monthly income (Gahagan, 2013: 4).

There is a lack of properties valued below R300,000.00 and a housing solution of easy access to land – with the involvement of the private sector in high-density development, which would promote access to home ownership for South Africans (Banking Association South Africa - BASA, 2014: 19).

## **1.1 A Preliminary Review of the Related Literature**

### **1.1.1 Housing in South Africa**

Home ownership is generally associated with residential immobility, differentiation, and fragmentation. These issues are viewed as more risky – with the uncertainty of housing price and interest rate fluctuation (Phang, 2011: 39). The South African housing market is affected by the fundamental principles of supply and demand (FinMark Trust, 2006: 4).

The National Planning Commission highlighted that 60% of South African households qualify for subsidised houses, leaving a group representing approximately 25% that do not qualify for a fully subsidised house; yet, they do not earn enough to qualify for a mortgage bond finance. That segment is known as the gap in the housing market (National Planning Commission - NPC, 2011: 271).

The current social and economic state of South Africa segregates the housing market into categories, based on the affordability of households relating to the acquisition of residential property. The South African housing market is divided into the following markets:

**Table 1:** The South African housing market

| <b>Market</b>                               | <b>Monthly gross income</b> | <b>Value of Property</b> |
|---|-----------------------------|--------------------------|
| Subsidy-housing Market, a giveaway market   | R0 – R3,500                 | R0 – R 116,702           |
| Gap-housing Market, a finance-linked market | R3,501 – R9,000             | R116,703 – R233,404      |
| Gap-housing Market, a bonded market         | R9,001 – R15,000            | R 233,405 – R483,481     |
| Normal housing market a bonded market       | R15,001 +                   | R483,482 +               |

Source: Rust (2012: 4)

Table 1 suggests that, the South African housing market is divided into the following categories:

- The Subsidised-housing market is a residential market with properties valued below R116,700 for households that earn an income below R3,500 per month and qualify for government free-housing (DHS, 2004: 9);
- The Gap-housing market with financial linkage is a residential property market that receives government support in terms of the Financial Sector Charter of 2007 and programmes that make a provision for properties valued between R116,703 to R233,404 (Financial and Fiscal Commission, 2012: 17);
- The Gap-housing market is a residential property market, which depends on the mortgage bond financed by financial institutions for properties valued between R 233,405 to R483,481 for households that earn between R9,001 and R15,000 (Financial and Fiscal Commission, 2012: 18), and
- The Normal housing market is a property market that depends on the mortgage finance provided by financial institutions for properties valued above R483,482 and for households that earn above R15,001.00 (Financial and Fiscal Commission, 2012: 18).

The rapid growth in the market value of residential properties and the increase in the number of first-time buyers, has caused a growing number of consumers that cannot afford to buy residential property (Shave, 2007: 4). The increase in consumer demand has caused an increase

in residential property prices, which impacts on the affordability of the gap-housing market. The South African housing market does have a gap that is negatively affecting adequate access to home ownership, due to the lack of affordability for mortgage finance, which limits the participation of financial institutions.

### **1.1.2 Gap-housing finance**

The main players of property finance in South African include commercial banks, micro - finance institutions and alternative lenders, who perceive the low-income housing sector as a high-risk sector (Kajimo-Shakantu & Evans, 2007: 81 - 82). The affordable segment of the residential property market continues to be affected by the low appetite of banks for mortgage lending (National Housing Finance Corporation - NHFC, 2014: 17). The residential property is an asset that can be used to obtain loans; but residential property prices in South Africa increase faster than the rate of saving for most South Africans (Cameron, 2002: 4).

There are several social, cultural and economic reasons that have been suggested for the commercial banks' unwillingness to lend to low-income earners. These include: a cultural resistance to accept the low-income earners' willingness to repay; a belief that they do not have sufficient money for savings; a lack of literacy skills to fill in banking forms; un-bankable in terms of the inability to service loans; do not know how to handle money, dependent on help regarding how to use a loan and requiring subsidised interest rates (Kajimo-Shakantu & Evans 2007: 82 citing Remenyi, 1991; Tomlinson, 1996; Bolnick & Mitlin, 1999a; UNCHS, 2002).

The government's intention, ever since 1994, has been to facilitate increased private lending and investment in low- and medium-income housing, whilst eliminating geographic discrimination in the origination of housing loans (DHS, 2004: 4). The Financial Sector Charter Notice 11 of 2007, Clause 2.34.3 made a provision for private sector financial institutions to finance low-cost housing for households with a stable income in excess of R1,500 per month and less than R7,500 per month (RSA, 2007: 8). Generally, banks do not permit monthly home loan repayments to exceed 30% of single or joint gross monthly income after credit rating (Cameron, 2002: 13-14). The affordability of households is a crucial component of the access to housing finance and the challenge of how to address the gap caused by the reluctance of the formal sector institution to lend to the poor (Kajimo-Shakantu & Evans, 2007: 83).

Consequently, it appears that financial institutions are unwilling to lend to low-income earners because of the financial risk involved in the repayment of home loans; and they can only extend



loans relative to a monthly repayment amount not exceeding 30% of a household's single or joint-gross monthly income.

### **1.1.3 The Gap-housing supply**

The South African residential property market is not only affected by the property finance market; it is also affected by the supply of residential property, which requires the participation of the government and the private sector to promote adequate access to home ownership. The government's responsibility in the development of affordable housing is to initiate a serious partnerships with all the stakeholders within the affordable housing projects, in order to integrate their social responsibility – as an approach to overcoming the difficulties in providing housing for the poor (Othman & Abdellatif, 2011: 290).

The problem of home ownership is more complex than anticipated; and it requires integrated sustainable development and more tax relief for housing investors, including private initiatives for new dynamic housing delivery systems to meet the housing needs (Ramabodu, Kotze & Verster, 2007: 20).

The Department of Human Settlements (DHS) (2004: 5) indicated that:

“The slowdown in delivery and the under-expenditure of provincial budgets has been attributed to a variety of factors, which, *inter alia*, include a declining delivery linked to the withdrawal of large construction groups from the State-assisted housing sector because of the low profit margins. The withdrawal of these groups has left capacity gaps in construction, project management, financial management and subsidy administration. These gaps have not been filled through the introduction of emerging contractors because of the insufficient delivery capacity, limited technical and administrative expertise, and the inadequate access to bridging finance.”

The supply of South African housing is not integrated with government supplying housing for the affordable market and private developers participating in the bond market. Local Government (municipalities) plays a central role in the implementation of housing delivery; but they lack the capacity in procurement, administration and management of housing projects (RSA, 1999b: 131-132). The lack of capacity from municipalities requires the participation of private property developers, in order to promote adequate access to home ownership. Property developers perceive the construction industry as a high-risk with low-profit margin; and the high interest rates usually have a negative impact on building activity; whilst the stricter

lending criteria of banks depress the effective building demand (Master Builders South Africa - MBSA, 2014: 31).

Private property developers feel that, the inclusion of affordable, or the gap market, would increase their risk and compromise project viability (National Planning Commission-NPC, 2011: 271). The risk level influences the participation of property developers in the supply of residential properties. The decline in residential building is not hard to find. With the introduction of the National Credit Act, which makes it incumbent on banks to ensure that mortgages are granted in a responsible manner, and the consequent decline of homebuilding loans, including mortgage loans with only a few homeowners qualifying for loans (Master Builders South Africa-MBSA, 2014: 29).

The affordability of property owners to access homebuilding loans or to access finance via a property developer affects their participation in the supply of residential properties.

The strict lending criteria by financial institutions and the high interest rates also limit private property developers in supplying new houses. Therefore, it appears that there is no incentive for private property developers to supply housing in the gap-housing market because of the risk involved, which can compromise the project's viability.

#### **1.1.4 Gap-housing trading market**

The increase in property prices reduces the affordability of properties. This creates a barrier to the housing market for South Africans to fully participate and to have adequate access to home ownership. A boom in the property industry is a highlight that indicates a potential for property as a prime investment class – with a dramatic impact on the wealth for the existing property owners – and the affordable constraints of new home seekers, not to mention the lack of capacity of the State to continue to deliver subsidised housing (Rust, 2006: 4).

Mokgadinyane *et al.* (2012: 467) indicated that currently, “there is no incentive to encourage people to solve their own housing challenges.” The Banking Association's figures show a rapid growth in property prices; and basic new housing is no longer affordable to the Financial Sector Charter (FSC) target market (Rust, 2006: 29). A boom or recession in the property market affects the participation of purchasers, sellers and realtors. The high property prices and the bond repayment period affect the way people view the property market, compared to other sectors, such as the motor industry. Kajimo-Shakantu and Evans (2007: 93) indicated that there

was, “general acceptance among the banks, that financing of the low-income households needs to change, in order to shorten repayment period, rather than the 20 year-mortgage bonds.”

Home ownership is transferred by preparing the requisite transfer documentation after the confirmation of the approved mortgage loan application by financial institutions, including the signatures of both the purchaser and the seller, together with the receipt of various clearances required by government, including the cancellation of an existing mortgage bond, with the lodgement done at the regional Deeds Registry office (Smith Tabata Buchanan Boyes-STBB, 2015: 4). Property law development in relation to the various forms of ownership have had some measure of success in the higher income groups; the same degree of success was not noted in the lower income group (Pienaar, 2011: 136).

The change in property law can affect the participation of the purchaser, seller and realtor. The rights of property ownership for one’s own enjoyment are essential to the freedom of every person (Diale, 2014: 22).

The complexity of housing challenges requires a correct balance between protecting the property rights of vulnerable individuals, protecting State investments, allowing the integration of State-provided housing into the property market, in order to stimulate the secondary housing market and to ensure the location flexibility for housing beneficiaries (NPC, 2011: 270). Section 10 (a) of the Housing Act of 1997 prohibits any sale of government subsidised housing for a period of eight years, which has an unintended consequence that creates a significant barrier to formal secondary transactions. This was meant to protect subsidy beneficiaries from selling their properties below the market price (DHS, 2004: 10).

The lack of trading in the subsidy housing market affects the trading in the gap-housing market as a secondary market; and this has a negative impact on the participation of realtors. There is also a need to create an alternative for the subsidy house, by changing the face of the stereotypical RDP houses (DHS, 2004: 17). The creation of design options in the provision of high quality subsidy houses could change the perceptions. And that would create a demand for subsidised house by making them more marketable. This could be a good collateral for financial institutions. The change in the perception of RDP houses would improve the trading of the subsidised housing market, as a primary access to the adequate home ownership, which can reduce the demand in the gap-housing market. The current subsidy-housing market has created a perverse incentive, which distorts the prices in the gap-housing market; and this has

resulted in continued dependency on the State, rather than encouraging investment by the private sector and households (Financial and Fiscal Commission, 2012: 33).

The low to middle income residential property market for households that earn between R1,500 to R7,500 per month has been on the decline for some time; and it does not meet the demand in the subsidised and the affordable housing markets (Rust, 2006: 21).

It therefore appears that the high property price creates a barrier for South Africans to fully participate in the gap-housing market. The provision, which prohibits the sale of subsidised houses, known as RDP houses, for a period of eight years, also creates a demand for the gap-housing market, as well as a barrier for realtors to fully participate in the marketing of residential property acquired through the government's subsidy scheme.

The 1.6 million subsidised houses that were built for the poor have failed to become a valuable asset; but instead, they have become a liability for the municipalities, which struggle to come to grips with the rapid change in the economic conditions; since South Africa's inclusion in the global economy (DHS, 2004: 5). The poor performance of the primary housing market, the lack of affordability and the property rights suggest a lack of incentives for realtors to participate in the gap-housing market.

### **1.1.5 Summary: Preliminary literature review**

The South African property market is influenced by affordability, supply and demand, which requires the participation of government and the private sector in bringing the ideal of adequate access to home ownership into a reality. The residential property market is divided into the following categories, based on the income bracket, together with the participation of the government and the private financial institutions:

- The subsidised housing market is a market for residential property valued below R116,702.00; and it was intended for those who receive free housing from the government;
- The Gap-housing market, with financial linkage, is a residential property market that receives government support in terms of the Financial Sector Charter of 2007 and programmes that make a provision for properties valued between R116,703 to R233,404;
- The Gap-housing market is a residential property market, which depends on the mortgage bond finance by financial institutions for properties valued between R 233,405 to

R483,481; and it was intended for households that earn between R9,001 and R15,000 per month, and

- The Normal housing market is a market for residential property valued above R483,482; and it depends on private financial institutional finance.

The gap-housing market is negatively affected by a lack of finance from financial institutions, a lack of supply by property developers – and poor trading with the poor performance of the subsidised housing market.

## **1.2 The Problem And Its Setting**

### **1.2.1 The statement of the problem**

The gap-housing market does not allow adequate access to home ownership because of a lack of financial support, the under-supply of the gap-housing market; it does not trade; and it does not allow for the migration of the subsidised housing market into the formal market.

### **1.2.2 The main problem**

A lack of citizens' access to, trading in and supply to the South African gap-housing market leads to home ownership issues in the gap-housing market.

### **1.2.3 The sub-problems**

**Sub-problem 1:** South African citizens in the gap-housing market do not have adequate access to finance, in order to be able to participate in the gap-housing market.

**Sub-problem 2:** There is an undersupply of houses in the gap-housing market by private property developers.

**Sub-problem 3:** Houses in the gap-housing market are not adequately traded.

## **1.3 The Hypotheses**

**Hypothesis 1:** There is a lack of incentive for private sector financial institutions to fully participate in the gap-housing market.

**Hypothesis 2:** There is a lack of incentive for private-sector developers to increase the supply of housing for the gap-housing market.

**Hypothesis 3:** There is a lack of incentive for realtors to fully participate in the marketing of houses in the gap-housing market.

#### **1.4 The Delimitations Of The Study**

This study will be limited to properties used as primary residents in the South African housing market. The study will exclude rental and other forms of access to adequate housing.

The study will be limited to the gap-housing market in South Africa; and it will use other housing markets as benchmarks. The random selection targets stakeholders that have branch offices in most provinces of South Africa. The research study will consider the views and the perceptions of property-market stakeholders situated in Cape Town, the Western Cape; and it will not disqualify any responses outside the province. The Western Cape province had the biggest count of property transfers between 2013 to 2014, according to the South African Property Transfer Guide (Tivvit Solutions, 2014: 1) and government's "Breaking New Ground" comprehensive plan was piloted in Cape Town as a joint program between the National Department, the Western Cape Provincial Government and the Cape Town Metropolitan Council (DHS, 2004: 13).

The pre-emptive clause allow households that wish to sell their subsidy house before the eight-year term period lapses; and they should give the provincial office the first option to buy. No province, besides the Western Cape has implemented such mechanisms to buy back any Units; and to then transfer them to the next person on the waiting list (Price, 2015: 11).

#### **1.5 The Assumptions**

The research has been based on the following assumptions:

**Assumption 1:** The Census conducted in the year of 2011 will be considered as relevant for the purpose of this study.

**Assumption 2:** The responses from stakeholders that have branch offices in different Provinces will provide a good indication of the current state of the gap-housing market in South Africa.

**Assumption 3:** All property transfers are done in a formal manner relative to the property business.

## 1.6 The Definition of Terms

**Housing development** means the establishment and maintenance of habitable, stable and sustainable public and private residential environments – to ensure viable households and communities in areas allowing convenient access to economic opportunities, health, educational, social amenities and access to basic services in terms of the Housing Act 107 of 1997 (RSA, 2001: 4).

**Municipality** means a local authority, as conceived in Section 151 of the Constitution of the Republic of South Africa Act 108 of 1996, exercising jurisdiction in the area where the land is situated (RSA, 1999a: 1331(2)).

**Unemployed** is a person who does not have work; but one who looks for any available work at a reference period (Stats SA, 2012: 81).

**Deprivation** refers to peoples' unmet needs (Stats SA, 2006: 7).

**Poverty** refers to the lack of resources required to meet people's basic needs (Stats SA, 2006: 7).

**Mortgage Bond** is the product of an agreement between the mortgager and the mortgagee, where the former uses his/her property to secure a valid debt in favour of the latter (Juma, 2012: 2).

**Gap-housing market** refers to people earning above the level required to receive a State-subsidised house, but below the level required to obtain a bond from a commercial bank (NPC, 2011: 61).

**Market** is a place where the forces of supply and demand interact (Graham *et al.*, 2015: 1).

## 1.7 The Importance Of The Study

The study will contribute to the body of knowledge related to the South African gap-housing market. The study is significant for South Africans seeking adequate access to housing in terms of the South African Constitution, Act 108 of 1996, section 26 (1) (RSA, 1999a: 1255), by identifying the major challenges in the gap-housing market.

The study also contributes to an understanding of the current performance of the housing market against the expectation to have adequate access to home ownership. The real estate

market in South Africa is unstable, with the gap-housing market falling between the housing provided by government and the housing financed by private financial institutions.

It is very important to understand that, it is not sustainable for the government to continue to provide free low-cost houses, and that households will eventually need to take it upon themselves to address their own housing needs (Mokgadinyane *et al.*, 2012: 467), as highlighted in the study of the incremental housing process. The South Africa government does have a role to play in servicing the gap-housing market; but it is becoming clear that housing in South Africa can never be completely delivered by the public sector (Banking Association of South Africa-BASA, 2014: 17).

The key factor that is undermining South Africa's affordable housing programme has been a failure to acknowledge the fundamental linkage of low-income housing with upper-income housing, in the housing ladder (FinMark Trust, 2006: 33).

The study also contributes to an understanding of the participation of the private sector to achieve the expectations of the South African Constitution. The backlog in the affordable market, including the lack of affordability by households is another identified challenge (Naude & Pillay, 2014: 91), which could affect the participation of the private financial institutions and realtors. The lack of legal recognition of the property rights can result in insecurity of tenure; and it could also hamper further development (Pillay, 2008: 103). The study is limited to the legal title, which affects the value of property in the gap-housing market as collateral for lenders.

The study will assist in understanding the incentives for the private sector, in order to participate in the South African gap-housing market. The study that was done in the United Kingdom (UK) – and not in South Africa, which suggests that, market signals are major tools in making supply decisions for the delivery of new affordable housing through competitive bidding, incentivising innovations and cross-subsidies (Gibb, 2013: 64-79). The Department of Human Settlements will be implementing the Housing Guarantee Fund that is still to be finalised. In theory, it is a mortgage insurance that will assist to facilitate and increase the supply of affordable housing finance for the gap-housing market (Tissington, 2011: 41).

There is also a need to put in place a policy on incentives – for the supply of housing in South Africa (BASA, 2014: 17).

This study is also intended to create an understanding on possible ways to encourage the



participation of the private sector in the gap-housing market through investigation and the analysis of information by the researcher. The study also seeks to inform future studies on this subject, for South Africans to have adequate access to home ownership.

### **1.8 The Aims And Objectives Of The Study**

The aim of the study is to analyse the status of access to home ownership within the South African gap-housing market, in order to contribute to the body of knowledge.

The secondary research objective is to analyse the participation of the private sector in the gap-housing market, in order to contribute to the theoretical debate of creating a friendly environment for the private sector to fully participate in providing adequate access to home ownership for South Africans.

## CHAPTER TWO: A REVIEW OF THE RELATED LITERATURE

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### 2.1 Introduction

Expectation is created by the South African Constitution Act 108 of 1996 with the perceived performance of adequate access to home ownership. The private sector, together with the government must assist in addressing the problem of the gap between the normal housing market for properties valued above R483, 482 and the subsidised housing market for properties valued below R116,702.

The Estate Agency Affairs Board of South Africa (2014: 3) indicated that, the former Minister of Human Settlements, Connie September said:

“We can achieve deracialisation through the provision of housing subsidies to the poorest of the poor; providing people in the gap market with guarantees to buy homes in areas of their choice through banks; making sure that banks do not unfairly discriminate against certain categories of our citizenry through their lending practices; and regulating the entire housing and human settlement sector.”

The South African housing market is not balanced, considering the mounting residential shortage and the high housing price inflation, which reduces the affordability for households (Loos, 2015: 2). The gap-housing market requires government to create a friendly environment, in order for the private sector to fully participate. The incentive theory recognises the rewarding function of providing guarantees with the effort to motivate for participation to achieve the desired output (Grant, 1999: 459). The current performance of the housing market in South Africa with the gap-housing market, suggests a lack of incentive for private financial institutions to participate; and consequently, there is an undersupply in the gap-housing market, which is not traded adequately.

The change in demand for housing is understood to be driven by demographic growth, the reduction of functional housing size, migration and economic growth (Graham *et al.*, 2015: 21). The South African housing problem is defined as “40x40x40x40” situation, which suggests 40m<sup>2</sup> homes, 40km from where people work, spending 40% of their income on transport and probably live in communities, where 40% of the people are unemployed, as highlighted by the Bank Association of South Africa (BASA, 2014: 17).

## **2.2 Expectations**

### **2.2.1 Residential-property finance**

Residential housing finance can be acquired by various ways in promoting access to adequate housing. There are five ways of financing when purchasing a residential property, which include (The Institute of Estate Agents of South African, 1995: 35):

- All cash;
- Partly cash, balanced by the mortgage bond;
- Partly cash, balanced by instalments;
- Co-ownership, and
- 100% mortgage bond.

The expectation of buyers is to get a residential property that will meet their basic needs and aspirations in a good location, and which can be affordably financed by the financial institutions. The expectation is based on the availability of a suitable residential property in the market – before the approval of mortgage loan application by the financial institution, together with the involvement of the realtor in the marketing and facilitation of the sale.

### **2.2.2 Residential-property development**

The expectation is also the availability of suitable residential property, which is based on the supply through property-development initiatives. The expectation of government in the residential property development includes (Othman & Mia, 2008: 241 citing Sisulu, 2004):

- The eradication of informal human settlements in South Africa;
- The acceleration of housing delivery, as a key strategy for poverty alleviation;
- To utilise the provision of housing, as a major job-creation strategy;
- The adequate access to housing by ensuring that property can be accessed by all, as an asset for wealth creation and empowerment;
- To leverage growth in the economy, combating crime and promoting social cohesion;
- The use of housing development to break barriers between the first economy's residential property boom and the second economy slump, and
- The utilisation of housing as an instrument for the development of sustainable human settlements in support of spatial restructuring.

The property development initiatives require a demand for development and access to finance for the construction process – with the expectation of realising a return on the investment. The return on the investment is driven by the affordability of buyers that created a demand for development.

The expectation of the property developer is business oriented to maximise the benefits, with the minimum of risks.

### **2.2.3 Residential-property marketing and trading**

The trading of residential property requires the involvement of realtors in the marketing of sales, in order to encourage the potential buyer to purchase the property through an open market. The areas of responsibilities for realtors include the following (Greer & Kolbe, 2003: 13):

- The sale and lease of the residential property;
- The sale of residential plots, including the identification of opportunities to subdivide land and guide clients who embark on such a transaction;
- The selling, managing and leasing of commercial property;
- The selling and leasing of small-holdings and farms;
- The selling and leasing of land developments, and
- Appraisal of the available properties within a particular property market.

The expectation of realtors is to guide both the seller and the buyer during a transaction, as well as the transfer of property ownership.

The involvement of the realtor requires a mandate from the seller for the marketing of the property. The realtor will receive a sole or open mandate with marketing rights – through various platforms, including regulated “for sale” and “on show” signage by the local authority. The realtor also facilitates the transfer of ownership by the attorneys at the regional Deeds Registry office.

### **2.2.4 Government-policy position**

The Government must be able to create an environment for everyone to have adequate access to home ownership. Government spending depends on the state of the South African economy. The South African economy depends upon export earnings, thereby helping to balance the

amount spent on imports from other countries, and to raise revenue for infrastructural spending. This is collected from direct tax, indirect taxation through value-added tax, property tax and various levies (Collins *et al.*, 2013: 384).

The property tax includes the following taxes:

- Capital Gains Tax is made on the disposal of an asset in terms of Section 26(a) of the Taxation Laws Amendment Act no. 5 of 2001, to be included in the taxable income of the gain (South African Revenue Service-SARS, 2015: 46);
- Transfer duty is defined in section 1(1) of the Transfer Duty Act 40 of 1949; and it is levied during the acquisition of the property, based on the value of the property (SARS, 2015: 76), and
- Municipal levies are the amount paid to the municipality for their services, based on the value of the property before disposal of the property in terms of clause 11 (1) of the Municipal Property Act no. 6 of 2004 (RSA, 2004: 24).

The revenue collected by government gets allocated to different departments for social responsibility, according to the priorities of the country. The delivery of housing by the South African government involves national and provincial spheres, with the primary tasks of policy development, including implementation; while local government has to identify suitable land and plan bulk infrastructure, provision of the related community services, various facilities, and to create an environment suitable for housing delivery (Charlton; *et al.*, 2014: 5 citing DoH, 1994).

#### **2.2.4.1 Government-housing programmes**

The Department of Human Settlements (DHS) established the following institutions to share the risk in the implementation of housing policies that provide much-needed shelter for South Africans (DHS, 2014b: 57):

- The National Home Builders Registration Council (NHBRC) was established to protect homeowners, or to serve as a barrier against mediocrity in construction (DHS, 2014b: 60). The NHBRC assists, in order to ensure the quality of properties in the housing market;
- The National Urban Reconstruction and the Housing Agency (NURCHA) offer loans for bridging finance to contractors in the subsidy, infrastructural development and to property developers in the affordable gap-housing market; but only financial projects based on the NURCHA's assessment on viable and profitable projects (DHS, 2014b: 62);

- The National Housing Finance Corporation (NHFC) is the major catalyst in providing access to affordable housing for low- to middle-income households with monthly incomes between R3,501 and R15,000 (DHS, 2014b: 66);
- The Rural Housing Loan Fund (RHLF) was established in 1996 to champion new home-loan lending practices for low-income earners living in rural areas, so that they can build their homes (DHS, 2014b: 7);
- The Housing Development Agency (HDA) was established as a National Public Development Agency by an Act of Parliament, Act no. 23 of 2008, with a mandate to fast-track the acquisition and release of vacant State land in well-located areas for the development of sustainable human settlements (DHS, 2014b: 74);
- The Social Housing Regulatory Authority (SHRA) is the promulgation of the Social Housing Act no. 16 of 2008 with a mandate not only to invest but to regulate social housing institutions to lease out Units to people who can afford them (DHS, 2014b: 78) The SHRA is a housing programme for households earning below R3,501 per month;
- The Estate Agency Affairs Board (EAAB) was established, in order to regulate the real estate sector by ensuring that all the real estate agents are registered, in possession of a valid fidelity-fund certificate and ensuring that real estate agents adhere to the Code of Conduct and the Regulations regarding the selling or renting out of property (DHS, 2014b: 82), and
- The integrated Residential Development Programme (IRDP) provides for the acquisition of land, the servicing of stands for a variety of land use, including the provision for residential stands for low-, middle- and high-income groups (Didiza, 2014: 22).

Although there are State-housing programmes defined by income-qualification criteria, as a supply intervention; there is also a mounting demand in the gap-housing market (Graham *et al.*, 2015: 27). The South African government has a backlog in the subsidy housing and the Unit that can be produced in the gap-housing market would sell for a market price of R350,000, which caters only for households with monthly income around R11,500 per month (BASA, 2015: 15).

The National Housing Finance Corporation made the following strategic investments as a response in the gap-housing challenge:

- The Housing Investment Partners Proprietary Limited (HIP) is a National Housing Finance Corporation (with 33.33% share) in the joint venture with Old Mutual Capital Holdings Limited (OMCH) (with 66.67% share). This was established as a fund management

company to design, develop and implement an income-linked mortgage product in the affordable housing market (NHFC, 2014: 16);

- The Trust for Urban Housing Finance Holdings Proprietary Limited (TUHF) is playing a critical role in the re-development of the inner city of Johannesburg – in the form of secured mortgage loans (NHFC, 2014: 16);
- The Cape Town Community Housing Company Proprietary Limited (CTCHC) is a property developer, which specialises in instalment purchase agreements and outright sales (NHFC, 2014: 16);
- The International Housing Solutions (IHS) is an overseas private investment corporation, which provides the housing opportunities in the affordable housing market or gap-housing market (NHFC, 2014: 16), and
- The Finance Linked Individual Subsidy Programme (FLISP) provides a down payment assistance to qualifying households, who have secured mortgage finance, to acquire an existing house or a vacant residential serviced stand linked to house-building contracts, with the home builders registered with the National Home Builders Registration Council (National Home Builders Registration Council-NHFC, 2014: 16).

The Old Mutual has set up an intermediary called ‘Housing Investment Partners’, which is an alternative to mortgage repayment that is not linked to the interest rate, but to a person’s salary (DHS, 2014b: 68). The Housing Impact Fund South Africa (HIFSA) from Old Mutual also invests in all forms of low-income housing and gap-housing market-related investments targeting households earning less than R17,600 per month that are subject to annual adjustments (Old Mutual Investment Group, 2014: 1).

The Financial Sector Charter Notice made a provision for a financial institution to finance low-cost housing for households with a stable income in excess of R1,500 per month and less than R7,500 per month. The South African government has also made adjustments to the transfer duty of a residential property. Smith Tabata Buchanan Boyes (2015: 5) outlined that, the purchaser is responsible for the payment of the transfer costs and the cost of registering a new mortgage bond over the property purchased, from which the conveyance fee is determined, according to the property price as follows:

- R0 – R750,000 is exempted from any fees.
- R750,001 – R1, 250,000 is 3% of R750,000.
- R1, 250 000 – R1, 750,000 is R15,000 + 6% of R1, 250,000.

- R1, 750,001 – R2, 250,000 is R45,000 + 8% of R1, 750, 000.
- R2, 250,001 and above is R85,000 + 11% of R2, 250,000.

The exemption of transfer duty also includes the beneficiary of a last Will, transfer to a surviving spouse and a divorced person (Gunstons attorneys, 2014: 5) .

### **2.2.5 Summary: government-policy position**

The above literature suggests that, the government’s policy response to the gap-housing market is a direct incentive for housing beneficiaries, with the provision of loans as bridging finance for property developers on viable and profitable projects. The South African government uses tax to create revenue with a limited budget for housing programmes. The exemption on transfer duty for properties valued below R750,000 and the Financial Sector Charter policy suggests a good incentive for the participation of the private sector in the gap-housing market.

## **2.3 Confirmed Performance**

### **2.3.1 Government participation**

The South African government has put in place policies and programs to address the housing challenge for everyone to have adequate access to housing. However, this is faced with the following challenges (Charlton; *et al.* 2014: 10-12):

- The high cost of well-located urban land;
- The policy gap has funding implications; and it affects the way institutions are responding to the Human Settlement mandate;
- More effective partnerships must still be achieved between government, private sector investment, communities and individuals; because the private sector investment in isolation is often unchecked; and sometimes it indirectly contradicts the broad development goals and intentions, and
- The changes in Human Settlement can mean that cities through municipalities may lack the capacity to quickly grasp and deliver on the evolving Human-Settlement mandate.

The expectation of the government and the private sector is not integrated – in order to have the perceived performance of adequate access to home ownership for South Africans.



### **2.3.2 The Gap-housing market finance**

The confirmed performance is indicated by the current housing market reaction. This is affected by various economic and social factors. The South African housing market is not a single property market; since it lacks transformation; there is the high cost of suitably located land, including subsidised housing and insufficient private-sector involvement (Charlton, *et al.*, 2014: 5). The factors that affect the affordability of housing and mortgage finance include property demand and supply, property prices, market activity, buying patterns, transaction volumes and the demand for mortgage finance (Du Toit, 2014: 6). Employment and economic empowerment are the primary catalysts for the increase in disposable income and saving that would subsequently boost investment in home ownership (Udechukwu, 2008: 193). The socio-political factors seems to create uncertainty in a highly volatile South African property market. This causes the fund managers to be extremely conservative in their investment decisions (Lowies *et al.* 2016: 63).

The ability to access home ownership depends on household income and mortgage repayments (McCord *et al.*, 2011: 399). The lack of affordability can increase the downscaling rate, which creates a demand on the lower property market.

#### **2.3.2.1 Demand**

The South African population living in township, informal settlements and low-income housing developments are estimated to comprise above 60% of the total population (RSA, 2007b: 4). There is a growing number of households in South Africa, who do not qualify for subsidies, with monthly incomes above R3,500; but they are unable to access housing finance from the private sector that shows no interest in providing loans to the gap-income category (Charlton; *et al.* 2014: 5 citing SACN, 2012). The social factors, which include population growth and the unemployment rate contribute to the housing problem in South Africa. The Statistics show an increase in unemployment rates in South Africa from 4.7 Million in 2012 to 5 Million in 2014 (Stats SA, 2014b: 6.17).

The South African Statistics survey conducted in 2014 on employable groups from age 15 to 65 years, includes the monthly-income bracket of the population group, according to the table below:

**Table 2:** South African statistics of monthly income groups from 15 to 65 years

| South African income group | South African working group |
|----------------------------|-----------------------------|
| None                       | 214,377                     |
| R1 – R400                  | 1, 319,987                  |
| R401 – R800                | 1, 625,550                  |
| R801 – R1,600              | 2, 108,071                  |
| R1,601 – R3,200            | 1, 821,446                  |
| R3,201 – R6,400            | 1, 337,427                  |
| R6,401 – R12,800           | 717,074                     |
| R12,801 – R25,600          | 283,385                     |
| R25,601 – R51,200          | 93,771                      |
| R51,201 – R102,400         | 35,311                      |
| R102,401 – 204,800         | 17,204                      |
| 204,800 – more             | 10,157                      |
| <b>Total</b>               | <b>9, 583,762</b>           |

Source: (Stats SA 2014b: 2.15)

Table 2 indicates that the employable group that earn between R1,601 to R 12,800 per month constitutes 21% of the total employable population group aged 15 to 65 years, which falls within the gap-housing market. The population income group from R0 to R1,600 qualifies for the government subsidy, which constitutes 74%; and 5% of the total employable population qualifies for mortgage loans. The gap-housing market is the second biggest housing market in South Africa; and the subsidised housing market is the first in size, as is highlighted below:

**South African housing market**



**Figure 1:** Source: Stats SA (2014a: 2.15)

Figure 1 indicates that the gap-housing market is 21%, with 74% of the employable population in the subsidy-housing market. This constitutes a total of 95% of the employable population with the demand to access adequate housing.

The gap-housing market is affected by the demands of the population that does not have adequate access to mortgage finance, which causes inadequate access to home ownership. The major challenge in the South African property market is ownership. The 2011 statistics shows

that only 41.3% of property ownership are without a balance on mortgage loans; 11.8% of property ownership is with mortgage loan balances; 25% are rentals; 18.6% is occupied rent-free; and 3.3% on other terms (Stats SA, 2012: 57). The mounting demand in the gap-housing market causes an increase in property prices, which affects the affordability of the first-time buyers.

### 2.3.2.2 Affordability

The major economic factor is the real economic growth of South Africa that showed a slow marginal rate of 0.6% in the fourth quarter of 2015, with an overall disappointing real growth rate of 1.3% for the full year of 2015 (SARB, 2016: 1). The slow economic growth has a negative impact on the disposable income, which causes a decline in the affordability of the gap-housing market.

The housing market performance shows that the affordability of house prices and mortgage repayments on household disposable income have deteriorated further in the first quarter of 2014 (Du Toit, 2014: 5). The measures of buying affordable home, namely the average housing price, over average employee remuneration index have increased slightly by 0.6% in the 2<sup>nd</sup> quarter of 2014, compared to the level for the previous quarter (Loos, 2015: 1).

Table 3 outlines the affordability growth trends on average housing price from Absa bank (Du Toit, 2014: 9):

**Table 3:** Average normal housing price

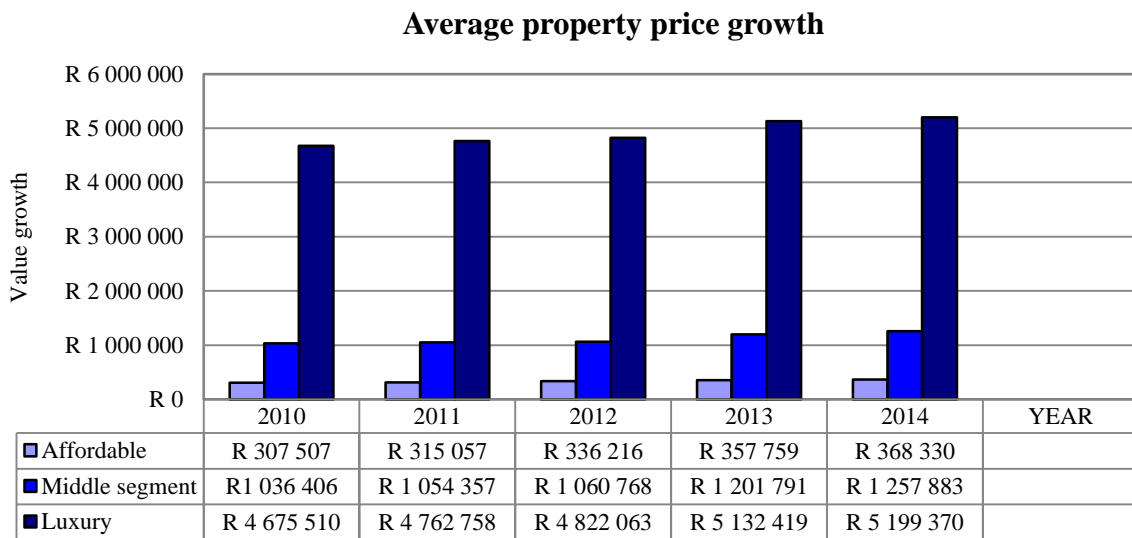
| National   | 2010        | 2011        | 2012        |
|--|-------------|-------------|-------------|
| Middle segment (80m <sup>2</sup> – 400m <sup>2</sup> , ≤R4m) | R1, 036,406 | R1, 054,357 | R1, 060,768 |
| Small (80m <sup>2</sup> – 140m <sup>2</sup> , ≤R4m)          | R775,599    | R739,157    | R702,477    |
| Medium (141m <sup>2</sup> – 220m <sup>2</sup> , ≤R4m)        | R970,115    | R986,381    | R1, 017,994 |
| Large (221m <sup>2</sup> – 400m <sup>2</sup> , ≤R4m)         | R1, 446,373 | R1, 480,620 | R1, 517,920 |
| New (80m <sup>2</sup> – 400m <sup>2</sup> , ≤R4m)            | R1, 430,013 | R1, 520,913 | R1, 588,804 |
| Existing (80m <sup>2</sup> – 400m <sup>2</sup> , ≤R4m)       | R1, 021,323 | R1, 034,612 | R1, 037,671 |
| Affordable (40m <sup>2</sup> -79m <sup>2</sup> , ≤R4m)       | R307,507    | R315,058    | R336,216    |
| Luxury (R4m – R14.6m)  | R4, 675,510 | R4, 762,758 | R4, 822,063 |

Source: Du Toit (2014: 9)

Table 3 indicates that the gap-housing market has an average price increase of 4.40% on year to year, compared to 4.63% of the middle-segment housing market and an average increase of 2.60% on the luxury housing market from 2010 until the second quarter of 2014. The gap-

housing market prices are growing faster than the normal housing market, because of the increasing demand.

The South African Reserve Bank also recorded a growth rate of 7.6% in the affordable or gap-housing market for 40m<sup>2</sup> to 79m<sup>2</sup> houses of residential properties valued below R545,000 in the 3<sup>rd</sup> quarter of 2014, compared to 6.7% in the 2<sup>nd</sup> quarter and 3.5% in the 1<sup>st</sup> quarter of 2014 (SARB, 2014: 60). The gap-housing market shows a significant growth rate within the year. The graph below shows the comparison on average price growth of the different residential property markets:



**Figure 2:** Source: Du Toit (2014: 9)

Figure 2 shows a constant residential property price increase for different South African markets. The House Price Index shows a massive increase of 57.84% in the 3<sup>rd</sup> quarter of 2014, which is still higher than the price index in the middle of the year 2000 (Loos, 2015b: 3).

This increase of confidence in the residential property creates financial pressure for the consumers, who are believed by agents to be aiming to buy a cheaper property, as opposed to renting, and especially when the house price index growth of the first quarter in 2014 shows an average price increase of 118.1% higher than the first quarter levels in 2004 (EAAB SA, 2014: 40-43). There is a lack of loan schemes that adequately cater for the needs of the low-income group and this deprives the low-income population of access to housing finance (Wapwera *et al.*, 2011: 296-297).

### **2.3.2.3 Summary: Demand and affordability in the gap-housing market**

The poor economic growth of South Africa and the growth rate of unemployment causes a reduction in the affordability for the gap-housing market. The population growth increases a demand that is currently at 95% of subsidy-housing and gap-housing market, which indicates that the majority do not have adequate access to home ownership. The property price increase for properties valued below R545,000 also affects the affordability of the South African gap-housing market, to have adequate access to home ownership.

### **2.3.2.4 Challenges of private financial institutions in financing the gap-housing market**

The mortgage lending for gap-housing market is less attractive to credit providers, because of a combination of market factors in terms of the supply and demand, with property prices as well as the cost of funding and acquisition, in combination with the changed risk profile attributed to this (Devnomics, 2012: 16). The mortgage bond is the lender's product, which attaches immovable property as security for the loan; but it becomes difficult for the lender to find security in the affordable or gap-housing market, due to the following factors:

- The house price growth in the affordable or gap-housing market has lagged behind that of higher valued houses; and this is the case for many poorer home owners that perceive their property as being dead capital (FinMark Trust, 2007: 5);
- The affordable or gap-housing market cannot use their homes as collateral because their homes fail to comply with the standards set by the lenders, or because they do not have any formal proof of ownership (FinMark Trust, 2007: 5), and
- There is an inability to effectively and efficiently evict residents that have defaulted on payments. This has caused the financial institutions or lenders to withdraw from the low and gap-housing market (Naude & Pillay, 2014: 79).

The mortgage lenders or mortgagor struggles to recover security, when the mortgagee fails to meet this obligation, especially when the property in question is a residential property, whereby section 26(3) prohibits the eviction from a home without an order of the High Court made after considering all the relevant circumstances (Juma, 2012: 5).

Judge Erasmus in the High Court of South Africa in the case between Standard Bank and Abduraouf Daorwood, case number 15438/11, showed the following legal implications on the

lender or mortgager on the execution against property, when the mortgagee fails to fulfil the obligations of his debt (RSA, 2012: 20):

- The Constitution of the Republic of South Africa, Section 26 (1) of 1996, which provides for everyone the right to have access to adequate housing. If the claim orders for execution that infringes such a right, the information which is supporting the claim is required before the court (RSA, 2012: 20);
- In terms of Section 26 (3) of the Constitution, you may not be evicted from your home or your home may not be declared executed and sold in execution – without the order of court made after considering all the relevant circumstances (RSA, 2012: 20), and
- In terms of rule 46 (1) (a) (ii) of the Rules of the High Courts of South Africa, no writ of execution shall be issued against your primary residence (i.e. your home), unless the court, having considered all the relevant circumstances, orders execution against such a property (RSA, 2012: 20).

The lack of collateral, the lack of formal ownership, the poor market value of the property and property rights are considered to be disincentives for the participation of private financial institutions in the gap-housing market. Well-defined and secured property rights play an important role in creating incentives, lowering transaction costs, increasing the demand for investment in the property market (Botha, 2013: 108).

### **Closing remarks**

The gap-housing market is not only affected by the lack of affordability, but also by the lack of security. The mortgage bond is less attractive for lenders with high borrowing costs and the eviction on the defaulter to execute against immovable property would require a court order, which can be time-consuming and costly for the lender. The rapid property price growth rate, the high demand of both subsidised housing and the gap-housing market suggest an inadequate access to home ownership for the first-time buyers. The high demand on the gap-housing market requires a supply that would be able to reduce the market prices.

The general comments from a respondent on the relationship between the gap-housing markets and financial institutions states that: “The gap-housing market is important for government and banks. Banks can use it for growth and [the] government [can use it] to close the housing backlog.”

### **2.3.3 Private residential-property developers**

The tighter supply of new residential stock is a key driver on house prices; and this is offset by the increase in the repurchase rate, subdued income, unemployment growth and relatively low consumer confidence (SARB, 2014: 59). The residential building activity will continue to be driven by the economy, the consumers' choice, housing demand and supply. The economic theory deals with the market demand and supply, with increased uncertainty in the space of demand-supply interplay for property development – causing a reduced investment because of the risk margin (Reed & Wu, 2013: 39-40). The exchange of uncertainty of reducing the risk with assumed long-term interest of maximising benefits by the property owner is an incentive to maintain the long-term supply of the resource (Batty, 2006: 209).

The factors affecting the demand for new housing include the trends in the secondary housing market, changes in lifestyle, the availability of serviced land for development and the building costs (Du Toit, 2014: 6).

The Master Builder South Africa (MBSA) conducted a survey on its members between 2011 and 2012. This indicated that less than 2% of its own members were involved in the construction of private residential property, especially for houses, which are less than 80m<sup>2</sup> or gap-housing market, compared to other housing markets (Master Builder South Africa - MBSA, 2012: 7). The negative factors that impact the strategic issues on the state of the building industry include the following (MBSA, 2012: 9):

- The ability to access credit or working capital;
- The ability of clients to obtain mortgage finance for building;
- The building material and labour costs;
- The cost of suitable land;
- The competition in the industry for building projects;
- The competition from other builders;
- The delayed payments;
- The rental market;
- The lack of infrastructure;
- The lack of electricity, and
- The service delivery by provinces and councils.

The positive factors that had an impact include the national building regulations and energy efficiency legislations (SANS 204 / 10400) (MBSA, 2012: 9). The withdrawal of private sector developers in the delivery of low-income housing is also due to the tightening of environmental regulation, delays in township registration, the transfer of title deeds, and the increasing financial risk with poor profit margins (Tissington, 2010: 37). The residential property investment in 2014 had dropped by -5.8% with a major decrease on buildings completed for housing size below 80m<sup>2</sup> from 808,514 in 2013 to 764,769 in 2014 and housing size above 80m<sup>2</sup> also experienced a major decline from 2, 859,082 in 2013 to 2, 769,008 in 2014 (MBSA, 2015: 6).

The residential property development industry contributes to the supply of gap-housing; but the tight supply suggests a lack of participation by residential property developers.

#### **2.3.3.1 Project finance for housing developers**

The access to credit or to finance was indicated as the major challenge in residential property development. The larger and more successful contractors or developers have good cash management skills, which in time may reduce the need for construction finance; whilst emerging contractors who require intermediate support initially will graduate to programmes where the financing is undertaken by the NURCHA; and intermediation is not required (Gardner, 2006: 14). The urban regeneration, incentive and experience of private property developers' influence are important factors that include: market conditions and location risk of a development, which influences the financing decision (Botha, 2013: 202 citing Powell, 1990).

The risk is the volatility of future returns and the proxies by historical volatility (Baum & Macgregor 1992: 720).

#### **2.3.3.2 Challenges with project finance in the gap-housing market**

The South African Human Settlements have institutional and policy framework shortcomings, which restrain the housing-supply value chain with the beneficiary affordability constraints (BASA, 2015: 13). The restriction in the supply of the gap-housing market is due to the following factors:



### **2.3.3.2.1 Interest rates**

The South African government uses the interest rate as a tool to balance the economy of the country on imports and exports, which have a direct impact on the disposable income of consumers (Collins *et al.*, 2013: 384). The high interest rates were witnessed by the increase of 17 basis points from 5.96% on the 1<sup>st</sup> August 2014 to 6.13% on the 15<sup>th</sup> September 2014, breaching the 6% level for the first time in four years (SARB, 2014: 49-500). The challenges for property developers or investors on the issue of high interest rates include the following (Collins *et al.*, 2013: 384):

- The payment amount on the finance loan grows;
- The interest portion of the payment grows, which reduces the building-cash flow;
- The equity input could also grow, as the loan becomes more expensive;
- The finance of other assets, such as vehicles, demands larger payments;
- Purchasers' cash flows, in general, are stretched;
- Purchasers are forced to purchase and develop less because of their reduced cash flows;
- Operating costs could increase because of the increase in the supply cost, and
- Banks are becoming more careful about those to whom they lend money, and at what price.

Most residential property developers require access to finance or access to credit for construction costs. The gap between demand and supply is a reason for property cycle in the building cycle theory; since when property demand increases due to the supply shortage, building activities also increase; and the over-supply reduces the demand, which has an impact on the property prices (Reed & Wu, 2013: 38). The property development is also affected by the labour and material costs.

### **2.3.3.2.2 Building material and labour costs**

The supply constraints of the gap-housing market are due the high cost of new supplies, or replacement costs. The average property's replacement cost exceeds the market value of existing homes. It stood at 22.6% towards the end of 2013 (EAAB SA, 2014: 14-15).

#### **Labour costs**

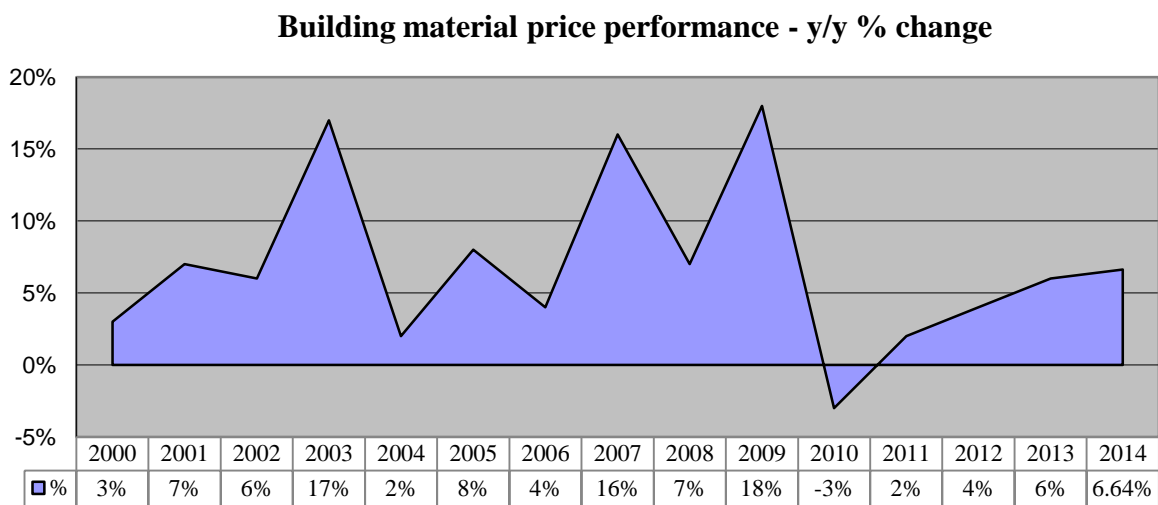
The labour costs form part of the production cost during the property-development process.

Any change in the labour costs has a direct impact in the total development cost of residential property. In 2014, the labour costs witnessed a growth of 5.8% in the construction sector

(SARB, 2014: 20). The labour cost growth implies a downward pressure in producing price inflation (OECD, 2013: 22).

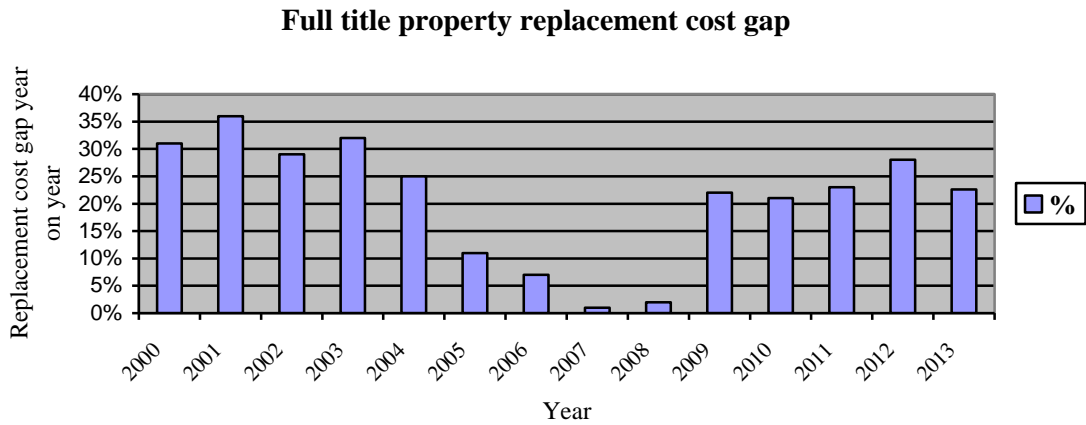
### Building material

The building material cost is controlled by the supply and the demand, including the behaviour of the international market, especially if the product is imported. The production cost of the new property development also involves material costs; and this has a direct impact on the total cost of the property development. The material costs in the construction industry throughout the years from year 2000 to year 2014 also have an influence on the overall costs.



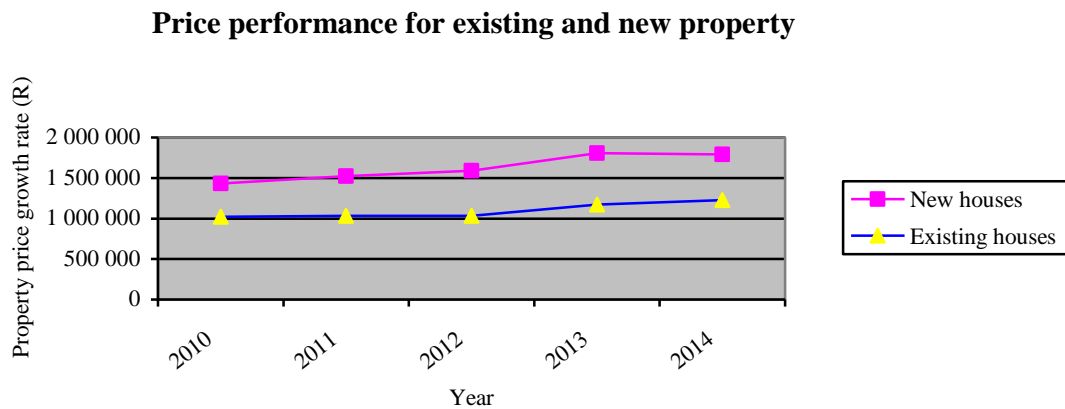
**Figure 3:** Source: EAAB SA (2014: 14).

Figure 3 shows the material costs since the year 2000 until the year 2014; and there is a constant building material price increase since the year 2000 to the year 2014. The increase in the building material costs causes an increase in the replacement cost of properties in the gap-housing market. The following Figure 4 shows the replacement cost performance in a residential-property market:



**Figure 4:** Source: EAAB SA (2014: 15).

Figure 4 indicates the property replacement costs increase that is above 20% in the year 2013, compared to 2% in year 2008. The 2014 survey from Statistics South Africa showed an increase of 10.6% in building value recorded for building plans approved; whilst building projects reported as completed decreased by 5.5% during January to October 2014, compared with January to October 2013 (Stats SA, 2014a: 6). This suggests that most planned building projects are not implemented or constructed. The graph below shows a growing rate of property prices for new houses compared to existing houses:



**Figure 5:** Source: Du Toit (2014: 9)

The graph in Figure 5 suggests that, the increase in construction cost due to inflation causes new houses to be more expensive compared to existing houses because of the high building costs of labour and materials. The residential property development must be approved by the municipality before implementation, which also has an impact on the value of money.

### **2.3.3.2.3 Local authority**

The Municipal Systems Act No 32 of 2000 outlines the rights and duties of municipal councils towards determining the fees charged for services, including the environmental impact assessment (EIA), zoning and re-zoning, the township establishment fee, the subdivision fee, the building plan fee, the connection fee for water, sewerage and electricity, consumption charges for water, sewerage, refuse and electricity, vacant land rates and property rates (SAPOA, 2013: 19-40). The property investors are currently faced with unreasonably high and mounting rates, with increases by some local authorities because of inaccurate data and maladministration. local authority efficiency is becoming an increasingly important factor, when making major property-investment decisions (EAAB SA, 2014: 11).

There is also the unintended consequence for municipalities of constructing more and more infrastructure – without addressing the condition of the existing infrastructure – in the attempt to address imbalances in access to service. And this is widening the gap of infrastructure maintenance (CSIR, 2007: 4). Most municipalities are unable to balance the provision of new infrastructure and the maintenance of the existing infrastructure; and they are considering increasing the rates, in order to create sufficient revenue.

The tender price also increased, as measured by the Bureau for Economic Research (BER) building cost index, which is used to adjust the subsidy, which rose by 5.7% in 2013, following an increase of 6.9% recorded in 2012 (DHS, 2014a: 23). The increase in tender prices causes a decrease in the delivery of residential property, especially of the subsidised housing market; and this negatively affects the municipal budget.

The lack of housing supply and loans covering partial construction of the property put inflationary pressure on what is available for sale. And this undermines the household's affordability to access housing (Financial and Fiscal Commission, 2012: 18). The affordability in the gap-housing market is a major problem for home ownership; because any attempts by lenders to extend the housing to households earning between R3,500 and R10,500 goes towards home improvements, rather than any new improvements (Financial and Fiscal Commission, 2012: 18).

### **2.3.3.3 Summary: Private residential property developers**

The lack of supply in the gap-housing market is not only affected by the lack of bridging finance for developers; but the increase in operational costs, the increasing costs of material,

due to inflation and high municipal rates can be a disincentive for property developers to supply new housing. Most property developers focus more on property improvements, rather than new developments. There is a lack of incentives for property developers to participate in the supply of houses in the gap-housing market.

Here is one of the general comments from the respondents about the gap-housing market development scheme:

“[The] most important factor is the availability of land and [the] efficient participation of local authorities in the planning process.”

#### **2.3.4 Realtors in the gap-housing market**

The realtors assist with the marketing of properties for sale and the coordination of property transactions between buyers and sellers with the involvement of an attorney and the lender. The real estate services are well suited for analysis of the relationship between potential qualities and the decision to initiate a service interaction with traditional relationships among process quality, customer satisfaction and customer intentions (Tuzovic, 2009: 498).

The residential property market will continue to be driven by economic growth, employment, growth in household income, property running costs, living costs in general, interest rates, consumers' credit-risk profile, banks' 'risk appetite, lending criteria and consumer confidence (Du Toit, 2014: 6). The recession in the economy negatively affects the sale prices of properties in particular locations (Epley, 2012: 379).

The factors that affect the sale of properties in the property market or productivity include, according to Collins *et al.* (2013: 81) include:

- Land which involves topography, geology, views and water utility;
- The location, which encompasses exposure, linkage, convenience and environment;
- Improvements, including buildings, roads, landscaping, dams and wind-pumps, and
- Institutional attributes, which cover town planning, building regulations, expropriation and legal factors.

The cost of home ownership extends beyond the costs of a mortgage; and not every household can manage the intensity of this demand in their finance; so, they opt for the alternative options

like renting (Price, 2015: 11). Luüs (2003: 160-161) outlined the following factors that realtors consider when investing directly in real estate:

- The risk involved is not only the volatility of the return, or the underlying price that can easily be measured for financial assets; but there are other unquantifiable risks in direct property investment;
- Homogeneity: Two property investments are hardly ever directly comparable; and using national or regional price data could only approximate the actual returns achieved on a specific investment;
- Liquidity: How soon and easily can an investment be liquidated;
- Tax implications: In South Africa, dividends are not taxed; but rentals and interest income are, including capital gains;
- Costs: There is always a cost factor with all types of investments; and property costs can also include transfer duties, bond-registration fees and agent's commission. Maintenance and repair costs should also be considered; but these are normally deductible for tax purposes, and
- Gearing: The property investment can be quite attractive; but sharp increases in interest rates could affect the return on the investment.

Between April 1994 and July 2002, 1.3 million subsidised houses were delivered as completed structures to housing beneficiaries by the South African government (PSC, 2003: 58). The South African government also provided additional RDP / State-subsidised housing to an estimated 1.8 million of households between 2002 and 2009 (Stats SA, 2009: 35). The property price growth rate of 4.40% on a year-to-year basis suggests that, the first delivery after 1994 of subsidised houses should have migrated into the gap-housing market after 8 years; and that the prohibition on any sale of subsidised house also lapsed in 2002. The first delivery of subsidised houses as the primary housing market should be adequately trading in the gap-housing market.

The government spent R1.3 billion between 1994 to 2002, which represents 10% of the department's annual budget, to demolish and rectify badly constructed RDP houses (Tissington, 2011: 80).

### 2.3.4.1 The Performance of the subsidised housing market

The co-existence of a social development agenda in South Africa is evident in the housing market, with the continued support of the subsidised-housing market, alongside the existence of a strong housing market are a feature in the South African housing system (Ndinda, Uzodike & Winaar, 2011: 763). The South African government provides subsidised housing for households who earn below R3,500 a month (DHS, 2013: 334).

The property transfers in the period of 12 months from 01 September 2013 to 31 August 2014, shows an average of 356 hundred thousand transfers, with an average property value transferred is R1.87 Million (Tivvit Solutions, 2014: 1). The average property value of 1.8 Million is a clear indication that the subsidy-housing market is not adequately trading.

The highest counts in cities of property-ownership transfers are, according to the table below:

**Table 4:** The highest transfer counts

| <b>Top 5 Cities with the Highest Transfer Counts</b>  |              |
|---|--------------|
| <b>City</b>   | <b>Count</b> |
| Pietermaritzburg (KwaZulu-Natal)                      | 2,945        |
| Milnerton (Western Cape)                              | 2,713        |
| Blue Downs (Western Cape)                             | 2,498        |
| Kraaifontein (Western Cape)                           | 1,994        |
| Mitchells Plain (Western Cape)                        | 1,756        |
| <b>Top 5 Suburbs with the Highest Transfer Counts</b> |              |
| <b>City</b>   | <b>Count</b> |
| Cape Town   | 22,011       |
| Pretoria  | 14,540       |
| Johannesburg  | 13,959       |
| Durban  | 10,911       |
| Sandton   | 7,935        |

Source: Tivvit Solutions (2014: 1)

Table 4 indicates that the highest transfer counts of property ownership in South Africa, with Cape Town receiving the highest counts of 22,011, after 12 months, between 2013 and 2014. The subsidy housing market and the gap-housing market constitute 95% demand; while the property value average of R1.8 million of highest transfer counts represents 5% of the South African employable population. Cape Town receives the highest number of immigrants, based on the assumption by Statistics South Africa; and the highest property transfer counts in South

Africa, as highlighted in Table 4. Although the transfer duty for purchasing a property in the gap-housing market is 0% of the purchasing price for properties valued below R600,000 (Grant Thornton, 2013: 4), there is no evidence of improved performance on the transfer of property ownership.

The challenges contributing to the poor performance of the subsidy-housing market include the following:

- The overcrowded formal housing, due to housing backlogs; here freedom of choice is controlled by the State, which decides on the design and size of the subsidised unit including the level of service provided (Ndinda *et al.*, 2011: 762-765);
- The well-located serviced land has become increasingly high in demand, and therefore more expensive. This forces the State to only acquire land in undesirable peripheral areas where land is cheaper; and therefore, the only alternative for the poor is either a government-subsidy of a 42m<sup>2</sup> house on the margins of the city or an informal dwelling with no access to basic services (Bhana *et al.* 2009: 4), and
- Social housing is faced with a lack of competition, weak incentives to efficiency and the over-consumption associated with price subsidies (Gibb, 2013: 65).

The poor trading performance of the subsidy-housing market creates a demand in the gap-housing market, and an inadequate access to home ownership.

#### **2.3.4.2 Challenges for realtors in marketing gap-housing**

The realtors can only receive payment on the date of transfer in the form of a commission, based on the percentage of property price after marketing the property through a sole or open mandate. If the property is advertised for sale for a long period of time, without any buyer or sale, the realtor may consider a cooling period for re-advertising, in order to reduce the marketing costs; since any advert without a sale is a loss. The gap-houses have the following challenges during marketing:

- The lack of affordability by potential buyers as also outlined below, as realtors view a lack of stimulus in the gap-housing market (Standard Bank, 2012: 5).



Standard bank outlined the following challenges for realtors to fully market the affordable or gap-housing market (Standard Bank, 2012: 6):

- The gap-housing market is at the “margin of affordability”, which creates a concern that consumers cannot absorb shocks brought about by rising interest rates or tariff hikes; and it is increasingly difficult for households to adhere to future obligations;
- Accessing of debt finance for gap-housing market is viewed by the majority of realtors as a key challenge, with insufficient deposit saving, impaired credit records on the part of the potential buyer, as well as elevated existing household debt, restricting further debt uptake;
- The realtors indicated that, the levelling out of mortgage cost of late, assisted by the lower interest rate, the rising running costs of home ownership, are shifting the profile closer to 50/50;
- The poor performance of the subsidy-housing market affects the performance and supply of the gap-housing market; because all the subsidy houses delivered after 1994 should have migrated to the gap-housing market, based on the growth in property values;
- The affordable housing or gap-housing market is found on cheap land on both peripheral locations and inner city sites; where the supply has been historically created by economic or other shocks to the existing land use (Gibb, 2013: 65);
- The owners of affordable housing exploit one of the few resources they have, which is space – by allowing others to build informal structures called “shacks” in their backyards, thereby creating rental income (Govender, Barnes & Pieper, 2011: 4);
- The National Treasury’s findings also suggest that most township home owners are unwilling to sell their houses; since they require a legal limitation to the trade of residential properties in townships; and this should be reduced (RSA, 1999b: 129), and
- Affordable housing or gap-housing market is a neglected component of the urban regeneration strategies (HDA, 2013: 15).

#### **2.3.4.3 Summary: Realtor’s participation in the gap-housing market**

The gap-housing market is not only affected by the lack of affordability, but also by the poor location for marketing by realtors. The poor performance of the subsidy-housing market affects the supply of the gap-housing market.

The general comments from the respondent regarding the marketing of gap-housing market are: “We currently do not have available properties in the R116,703 – R483,481, although they are desperately needed, according to the huge demand.”

## 2.4 Conclusion of the related literature review

The gap-housing market in South Africa is affected by various factors, which can be an incentive; and some can be a disincentive for the participation of private financial institutions, property developers and realtors.

The Bosch (2015: 5) reported that, Bruce Swain, managing director of the Leapfrog Property Group, says:

“The situation is further compounded by the fact that the astounding backlog at the deeds office also means that thousands of housing beneficiaries have not been given the title-deed to their properties; so they cannot sell them, or use them as collateral to obtain loans.”

The related literature established the factors that can be considered as incentives, or as disincentives, which influence the participation, or the lack of participation of the private sector in the gap-housing market, as indicated in the Table5 below:

**Table 5:** The incentive or disincentive of South African gap-housing market

| <b>Housing market</b>   | <b>Government Incentive product for consumer</b>     | <b>Incentive or disincentives for Financial Institution</b> | <b>Incentive or disincentives for Property Developer</b> | <b>Incentive or disincentives for Realtors</b> |
|---|--|---|--|--|
| Gap-housing Market, a finance-linked market from R3,501 to R9,000 per month for property from R116,703 to R 233,404 | National Housing Finance Corporation (NHFC).         | Property rights   | Access to finance.                                       | Property rights                                |
|   | Housing Impact Fund South Africa (HIFSA).            | Location of the property.                                   | Profitability  | Zoning of property                             |
|   | Transfer duty exempted.                              | Property market value                                       | Demand   | Property size                                  |
|   | Integrated Residential Development Programme (IRDP). | Property improvements                                       | The ability of clients to obtain a building loan.        | Property location                              |

| <b>Housing market</b>  | <b>Government Incentive product for consumer</b>    | <b>Incentive or disincentives for Financial Institution</b> | <b>Incentive or disincentives for Property Developer</b>   | <b>Incentive or disincentives for Realtors</b>            |
|--|---|---|--|---|
|  |   | Property's current use                                      | Access and affordability of basic municipal services, including township establishment, zoning, rates and taxes, electrical supply | Property appreciation rate                                |
|  |   | Property's current condition                                | Feasibility  | Property current use                                      |
|  |   | Affordability   | Affordable residential land.   | Property demand   |
|  |   |   | Viability  | Affordability of potential buyers/ positive response from |
|  |   |   | Risk level   | Property supply   |
|  |   |   | Production costs   | Property market value                                     |
|  |   |   |  | Rates and taxes   |
|  |   |   |  | Property current condition                                |
|  |   |   |  | Property improvement                                      |
|  |   |   |  | Neighbourhood regulations                                 |
| Gap-housing Market, a bonded market from R9,001 – R15,000 per month for property from R 233,404 – R483,481 |   | Property rights.  | Access to finance.   | Property rights   |
|  | National Housing Finance Corporation (NHFC)         | Location of the property                                    | Profitability  | Zoning of property  |
|  | Integrated Residential Development Programme (IRDP) | Property market value                                       | Demand   | Property size   |
|  |   | Property improvements                                       | The ability of clients to obtain a building loan.  | Property location   |
|  |   | Property current use  | Access and affordability to basic municipal services including township  | Property-appreciation rate                                |

| <b>Housing market</b> | <b>Government Incentive product for consumer</b> | <b>Incentive or disincentives for Financial Institution</b> | <b>Incentive or disincentives for Property Developer</b>       | <b>Incentive or disincentives for Realtors</b> |
|-----------------------|--|---|--|--|
|                       |  |   | establishment fees, zoning, rates and taxes, electrical supply |  |
|                       |  | Property's current condition                                | Feasibility  | Property's current use                         |
|                       |  | Affordability   | Affordable residential land.                                   | Property demand                                |
|                       |  |   | Viability  | Affordability of potential buyers              |
|                       |  |   | Risk level   | Property supply                                |
|                       |  |   | Production costs   | Property market value                          |
|                       |  |   |  | Rates and taxes                                |
|                       |  |   |  | Property current condition                     |
|                       |  |   |  | Property improvement                           |
|                       |  |   |  | Neighbourhood regulations                      |

Table 5 provides a summary of the government's support and the factors affecting the participation of the private sector in the gap-housing market for South Africans to have adequate access to home ownership. The expectation is government's policy position in terms of the South African Constitution, with the perceived performance of adequate access to housing. The South African government put in place the following programmes to deal with the gap-housing challenge in the housing market:

- National Housing Finance Corporation (NHFC) with FLISP, which is targeting the gap-housing market;
- Housing Impact Fund South Africa (HIFSA) is the investment targeting the gap-housing market;
- Transfer duty is exempted for the subsidy housing and gap-housing market, and
- Integrated Residential Development Programme (IRDP).

The literature clearly indicates that the government cannot provide adequate access to home ownership – without the participation of the private sector.

The factor that affects the participation of the private financial institutions in financing the gap-housing market, for South African to have adequate access to home ownership includes:

- Property rights;
- Property improvement;
- Property market value;
- Property location;
- Property's current use;
- Property's current condition, and
- Affordability.

The factors that influence performance can be an incentive or a disincentive for private financial institutions to participate in the gap-housing market.

Before any participation of the private financial institution, there must be a consensus between the seller and buyer – with serious intentions to participate in the business transaction, including the involvement of the realtor for the marketing of property to a potential buyer. The factors that affect the participation of the realtors for the adequate trading of the gap-housing market include the following:

- Property rights;
- Property size;
- Zoning of the property;
- Property location;
- Appreciation rate of the property;
- Property's current use;
- Property demand;
- Affordability of potential buyers;
- Property supply;
- Property's market value;
- Rates and taxes;
- Property improvements;
- Neighbourhood regulations, and
- Property's current condition.

The factors are incentives or disincentives for realtors to fully participate in the marketing for the trading of properties in the gap-housing market. Before trading takes place, the property must be available in the housing market for the realtor to fully participate in the marketing for the adequate trading. The factors that affect the participation of property developers in the supply of the gap-housing market include the following:

- Access to finance;
- Profitability;
- Demand;
- Ability of the clients to obtain a building loan;
- Feasibility;
- Viability;
- Availability and affordability of municipal services, including township establishment fees, zoning, electrical supply, rates and taxes;
- Affordable residential land;
- Risk levels, and
- Production costs, including labour costs and material costs.

The factors that affect performance are incentives or disincentives for private property developers to fully participate in the supply of the gap-housing market.

## **CHAPTER THREE: THE RESEARCH METHODOLOGY**

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### **3.1 The Data**

There are two types of data, namely primary and secondary data that were used for the treatise. The data were collected, sorted, and analysed – based on the Mean weighting and statistically interpreted by the use of Excel programme, according to the indicator, in order to test the hypotheses.

#### **3.1.1 The Primary Data**

The primary data comprise questionnaires completed by the various stakeholders.

#### **3.1.2 The Secondary Data**

The secondary data were gathered from various sources, including journals, books, magazines, newspapers, reports and the internet.

#### **3.1.3 The sampling method**

The sampling method utilised for the study is the judgment method. The judgement method is a researcher's judgement on respondent selection, who are specialists in the subject of the study (Struwig & Stead, 2013: 116). The specialists used in this study are major South African banks, residential property developers and real-estate agents.

### **3.2 The Criteria Governing The Admissibility Of The Data**

#### **3.2.1 Standards for data collection**

The primary data are a response from the questionnaires. The data were collected manually and through the internet by the use of electronic mail. The secondary data were assessed through browsing the Library shelves, library catalogues, journals, internet, indices and abstracts.

#### **3.2.2 Measurement instrument**

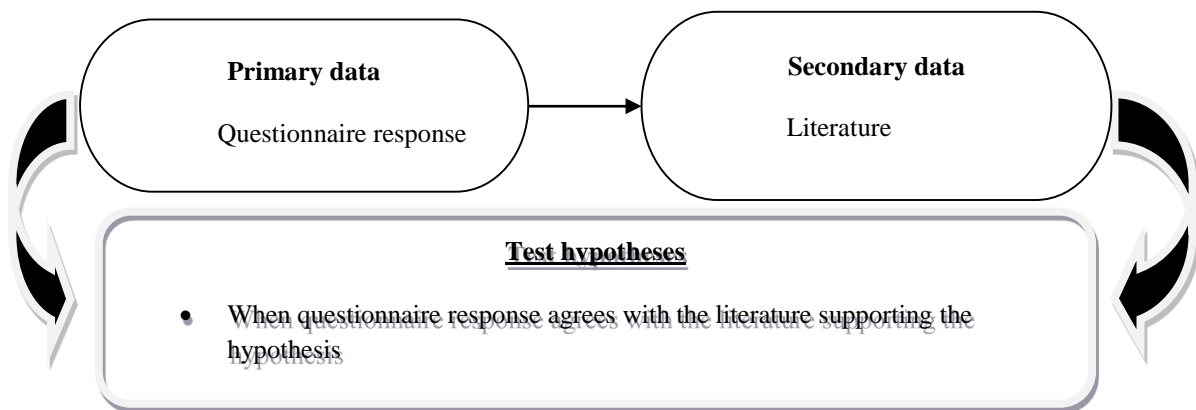
The study is a quantitative study because of the objective questionnaire and the quantified data. The questionnaire design is a descriptive survey to review the perceived performance against the confirmed performance of the gap-housing market in South Africa. The type of the

descriptive survey is a measure of central tendency and dispersion (Struwig & Stead, 2013: 165). The subjectivity is based on the respondent's perception and the closed-ended question, which is aligned with the 5-point Likert-type scale. There were some open-ended qualitative aspects to the questionnaire.

### 3.2.3 The validity and reliability

The validity of a measurement instrument is the extent to which the instrument measures what it is intended to measure (Leedy & Ormrod, 2010: 28). The validity of the data and the instrument is when the primary data and the secondary data can find a relationship and be able to test each hypothesis, as indicated in Figure 6.

#### The validity and reliability of findings



**Figure: 6:** Validity and reliability of findings

The validity and reliability are the consistency with which a measuring instrument yields a certain result, when the entity being measured has not changed; or it remains unchanged (Leedy & Ormrod, 2010: 29). The reliability is a consistency response to both sources of information that are able to test the hypothesis. The premises must agree with the conclusion of the findings.

### 3.3 Research Design

Academic research is an examination of testing or investigating new facts with their correct implementation and to review the established conclusions and theories, in the light of newly discovered facts, or the practical application of such conclusions, theories or laws (Leedy & Ormond, 1997: 11). The research philosophy is based on the subsequent knowledge that will be established by the survey (Shakantu, 2014: 73). The epistemology is objective; because it is



based on the empirical study supported by the literature (Shakantu, 2014: 73). The Ontology is Parmenidean, based on the majority of respondents' views of their reality; and the paradigm is positivist, based on the quantitative analysis of the survey (Shakantu, 2014: 73).

The research is using the 'expectation-confirmation theory' to analyse the stakeholder's response compared to the expectations of government – as individuals representing the public – based on the policy position and confirmation of the response from the housing market. The expectation-confirmation theory posits that expectations, coupled with perceived performance lead to post-performance satisfaction, the effect of which is mediated through positive or negative disconfirmation (Oliver, 1977: 480).

### **3.4 The Research Method**

The research was conducted in two stages to ensure that the primary and secondary data were able to test the hypothesis. The descriptive research is a study of the existing general theory that is borne out of a specific situation (Shakantu, 2014: 16). The study is the analysis of the gap-housing market, based on the expectation and the confirmed performance.

The method used for the study is a quantitative method. The quantitative method is objective, based on quantifiable evidence through the empirically based respondent's perception on the closed-ended questionnaire, which is aligned with a 5-point Likert-type scale and some open-ended qualitative aspects, which are subjective, based on the quality of the evidence; and they cannot be quantified. The qualitative method involves judgment, based on trends, reports and opinions (Polancic n.d. citing Winston, 1997; Neuman, 2005; Johnston & Shanks, 2003; Bernd *et al.* 2002).

Leedy and Ormrod (2010: 94) defined the two methods as follows:

“ The quantitative method involves looking at amounts or quantities of one or more variables of interest, perhaps by using commonly acceptable measures of the physical world; while the qualitative method involves looking at characteristics, or qualities, that cannot easily be reduced to numerical values.” The qualitative and a quantitative data were sourced from different sources in the form of a questionnaire, which will be objective to organisations involved in the residential property market, and subjective to the respondents' judgement.

### 3.4.1 The specific projected treatment of each sub-problem

**Sub-problem 1:** South African citizens in the gap-housing market do not have adequate access to finance, in order to be able to participate in the gap-housing market.

**Hypothesis 1:** There is a lack of incentive for private sector financial institutions to fully participate in the gap-housing market.

**Table 6:** Hypothesis 1 – Data collection and interpretation

| What data are needed?  | Where are the data located?  | How will the data be secured?  | How will the data be interpreted?   |
|--|--|--|---|
| <ul style="list-style-type: none"> <li>• Reports analysis.</li> <li>• Research documents.</li> <li>• Surveys.</li> <li>• Magazines.</li> <li>• Journals.</li> <li>• Catalogs.</li> <li>• Books.</li> <li>• Statistics.</li> <li>• Newspapers.</li> </ul> | <ul style="list-style-type: none"> <li>• Company websites.</li> <li>• Organisation’s database.</li> <li>• Library.</li> <li>• Online Library.</li> </ul> | <ul style="list-style-type: none"> <li>• Office visits.</li> <li>• Electronic access to information.</li> <li>• Library visits.</li> <li>• Online Library access.</li> </ul> | <ul style="list-style-type: none"> <li>• All the data will be analysed based on the consistent, interpreted on the context and referenced.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Empirical study.</li> </ul>   | <ul style="list-style-type: none"> <li>• Private financial institutions.</li> </ul>  | <ul style="list-style-type: none"> <li>• Submission of questionnaires to Private financial institutions.</li> </ul>  | <ul style="list-style-type: none"> <li>• The analysis of the response from the questionnaire on private financial institutions’ participates in the gap-housing market. The analysis of frequency and rating</li> </ul> |

Table 6 indicates that the primary data were analysed through the closed-ended question, which is aligned with the 5-point Likert-type scale from private financial institutions. The secondary data were referenced from different sources.

**Sub-problem 2:** There is an undersupply of houses in the gap-housing market by private property developers.

**Hypothesis 2:** There is a lack of incentives for private-sector developers to increase the supply of housing for the gap-housing market.

**Table 7:** Hypothesis 2 – Data collection and interpretation

| What data are needed?  | Where are the data located?  | How will the data be secured?  | How will the data be interpreted?   |
|--|--|--|---|
| <ul style="list-style-type: none"> <li>• Reports.</li> <li>• Analysis.</li> <li>• Research documents.</li> <li>• Surveys.</li> <li>• Magazines.</li> <li>• Journals.</li> <li>• Catalogs.</li> <li>• Books.</li> <li>• Statistics.</li> <li>• Newspapers.</li> </ul> | <ul style="list-style-type: none"> <li>• Company websites.</li> <li>• Organisation’s database.</li> <li>• Library.</li> <li>• Online Library.</li> </ul> | <ul style="list-style-type: none"> <li>• Office visits.</li> <li>• Electronic access to information.</li> <li>• Library visits.</li> <li>• Online Library access.</li> </ul> | <ul style="list-style-type: none"> <li>• All the data will be analysed based on the consistent, interpreted on the context and referenced.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Empirical study.</li> </ul>   | <ul style="list-style-type: none"> <li>• Private property developers.</li> </ul>   | <ul style="list-style-type: none"> <li>• Submission of questionnaires to private property developers.</li> </ul>   | <ul style="list-style-type: none"> <li>• The analysis of the response from the questionnaire on private property developers’ participate in the gap-housing market. The analysis of frequency and rating</li> </ul> |

Table 7 indicates that the primary data were analysed through the closed-ended question, which is aligned with the 5-point Likert-type scale from private property developers. The secondary data were referenced from different sources.

**Sub-problem 3:** Houses within the gap-housing market are not adequately traded.

**Hypothesis 3:** There is a lack of incentive for realtors to fully participate in the marketing of houses in the gap-housing market.

**Table 8:** Hypothesis 3 – Data collection and interpretation

| What data are needed?  | Where are the data located?  | How will the data be secured?  | How will the data be interpreted?  |
|--|--|--|--|
| <ul style="list-style-type: none"> <li>• Reports</li> <li>• Analysis</li> <li>• Research documents</li> <li>• Surveys</li> <li>• Magazines</li> <li>• Journals</li> <li>• Catalogs</li> <li>• Books</li> <li>• Statistics</li> <li>• Newspapers</li> </ul> | <ul style="list-style-type: none"> <li>• Company websites</li> <li>• Organisation’s database</li> <li>• Library</li> <li>• Online Library</li> </ul> | <ul style="list-style-type: none"> <li>• Office visits.</li> <li>• Electronic access to information.</li> <li>• Library visits.</li> <li>• Online Library access.</li> </ul> | <ul style="list-style-type: none"> <li>• All the data will be analysed based on the consistent, interpreted on the context and referenced.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Empirical study.</li> </ul>   | <ul style="list-style-type: none"> <li>• Realtors.</li> </ul>  | <ul style="list-style-type: none"> <li>• Submission of questionnaires to realtors.</li> </ul>  | <ul style="list-style-type: none"> <li>• The analysis of the response from the questionnaire on realtors’ participates in the gap-house market. The analysis of frequency and rating.</li> </ul> |

Table 8 indicates that the primary data were analysed through the closed-ended question, which is aligned with the 5-point Likert-type scale from the realtors. The secondary data were referenced from different sources. The hypotheses were tested by analysing the housing market with measures in place by government to improve housing performance and expectation against the confirmed performance from the response of the study.

### **3.5 Ethical Considerations**

#### **3.5.1 Research Ethics in General**

All the respondents were allowed to respond or not, to the research questionnaire; and the respondents were also entitled to their own opinion on the research subject. The data were treated with respect and dignity. The study respects the privacy, confidentiality and other rights within the Constitution of the Republic of South Africa, including the Protection of Personal Information Act No. 4 of 2013, and adherence to NMMU policy. The research also adhered to the moral guidelines (Struwig & Stead, 2001: 66-72).

#### **3.5.2 Confidentiality**

The data were treated with confidentiality; and anonymity was guaranteed. The data were also treated, in accordance with and adhered to the NMMU policy.

#### **3.5.3 Ethics in Internet Research Studies**

The study was undertaken within the regulations that govern internet research studies and within the Electronic Communications and Transaction Act No. 25 of 2002.

### **3.6 Closing Remarks – Ethical Considerations**

The study should not be vetted by the NMMU Ethics Committee; because it is not studying people considered to be from vulnerable groups. The study ensures that all the rights under the Constitution of the Republic of South Africa are protected.

### **3.7 The Qualifications Of The Researcher**

The research was conducted by Daniel Dumisa Ludidi, B-Tech in Quantity Surveying from the Durban University of Technology.

### 3.8 Theoretical Framework For The Study

The theoretical framework identified for the study was the expectation-confirmation theory from the retail industry. The expectation-confirmation theory posits the expectations, coupled with the perceived performance leading to post-purchase satisfaction, which affects the outcome through positive or negative disconfirmation between expectations and performance (Oliver, 1977: 480). The expectation-confirmation theory can be associated with property theory. The property theory explores the debate on the respect of the settled expectation and it focuses on the anxieties that seem to underlie arguments for certainty (Davidson, 2011: 44). The confirmation provides assurance of the expectation.

The theoretical background of the expectation-confirmation theory (ECT) was originally developed by Oliver in 1980. It comprises the construct of expectancy, the perceived performance, confirmation, satisfaction and the intention to repurchase; but the practical implications in the real world may depend on confirmation, time and the money available, as well as the utilitarian motivation (Tsao, 2013: 285-293).

The study uses the following theoretical framework derived from the literature review:

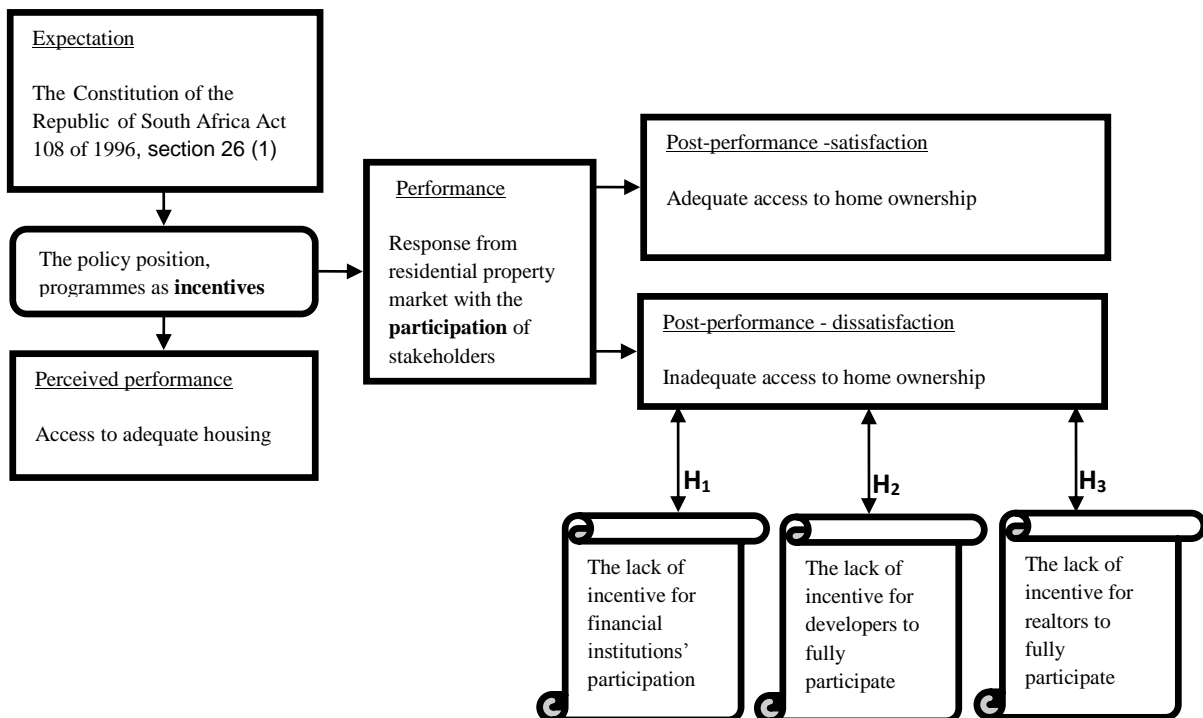


Figure 7: Research theoretical framework

Figure 7 indicates the expectation in terms of the Constitution of the Republic of South Africa. This implies idealism with the perceived performance of adequate access to housing, compared to the current reaction of the residential property market, as behaviourism with satisfactory or dissatisfactory results. The general concept of expectation is explored in the perception of property as a commodity. The frequent change gives emphasis to the sustainability, which is relating to building characteristics and performance aspects, as important determinants of a property's worth and market value (Lorenz *et al.*, 2012: 120) .

The South African government policy has been focusing largely on maintaining and protecting household income levels. Surprisingly, there has been relatively little attention given to the other side of the housing equation, such as the risks associated with home ownership (Reed & Wu, 2013: 34). The government policy should create a friendly environment for the private sector to participate; because it is clear that the government cannot solely (on its own) deliver adequate access to home ownership.

### **3.9 Theoretical Relationship**

#### **3.9.1 Incentive**

A property is a source of incentives for production, and also as a locative response to scarcity (Davidson, 2009: 764). An incentive creates expectation with perceived performance. Where the house is a family asset, the incentive for an individual to invest in that asset may diminish; and there is no certainty that the returns to that investment will be captured directly by the investor, or his, or her immediate family (FinMark Trust, 2007: 5).

Incentive has an impact on the commitment and motivation of performance, with significant concepts of predicting behaviour and outcomes through expectancy-based motivation (Lee & Kulviwat, 2008: 89-90 citing Vroom, 1964). The perceived performance of adequate access to home ownership requires the motivation of performance for the private sector to fully participate in the gap-housing market.

The literature review identified the incentives that would motivate the performance of the private sector to participate in the gap-housing market – for South Africans to have adequate access to home ownership, as an expectation in terms of the South African Constitution.

### **3.9.1.1 Incentive for private financial institutions**

The Table 5 of literature review suggests an incentive that would promote the participation of the private financial institutions in financing the gap-housing market. These include:

- Property rights;
- Property improvement;
- Property market value;
- Property location;
- Property's current use;
- Property's current condition, and
- Affordability.

### **3.9.1.2 Incentive for private property developers**

The Table 5 of literature review suggests an incentive that would promote the participation of property developers in the supply of the gap-housing market. This includes the following:

- Access to finance;
- Profitability;
- Demand;
- Ability of the clients to obtain building loans;
- Feasibility;
- Viability;
- Availability and affordability of municipal services, including township establishment fees, zoning, electricity supply, rates and taxes;
- Affordable residential land;
- Risk levels, and
- Production costs, including labour costs and material costs.

### **3.9.1.3 Incentive for realtors**

The Table 5 of literature review suggests an incentive that would promote the participation of the realtors in the marketing for the adequate trading of the gap-housing market. This includes the following:

- Property rights;
- Property size;
- Zoning of the property;
- Property location;
- Appreciation rate of the property;
- Property's current use;
- Property demand;
- Affordability of potential buyers;
- Property supply;
- Property's market value;
- Rates and taxes;
- Property improvements;
- Neighbourhood regulations, and
- Property's current condition.

### **3.9.2 Participation**

The participation decision or investment in general, is the sacrifice of a certain present value for a possibly uncertain future value (Cloete, 2005: 3). The participation in the gap-housing market is based on the characteristic-based description of the market and the experience-based description of the market behaviour. The characteristics-based description is a statement on the availability, number, size of particular building feature, or the components (Lorenz & Lützkendorf, 2008: 494).

The experience-based description is a subjective and qualitative judgement, based on implicit assumptions (Lorenz & Lützkendorf, 2008: 494).

The participation in property development is largely affected by risk; as every development project involves risk to a greater or lesser extent (Botha, 2013: 7, citing Syms, 2002). A property investor would strive to achieve the maximum possible return for the minimum risk



(Cloete, 2005: 271). The performance is based on participation; and without participation, there is no performance.

The risk is an experience-based description for the decision to participate, which cannot be quantified, and which compromises the perceived performance.

### **3.9.2.1 Participation of private financial institutions in the gap-housing market**

The literature has established a sequential logic that there is a connection between the incentive and participation – to promote adequate access to home ownership.

The literature has identified the following variables between expectation and performance:

- The first variable is incentive as an independent variable, and participation as a dependent variable, and
- The second variable is participation as an independent variable, which influences the dependent variable of adequate access to home ownership.

The variables were able to test the hypothesis that there is a lack of incentive for private sector financial institutions to fully participate in the gap-housing market.

### **3.9.2.2 Participation of private-property developers in the gap-housing market**

The literature has established a sentential logic that there is a connection between incentive and participation – to increase the supply in the gap-housing market.

The literature has identified the following variables between expectation and performance:

- The first variable is incentive, as an independent variable; and participation as a dependent variable, and
- The second variable is participation as an independent variable, which influences the dependent variable to increase the supply of houses in the gap-housing market.

The variables were able to test the hypothesis that, there is a lack of incentives for private sector developers to increase the supply of housing for the gap-housing market.

### **3.9.2.3 Participation of realtors in the gap-housing market**

The literature has established a sentential logic that there is a connection between incentive and participation in marketing for adequate trading in the gap-housing market.

The literature has identified the following variables between expectation and performance:

- The first variable is incentive, as an independent variable; and participation, as the dependent variable, and
- The second variable is participation as independent, which influences the dependent variable of adequate trading of the gap-housing market.

The variables were able to test the hypothesis that there is a lack of incentive for realtors to fully participate in the marketing of houses in the gap-housing market.

## CHAPTER FOUR: RESULTS, ANALYSIS AND INTERPRETATION

In this chapter, the research methodology for the study is an empirical study to test the hypotheses. The purpose of the study is to review the gap-housing market by reviewing the related literature and by conducting an empirical investigation.

The survey was conducted using a quantitative statistical approach, with the distribution of research questionnaires based on judgement sampling. The computer programme used is Excel for the analysis of the data received.

### 4.1 The Data Collection

The sample was electronically distributed through an e-mail attachment; and hard copies were hand-delivered. The sampling method is judgement sampling; the selection of the specialists, who participated in the gap-housing market, is outlined in Table 9.

**Table 9:** Sample response rate

| Target  |                    | Response  |              |
|---|--------------------|-----------|--------------|
| Target group                                    | Sample target sent | Received  | %            |
| South African major home financing institutions | 4                  | 4         | 100          |
| Residential Property Developing Companies       | 50                 | 12        | 24           |
| Real Estate Agent Companies                     | 50                 | 14        | 28           |
| <b>Total</b>                                    | <b>104</b>         | <b>30</b> | <b>28.85</b> |

Judgement sampling was utilised for the purpose of the study because of the time constraints, and to avoid the complexity of a larger sample stratum.

The sample consisted of 104 organizations identified respondents as. This is indicated in Table 9, of which 30 completed and returned questionnaires, which to a response rate of 29% of the 104 targeted companies and 51% of the responses.

The study assured confidentiality to the respondents; and it stressed the importance of the respondents' participation. The research questionnaire was distributed by hand and via e-mail, as explained in the attached annexure.

The questionnaire received a poor electronic email response from a target number of 50 property developers and 50 realtors. The respondents were also reminded three times to complete and submit the questionnaire. The random sampling targeted stakeholders that have

a branch in the different provinces. The researcher did not narrow down the views of the shareholders; the research was based on the geographical location of the study. The questionnaire was submitted, collected, or returned.

## **4.2 Analysis Of The Data**

The data obtained from the respondents for the survey were analysed and interpreted, in order to develop results that would confirm or reject the hypotheses. The analysis of the data consists of the calculation of descriptive statistics in the form of frequency distributions and the central tendency, in order to calculate the Mean Score (MS).

The data produce a small sample. The analysis was based on the non-parametric test – to test the population median against the target value – and to test the correlation between the dependent and the independent variables of adequate access to the gap-housing market.

## **4.3 The Empirical Results**

The main objective of the study is to review the gap-housing market in terms of the South African Constitution, which advocates adequate access to housing. In this chapter, the research findings are discussed and interpreted; the hypotheses are tested via the empirical study. The empirical study confirms the performance of the private sector in the gap-housing market, based on the responses from the questionnaire. This was evaluated against the perceived performance created by the expectation of the South African Constitution.

### **4.3.1 Interpretation of the results**

The following indicators were used when analysing the data:

|          |   |                                   |
|----------|---|-----------------------------------|
| Minority | - | Less than 33.4%                   |
| Below    | - | 41.70%                            |
| Half     | - | 50%                               |
| Above    | - | 58.35%                            |
| Majority | - | 66.7% and more, but less than 80% |
| Most     | - | 80% and more, but less than 100%  |
| All      | - | 100%                              |

In order to describe the findings in detail, the following terms were used when analysing the

MS weighting:

- |                            |  |
|----------------------------|--|
| $\geq 1.00$ to $\leq 1.80$ | <ul style="list-style-type: none"><li>- not at all to nearly not important</li><li>- minor to near minor extent</li><li>- very low to nearly low</li><li>- very poor to nearly poor</li></ul>  |
| $> 1.80$ to $\leq 2.60$    | <ul style="list-style-type: none"><li>- not important to nearly important / nearly important</li><li>- minor to nearly minor extent / nearly minor extent</li><li>- low to near average / near average</li><li>- poor to near average / near average</li></ul>     |
| $> 2.60$ to $\leq 3.40$    | <ul style="list-style-type: none"><li>- nearly important to important / important</li><li>- nearly minor extent to sometimes / sometimes</li><li>- average to nearly high / nearly high</li><li>- average to good / nearly good</li></ul>                          |
| $> 3.40$ to $\leq 4.20$    | <ul style="list-style-type: none"><li>- important to nearly very important/ nearly very important</li><li>- Sometimes to a nearly major / nearly major extent</li><li>- nearly high to high / high</li><li>- good to nearly excellent / nearly excellent</li></ul> |
| $> 4.20$ to $\leq 5.00$    | <ul style="list-style-type: none"><li>- nearly very important to very important / very important</li><li>- nearly major to major / major extent</li><li>- high to nearly very high / very high</li><li>- nearly excellent to excellent / excellent</li></ul>       |

The following formulas were also used from the responses of the empirical study:

- Score = number of respondents x indicator point;
- Mean (Ms) = sum of x values / number of numerical values in the dataset;
- % of the score = (Score / Total score) x 100;
- Standard deviation =  $\sqrt{\frac{\sum(x-\bar{x})^2}{n-1}}$ ; and

- $$\text{Variance} = \frac{\sum(x-\bar{x})^2}{n-1}$$

#### 4.3.2 Part 1: Personal information

##### Question 1: Please indicate the type of organisation you are working for?

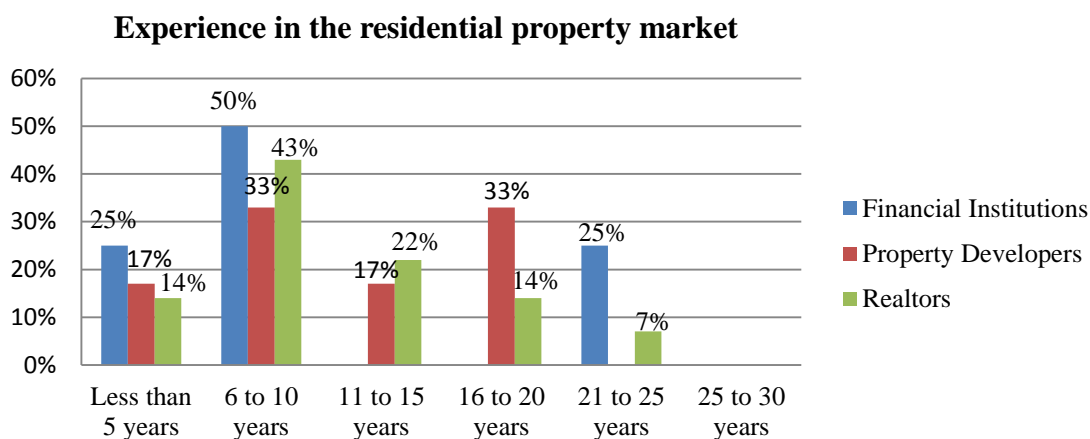
The questionnaire received a positive response of 100% of 4 respondents from South African major financial institutions, according to the target sample population. The random sampling targeted financial institutions that have branch offices in all seven provinces of South Africa, but using the same operational system. The questionnaire was designed to get responses on the company’s criteria – and not just the respondents’ general opinion.

The questionnaire to property developers received a poor response. Of the 11 respondents, which constitute 24% from the random sampling population targeting 50 were from big and medium-sized property developers. The stakeholders showed a lot of interest in the subject of the study; but they failed to respond, even after three reminders to submit.

The questionnaire to the realtors received a poor response of 14 respondents (which equates to 28%) from the total of 50 random sampling target of big and medium-sized realtors in South Africa.

##### Question 2: How many years have you been working within this organisation?

The residential property experience was the only experience considered for the research study. Figure 8.1 presents a summary of the experience of the respondents from the different stakeholders.



**Figure 8.1:** Respondent’s level of residential property experience

Figure 8.1 indicates that 25% of the respondents that had less than 5 years of experience in the residential property finance; 25% of the respondents that have had 21 to 25 years of experience in property finance; and 50% of the respondents had 6 to 10 years of experience in property finance.

Figure 8.1 also indicates that 17% of the respondents had less than 5 years of experience in property development; 33% have had 6 to 10 years of experience in property development, and 17% have 11 to 15 years of experience in property development – with 33% having 16 to 20 years of experience in property development.

Figure 8.1 also indicates that, 14% of the respondents had had less than 5 years of experience as real estate agents; 43% have had 6 to 10 years of experience as real-estate agents; and 22% who have had 11 to 15 years of experience as real estate agents; 14% having 16 to 20 years of experience as real estate agents; and only 7% have had 21 to 25 years experience as real estate agents.

**Question 3:** Please indicate your gender?

The gender of respondents from the financial institutions: 3 respondents were females and 1 respondent was a male.

The gender of the respondents from the property developers: 11 respondents were males and 1 respondent was a female.

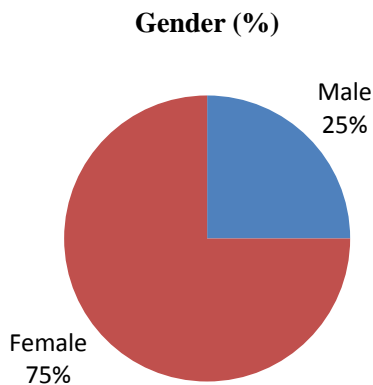
The gender of the respondents from the realtors: 10 respondents were females; and 4 respondents were males.

**Question 4:** Please indicate your age?

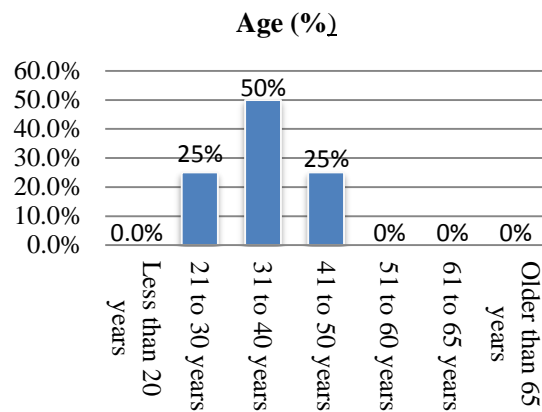
**Financial institutions**

The ages of the respondents from financial institutions: 2 respondents were in the age group between 31 to 40 years old; 1 respondent was in the age group between 21 to 30 years old; and 1 respondent was in the age group between 41 to 50 years old.

### Summary of gender and age of the respondents



**Figure 8.2:** Respondents' gender



**Figure 8.3:** Respondents' age group

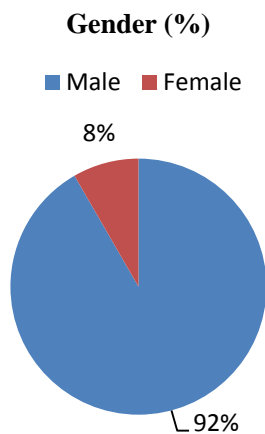
Figure 8.2 indicates that the majority of 75%, which equates to the 3 respondents from the financial institutions, who were females. The minority of 25% equates to the 1 respondent, who was a male.

Figure 8.3 indicates that 50%, which equates to 2 respondents from the financial institutions, who were in the age group between 31 to 40 years old, of which 25% linked with the 1 respondent, who was in the age group between 21 to 30 years old; while the other 25% was between 41 to 50 years old. The mean age of the respondents is thus 40 years old.

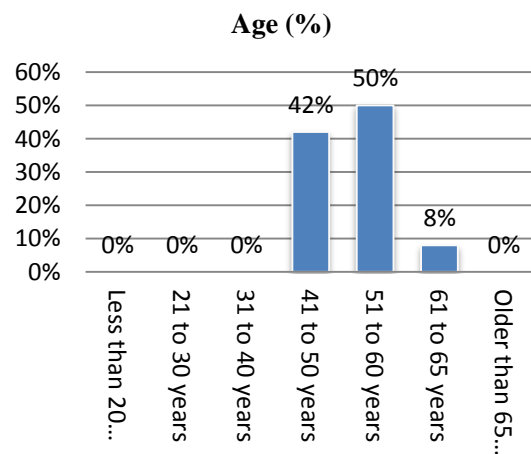
### Property developers

The age of the respondents from the property developers: 6 respondents were in the age group between 51 to 60 years old; 5 respondents were in age group between 41 to 50 years old; and 1 respondent was in the age group between 61 to 65 years old.

### Summary of gender and age of the respondents



**Figure 8.4 –** Respondent's gender



**Figure 8.5 –** Respondent's age group



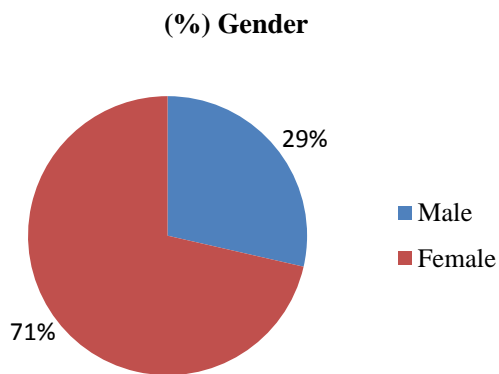
Figure 8.4 indicates that 91.67% (which equate to 11 respondents from the private property developers) were males; and the minority of 8.33% was the 1 respondent who was a female.

Figure 8.5 indicates that 50% (which equates to 6 respondents) were in the age group between 51 to 60 years old; 42% that correspond with the 5 respondents were in the age group between 41 to 50 years old, and 8% that linked with the 1 respondent between 61 to 65 years old. The mean age of the respondents was 56 years old.

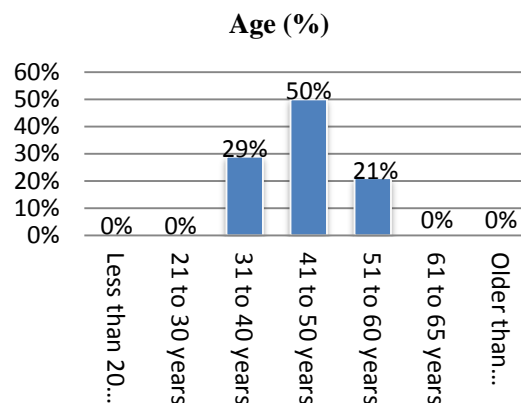
### Realtors

The age of the respondents from the realtors: 7 respondents were in the age group between 41 to 50 years old; 4 respondents were in the age group between 31 to 40 years; and 3 respondents were in the age group between 51 to 60 years old.

### Summary of gender and age of the respondents



**Figure 8.6:** Respondent's gender



**Figure 8.7:** Respondent's age

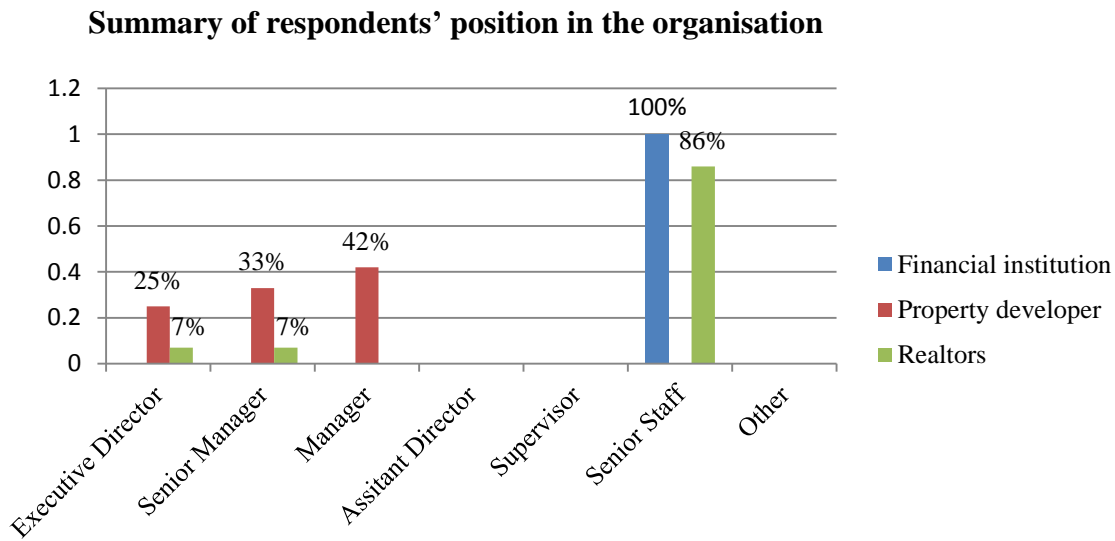
Figure 8.6 indicates that, 71%, which corresponds with 10 respondents, were females; and the minority of 29% that linked with the 4 respondents, who were male realtors.

Figure 8.7 indicates that 50% (which equates to 7 respondents) were in the age group between 41 to 50 years old; 29% linked with the 4 respondents, whose age group was between 31 to 40 years old; and 21% for the 3 respondents, who were in the age group between 51 to 60 years old. The mean age of the total number of respondents was 50 years old.

**Question 5:** Please indicate the position you occupy in the organisation for which you are working?

The questionnaire also requested a position level, in order to understand the respondent's role in decision-making. Some respondents disclosed their occupational post, but not the post level,

especially realtors and financial institutions. Figure 8.8 is a summary of the experience of the respondents from the different stakeholders.



**Figure 8.8:** Respondents' position in the organization

Figure 8.8 indicates that 100% of the respondents were senior staff in the financial institution for which they worked. 25% of the respondents were executive directors; 33% were senior managers; and 42% were managers in the property developers' organization for which they worked.

7% of the respondents of realtors were the executive directors; the other 7% of the respondents were directors; and 86% were senior staff in the organization.

#### 4.3.3 Part 2: Evaluation of the study

The following closed-ended question aligned with a 5-point Likert-type scale were sent to the respondents:

**Question 6.1:** How important are the following incentives in motivating the financial institution to participate in financing residential properties valued between R116,703 to R483,481?

The empirical study was used to realise the important incentives for gap-housing finance.

**Table 10:** The important incentives for financial institutions to participate in the gap-housing

| Item                       | Respondent %        |      |      |      |      | Total | Mean | Standard deviation | Rank |
|----------------------------|---------------------|------|------|------|------|-------|------|--------------------|------|
|                            | Not at all.....Very |      |      |      |      |       |      |                    |      |
|                            | 1                   | 2    | 3    | 4    | 5    |       |      |                    |      |
| Property market value      | 0.0                 | 0.0  | 0.0  | 70.6 | 29.4 | 4     | 4.25 | 0.50               | 1    |
| Location of the property   | 0.0                 | 12.5 | 0.0  | 25.0 | 62.5 | 4     | 4.00 | 1.41               | 2    |
| Property rights            | 0.0                 | 0.0  | 20.0 | 80.0 | 0.0  | 4     | 3.75 | 0.50               | 3    |
| Property current use       | 0.0                 | 0.0  | 40.0 | 26.7 | 33.3 | 4     | 3.75 | 0.96               | 3    |
| Affordability              | 0.0                 | 0.0  | 40.0 | 26.7 | 33.3 | 4     | 3.75 | 0.96               | 3    |
| Property current condition | 7.1                 | 0.0  | 21.4 | 0.0  | 71.4 | 4     | 3.50 | 1.92               | 4    |
| Property improvement       | 7.7                 | 0.0  | 23.1 | 30.8 | 38.5 | 4     | 3.25 | 1.70               | 5    |

Table 10 indicates the important incentives that motivate financial institution to participate in the financing of residential properties valued between R116,703 to R483,481 in terms of evaluation by the responses of indicator points ranging from 1 (Not at all) to 5 (Very important):

- **Property market value:** The property market value is ranked first, based on the mean (MS) of 4.25 with a score of 17 points, as an important incentive for private financial institutions to participate in the gap-housing market.
- **Location of the property:** The location of the property is ranked second, based on the mean (MS) of 4.00 with a score of 16 points, as an important incentive for private financial institutions to participate in the gap-housing market.
- **Property rights:** The property rights are ranked third, based on the mean (MS) of 3.75, with a score of 15 points, as important incentives for private financial institution to participate in the gap-housing market.
- **Property's current use:** The property's current use is ranked third, based on the mean (MS) of 3.75, with a score of 15 points, as an important incentive for private financial institutions to participate in the gap-housing market.
- **Affordability:** The affordability is ranked third, based on the mean (MS) of 3.75, with a score of 15 points, as an important incentive for private financial institutions to participate in the gap-housing market.
- **Property's current condition:** The property's current condition is ranked fourth, based on the mean (MS) of 3.50, with a score of 14 points, as an important incentive for private financial institutions to participate in the gap-housing market.
- **Property improvements:** The property improvement is ranked fifth, based on the mean (MS) of 3.25, with a score of 13 points, as an important incentive for private financial

institutions to participate in the gap-housing market.

### Summary

The respondents perceive the property market value, as nearly very important to very important incentives for financial institutions to finance gap-housing market; as they fall within a threshold of  $> 4.20$  to  $\leq 5.00$ , according to the indicator points.

The respondents perceive the affordability, the location of the property, the property rights, the property's current condition and the property's current use as important to nearly very important incentives for financial institutions to finance gap-housing market; as they fall within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

The respondents perceive the property's improvements as nearly important to important; as they falls within the threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points.

### Non-parametric test for important incentives in property finance

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) by a non-parametric test, when the respondents agree with the researcher's hypothesis as the alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05.

The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 11:** Non-parametric test of the important incentives for property finance

| Hypothesis                   | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|------------------------------|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Property's market value      | 4      | 4.25 | 0.50 | 0.25           | 4        | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Location of the property     | 4      | 4.00 | 1.41 | 0.71           | 3        | 1        | 0.94    | $H_0$ not rejected<br>$0.94 > 0.05$ |
| Property rights              | 4      | 3.75 | 0.50 | 0.25           | 4        | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property's current use       | 4      | 3.75 | 0.96 | 0.48           | 4        | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Affordability                | 4      | 3.75 | 0.96 | 0.48           | 4        | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property's current condition | 4      | 3.50 | 1.92 | 0.96           | 3        | 1        | 0.94    | $H_0$ not rejected<br>$0.94 > 0.05$ |
| Property's improvement       | 4      | 3.25 | 1.71 | 0.85           | 3        | 1        | 0.94    | $H_0$ not rejected<br>$0.94 > 0.05$ |

Table 11 indicates the important incentives that encourage private financial institutions to finance the gap-housing market; because  $H_0$  is not rejected; since the p-value is greater than the

probability value of 0.05, as sufficient sample evidence to support the following as important incentives:

- Property market value;
- Property rights;
- Affordability;
- Property’s current use;
- Location of the property;
- The property’s current condition, and
- Property’s improvement.

The following closed-ended questions aligned with a 5-point Likert-type scale were sent to the respondents:

**Question 6.2:** How important are the following incentives for securing collateral; as the property for financial institutions to participate in financing residential properties is valued between R116,703 and R483,481?

The empirical study was used to understand the important incentives for securing collateral, as a property for gap-housing finance.

**Table 12:** The important incentives in a property as collateral for mortgage finance.

| Item                         | Respondent %        |      |      |      |      | Total | Mean | Standard deviation | Rank |
|------------------------------|---------------------|------|------|------|------|-------|------|--------------------|------|
|                              | Not at all.....Very |      |      |      |      |       |      |                    |      |
|                              | 1                   | 2    | 3    | 4    | 5    |       |      |                    |      |
| Property’s location          | 0.0                 | 12.5 | 0.0  | 25.0 | 62.5 | 4     | 4.00 | 1.41               | 1    |
| Property’s market value      | 0.0                 | 0.0  | 18.8 | 50.0 | 31.2 | 4     | 4.00 | 0.82               | 1    |
| Property’s rights            | 0.0                 | 0.0  | 20.0 | 80.0 | 0.0  | 4     | 3.75 | 0.5                | 2    |
| Property’s current use       | 0.0                 | 14.3 | 21.4 | 28.6 | 35.7 | 4     | 3.50 | 1.29               | 3    |
| Property’s current condition | 7.7                 | 0.0  | 23.1 | 30.8 | 38.5 | 4     | 3.25 | 1.71               | 4    |
| Property’s improvements      | 8.3                 | 0.0  | 25.0 | 66.7 | 0.0  | 4     | 3.00 | 1.41               | 5    |

Table 12 indicates the important incentives when securing collateral as property for the financial institution to participate in the financing of residential properties valued between R116,703 to R483,481 in terms of indicator points ranges from 1 (Not at all) to 5 (Very important):

- **Location of the property:** The property's location is ranked first, based on the mean (MS) of 4.00, with a score of 16, as an important incentive for collateral as property for private financial institutions to participate in the gap-housing market.
- **Property's market value:** The property's market value is ranked first, based on the mean (MS) of 4.00, with a score of 16, as an important incentive for collateral, as a property for private financial institutions to participate in the gap-housing market
- **Property rights:** The property rights are ranked second, based on the mean (MS) of 3.75 with a score of 15 points, as an important incentive for collateral, as a property for private financial institutions to participate in the gap-housing market.
- **Property's current use:** The property's current use is ranked third, based on the mean (MS) of 3.50, with a score of 14 points, as an important incentive for collateral, as a property for private financial institutions to participate in the gap-housing market.
- **Property's current condition:** The property's current condition is ranked fourth, based on the mean (MS) of 3.25, with a score of 13 points, as an important incentive for collateral, as a property for private financial institutions to participate in the gap-housing market.
- **Property's improvements:** The property's improvement is ranked fifth, based on the mean (MS) of 3.00, with a score of 12 points, as an important incentive for collateral, as a property for private financial institutions to participate in the gap-housing market.

### **Summary**

The respondents perceive the property's market value, the property's location, the property's rights and the property's current use as important to nearly very important incentives for collateral for financial institutions to finance gap-housing market; as they fall within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

The respondents perceive the property's improvements and the property's current condition as nearly important to an important incentive for collateral; as it falls within the threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points.

### **Non-parametric test for important incentives for the property as collateral**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) via a non-parametric test, when the respondents agree with the researcher's hypothesis, as the alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot reject the null

hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 13:** Non-parametric test of important incentives for the property as collateral

| Hypothesis                   | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|------------------------------|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Location of the property     | 4      | 4.00 | 1.41 | 0.71           | 3        | 1        | 0.94    | $H_0$ not rejected<br>$0.94 > 0.05$ |
| Property market value        | 4      | 4.00 | 0.82 | 0.41           | 4        | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property's rights            | 4      | 3.75 | 0.50 | 0.25           | 4        | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property's current use       | 4      | 3.50 | 1.29 | 0.65           | 3        | 1        | 0.94    | $H_0$ not rejected<br>$0.94 > 0.05$ |
| Property's current condition | 4      | 3.25 | 1.71 | 0.85           | 3        | 1        | 0.94    | $H_0$ not rejected<br>$0.94 > 0.05$ |
| Property's improvement       | 4      | 3.00 | 1.41 | 0.71           | 3        | 1        | 0.94    | $H_0$ not rejected<br>$0.94 > 0.05$ |

Table 13 indicates the important incentives that encourage private financial institutions to financing the gap-housing market; because  $H_0$  is not rejected; since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the following as incentives for securing collateral:

- Property's market value;
- Property's rights;
- Property's current use;
- Location of the property;
- Property's current condition; and
- Property's improvement.

The following closed-ended question aligned with a 5-point Likert-type scale was sent to the respondents:

**Question 6.3:** To what extent do you rate the relationship between securing collateral for residential properties and financial institution's participation in financing residential properties valued between R116,703 to R483,481?

The empirical study was used to realise the relationship between securing collateral and gap-housing finance.

**Table 14:** The relationship between secured collateral and financial institution’s participation in gap-housing

| Respondent %    |     |      |      |     | Total | Mean | Standard deviation | Rank |
|-----------------|-----|------|------|-----|-------|------|--------------------|------|
| Minor.....Major |     |      |      |     |       |      |                    |      |
| 1               | 2   | 3    | 4    | 5   |       |      |                    |      |
| 0.0             | 0.0 | 42.9 | 57.1 | 0.0 | 4     | 3.50 | 0.58               | 1    |

Table 14 indicates the extent of the relationship between the securing of collateral as residential properties and financial institution’s participation in financing residential properties valued between R116,703 to R483,481 in terms of the responses on indicator points ranging from 1 (Minor) to 5 (Major).

The respondents perceive the extent of the relationship between securing collateral for a residential property and the financial institution’s participation in financing gap-housing market, as sometimes a near major, based on the mean of 3.50 with a score of 14 points, which falls within the threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

**Non-parametric test for a relationship between the collateral and property finance**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agree with the researcher’s hypothesis as the alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in a median category of  $>2.60$  to  $\leq 3.40$ .

**Table 15:** Non-parametric test of a relationship between collateral and property finance

| Hypothesis  | Sample | Mean | SD   | Standard Error | Sing (+) | Sing (-) | P-value | Remarks                             |
|---|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Relationship of securing collateral and gap-housing finance | 4      | 3.5  | 0.58 | 0.29           | 3        | 1        | 0.94    | $H_0$ not rejected<br>$0.94 > 0.05$ |

Table 15 indicates that there is a relationship between securing collateral for a property and the private financial institutions’ willingness to finance the gap-housing market; because  $H_0$  is not rejected; since the p-value is greater than the probability of 0.05 as sufficient sample evidence to support the relationship.



The following closed-ended question, aligned with 5-point Likert-type scale, was sent to the respondents:

**Question 6.1:** Please rate the property developer’s participation in the supply to the following property-development schemes?

The empirical study was used to realise the extent of private developer’s participation in the supply to the housing market.

**Table 16:** The property developer’s participation in the supply of housing

| Item  | Respondent % |      |      |      |      | Total | Mean | Standard deviation | Rank |
|---|--------------|------|------|------|------|-------|------|--------------------|------|
|   | Low.....High |      |      |      |      |       |      |                    |      |
|   | 1            | 2    | 3    | 4    | 5    |       |      |                    |      |
| Residential Properties valued above R483,482                | 0.0          | 0.0  | 0.0  | 6.8  | 93.2 | 12    | 4.92 | 0.28               | 1    |
| Rental Residential Properties                               | 0.0          | 0.0  | 58.5 | 29.3 | 12.2 | 12    | 3.42 | 0.67               | 2    |
| Residential Properties valued between R 233,405 to R483,481 | 6.9          | 34.5 | 31.0 | 27.6 | 0.0  | 12    | 2.42 | 1.00               | 3    |
| Commercial Properties                                       | 15.4         | 38.5 | 46.1 | 0.0  | 0.0  | 12    | 1.92 | 0.79               | 4    |
| Residential Properties valued below R116,702                | 100          | 0.0  | 0.0  | 0.0  | 0.0  | 12    | 1.00 | 0.00               | 5    |
| Residential Properties valued between R116,702 to R 233,404 | 100          | 0.0  | 0.0  | 0.0  | 0.0  | 12    | 1.00 | 0.00               | 5    |

Table 16 indicates the extent of the property developer’s participation in the supply of residential property in terms of responses based on indicator points ranging from 1 (Low) to 5 (High):

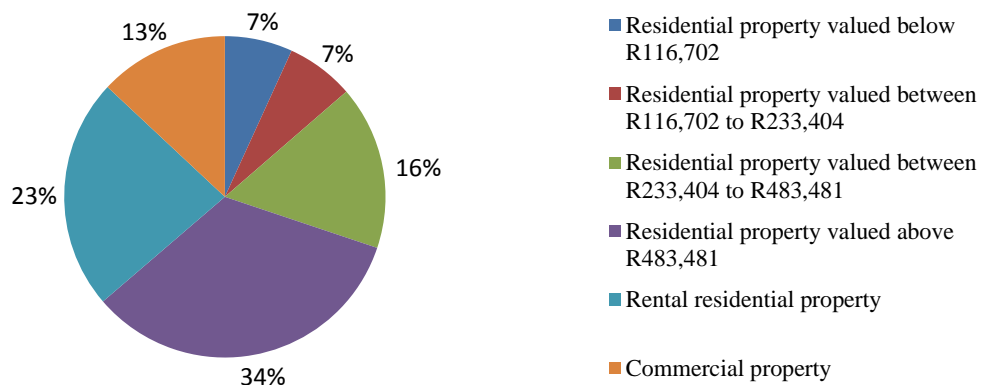
- **Residential properties valued above R483,481:** The participation of respondents in the supply of residential properties valued above R483,482 is ranked first, based on mean (MS) of 4.92 from the total score of 59 points;
- **Rental residential property:** The participation of respondents in the supply of rental residential properties is ranked second, based on the mean (MS) of 3.42 from the total score of 41 points;
- **Residential properties valued between R233,404 to R483,481:** The participation of the respondents in the supply of residential properties valued between R 233,405 to R483,481 is ranked third, based on the mean (MS) of 2.42 from the total score of 29 points;
- **Commercial property:** The participation of the respondents in the supply of commercial properties is ranked fourth, based on MS of 1.92 from the total score of 23 points;

- **Residential properties valued between R116,702 to R233,404:** The participation of respondents in the supply of residential properties valued between R116,702 to R233,404 is ranked fifth, based on the mean (MS) of 1.00 from the total number of score points of 12, and
- **Residential properties valued below R116,702:** The participation of the respondents in the supply of residential properties valued below R116,702 is ranked fifth, based on the mean (MS) of 1.00 from the total score of 12 points.

### Summary

Figure 8.9 summarizes the participation of private developers in the South African Property market.

**Property developer's participation**



**Figure 8.9:** Mean (MS) of property developer's participation in the development scheme

Figure 8.9 indicates the extent of participation in residential property valued above R483,482; and the rental of residential properties is high to nearly very high; as it falls within the threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

The respondents' extent of participation in the supply of residential properties valued between R233,405 to R483,481 and commercial property is very low to nearly average; as it falls within the threshold of  $> 1.80$  to  $\leq 2.60$ , according to the indicator points.

The respondents' extent of participation in the supply of residential properties valued below R233,404 is very low to nearly low; as it falls within the threshold of  $\geq 1.00$  to  $\leq 1.80$ , according to the indicator points.

### Non-parametric test for the participation of project developers in the housing market

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) via a non-parametric test, when the respondents agreed with the researcher's hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected, when the p-value is greater than Alpha ( $\alpha$ ); and we cannot reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 17:** Non-parametric test of property developer's participation.

| Hypothesis   | Sample | Mean | SD   | Standard Error | Sing (+) | Sing (-) | P-value | Remarks                             |
|--|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Residential Properties valued below R116,702               | 12     | 1.00 | 0.00 | 0.00           | 0        | 12       | 0.00    | $H_0$ is rejected<br>$0.00 < 0.05$  |
| Residential Properties valued between R116,702 to R233,404 | 12     | 1.00 | 0.00 | 0.00           | 0        | 12       | 0.00    | $H_0$ is rejected<br>$0.00 < 0.05$  |
| Residential Properties valued between R233,405 to R483,481 | 12     | 2.42 | 1.00 | 0.29           | 5        | 7        | 0.39    | $H_0$ not rejected<br>$0.39 > 0.05$ |
| Residential Properties valued above R483,482               | 12     | 4.92 | 0.29 | 0.08           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Rental Residential Properties                              | 12     | 3.42 | 0.67 | 0.19           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Commercial Properties                                      | 12     | 1.92 | 0.79 | 0.23           | 3        | 9        | 0.07    | $H_0$ not rejected<br>$0.07 > 0.05$ |

Table 17 indicates the property developer's participation in the supply of housing market; because  $H_0$  is not rejected; since the p-value is greater than the probability of 0.05 as sufficient sample evidence to support the following participation:

- Residential Properties valued between R233,405 to R483,481;
- Residential Properties valued above R483,482;
- Rental Residential Properties, and
- Commercial Properties.

The private property developer cannot be proven to be participating in residential properties valued below R116,702 and residential properties valued between R116,702 to R233,404; because  $H_0$  is rejected; since the p-value is less than the probability of 0.05; as there is sufficient sample evidence to support the hypothesis.

The following closed-ended question, aligned with a 5-point Likert-type scale was sent to the respondents:

**Question 6.2:** How important are the following incentives in motivating private sector developers to fully participate in the supply of residential properties valued between R116,703 to R483,481?

The empirical study was used to realise the important incentives for private developers' participation in the supply of gap-housing market.

**Table 18:** The important incentives for property developers to supply gap-housing market

| Item  | Respondent %        |     |      |      |      | Total | Mean | Standard deviation | Rank |
|---|---------------------|-----|------|------|------|-------|------|--------------------|------|
|   | Not at all.....Very |     |      |      |      |       |      |                    |      |
|   | 1                   | 2   | 3    | 4    | 5    |       |      |                    |      |
| Profitability                                     | 0.0                 | 0.0 | 0.0  | 0.0  | 100  | 12    | 5.00 | 0.00               | 1    |
| Affordable residential land                       | 0.0                 | 0.0 | 0.0  | 28.6 | 71.4 | 12    | 4.67 | 0.49               | 2    |
| Viability   | 0.0                 | 0.0 | 11.5 | 30.8 | 57.7 | 12    | 4.33 | 0.77               | 3    |
| The ability of clients to obtain a building loan. | 0.0                 | 0.0 | 5.9  | 54.9 | 39.2 | 12    | 4.25 | 0.62               | 4    |
| Risk level  | 0.0                 | 0.0 | 11.8 | 39.2 | 49.0 | 12    | 4.25 | 0.75               | 4    |
| Feasibility                                       | 0.0                 | 0.0 | 12.0 | 48.0 | 40.0 | 12    | 4.17 | 0.72               | 5    |
| Zoning regulations and possible re-zoning         | 0.0                 | 0.0 | 18.0 | 32.0 | 50.0 | 12    | 4.17 | 0.84               | 5    |
| Demand  | 0.0                 | 0.0 | 24.0 | 16.0 | 60.0 | 12    | 4.17 | 0.94               | 5    |
| Access to finance                                 | 0.0                 | 0.0 | 19.1 | 59.6 | 21.3 | 12    | 3.92 | 0.67               | 6    |
| Access to basic municipal services                | 0.0                 | 0.0 | 33.3 | 44.4 | 22.3 | 12    | 3.75 | 0.75               | 7    |
| Energy and electrical supply                      | 0.0                 | 0.0 | 40.9 | 36.4 | 22.7 | 12    | 3.67 | 0.78               | 8    |
| Town planning regulations and restrictions        | 0.0                 | 0.0 | 40.9 | 36.4 | 22.7 | 12    | 3.67 | 0.78               | 8    |
| Production costs                                  | 0.0                 | 0.0 | 60.0 | 40.0 | 0.0  | 12    | 3.33 | 0.49               | 9    |
| Affordable municipal rates                        | 0.0                 | 0.0 | 78.9 | 21.1 | 0.0  | 12    | 3.17 | 0.39               | 10   |
| Tax and rates relief                              | 0.0                 | 0.0 | 89.2 | 10.8 | 0.0  | 12    | 3.11 | 0.29               | 11   |

Table 18 indicates the important incentives that motive private sector developers to fully participate in the supply of residential properties valued between R116,703 to R483,481 in terms of responses on indicator points ranging from 1 (Not at all) to 5 (Very important):

- **Profitability:** The profitability of the development is ranked first, based on the mean (MS) of 5.00 from the total score of 60 points;
- **Affordable residential land:** The access to affordable residential land for development is ranked second, based on the mean (MS) of 4.67 from the total score of 56 points;

- **Viability:** The viability of the development is ranked third, based on the mean (MS) of 4.33 from the total score of 52 points;
- **Risk level and ability of clients to obtain a building loan:** The risk level of the development and the ability of client to have access to building finance or loan are ranked fourth, based on the mean (MS) of 4.25 from the total score of 51 points;
- **Zoning regulations or possible re-zoning, feasibility and demand:** The zoning regulation or possible re-zoning opportunities of the property, feasibility of the development and demand for the specific property are ranked fifth, based on the mean (MS) of 4.17 from the total score of 50 points;
- **Access to finance:** The easy access to finance by the property developer is ranked sixth, based on the mean (MS) of 3.92 from the total score of 47 points;
- **Access to basic municipal service:** The availability of basic municipal services in the area is ranked seventh, based on the mean (MS) of 3.75 from the total score of 45 points;
- **Energy and electrical supply, town planning regulations and restrictions:** The town planning regulation of the area and energy supply are ranked eighth, based on the mean (MS) of 3.67 from the total score of 44 points;
- **Production cost:** The production costs during development is ranked ninth, based on the mean (MS) of 3.33 from the total score of 40 points;
- **Affordable municipal rates:** The affordability of municipal rates is ranked tenth, based on the mean (MS) of 3.17 from the total score of 38 points, and
- **Tax and rates relief:** The tax or rates discount from municipality is ranked eleventh, based on the mean (MS) of 3.11 from the total score of 37 points.

## Summary

The respondents perceive profitability, affordable land, viability, risk level and the ability of a client to obtain a building loan as nearly very important to very important incentives to motivate private sector developers to fully participate in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 4.20$  to  $\leq 5.00$ , according to the indicator points.

The respondents perceive the access to basic municipal services, energy and electricity supply, town-planning regulations and restrictions and production costs, demand for property, feasibility, zoning regulations and possible re-zoning, as important to nearly very important incentives to motivate private sector developers to fully participate in the supply of residential

properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

The respondents perceive affordable municipal rates, production costs, and tax and rate reliefs as nearly important to important incentives to motivate private sector developers to fully participate in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points.

### **Non-parametric test for important incentives for property developers**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) via a non-parametric test, when the respondents agreed with researcher's hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

Table 19 indicates the important incentives that encourage private property developers to participate in the supply of gap-housing market; because  $H_0$  is not rejected; since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the following as important incentives:

- Access to finance;
- Profitability;
- Demand;
- Ability of the clients in obtaining building loans;
- Feasibility;
- Viability;
- Availability and affordability of municipal services, including township establishment fees, zoning, electrical supply;
- Zoning regulations and possible re-zoning;
- Rates and taxes;
- Affordable residential land;
- Risk levels;
- Production costs, including labour costs and material costs;

- Town planning regulations and restrictions;
- Affordable municipal rates, and
- Energy and electrical supply.

**Table 19:** Non-parametric test for important incentives of property developers' participation

| Hypothesis  | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                                     |
|---|--------|------|------|----------------|----------|----------|---------|---|
| Access to finance                                 | 12     | 3.92 | 0.67 | 0.19           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Profitability                                     | 12     | 5    | 0.00 | 0.00           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Energy and electrical supply                      | 12     | 3.67 | 0.78 | 0.23           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| The ability of clients to obtain a building loans | 12     | 4.25 | 0.62 | 0.18           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Access to basic municipal services                | 12     | 3.75 | 0.75 | 0.22           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Affordable municipal rates                        | 12     | 3.17 | 0.39 | 0.11           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Affordable residential land                       | 12     | 4.67 | 0.49 | 0.14           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Tax and rates relief                              | 12     | 3.08 | 0.28 | 0.08           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Risk level  | 12     | 4.25 | 0.75 | 0.22           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Zoning regulations and possible re-zoning         | 12     | 4.17 | 0.84 | 0.24           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Production costs                                  | 12     | 3.33 | 0.49 | 0.14           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Town planning regulations and restrictions        | 12     | 3.67 | 0.78 | 0.22           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Feasibility                                       | 12     | 4.17 | 0.72 | 0.21           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Demand  | 12     | 4.17 | 0.94 | 0.27           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |
| Viability   | 12     | 4.33 | 0.78 | 0.22           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1 .00 > 0.05 |

The following closed-ended question, aligned to a 5-point Likert-type scale was sent to the respondents:

**Question 6.3:** To what extent do the following risks affect private sector developers' participation in the supply of residential properties valued between R116 703 to R483 481?

The empirical study was used to realise the extent of risks that affect private property developers' participation in the supply of gap-housing market.

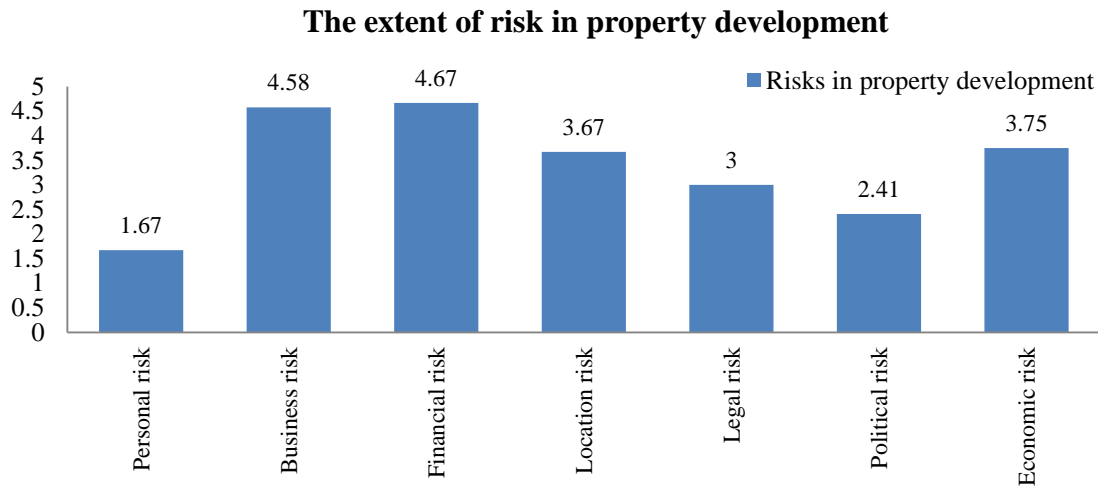
**Table 20:** The risks that affect property developers' supply of gap-housing market

| Item           | Respondent %    |      |      |      |      | Total | Mean | Standard deviation | Rank |
|----------------|-----------------|------|------|------|------|-------|------|--------------------|------|
|                | Minor.....Major |      |      |      |      |       |      |                    |      |
|                | 1               | 2    | 3    | 4    | 5    |       |      |                    |      |
| Financial risk | 0.0             | 0.0  | 0.0  | 28.6 | 71.4 | 12    | 4.67 | 0.49               | 1    |
| Business risk  | 0.0             | 0.0  | 0.0  | 36.4 | 63.6 | 12    | 4.58 | 0.52               | 2    |
| Economic risk  | 0.0             | 0.0  | 33.3 | 44.5 | 22.2 | 12    | 3.75 | 0.75               | 3    |
| Location risk  | 0.0             | 0.0  | 34.1 | 54.5 | 11.4 | 12    | 3.67 | 0.65               | 4    |
| Legal risk     | 0.0             | 16.7 | 50.0 | 33.3 | 0.0  | 12    | 3.00 | 0.73               | 5    |
| Political risk | 6.9             | 27.6 | 51.7 | 13.8 | 0.0  | 12    | 2.41 | 0.90               | 6    |
| Personal risk  | 25.0            | 60.0 | 15.0 | 0.0  | 0.0  | 12    | 1.67 | 0.65               | 7    |

Table 20 indicates the extent of risks that affect private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481 in terms of responses on indicator points ranging from 1 (Minor) to 5 (Major):

- **Financial risk:** The financial risk for property developer is ranked first, based on the mean (MS) of 4.67 from the total score of 56 points;
- **Business risk:** The business risk for property developer is ranked second, based on the mean (MS) of 4.58 from the total score of 55 points;
- **Economic risk:** The economic risk of the country is ranked third, based on the mean (MS) of 3.75 from the total score of 45 points;
- **Location risk:** The location risk of the property is ranked fourth, based on the mean (MS) of 3.67 from the total score of 44 points;
- **Legal risk:** The legal risk of the development is ranked fifth, based on the mean (MS) of 3.00 from the total score of 36 points;
- **Political risk:** The political risk of the country to the property developer is ranked sixth, based on the mean (MS) of 2.41 from the total score of 29 points, and
- **Personal risk:** The personal risk in the business and the development venture is ranked seventh, based on the mean (MS) of 1.67 from the total score of 20 points.





**Figure 8.10:** Mean (MS) in the extent of risk in property development

Figure 8.10 indicates the respondents' perception of the extent of financial and business risk as near major to major risk affecting private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 4.20$  to  $\leq 5.00$ , according to the indicator points.

The respondents' perception of the extent of economic and location risk, as nearly sometimes to a nearly major risk, affecting private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

The respondents' perception of the extent of legal and political risk as minor to nearly sometimes as a frequency of the risk that affects private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points. The respondents' perception of the extent of personal risk as nearly minor to minor risk affecting private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 1.80$  to  $\leq 2.60$ , according to the indicator points.

### **Non-parametric test for the extent of risk on the participation of property developer**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with researcher's hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the

null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in median category of  $>2.60$  to  $\leq 3.40$ .

**Table 21:** Non-parametric test on the extent of risk on property developers' participation

| Hypothesis     | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                                    |
|----------------|--------|------|------|----------------|----------|----------|---------|--|
| Personal risk  | 12     | 1.67 | 0.65 | 0.19           | 1        | 11       | 0.00    | H <sub>0</sub> is rejected<br>0.00 < 0.05  |
| Business risk  | 12     | 4.58 | 0.52 | 0.15           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1.00 > 0.05 |
| Financial risk | 12     | 4.67 | 0.49 | 0.14           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1.00 > 0.05 |
| Location risk  | 12     | 3.67 | 0.65 | 0.19           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1.00 > 0.05 |
| Legal risk     | 12     | 3.00 | 0.74 | 0.21           | 9        | 3        | 0.98    | H <sub>0</sub> not rejected<br>0.98 > 0.05 |
| Political risk | 12     | 2.42 | 0.90 | 0.25           | 6        | 6        | 0.61    | H <sub>0</sub> not rejected<br>0.61 > 0.05 |
| Economic risk  | 12     | 3.75 | 0.75 | 0.21           | 12       | 0        | 1.00    | H <sub>0</sub> not rejected<br>1.00 > 0.05 |

Table 21 indicates the risks that influence private property developers' participation in the supply of gap-housing market; because H<sub>0</sub> is not rejected, since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the following as risks:

- Business risk;
- Financial risk;
- Location risk;
- Legal risk;
- Economic risk; and
- Political risk.

The personal risk cannot be proven to be a risk in the development of residential property; because H<sub>0</sub> is rejected; since the p-value is less than the probability of 0.05, as sufficient sample evidence to support the hypothesis.

The following closed-ended question, aligned to the 5-point Likert-type scale was sent to the respondents:

**Question 6.4:** To what extent do the following incentives influence private sector developers' participation in supplying residential properties valued between R116,703 to R483,481?

The empirical study was used to realise the influence of the incentives in the decision-making for gap-housing development.

**Table 22:** The incentives that influence property developers in the supply of gap-housing

| Item  | Respondent %            |      |      |      |      | Total | Mean | Standard deviation | Rank |
|---|-------------------------|------|------|------|------|-------|------|--------------------|------|
|   | Very poor.....Excellent |      |      |      |      |       |      |                    |      |
|   | 1                       | 2    | 3    | 4    | 5    |       |      |                    |      |
| Access to finance.                                | 0.0                     | 0.0  | 19.1 | 59.6 | 21.3 | 12    | 3.91 | 0.67               | 1    |
| The ability of clients to obtain a building loan. | 0.0                     | 0.0  | 58.5 | 29.3 | 12.2 | 12    | 3.42 | 0.67               | 2    |
| Access to basic municipal services                | 0.0                     | 5.3  | 71.0 | 10.5 | 13.2 | 12    | 3.42 | 0.67               | 2    |
| Affordable residential land                       | 0.0                     | 0.0  | 58.5 | 29.3 | 12.2 | 12    | 3.42 | 0.67               | 2    |
| Profitability                                     | 0.0                     | 5.0  | 52.5 | 30.0 | 12.5 | 12    | 3.33 | 0.78               | 3    |
| Feasibility                                       | 0.0                     | 0.0  | 67.5 | 20.0 | 12.5 | 12    | 3.33 | 0.65               | 3    |
| Demand  | 0.0                     | 0.0  | 60.0 | 40.0 | 0.0  | 12    | 3.33 | 0.49               | 3    |
| Viability   | 0.0                     | 0.0  | 76.9 | 10.3 | 12.8 | 12    | 3.25 | 0.62               | 4    |
| Town planning regulations and restrictions        | 0.0                     | 0.0  | 86.8 | 0.0  | 13.2 | 12    | 3.17 | 0.58               | 5    |
| Affordable municipal rates                        | 0.0                     | 0.0  | 89.2 | 10.8 | 0.0  | 12    | 3.08 | 0.29               | 6    |
| Tax and rates relief                              | 0.0                     | 0.0  | 89.2 | 10.8 | 0.0  | 12    | 3.08 | 0.29               | 6    |
| Zoning regulations and possible re-zoning         | 0.0                     | 0.0  | 89.2 | 10.8 | 0.0  | 12    | 3.08 | 0.29               | 6    |
| Energy and electrical supply                      | 0.0                     | 11.1 | 66.7 | 22.2 | 0.0  | 12    | 3.00 | 0.60               | 7    |
| Production costs                                  | 0.0                     | 0.0  | 100  | 0.0  | 0.0  | 12    | 3.00 | 0.00               | 7    |
| Risk level  | 10.0                    | 26.6 | 20.0 | 26.7 | 16.7 | 12    | 2.50 | 1.31               | 8    |

Table 22 indicates the extent of incentives to influence private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481 in terms of percentage responses on the indicator points ranging from 1 (Not at all) to 5 (Very):

- **Access to finance:** The access to finance is ranked first, based on the mean (MS) of 3.91 from the total score of 47 points;
- **Affordability of residential land, access to basic municipal services and the ability of a client to obtain the building loan:** They are ranked second, based on the mean (MS) of 3.42 from the total score of 41 points;

- **Profitability, feasibility and demand:** They are ranked third, based on the mean (MS) of 3.33 from the total score of 40 points;
- **Viability:** The viability of the development is ranked fourth, based on the mean (MS) of 3.25 from the total score of 39 points;
- **Town planning regulation and restriction:** The town planning regulation and restriction of the area is ranked fifth, based on a mean (MS) of 3.17 from the total score of 38 points;
- **Affordability of municipal services, tax and rates relief and zoning regulations or possible re-zoning:** they are ranked sixth, based on the mean (MS) of 3.08 from the total score of 37 points;
- **Production cost and electrical supply:** They are ranked seventh, based on the mean (MS) of 3.00 from the total score of 36 points, and
- **Risk level:** the risk level of development is ranked eight, based on the mean (MS) of 2.50 from the total score of 30 points.

### Summary

The respondents' perception of the extent of access to finance, the affordability of residential land, the ability of the client to obtain building loans and access to basic municipal services as nearly good to excellent, as incentives that influence private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

The respondents' perception of the extent of viability, town planning regulations and restrictions, zoning regulations and possible re-zoning, affordability, municipal rates, tax and rates relief and production cost, profitability, feasibility and demand as average to nearly good as incentives that influence private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points.

The respondents' perception of the extent of risk level as poor to nearly average; as incentives that influence private sector developers' participation in the supply of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 1.80$  to  $\leq 2.60$ , according to the indicator points.

### Non-parametric test for incentives that influence the participation of property developers

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with researcher's hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected, when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis at the 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3, with a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 23:** Non-parametric test of incentives that influence the participation of developers

| Hypothesis                                       | Sample | Mean | SD   | Standard Error | Sing (+) | Sing (-) | P-value | Remarks                             |
|--|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Access to finance                                | 12     | 3.92 | 0.67 | 0.19           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Profitability                                    | 12     | 3.33 | 0.78 | 0.22           | 11       | 1        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Energy and electrical supply                     | 12     | 3.00 | 0.60 | 0.17           | 10       | 2        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| The ability of clients to obtain a building loan | 12     | 3.42 | 0.67 | 0.19           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Access to basic municipal services               | 12     | 3.42 | 0.67 | 0.19           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Affordable municipal rates                       | 12     | 3.08 | 0.29 | 0.08           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Affordable residential land                      | 12     | 3.42 | 0.67 | 0.19           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Tax and rates relief                             | 12     | 3.08 | 0.28 | 0.08           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Risk level                                       | 12     | 2.50 | 1.31 | 0.38           | 5        | 7        | 0.39    | $H_0$ not rejected<br>$0.39 > 0.05$ |
| Zoning regulations and possible re-zoning        | 12     | 3.08 | 0.28 | 0.08           | 12       | 1        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Production costs                                 | 12     | 3.00 | 0.00 | 0.00           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Town planning regulations and restrictions       | 12     | 3.17 | 0.58 | 0.17           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Feasibility                                      | 12     | 3.33 | 0.65 | 0.18           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Demand   | 12     | 3.33 | 0.49 | 0.14           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Viability  | 12     | 3.25 | 0.61 | 0.18           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |

Table 23 indicates the incentives that influence private property developers to participate in the supply of gap-housing market; because  $H_0$  is not rejected; since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the following as incentives in decision-making:

- Access to finance;

- Profitability;
- Demand;
- Ability of the clients to obtain building loans;
- Feasibility;
- Viability;
- Availability and affordability of municipal services, including township establishment fees, zoning, electrical supply;
- Zoning regulations and possible re-zoning;
- Rates and taxes;
- Affordable residential land;
- Risk levels;
- Production cost, including labour costs and material costs;
- Town-planning regulations and restrictions;
- Affordable municipal rates, and
- Energy and electrical supply.

The following closed-ended question, which is aligned with the 5-point Likert-type scale, was sent to the respondents:

**Question 6.5:** To what extent do you rate the relationship between incentive and the participation of the private sector developer to supply properties valued between R116,703 to R483,481?

The empirical study was used to realise the extent of the relationship between incentives and the participation of property developers in the gap-housing finance.

**Table 24:** The relationship between incentives and developer’s participation in gap-housing

| Respondent %    |     |      |      |     | Total | Mean | Standard deviation | Rank |
|-----------------|-----|------|------|-----|-------|------|--------------------|------|
| Minor.....Major |     |      |      |     |       |      |                    |      |
| 1               | 2   | 3    | 4    | 5   |       |      |                    |      |
| 0.0             | 0.0 | 69.2 | 30.8 | 0.0 | 12    | 3.25 | 0.45               | 1    |

Table 24 indicates the extent of the relationship between the incentive and the participation of property developers in supplying residential properties valued between R116,703 and R483,481, in terms of the percentage of response on indicator points ranging from 1 (Minor) to 5 (Major). It also indicates a MS of 3.31, which falls within the threshold of  $> 2.60$  to  $\leq 3.40$

as minor to average, based on the indicator points.

**Non-parametric test for the relationship between incentives and the participation of property developers**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with researcher’s hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected, when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 25:** Non-parametric test on the relationship between incentives and developers’ participation

| Hypothesis   | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|--|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Relationship between incentive and participation in property development | 12     | 3.25 | 0.45 | 0.13           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |

Table 25 indicates that there is a relationship between the incentive and participation in the supply of the gap-housing market; because  $H_0$  is not rejected; since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the relationship.

The following closed-ended question, which is aligned with the 5-point Likert-type scale, was sent to the respondents:

**Question 6.6:** To what extent do you rate the relationship between risk and the participation of private sector developers to supply properties valued between R116,703 to R483,481?

The empirical study was used to realise the extent of the relationship between risk and the participation of the property developer in the supply of gap-housing finance.

**Table 26:** The relationship between risk and developer’s participation in the gap-housing

| Respondent %    |     |      |      |      | Total | Mean | Standard Deviation | Rank |
|-----------------|-----|------|------|------|-------|------|--------------------|------|
| Minor.....Major |     |      |      |      |       |      |                    |      |
| 1               | 2   | 3    | 4    | 5    |       |      |                    |      |
| 0.0             | 0.0 | 24.5 | 24.5 | 51.0 | 12    | 4.08 | 0.90               | 1    |

Table 26 indicates the extent of the relationship between the risk and the participation of property developers in supplying residential properties valued between R116,703 to R483,481

in terms of the percentage of responses on indicator points ranging from 1 (Minor) to 5 (Major). The respondents perceived the extent of the relationship between risk and the participation of the private sector developers to supply properties valued between R116,703 to R483,481 as sometimes to nearly major, based on the MS of 4.08, which falls within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

**Non-parametric test for the relationship between risk and developers’ participation**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test; when the respondents agreed with the researcher’s hypothesis as an alternative. The hypothesis testing is considered to be right-tailed test, where the null hypothesis is rejected, when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 27:** Non-parametric test of the relationship between risk and developers’ participation.

| Hypothesis  | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|---|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Relationship between risk and participation in property development | 12     | 4.08 | 0.90 | 0.25           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |

Table 27 indicates that there is a relationship between risk and participation in the supply of gap-housing market; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the relationship.

The following closed-ended question, which is aligned with a 5-point Likert-type scale, was sent to the respondents:

**Question 6.7:** To what extent do you rate the relationship between the participation of private sector developers and the supply of properties valued between R116,703 to R483,481?

The empirical study was used to realise the extent of the relationship between the participation of private developers and the supply of gap-housing finance.

**Table 28:** The relationship between developers’ participation and the supply of gap-housing

| Respondent %    |     |      |      |      | Total | Mean | Standard Deviation | Rank |
|-----------------|-----|------|------|------|-------|------|--------------------|------|
| Minor.....Major |     |      |      |      |       |      |                    |      |
| 1               | 2   | 3    | 4    | 5    |       |      |                    |      |
| 0.0             | 0.0 | 40.0 | 26.7 | 33.3 | 12    | 3.75 | 0.87               | 1    |



Table 28 indicates the extent of the relationship between the participation of property developers and the supply of residential properties valued between R116,703 to R483,481, in terms of the percentage of responses on indicator points ranging from 1 (Minor) to 5 (Major).

The respondents perceived the extent of the relationship between participation and the supply of properties valued between R116,703 to R483,481 as sometimes to nearly major, based on the mean (MS) of 3.75, which falls within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

### **Non-parametric test for the developers' participation and the supply of gap-housing**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test when the respondents agreed with researcher's hypothesis, as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when p-value is greater than Alpha ( $\alpha$ ); and we cannot reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in median category of  $>2.60$  to  $\leq 3.40$ .

**Table 29:** Non-parametric test on the relationship between developers' participation and the supply of gap-housing

| Hypothesis  | Sample | Mean | SD   | Standard Error | Sing (+) | SING (-) | P-value | Remarks                             |
|---|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Relationship between participation of property developers and supply of gap-housing market. | 12     | 3.75 | 0.87 | 0.25           | 12       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |

Table 29 indicates that there is a relationship between the participation of private developers and the supply of gap-housing market; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the relationship.

### **Non-parametric test of correlation between the incentive and developers' participation**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with the researcher's hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected, when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 30:** Non-parametric test on the correlation between the incentive and developers' participation

| Correlation                                      | Residential Properties valued below R116,702 market |         | Residential Properties valued between R116,702 to R 233,404 market |         | Residential Properties valued between R 233,405 to R483,481 market |         | Residential Properties valued above R483,482 market |         |
|--|---|---------|--|---------|--|---------|---|---------|
|  | Ranked data   | P-value | Ranked data  | P-value | Ranked data  | P-value | Ranked data   | P-value |
| Hypothesis incentive                             |   |         |  |         |  |         |   |         |
| Access to finance                                | -0.99   | 0.00    | -0.99  | 0.00    | -0.95  | 0.00    | 0.94  | 1.00    |
| Profitability                                    | -0.98   | 0.00    | -0.98  | 0.00    | -0.92  | 0.01    | 0.95  | 1.00    |
| Energy and electrical supply                     | -0.98   | 0.00    | -0.98  | 0.00    | -0.96  | 0.00    | 0.93  | 0.99    |
| The ability of clients to obtain a building loan | -0.99   | 0.00    | -0.99  | 0.00    | -0.86  | 0.07    | 0.97  | 1.00    |
| Access to basic municipal services               | -0.99   | 0.00    | -0.99  | 0.00    | -0.82  | 0.13    | 0.97  | 1.00    |
| Affordable municipal rates                       | -1,00   | 0.00    | -1,00  | 0.00    | -0.82  | 0.12    | 0.98  | 1.00    |
| Affordable residential land                      | -0.99   | 0.00    | -0.99  | 0.00    | -0.87  | 0.06    | 0.97  | 1.00    |
| Tax and rates relief                             | -1,00   | 0.00    | -1,00  | 0.00    | -0.96  | 0.00    | 1.00  | 1.00    |
| Risk level                                       | -0.95   | 0.00    | -0.95  | 0.00    | -0.32  | 0.48    | 0.98  | 1.00    |
| Zoning regulations and possible re-zoning        | -1.00   | 0.00    | -1.00  | 0.00    | -0.66  | 0.32    | 1.00  | 1.00    |
| Production costs                                 | 0.00  | 0.00    | 0.00   | 0.00    | -0.69  | 0.30    | 1.00  | 1.00    |
| Town planning regulations and restrictions       | -1.00   | 0.00    | -1.00  | 0.00    | -0.95  | 0.00    | 0.98  | 1.00    |
| Feasibility                                      | -0.99   | 0.00    | -0.99  | 0.00    | -0.80  | 0.15    | 0.97  | 1.00    |
| Demand   | -1.00   | 0.00    | -1.00  | 0.00    | -0.85  | 0.11    | 1.00  | 1.00    |
| Viability  | -0.99   | 0.00    | -0.99  | 0.00    | -0.99  | 0.00    | 0.97  | 1.00    |

Table 30 indicates that there is a relationship between the incentive and the participation of property developers in the property market valued between R233,405 to R483,481 with demand, feasibility, production cost, zoning regulation and possibility rezoning, risk level, affordable land, affordable municipal rates, affordable municipal rates, ability of the client to obtain a building loan and access to municipal services. These factors are considered to be an incentive that influences the participation in the residential property valued between R233,405 to R483,481; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05. There is a relationship between the lack of incentive and the lack of participation with viability, town planning regulation, tax and rates relief, access to finance, profitability, energy and electrical supply are not proven to be incentives that influence participation in residential properties valued between R233,405 to R483,481; because  $H_0$  is rejected, since the p-value is less than the probability of 0.05.

There is a relationship between the lack of incentive and the lack of participation that influence participation in residential property valued below R233,404; because  $H_0$  is rejected, since the p-value is less than the probability of 0.05.

The following closed-ended question, which is aligned with the 5-point Likert-type scale, was sent to the respondents:

**Question 6.1:** To what extent is real estate agents' involvement in the marketing of the following residential properties?

The empirical study was used to realise the extent of realtors' participation in the marketing of gap-property to the market.

**Table 31:** The involvement of the realtors in the marketing of residential property

| Item  | Respondent %    |      |      |      |      | Total | Mean | Standard Deviation | Rank |
|---|-----------------|------|------|------|------|-------|------|--------------------|------|
|   | Minor.....Major |      |      |      |      |       |      |                    |      |
|   | 1               | 2    | 3    | 4    | 5    |       |      |                    |      |
| Residential Property valued above R483,482                | 0.0             | 0.0  | 0.0  | 11.8 | 88.2 | 14    | 4.86 | 0.36               | 1    |
| Residential Property valued between R 233,405 to R483,481 | 0.0             | 19.5 | 51.2 | 29.3 | 0.0  | 14    | 2.93 | 0.73               | 2    |
| Residential Property valued between R116,702 to R233,404  | 52.6            | 31.6 | 15.8 | 0.0  | 0.0  | 14    | 1.36 | 0.63               | 3    |
| Residential Property valued below R116,702                | 86.7            | 13.3 | 0.0  | 0.0  | 0.0  | 14    | 1.07 | 0.27               | 4    |

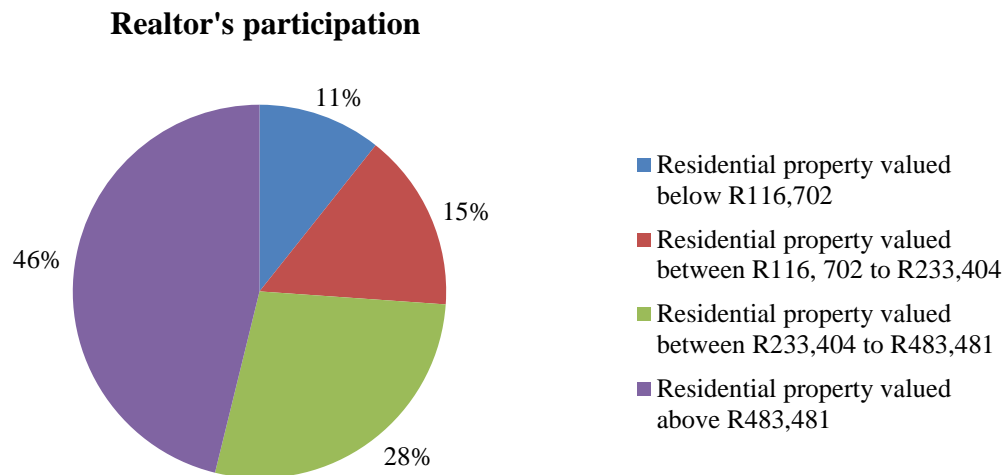
Table 31 indicates the extent of the real estate agents' participation in the marketing of residential property to the market in terms of the percentage of responses to the indicator points ranging from 1 (Minor) to 5 (Major):

- **Residential properties valued above R483,481:** The extent of their participation in the marketing of the following property markets; the participation of respondents in the marketing of residential properties valued above R483,482 is ranked first, based on the mean (MS) of 4.86 of the total score of 68 points;
- **Residential properties valued between R233,404 to R483,481:** The participation of respondents in the marketing of residential properties valued between R233,405 to R483,482 is ranked second. based on the mean (MS) of 2.93 from the total score of 41 points;
- **Residential properties valued between R116,702 to R233,404:** The participation of respondents in the marketing of residential properties valued between R 116,702 to R 233, 404 is ranked third, based on the MS of 1.36 from the total score of 19 points, and

- **Residential properties valued below R116,702:** The participation of respondents in the marketing of residential properties valued below R 116,702 is ranked fourth, based on the MS of 1.07 from the total score of 15 points.

### Summary

Figure 8.11 is a summary of the extent of participation of realtors in the South African Property market.



**Figure 8.11:** Mean (MS) of realtor’s participation in residential property

Figure 8.11 indicates the respondents’ extent of participation in residential property valued above R483,482 is nearly major to major; as it falls within the threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points. The respondents’ extent of participation in residential property valued between R233,405 to R483,482 is nearly minor to sometimes; as it falls within the threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points. The respondents’ extent of participation in residential property valued below R233,405 is minor; as it falls within the threshold of  $\geq 1.00$  to  $\leq 1.80$ , according to the indicator points.

### Non-parametric test for the participation of realtors in the housing market

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test when the respondents agreed with the researcher’s hypothesis, as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected, when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of

respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 32:** Non-parametric test on the participation of realtors in the housing market

| Hypothesis   | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                                    |
|--|--------|------|------|----------------|----------|----------|---------|--|
| Residential Properties valued above R483, 482                | 14     | 4.86 | 0.36 | 0.10           | 14.00    | 0.00     | 1.00    | H <sub>0</sub> not rejected<br>1.00 > 0.05 |
| Residential Properties valued between R233, 405 to R483, 481 | 14     | 2.93 | 0.73 | 0.19           | 10.00    | 4.00     | 0.97    | H <sub>0</sub> not rejected<br>0.97 > 0.05 |
| Residential Properties valued between R116, 702 to R233, 404 | 14     | 1.36 | 0.63 | 0.17           | 0.00     | 14.00    | 0.00    | H <sub>0</sub> is rejected<br>0.00 < 0.05  |
| Residential Properties valued below R116,702                 | 14     | 1.07 | 0.27 | 0.07           | 0.00     | 14.00    | 0.00    | H <sub>0</sub> is rejected<br>0.00 < 0.05  |

Table 32 indicates the realtor's participation in the marketing of housing to the market; because H<sub>0</sub> is not rejected, since the p-value is greater than the probability of 0.05; as there is sufficient sample evidence to support the following participation:

- The survey proves the participation of realtors in the marketing of residential properties valued between R233,405 to R483,481, and residential property valued above R483,482, because H<sub>0</sub> is not rejected, based on the p-value that is greater than the probability of 0.05.
- The realtors cannot be proven to be participating in the marketing of residential properties valued below R116,702 and residential properties valued between R116,702 to R233,404; because H<sub>0</sub> is rejected, since the p-value is less than the probability of 0.05.

The following closed-ended question, which is aligned with the 5-point Likert-type scale, was sent to the respondents:

**Question 6.2:** How important are the following incentives in motivating realtors to participate in the marketing of gap-housing to the market, for properties valued between R116,703 and R483,481?

The empirical study was used to realise the important incentives that motivate realtors to participate in the gap-housing market.

**Table 33:** The important incentives for realtors to participate in the marketing of gap-housing

| Item                              | Respondent %         |      |      |      |      | Total | Mean | Standard Deviation | Rank |
|-----------------------------------|----------------------|------|------|------|------|-------|------|--------------------|------|
|                                   | Not at all..... Very |      |      |      |      |       |      |                    |      |
|                                   | 1                    | 2    | 3    | 4    | 5    |       |      |                    |      |
| Property supply                   | 0.0                  | 0.0  | 4.5  | 12.2 | 83.3 | 14    | 4.71 | 0.61               | 1    |
| Affordability of potential buyers | 0.0                  | 0.0  | 9.4  | 12.5 | 78.1 | 14    | 4.57 | 0.76               | 2    |
| Property appreciation rate        | 0.0                  | 0.0  | 4.8  | 31.7 | 63.5 | 14    | 4.50 | 0.65               | 3    |
| Property demand                   | 0.0                  | 0.0  | 0.0  | 59.0 | 41.0 | 14    | 4.35 | 0.49               | 4    |
| Property location                 | 0.0                  | 0.0  | 9.8  | 32.8 | 57.4 | 14    | 4.36 | 0.75               | 4    |
| Property market value             | 0.0                  | 0.0  | 10.2 | 47.5 | 42.3 | 14    | 4.21 | 0.70               | 5    |
| Property improvement              | 0.0                  | 0.0  | 16.4 | 65.5 | 18.1 | 14    | 3.93 | 0.62               | 6    |
| Property current use              | 0.0                  | 0.0  | 40.4 | 30.8 | 28.8 | 14    | 3.71 | 0.82               | 7    |
| Property current condition        | 0.0                  | 0.0  | 49.0 | 40.8 | 10.2 | 14    | 3.50 | 0.65               | 8    |
| Zoning of property                | 2.1                  | 0.0  | 37.5 | 50.0 | 10.4 | 14    | 3.43 | 0.94               | 9    |
| Property size                     | 0.0                  | 4.1  | 43.8 | 41.7 | 10.4 | 14    | 3.43 | 0.76               | 9    |
| Rates and taxes                   | 0.0                  | 0.0  | 56.3 | 33.3 | 10.4 | 14    | 3.43 | 0.65               | 9    |
| Property rights                   | 4.4                  | 4.4  | 33.3 | 35.6 | 22.3 | 14    | 3.21 | 1.25               | 10   |
| Neighbourhood regulations         | 20.7                 | 13.8 | 51.7 | 13.8 | 0.0  | 14    | 2.07 | 1.07               | 11   |

Table 33 indicates the important incentives that motivate private sector developers to fully participate in the supply of residential properties valued between R116,703 to R483,481 in terms of the percentage responses on indicator points ranging from 1 (Not at all) to 5 (Very important):

- **Property supply:** The property supply is ranked first, based on the mean (MS) of 4.71 from the total score of 66 points;
- **Affordability of potential buyers:** The affordability of potential buyers or positive response from banks is ranked second, based on the mean (MS) of 4.57 from the total score of 64 points;
- **Property appreciation rate:** The property appreciation rate is ranked third, based on the mean (MS) of 4.50 from the total score of 63 points;
- **Property demand and location:** The property demand and location are ranked fourth, based on the MS of 4.35 and 4.36 from the total score of 61 points;
- **Property market value:** The property market value is ranked fifth, based on the MS of 4.21 from the total score of 59 points;

- **Property improvement:** The property improvements are ranked sixth, based on the mean (MS) of 3.93 from the total score of 55 points;
- **Property's current use:** The property current use is ranked seventh based on MS of 3.71 from the total score of 52 points;
- **Property's current condition:** The current property condition is ranked eighth, based on the mean (MS) of 3.50 of the total score of 49 points;
- **Zoning of property, property size, rates and taxes:** The zoning of the property, property size, rates, and taxes are ranked ninth, based on MS of 3.43 of the total score of 48 points;
- **Property rights:** The property rights are ranked tenth, based on the mean (MS) of 3.21 from the total score of 45 points, and
- **Neighbourhood regulations:** The neighbourhood regulations are ranked eleventh, based on the mean (MS) of 2.07 from the total score of 29 points.

### **Summary**

The respondents perceive property supply, affordability of potential buyers, or positive response from banks, the property appreciation rate, property location, property demand and property market value as nearly very important to very important incentives to motivate realtors to fully participate in the marketing of residential properties valued between R116,703 to R483,481; as they fall within the threshold of  $> 4.20$  to  $\leq 5.00$ , according to the indicator points.

The respondents perceive property improvements, property's current use, property rights, zoning, current property condition, property size, rates and taxes as nearly important to important incentives to motivate realtors to fully participate in the marketing of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points.

The respondents perceive neighbourhood regulations as not important to nearly important to motivate realtors to fully participate in the marketing of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 1.80$  to  $\leq 2.60$ , according to the indicator points.

### **Non-parametric test on important incentives for realtors**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a nonparametric test when the respondents agreed with the researcher's hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null

hypothesis is rejected, when the p-value is greater than Alpha ( $\alpha$ ); and we cannot reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 34:** Non-parametric test on important incentives that motivate realtors' participation.

| Hypothesis                        | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|-----------------------------------|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Property rights                   | 14     | 3.21 | 1.25 | 0.33           | 11.00    | 3.00     | 0.99    | $H_0$ not rejected<br>$0.99 > 0.05$ |
| Zoning of property                | 14     | 3.43 | 0.94 | 0.25           | 13.00    | 1.00     | 1.00    | $H_0$ not rejected<br>$1.0 > 0.05$  |
| Property size                     | 14     | 3.43 | 0.76 | 0.20           | 13.00    | 1.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property location                 | 14     | 4.36 | 0.75 | 0.19           | 14.00    | 1.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property appreciation rate        | 14     | 4.50 | 0.65 | 0.17           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property current use              | 14     | 3.71 | 0.82 | 0.22           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property demand                   | 14     | 4.36 | 0.50 | 0.13           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Affordability of potential buyers | 14     | 4.57 | 0.76 | 0.20           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property supply                   | 14     | 4.71 | 0.61 | 0.16           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property's market value           | 14     | 4.21 | 0.70 | 0.19           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Rates and taxes                   | 14     | 3.43 | 0.65 | 0.17           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property's current condition      | 14     | 3.50 | 0.65 | 0.17           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property's improvement            | 14     | 3.93 | 0.63 | 0.16           | 14.00    | 0.00     | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Neighbourhood regulations         | 14     | 2.07 | 1.07 | 0.29           | 6.00     | 8.00     | 0.40    | $H_0$ is rejected<br>$0.40 < 0.05$  |

Table 34 indicates the important incentives that encourage realtors to participate in the marketing of gap-housing market; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the following as important incentives:

- Property rights;
- Property size;
- Zoning of the property;
- Property location;
- Appreciation rate of the property;
- Property's current use;



- Property demand;
- Affordability of potential buyers;
- Property supply;
- Property's market value;
- Rates and taxes;
- Property improvements; and
- Property's current condition.

The neighbourhood regulations cannot be proven to be an important incentive in the marketing of residential property; because  $H_0$  is rejected, since the p-value is less than the probability of 0.05, as sufficient sample evidence to support the hypothesis.

The following closed-ended question, which is aligned with the 5-point Likert-type scale, was sent to the respondents:

**Question 6.3:** To what extent do the following incentives influence realtors' participation in the marketing of residential properties valued between R116,703 to R483,481?

The empirical study was used to realise the influence of the incentives in the decision-making for gap-housing development.

**Table 35:** The incentives that influence realtors' participate in the gap-housing

| Item                              | Respondent %            |      |      |      |      | Total | Mean | Standard Deviation | Rank |
|-----------------------------------|-------------------------|------|------|------|------|-------|------|--------------------|------|
|                                   | Very poor.....Excellent |      |      |      |      |       |      |                    |      |
|                                   | 1                       | 2    | 3    | 4    | 5    |       |      |                    |      |
| Property demand                   | 0.0                     | 0.0  | 21.1 | 35.1 | 43.9 | 14    | 4.07 | 0.83               | 1    |
| Property current use              | 0.0                     | 4.0  | 42.9 | 32.7 | 20.4 | 14    | 3.50 | 0.86               | 2    |
| Property improvement              | 0.0                     | 0.0  | 50.0 | 50.0 | 0.0  | 14    | 3.43 | 0.51               | 3    |
| Property market value             | 0.0                     | 0.0  | 62.5 | 16.7 | 20.8 | 14    | 3.43 | 0.76               | 3    |
| Property appreciation rate        | 0.0                     | 0.0  | 63.8 | 25.6 | 10.6 | 14    | 3.36 | 0.63               | 4    |
| Affordability of potential buyers | 0.0                     | 21.3 | 12.8 | 34.0 | 31.9 | 14    | 3.36 | 1.22               | 4    |
| Property supply                   | 4.3                     | 4.3  | 32.6 | 26.2 | 32.6 | 14    | 3.29 | 1.33               | 5    |
| Property current condition        | 0.0                     | 0.0  | 71.7 | 17.4 | 10.9 | 14    | 3.29 | 0.61               | 5    |
| Rates and taxes                   | 0.0                     | 0.0  | 88.6 | 0.0  | 11.4 | 14    | 3.14 | 0.54               | 6    |
| Property location                 | 0.0                     | 4.5  | 75.0 | 9.1  | 11.4 | 14    | 3.14 | 0.62               | 6    |
| Property size                     | 0.0                     | 4.7  | 83.7 | 0.0  | 11.6 | 14    | 3.07 | 0.62               | 7    |
| Property rights                   | 5.3                     | 21.1 | 39.5 | 21.0 | 13.1 | 14    | 2.71 | 1.14               | 8    |
| Zoning of property                | 8.8                     | 35.3 | 17.6 | 23.6 | 14.7 | 14    | 2.43 | 1.22               | 9    |
| Neighbourhood regulations         | 18.2                    | 0.0  | 45.5 | 36.3 | 0.0  | 14    | 2.36 | 1.28               | 10   |

Table 35 indicates the incentives that influence realtors to fully participate in the gap-housing valued between R116,703 to R483,481 in terms of percentage responses on indicator points ranging from 1 (Very poor) to 5 (Excellent):

- **Property demand:** The property demand is ranked first, based on the mean (MS) of 4.07 from the total score 57 points;
- **Property's current use:** The property's current use is ranked second, based on the mean (MS) of 3.50 from the total score of 48 points;
- **Property's market value:** The property's market value and property improvements are ranked third, based on the MS of 3.43 from the total score 48 points;
- **Property-appreciation rate and affordability of potential buyers:** The property appreciation rate of property and affordability of potential buyers are ranked fourth, based on the mean (MS) of 3.36 from the total score of 47 points;
- **Property supply and property's current use:** The property's current use and the property supply are ranked fifth, based on the mean (MS) of 3.29 from the total score of 46 points;
- **Property location, Rates and taxes:** The property location, rates and taxes are ranked sixth, based on the mean (MS) of 3.14 of the total score of 44 points;
- **Property size:** The size of subject property is ranked seventh, based on the mean (MS) of 3.07 of the total score of 43 points;
- **Property rights:** The property rights is ranked eighth, based on the mean (MS) of 2.71 of the total score of 38 points.
- **Zoning of property:** The property zoning is ranked ninth, based on the mean (MS) of 2.43 of the total score of 34 points.
- **Neighbourhood regulations:** The neighbourhood regulations is ranked tenth, based on the mean (MS) of 2.36 from the total score of 33 points.

## Summary

The respondents' perception of the extent that property demand, current property use, property improvements and property market value as a good to nearly excellent incentive to influence the participation of realtors in the marketing of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points. The respondents' perception of the extent that the property's appreciation rate, affordability of potential buyers, property location, property rights, property size, property's

current use, property supply, rates and taxes, as average to nearly good incentives that influence the participation of realtors in the marketing of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points.

The respondents' perception of the extent that property zoning and neighbourhood regulations serve as a poor to average incentive that influences the participation of realtors in the marketing of residential properties valued between R116,703 to R483,481; as they fall within a threshold of  $> 1.80$  to  $\leq 2.60$ , according to the indicator point

### **Non-parametric test for the incentives that influence realtors' participation in the gap-housing market**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a nonparametric test, when the respondents agree with the researcher's hypothesis as an alternative.

**Table 36:** Non-parametric test on incentives that influence realtors' participation in the gap-housing market

| Hypothesis                        | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|-----------------------------------|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Property rights                   | 14     | 2.71 | 1.14 | 0.30           | 8        | 6        | 0.79    | $H_0$ not rejected<br>$0.79 > 0.05$ |
| Zoning of property                | 14     | 2.43 | 1.22 | 0.33           | 5        | 9        | 0.21    | $H_0$ not rejected<br>$0.21 > 0.05$ |
| Property size                     | 14     | 3.07 | 0.62 | 0.17           | 13       | 1        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property location                 | 14     | 3.14 | 0.66 | 0.18           | 13       | 1        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property appreciation rate        | 14     | 3.36 | 0.63 | 0.17           | 14       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property's current use            | 14     | 3.50 | 0.86 | 0.23           | 13       | 1        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property demand                   | 14     | 4.0  | 0.83 | 0.22           | 14       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Affordability of potential buyers | 14     | 3.36 | 1.22 | 0.33           | 9        | 5        | 0.91    | $H_0$ not rejected<br>$0.99 > 0.05$ |
| Property supply                   | 14     | 3.29 | 1.33 | 0.35           | 11       | 3        | 0.99    | $H_0$ not rejected<br>$0.99 > 0.05$ |
| Property market value             | 14     | 3.43 | 0.76 | 0.20           | 14       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Rates and taxes                   | 14     | 3.14 | 0.53 | 0.14           | 14       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property current condition        | 14     | 3.29 | 0.61 | 0.16           | 14       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Property improvement              | 14     | 3.43 | 0.51 | 0.14           | 14       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |
| Neighbourhood regulations         | 14     | 2.36 | 1.28 | 0.34           | 8        | 6        | 0.79    | $H_0$ not rejected<br>$0.79 > 0.05$ |

Table 36 indicates the incentives that influence realtors to participate in the marketing of gap-housing; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05 as the sufficient sample evidence to support the following as incentives for decision-making:

- Property rights;
- Property size;
- Zoning of the property;
- Property location;
- Appreciation rate of the property;
- Property's current use;
- Property demand;
- Affordability of potential buyers;
- Property supply;
- Property's market value;
- Rates and taxes;
- Property improvements;
- Neighbourhood regulations; and
- Property's current condition.

The following closed-ended question, which is aligned with the 5-point Likert-type scale, was sent to the respondents:

**Question 6.3:** How do you rate the relationship between the participation of realtors in the marketing and trading of properties valued between R116,703 and R483,481?

The empirical study was used to realise the extent of the relationship between the participation of realtors in the marketing and trading of gap-housing finance.

**Table 37:** The relationship between realtors' participation and trading of gap-housing.

| Respondent %    |      |      |      |      | Total | Mean | Standard Deviation | Rank |
|-----------------|------|------|------|------|-------|------|--------------------|------|
| Minor.....Major |      |      |      |      |       |      |                    |      |
| 1               | 2    | 3    | 4    | 5    |       |      |                    |      |
| 0.0             | 13.3 | 40.0 | 35.6 | 11.1 | 14    | 3.21 | 0.89               | 1    |

Table 37 indicates the extent of the relationship between the participation of realtors in the marketing and trading of residential properties valued between R116,703 to R483,481 in terms of percentage responses on indicator points ranging from 1 (Minor) to 5 (Major).

The respondents perceive the extent of the relationship between the participation of realtors in the marketing and trading of properties valued between R116,703 to R483,481 as minor to nearly sometimes, based on the MS of 3.21, which falls within a threshold of  $> 2.60$  to  $\leq 3.40$ , according to the indicator points.

**Non-parametric test for the relationship between participation and trading in the gap-housing market**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with researcher’s hypothesis, as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 38:** Non-parametric test on the relationship between the realtor’s participation and trading of gap-housing market

| Hypothesis  | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|---|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Relationship of participation of realtors and trading | 14     | 3.21 | 0.89 | 0.24           | 11.00    | 3.00     | 0.99    | $H_0$ not rejected<br>$0.99 > 0.05$ |

Table 38 indicates that there is a relationship between the participation of realtors in the marketing and trading of gap-housing market; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the relationship.

The following closed-ended question, which is aligned with the 5-point Likert-type scale, was sent to the respondents:

**Question 6.4:** How do you rate the relationship between the participation of financial institutions and citizen’s access to ownership of properties valued between R116,703 to R483,481?

The empirical study was used to realise the extent of the relationship between the participation of private financial institutions and access to home ownership with gap-housing finance.

**Table 39:** The relationship between financial institutions’ participation and access to home ownership

| Respondent (%)  |     |      |      |      | Total | Mean | Standard Deviation | Rank |
|-----------------|-----|------|------|------|-------|------|--------------------|------|
| Minor.....Major |     |      |      |      |       |      |                    |      |
| 1               | 2   | 3    | 4    | 5    |       |      |                    |      |
| 0.0             | 0.0 | 39.6 | 22.6 | 37.8 | 14    | 3.79 | 0.89               | 1    |

Table 39 indicates the extent of the relationship between the participation of financial institution and citizen’s access to home ownership of properties valued between R116,703 to R483,481 in terms of the percentage responses on indicator points ranging from 1 (Minor) to 5 (Major). The respondents perceive the extent of the relationship between the participation of financial institutions and access to ownership of properties valued between R116,703 to R483,481, as sometimes to nearly major, based on the MS of 3.78, which falls within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

**Non-parametric test for the relationship between financial institutions’ participation and access to gap-housing.**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with researcher’s hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in median category of  $>2.60$  to  $\leq 3.40$ .

**Table 40:** Non-parametric test on the relationship between financial institutions’ participation and access to home ownership

| Hypothesis  | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|---|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| Relationship of participation of financial institutions and access to homeownership | 14     | 3.79 | 0.89 | 0.24           | 14       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |

Table 40 indicates that there is a relationship between the participation of financial institutions and access to home ownership of gap-housing market; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05, as sufficient sample evidence to support the relationship.

The following closed-ended question, which is aligned with a 5-point Likert-type scale, was sent to the respondents:

**Question 6.5:** How do you rate the sales performance of properties valued between R116,703 to R483,481?

The empirical study was used to realise the extent of sale in the gap-housing finance.

**Table 41:** The extent of the sales performance in the gap-housing market

| Respondent %            |     |      |      |      | Total | Mean | Standard<br>Deviation | Rank |
|-------------------------|-----|------|------|------|-------|------|-----------------------|------|
| Very poor.....Excellent |     |      |      |      |       |      |                       |      |
| 1                       | 2   | 3    | 4    | 5    |       |      |                       |      |
| 0.0                     | 0.0 | 46.2 | 15.3 | 38.5 | 14    | 3.71 | 0.91                  | 1    |

Table 41 indicates the extent of sales in the residential property valued between R116,703 to R483,481 in terms of the percentage of response, according to the indicator points ranging from 1 (Very poor) to 5 (Excellent).

The respondents perceive the extent of the sales performance of properties valued between R116,703 to R483,481, as good to nearly excellent, based on the MS of 3.71, which falls within a threshold of  $> 3.40$  to  $\leq 4.20$ , according to the indicator points.

**Non-parametric test on the extent of sales performance in the gap-housing market**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with the researcher’s hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and with a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 42:** Non-parametric test on the extent of sales performance in the gap-housing market

| Hypothesis   | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|--|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| The extent of property sales in the gap-housing market | 14     | 3.71 | 0.91 | 0.24           | 14       | 0        | 1.00    | $H_0$ not rejected<br>$1.00 > 0.05$ |

Table 42 indicates the extent of sales in the gap-housing market; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05, as sufficient sample evidence of the sale.

The following closed-ended question, which is aligned with the 5-point Likert-type scale, was sent to the respondents:

**Question 6.6:** How do you rate the mortgage bond approval of applications for properties valued between R116,703 to R483,481?

The empirical study was used to actualise the rate of mortgage bond approval in the gap-housing finance.

**Table 43:** The extent of bond approval in the gap-housing market

| Respondent %       |      |      |      |     | Total | Mean | Standard Deviation | Rank |
|--------------------|------|------|------|-----|-------|------|--------------------|------|
| Very.....Excellent |      |      |      |     |       |      |                    |      |
| 1                  | 2    | 3    | 4    | 5   |       |      |                    |      |
| 8.3                | 16.7 | 41.7 | 33.3 | 0.0 | 14    | 2.57 | 1.08               | 1    |

Table 43 indicates the extent of bond approval of applications for residential property valued between R116,703 to R483,481 in terms of the percentage of responses, according to the indicator points ranging from 1 (Very poor) to 5 (Excellent).

The respondents perceive the extent of mortgage bond approval of properties valued between R116,703 to R483,481 as very poor to poor, based on the MS of 2.57, which falls within the threshold of  $> 1.80$  to  $\leq 2.60$ , according to the indicator points.

**Non-parametric test of the extent of bond approval applications in the gap-housing market**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with the researcher’s hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected, when p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and with a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

**Table 44:** Non-parametric test on the extent of bond approval in the gap-housing market

| Hypothesis  | Sample | Mean | SD   | Standard error | Sing (+) | Sing (-) | P-value | Remarks                             |
|---|--------|------|------|----------------|----------|----------|---------|-------------------------------------|
| The extent of property sale in gap-housing market | 14     | 2.57 | 1.09 | 0.29           | 8.00     | 6.00     | 0.79    | $H_0$ not rejected<br>$0.79 > 0.05$ |



Table 44 indicates the extent of mortgage bond approval for gap-housing market; because  $H_0$  is not rejected, since Alpha is greater than the probability of 0.05, as sufficient sample evidence of the sale.

#### **Non-parametric test of correlation between incentive and the participation of realtors**

The empirical study was designed to test the hypothesis by rejecting the null hypothesis ( $H_0$ ) through a non-parametric test, when the respondents agreed with the researcher's hypothesis as an alternative. The hypothesis testing is considered to be a right-tailed test, where the null hypothesis is rejected when the p-value is greater than Alpha ( $\alpha$ ); and we cannot then reject the null hypothesis 95% level of confidence. The degree of freedom is the total number of respondents less one ( $n - 1$ ), which is 3 and a probability of 0.05. The target value is 2.61 in the median category of  $>2.60$  to  $\leq 3.40$ .

Table 45 indicates that there is a relationship between the lack of incentive and the lack of participation of realtors in the property market valued below R 233,404 with property improvement, property's current condition, rates and taxes, property's market value, property supply, affordability of potential buyers, property demand, property's current use, property-appreciation rate, property's location and property size. These factors do not have any connection for motivating realtors to fully participate in the marketing of residential property valued between R116,702 to R233,404; and  $H_0$  is rejected, since the p-value is less than the probability of 0.05.

The property rights, zoning of the property and neighbourhood regulations as incentives that have a link with the participation of realtors for property valued between R116,702 to R233,404. However,  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05.

**Table 45:** Non- Parametric test on correlation between incentive and participation of realtors

| Correlation                       | Residential Properties valued below R116,702 market |         | Residential Properties valued between R116,702 to R233,404 market |         | Residential Properties valued between R 233 ,405 to R483 ,481 market |         | Residential Properties valued above R483,482 market |         |
|-----------------------------------|---|---------|---|---------|--|---------|---|---------|
|                                   | Ranked data   | P-value | Ranked data   | P-value | Ranked data  | P-value | Ranked data   | P-value |
| Hypothesis incentive              |   |         |   |         |  |         |   |         |
| Property rights                   | -0.94   | 0.00    | -0.70   | 0.26    | 0.13   | 0.50    | 0.96  | 1.00    |
| Zoning of property                | -0.95   | 0.00    | -0.85   | 0.07    | -0.20  | 0.50    | 0.95  | 1.00    |
| Property size                     | -0.91   | 0.01    | -0.91   | 0.01    | -0.47  | 0.44    | 0.94  | 1.00    |
| Property location                 | -0.98   | 0.00    | -0.93   | 0.01    | -0.75  | 0.21    | 0.95  | 1.00    |
| Property appreciation rate        | -1.00   | 0.00    | -0.93   | 0.01    | -0.84  | 0.09    | 0.97  | 1.00    |
| Property's current use            | -0.99   | 0.00    | -0.98   | 0.00    | -0.81  | 0.12    | 0.96  | 0.99    |
| Property demand                   | -0.99   | 0.00    | -0.98   | 0.00    | -0.86  | 0.06    | 0.81  | 0.88    |
| Affordability of potential buyers | -0.99   | 0.00    | -0.92   | 0.01    | -0.53  | 0.41    | 0.97  | 1.00    |
| Property supply                   | -0.99   | 0.00    | -0.92   | 0.01    | -0.53  | 0.41    | 0.97  | 1.00    |
| Property-market value             | -1.00   | 0.00    | -0.94   | 0.01    | -0.82  | 0.11    | 0.98  | 1.00    |
| Rates and taxes                   | -0.97   | 0.00    | -0.94   | 0.00    | -0.75  | 0.21    | 0.98  | 1.00    |
| Property's current condition      | -1.00   | 0.00    | -0.93   | 0.00    | -0.77  | 0.18    | 0.97  | 1.00    |
| Property improvement              | -1.00   | 0.00    | -0.95   | 0.00    | -0.59  | 0.38    | 1.00  | 1.00    |
| Neighbourhood regulations         | -0.97   | 0.00    | -0.71   | 0.25    | -0.83  | 0.91    | 0.94  | 1.00    |

There is a relationship between incentive and the participation of realtors in residential property valued between R 233,405 to R483,481 and above R483,481 – with neighbourhood regulations, property improvement, property's current condition, rates and taxes, property's market value, property supply, the affordability of potential buyers, property demand, property's current use, property-appreciation rate, property location, property size, zoning of the property and property rights are considered to have an influence on the participation of realtors; because  $H_0$  is not rejected, since the p-value is greater than the probability of 0.05.

#### 4.3.3. Summary: Empirical study

The literature suggests the lack of incentive for the private sector to fully participate in the gap-housing market. The empirical study suggests that the financial institutions consider the following to be important incentives for participation, and on property as collateral for the mortgage bond:

- Property's market value;
- Property rights;

- Property's current use;
- Location of the property;
- Property's current condition, and
- Property improvement.

The property developers participate in the following property markets:

- Residential Properties valued between R233,405 to R483,481;
- Residential Properties valued above R483,482;
- Rental Residential Properties, and
- Commercial Properties.

The study established a direct correlation between the following incentives and participation of property developers in the residential properties valued between R 233,405 to R483,481; and the incentives include:

- Demand;
- Feasibility;
- Production cost;
- Zoning regulation;
- Possibility of rezoning;
- Risk level;
- Affordable land;
- Affordable municipal rates;
- Ability of clients to obtain loans, and
- Access to municipal services.

The empirical study also established a correlation with all the incentives and the participation of property developers for properties valued at R233,405 and above.

The realtors fully participate in the following residential property market:

- Residential Properties valued between R 233,405 to R483,481, and
- Residential Properties valued above R483,482.

The empirical study also established a correlation with the following incentives and participation of realtors in properties valued above R 233,405:

- Property rights;
- Property size;
- Zoning of the property;
- Property location;
- Appreciation rate of the property;
- Property's current use;
- Property demand;
- Affordability of potential buyers;
- Property supply;
- Property-market value;
- Rates and taxes;
- Property improvements;
- Neighbourhood regulations, and
- Property's current condition.

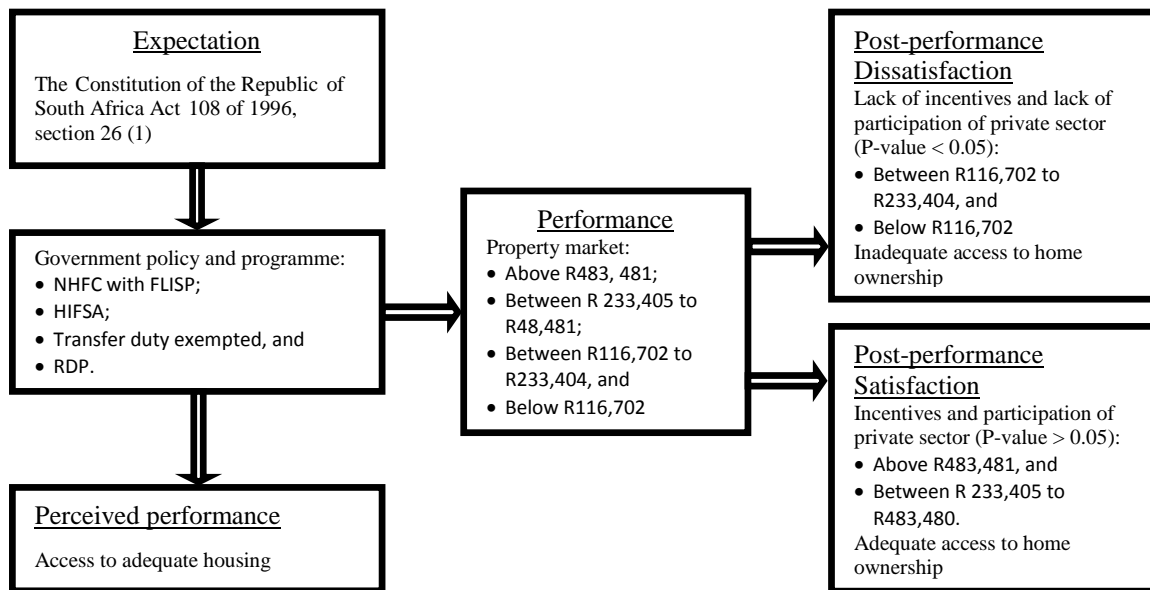
### **Expectation-Confirmation Theory (Ect)**

The expectation-confirmation theory is used to analyse the South African housing market, according to the following Figure 8.12:

Figure 9 indicates the expectation in terms of the South African Constitution and performance in terms of market reaction and the confirmation based on the empirical findings.

The South African housing market is divided into the following markets, based on affordability:

- Residential property market valued below R116,702;
- Residential property market valued between R116,702 to R233,404;
- Residential property market valued between R233,404 to R483,481; and
- Residential property market valued above R483,481.



**Figure 9:** Expectation-Confirmation Theory

The post-performance is satisfactory for properties valued above R233,405 with incentives that influence the participation of the private sector and adequate access to home ownership.

There is dissatisfaction with the post performance for properties valued below R233,404, with a lack of participation of the private sector, due to the lack of incentives and inadequate access to home ownership.

## **CHAPTER FIVE: CONCLUSION OF THE EMPIRICAL FINDINGS**

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### **5.1 Introduction**

The review of the related literature with the empirical findings of the study was used to test three hypotheses. The aim was to test whether the three hypotheses are supported, or not supported, by the empirical research and the reviewed literature.

### **5.2 The Testing Of The Hypotheses**

The statement of the problem: The gap-housing market does not allow adequate access to home ownership due to a lack of financial support, as well as undersupply; it does not trade and it does not allow the migration of subsidised housing into the formal market.

### **5.3 Hypothesis One**

There is a lack of incentive for private sector financial institutions to fully participate in the gap-housing market.

Sub-problem one: South African citizens in the gap-housing market do not have adequate access to finance, in order to participate in the gap-housing market.

#### **5.3.1 Conditional statement**

The private financial institutions can only participate, when there is consensus with a serious intention of a property sale between the seller and buyer, together with the involvement of realtors.

If there is lack of participation by realtors, then there is a lack of financial institution's participation – and inadequate trading in the gap-housing market.

If incentives influence participation, then the lack of participation by financial institutions is caused by the lack of incentive.

If there is participation from the private sector, then there is adequate access to home ownership.

### **5.3.2 Rules of inference**

#### **5.3.2.1 Disjunctive syllogism**

The study seeks to establish whether there is any participation of private financial institutions, or a lack of participation of private financial institutions in the gap-housing finance.

Tables 31 and 32 confirm that realtors participate in the marketing of the following housing market:

- Residential Properties valued between R 233,405 to R483,481; and
- Residential Properties valued above R483,482.

Therefore, there is a lack of realtor's participation in the marketing of residential properties valued at R 233,404 and below.

The lack of participation of realtors suggests a lack of participation of financial institutions in properties valued at R 233,404 and below.

#### **5.3.2.1 Hypothetical syllogism**

Tables 12 and 13 of the empirical study consider the property market value, property rights, properties' current use, the location of the property and property improvements, as incentives for a property in securing collateral for mortgage finance. Table 14 of the study also established that there is a relationship between secured collateral as property and the participation of financial institutions in the gap-housing market. Table 11 of the empirical study suggested that affordability and secured collateral are considered to be incentives that motivate the participation of financial institutions in property financing.

If incentives influence the participation of financial institutions, the lack of participation is due to a lack of incentives.

If financial institutions participate in financing the properties valued at R233,405 and above, then there is a lack of participation in properties valued at R 233,404 and below.

Therefore, if there is a lack of participation in properties valued at R 233,404 and below, then there is a lack of incentive.

Therefore, if there is a lack of participation of financial institutions, then there is a lack of adequate access to home ownership.

## **5.4 Hypothesis Two**

There is a lack of incentives for private sector developers to increase the supply of housing in the gap-housing market.

Sub-problem 2: There is an undersupply of houses in the gap-housing market by private property developers.

### **5.4.1 Conditional statement**

If incentives influence participation, then the lack of participation by property developers is caused by the lack of incentives.

If there is participation from private property developers in the gap-housing market, then there is an adequate supply of houses in the gap-housing market.

### **5.4.2 Rules of inference**

#### **5.4.2.1 Disjunctive syllogism**

The study seeks to establish whether there is any participation of private-property developers, or a lack of participation of private-property developers in the gap-housing finance.

Tables 16 and 17 confirm that private property developers participate in the development of the following housing market:

- Residential Properties valued between R 233,405 to R483, 481;
- Residential Properties valued above R483,482;
- Rental Residential Properties; and
- Commercial Properties.

Therefore, there is a lack of private-property developers' participation in the supply of residen

#### **5.4.2.2 Hypothetical syllogism**

Tables 22 and 23 of the empirical study consider the access to finance, profitability, demand, ability of the clients in obtaining building loans, feasibility, viability, availability and affordability of municipal, zoning regulations, rates, taxes, affordable residential land, risk levels, production cost, town-planning regulations, affordable municipal rates, energy and



electrical supply that motivate the participation of private-property developers in supplying the gap-housing market. Table 30 of the study also established that there is a relationship between the participation of private developers and the supply of gap-housing in the market.

If incentives influence the participation of private property developers, the lack of participation is due to the lack of incentives.

If property developers participate in the supply of properties valued above R 233,405, then there is a lack of participation in properties valued at R 233,404 and below.

Therefore, if there is a lack of participation in properties valued below R 233,404, then there is a lack of incentives.

Therefore, if there is a lack of participation, then there is an undersupply in the gap-housing market.

## **5.5 Hypothesis Three**

There is a lack of incentive for realtors to fully participate in the marketing of houses in the gap-housing market.

Sub-problem 3: Houses within the gap-housing market are not adequately traded.

### **5.5.1 Conditional statement**

If incentives influence participation, then the lack of participation by realtors is caused by a lack of incentive.

If there is participation in marketing by realtors, then there is adequate trading of the gap-housing market.

### **5.5.2 Rules of inference**

#### **5.5.2.1 Disjunctive syllogism**

The study seeks to establish whether there is any participation of private-property developers, or a lack of participation of private property developers in the gap-housing finance.

Tables 31 and 32 confirm that realtors participate in the marketing of the following housing market:

- Residential Properties valued between R 233,405 to R483,481;
- Residential Properties valued at R483,482 and above.

Therefore, there is a lack of realtor's participate in the marketing of residential properties valued at R 233,404 and below.

### **5.5.2.2 Hypothetical syllogism**

Tables 35 and 36 of the empirical study consider the property size, the zoning of the property, the property's location, the appreciation rate of the property, the property's current use, property demand, affordability of potential buyers, property supply, property market value, rates and taxes, property improvements and property's current condition to motivate the participation of realtors in the marketing of the gap-housing market. Table 45 of the study also established that there is a relationship between the participation of realtors in the marketing and the trading of houses in the gap-housing market.

If incentive influences the participation of realtors, then a lack of participation is due to a lack of incentives.

If realtors participate in the marketing of properties valued at R 233,405 and above, then there is a subsequent lack of participation in properties valued at R 233,404 and below.

Therefore, if there is a lack of participation in properties valued at R 233,404 and below, then there is lack of incentive. And, if there is a lack of participation, then there is inadequate trading in the gap-housing market.

## CHAPTER SIX: CONCLUSION

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The Constitution of the Republic of South Africa Act 108 of 1996 in terms of Section 26 (1) provides for everyone the right to have access to adequate housing. A house is defined as a physical structure; whilst a home also involves the social activities within the physical structure. The South African housing market have a gap between low-income housing that is solely provided by government, and high-income housing that is financed and supplied by the private sector. The gap-housing market is defined as those households that earn above R3,500 per month, but below R15,000 per month that do not qualify for a government-housing subsidy and are inadequately financed by the financial institutions.

The market value of residential properties in the gap-housing market is considered to be properties valued at R116,703 to R483,481. Adequate access to housing in South Africa is still an ideal, rather than a reality – with a distinct gap in the housing market.

The study is based on the theory and observation of the stakeholders' reactions to the South African housing-market performance. The theoretical debate of the study is based on the expectation created by the South African Constitution of the right for everyone to have access to adequate housing and the performance of the housing market. The study identifies the problem of a gap within a housing market that affects the market's performance for South Africans to have adequate access to housing.

The gap-housing market suggests a lack of financial support, as well as undersupply; and it is not adequately traded. The expectation of government is socially driven; whilst the expectations of the private sector are business-oriented. The government must create a friendly environment to bridge the gap between business and social expectations. An incentive creates an expectation of performance, which is based on participation.

The empirical study confirms the performance of the private sector in the gap-housing market, based on the response from the questionnaire. The study is a quantitative study, based on the respondent's perception of a closed-ended question, which is aligned with a 5-point Likert-type scale and some open-ended qualitative aspects in the questionnaire. The stakeholders that participated in the empirical study include financial institutions, private property developers and realtors. The empirical study confirmed that there is a lack of participation by financial institutions for mortgage finance, supply by private-property developers for properties valued at R233,404 and below, which are inadequate traded. The lack of participation suggests the

lack of incentive in the gap-housing market, especially for properties valued at R233,404 and below.

There is also a need to put in place a policy to serve as an incentive for the supply of housing in South Africa (BASA, 2014: 17). The key factor that is undermining the South African affordable housing programme has been a failure to acknowledge the fundamental linkage of low-income housing with upper-income housing, in the housing ladder (FinMark Trust, 2006: 33). The gap-housing market affects the linkage between the subsidy-housing market and the housing market that is financed by the private sector.

The gap-housing market does not allow adequate access to home ownership, due to a lack of adequate financial support and undersupply; furthermore, it does not trade adequately and it does not allow the migration of subsidy-housing market into the formal market.

## **6.1 Recommendations for further research**

This research study was designed to review the gap-housing market for South Africans to have adequate access to home ownership. Further research is required to explore the trading of the subsidy housing market, which would promote flexibility and mobility to increase the supply in the gap-housing market. The trading of the subsidy-housing market would also strengthen the linkage between low-income housing and the housing market financed by the private sector.

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# ANNEXURE A

COVERING LETTER TO RESPONDENTS



**Nelson Mandela  
Metropolitan  
University**

*f o r t o m o r r o w*

• PO Box 77000 • Nelson Mandela Metropolitan University

• Port Elizabeth • 6031 • South Africa • [www.nmmu.ac.za](http://www.nmmu.ac.za)

**Summerstrand North Campus  
Department of Construction Management**  
Tel.073 266 2260/ 082 733 1247 Fax. 086 566 9923  
E-mail: [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com)  
Contact person: Mar. D.D Ludidi  
20 October 2015

TO WHOM IT MAY CONCERN

Dear Madam/Sir,

**RESEARCH STUDY – Home ownership in the gap housing in South Africa**

I am conducting research for an MSc in Built Environment: Property Economics and Valuation treatise, which is investigating the residential property market in South Africa.

The study will be focusing on the gap-housing market. The issues to be considered include:

- The participation of the financial institutions in financing the gap-housing market;
- The participation of Property Developers in the supply; and
- The participation of Realtors in the marketing of the gap-housing market.

It would be truly appreciated if you can assist me in answering the attached questionnaire, which should not take more than 15 minutes to complete. Please feel free to be frank and honest with your answers; as all information will remain confidential; and your anonymity is assured.

Please return your completed questionnaire by not later than 13 November 2015 to:

Postal Address:

Rural Infrastructure Development (RID)  
14 Long Street  
Cape Town  
8000  
Attn: D.D. Ludidi

E-Mail: [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com)

Facsimile: 086 566 9923

Should you have any queries, please contact Daniel Dumisa Ludidi at 073 266 2260

Thanking you, in anticipation of your response.

Yours faithfully,

---

D.D. Ludidi

MSc (BE) Student

---

J.P. Bekker (MSc – BE, Pr CPM)

Supervisor

# ANNEXURE B

E-MAIL TO FINANCIAL INSTITUTION  
RESPONDENTS



**Nelson Mandela  
Metropolitan  
University**

*for tomorrow*

**Summerstrand North Campus  
Department of Construction Management**  
Tel. +27(0)41 504 3446/3995 Fax. +27(0)41 504 9871/1855  
E-mail: [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com)  
Contact person: Mr D.D. Ludidi  
20 October 2015)

**Re: MSc Study – Home ownership In the gap-housing market in South Africa**

Dear Sir/Madam,

I am conducting research for an MSc in Built Environment: Property Economics and Valuation treatise, which is investigating the residential property market in South Africa.

As a person involved in residential property finance, your inputs will be extremely important and valuable for this study. It would therefore be truly appreciated if you can assist me by completing the attached questionnaire survey.

Please feel free to be candid with your answers; as all data collected will remain confidential; and your anonymity is assured.

If you are not able to complete the survey yourself, please feel free to forward this email to a colleague or subordinate who would be able to complete it on your behalf.

The study focuses on home ownership in the gap-housing market in South Africa. Issues considered include:

- The participation of financial institutions in the gap-housing market;
- The participation of property developers in the gap-housing market;
- The participation of Realtors in gap-housing market.

Please open the attached documents, complete the survey by marking an X in the boxes next to the answers of your choice; and e-mail the completed questionnaire back to me at [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com).

It would be appreciated if you can return the completed survey any time, but not later than the 13 November 2015.

Should you have any queries, please contact Daniel Ludidi as indicated below.

Thanking you in anticipation of your response. Your time and input are valued and appreciated.

Yours faithfully,

**Mr DD Ludidi:** MSc (BE) Student

NMMU E-mail: [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com)

Mobile: 082 733 1247 Tel: 073 266 2260

**Mr J.P. Bekker:** Supervisor

Senior Lecturer, Department Building and Human Settlement Development

NMMU E-mail: [jpbekker@nmmu.ac.za](mailto:jpbekker@nmmu.ac.za)

Mobile: 082 378 5133

# ANNEXURE C

## RESEARCH QUESTIONNAIRE TO FINANCIAL INSTITUTIONS

Please answer all the questions. Please note that there are no correct answers; and we are only interested in your opinion.

To answer the next set of questions, please mark an X in the box next to the answer of your choice.

Question 1- The type of organisation?

Please indicate the type of organisation you are working for.

|                          |                       |
|--------------------------|-----------------------|
| <input type="checkbox"/> | Government            |
| <input type="checkbox"/> | Financial Institution |
| <input type="checkbox"/> | Property Developer    |
| <input type="checkbox"/> | Estate Agent          |
| <input type="checkbox"/> | Bond Originator       |
| <input type="checkbox"/> | Other                 |

Other, please specify: .....

Question 2- The period of Respondent's involvement in property finance?

For how many years have you been working in an organisation?

|                          |                    |
|--------------------------|--------------------|
| <input type="checkbox"/> | Less than 5 years  |
| <input type="checkbox"/> | 6 to 10 years      |
| <input type="checkbox"/> | 11 to 15 years     |
| <input type="checkbox"/> | 16 to 20 years     |
| <input type="checkbox"/> | 21 to 25 years     |
| <input type="checkbox"/> | 25 to 30 years     |
| <input type="checkbox"/> | 31 to 35 years     |
| <input type="checkbox"/> | 36 to 40 years     |
| <input type="checkbox"/> | 41 to 45 years     |
| <input type="checkbox"/> | More than 45 years |

Question 3- Respondent's gender

Please indicate your gender.

|                          |        |
|--------------------------|--------|
| <input type="checkbox"/> | Male   |
| <input type="checkbox"/> | Female |

Question 4- Respondent's age

Please indicate your age.

|  |                     |
|--|---------------------|
|  | Less than 20 years  |
|  | 21 to 30 years      |
|  | 31 to 40 years      |
|  | 41 to 50 years      |
|  | 51 to 60 years      |
|  | 61 to 65 years      |
|  | Older than 65 years |

Question 5- Respondent's position in the organization

Please indicate the position you occupy in the organisation for which you are working?

|  |                            |
|--|----------------------------|
|  | Chief / Executive Director |
|  | Director/Senior Manager    |
|  | Deputy Director/Manager    |
|  | Assistant Director         |
|  | Supervisor                 |
|  | Senior staff               |
|  | Other                      |

Other, please specify: .....

| <b>3.3 On a scale 1 (Not at all) to 5 (Very important), how important are the following incentives in motivating financial institutions to participate in financing residential properties valued between R116 703 to R483 481?</b> |                            |                            |   |   |   |   |
|---|----------------------------|----------------------------|---|---|---|---|
| <b>Item</b>   |                            | <b>Not at all.....Very</b> |   |   |   |   |
| 3.3.14  | Property rights            | 1                          | 2 | 3 | 4 | 5 |
| 3.3.15  | Location of the property   | 1                          | 2 | 3 | 4 | 5 |
| 3.3.16  | Property market value      | 1                          | 2 | 3 | 4 | 5 |
| 3.3.17  | Property improvements      | 1                          | 2 | 3 | 4 | 5 |
| 3.3.18  | Property current use       | 1                          | 2 | 3 | 4 | 5 |
| 3.3.19  | Property current condition | 1                          | 2 | 3 | 4 | 5 |
| 3.3.20  | Affordability              | 1                          | 2 | 3 | 4 | 5 |

| <b>3.4 On a scale 1 (Not at all) to 5 (Very important), how important are the following incentives for securing collateral as property for financial institutions to participate in financing residential properties valued between R116 703 and R483 481?</b> |                            |                            |   |   |   |   |
|--|----------------------------|----------------------------|---|---|---|---|
| <b>Item</b>  |                            | <b>Not at all.....Very</b> |   |   |   |   |
| 3.4.14   | Property rights            | 1                          | 2 | 3 | 4 | 5 |
| 3.4.15   | Property location          | 1                          | 2 | 3 | 4 | 5 |
| 3.4.16   | Property market value      | 1                          | 2 | 3 | 4 | 5 |
| 3.4.17   | Property improvements      | 1                          | 2 | 3 | 4 | 5 |
| 3.4.18   | Property current use       | 1                          | 2 | 3 | 4 | 5 |
| 3.4.19   | Property current condition | 1                          | 2 | 3 | 4 | 5 |

| <b>Item</b> |  | <b>Minor.....Major</b> |   |   |   |   |
|-------------|--|------------------------|---|---|---|---|
| <b>3.5</b>  | <b>On a scale 1 (Minor) to 5 (Major): To what extent do you rate the relationship between the securing of collateral for residential properties and financial institution's participation in financing residential properties valued between R116 703 to R483 481?</b> | 1                      | 2 | 3 | 4 | 5 |

General comments on the relationship between gap-housing market and Financial Institutions:

.....

.....



# ANNEXURE D

E-MAIL TO PRIVATE-SECTOR  
DEVELOPERS' RESPONDENTS



**Nelson Mandela  
Metropolitan  
University**

*for tomorrow*

**Summerstrand North Campus  
Department of Construction Management**

Tel. +27(0)41 504 3446/3995 Fax. +27(0)41 504 9871/1855

E-mail: [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com)

Contact person: Mr D.D. Ludidi  
20 October 2015)

**Re: MSc Study – Home ownership in the gap-housing market in South Africa**

Dear Sir/Madam,

I am conducting research for an MSc in Built Environment: Property Economics and Valuation treatise, which is investigating the residential property market in South Africa.

As a person involved in property development, your inputs will be extremely important and valuable for this study. It would therefore be truly appreciated if you can assist me by completing the attached questionnaire survey. Please feel free to be candid with your answers; as all the data collected will remain confidential, and your anonymity is assured.

If you are not able to complete the survey yourself, please feel free to forward this email to a colleague or subordinate who would be able to complete it on your behalf.

The study focuses on home ownership in the gap-housing market in South Africa. Issues considered include:

- The participation of financial institutions in the gap-housing market;
- The participation of property developers in the gap-housing market;
- The participation of Realtors in the gap-housing market.

Please open the attached documents, complete the survey by marking an X in the boxes next to the answers of your choice; and e-mail the completed questionnaire back to me at [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com).

It would be appreciated if you can return the completed survey any time, but not later than the 13 November 2015.

Should you have any queries, please contact Daniel Ludidi as indicated below.

Thanking you in anticipation of your response. Your time and input are valued and appreciated.

Yours faithfully,

**Mr DD Ludidi:** MSc (BE) Student

NMMU E-mail: [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com)

Mobile: 082 733 1247 Tel: 073 266 2260

**Mr J.P, Bekker:** Supervisor

Senior Lecturer, Department Building and Human Settlement Development

NMMU E-mail: [jpbekker@nmmu.ac.za](mailto:jpbekker@nmmu.ac.za)

Mobile: 082 378 5133

# ANNEXURE E

## RESEARCH QUESTIONNAIRE TO PRIVATE-SECTOR DEVELOPERS

Please answer all the questions. Please note that there are no correct answers; and we are only interested in your opinion.

To answer the next set of questions, please mark an X in the box next to the answer of your choice.

Question 1- The type of organisation?

Please indicate the type of organisation you are working for.

|                          |                       |
|--------------------------|-----------------------|
| <input type="checkbox"/> | Government            |
| <input type="checkbox"/> | Financial Institution |
| <input type="checkbox"/> | Property Developer    |
| <input type="checkbox"/> | Estate Agent          |
| <input type="checkbox"/> | Bond Originator       |
| <input type="checkbox"/> | Other                 |

Other, please specify: .....

Question 2- The period of Respondent's involvement with property development?

For how many years have you been working in an organisation?

|                          |                    |
|--------------------------|--------------------|
| <input type="checkbox"/> | Less than 5 years  |
| <input type="checkbox"/> | 6 to 10 years      |
| <input type="checkbox"/> | 11 to 15 years     |
| <input type="checkbox"/> | 16 to 20 years     |
| <input type="checkbox"/> | 21 to 25 years     |
| <input type="checkbox"/> | 25 to 30 years     |
| <input type="checkbox"/> | 31 to 35 years     |
| <input type="checkbox"/> | 36 to 40 years     |
| <input type="checkbox"/> | 41 to 45 years     |
| <input type="checkbox"/> | More than 45 years |

Question 3- Respondent's gender

Please indicate your gender

|                          |        |
|--------------------------|--------|
| <input type="checkbox"/> | Male   |
| <input type="checkbox"/> | Female |

**Question 4- Respondent's age**

Please indicate your age.

|  |                     |
|--|---------------------|
|  | Less than 20 years  |
|  | 21 to 30 years      |
|  | 31 to 40 years      |
|  | 41 to 50 years      |
|  | 51 to 60 years      |
|  | 61 to 65 years      |
|  | Older than 65 years |

**Question 5- Respondent's position in the organization**

Please indicate the position you occupy in the organisation for which you are working.

|  |                           |
|--|---------------------------|
|  | Chief Director/ Executive |
|  | Director/Senior Manager   |
|  | Deputy Director/Manager   |
|  | Assistant Director        |
|  | Supervisor                |
|  | Senior staff              |
|  | Other                     |

Other, please specify: .....

**Question 6**

|  |   |   |   |   |                     |   |  |  |  |
|--|---|---|---|---|---------------------|---|--|--|--|
| <b>3.6 On a scale 1 (Low) to 5 (High), please rate the property developer's participation in the supply of the following property development schemes?</b> |   |   |   |   |                     |   |  |  |  |
| <b>Item</b>  |   |   |   |   | <b>Low.....High</b> |   |  |  |  |
| 3.6.14   | Residential Properties valued below R116 702                | 1 | 2 | 3 | 4                   | 5 |  |  |  |
| 3.6.15   | Residential Properties valued between R116 702 to R 233 404 | 1 | 2 | 3 | 4                   | 5 |  |  |  |
| 3.6.16   | Residential Properties valued between R 233 405 to R483 481 | 1 | 2 | 3 | 4                   | 5 |  |  |  |
| 3.6.17   | Residential Properties valued above R483 482                | 1 | 2 | 3 | 4                   | 5 |  |  |  |
| 3.6.18   | Rental Residential Properties                               | 1 | 2 | 3 | 4                   | 5 |  |  |  |
| 3.6.19   | Commercial Properties                                       | 1 | 2 | 3 | 4                   | 5 |  |  |  |

| <b>3.7 On a scale 1 (Not at all) to 5 (Very important), how important are the following incentives in motivating private-sector developers to fully participate in the supply of residential properties valued between R116 703 to R483 481?</b> |  |                            |   |   |   |   |
|--|--|----------------------------|---|---|---|---|
| <b>Item</b>  |  | <b>Not at all.....Very</b> |   |   |   |   |
| 3.7.14   | Access to finance (from Banks, NURCHA, TUHF and other equity lenders). | 1                          | 2 | 3 | 4 | 5 |
| 3.7.15   | Profitability  | 1                          | 2 | 3 | 4 | 5 |
| 3.7.16   | Energy and electrical supply   | 1                          | 2 | 3 | 4 | 5 |
| 3.7.17   | The ability of clients to obtain a building loan.                      | 1                          | 2 | 3 | 4 | 5 |
| 3.7.18   | Access to basic municipal services                                     | 1                          | 2 | 3 | 4 | 5 |
| 3.7.19   | Affordable municipal rates (e.g township establishment fees, etc)      | 1                          | 2 | 3 | 4 | 5 |
| 3.7.20   | Affordable residential land  | 1                          | 2 | 3 | 4 | 5 |
| 3.7.21   | Tax and rates relief   | 1                          | 2 | 3 | 4 | 5 |
| 3.7.22   | Risk level   | 1                          | 2 | 3 | 4 | 5 |
| 3.7.23   | Zoning regulations and possible re-zoning                              | 1                          | 2 | 3 | 4 | 5 |
| 3.7.24   | Production costs   | 1                          | 2 | 3 | 4 | 5 |
| 3.7.25   | Town planning regulations and restrictions                             | 1                          | 2 | 3 | 4 | 5 |
| 3.7.26   | Feasibility  | 1                          | 2 | 3 | 4 | 5 |
| 3.7.27   | Demand   | 1                          | 2 | 3 | 4 | 5 |
| 3.7.28   | Viability  | 1                          | 2 | 3 | 4 | 5 |

| <b>3.8 On a scale 1 (Minor) to 5 (Major), to what extent do the following risks affect private sector developers' participation in the supply of residential properties valued between R116 703 to R483 481?</b> |                |                        |   |   |   |   |
|--|----------------|------------------------|---|---|---|---|
| <b>Item</b>  |                | <b>Minor.....Major</b> |   |   |   |   |
| 3.8.14   | Personal risk  | 1                      | 2 | 3 | 4 | 5 |
| 3.8.15   | Business risk  | 1                      | 2 | 3 | 4 | 5 |
| 3.8.16   | Financial risk | 1                      | 2 | 3 | 4 | 5 |
| 3.8.17   | Location risk  | 1                      | 2 | 3 | 4 | 5 |
| 3.8.18   | Legal risk     | 1                      | 2 | 3 | 4 | 5 |
| 3.8.19   | Political risk | 1                      | 2 | 3 | 4 | 5 |
| 3.8.20   | Economic risk  | 1                      | 2 | 3 | 4 | 5 |

| <b>3.9 On a scale 1 (Very poor) to 5 (Excellent), to what extent do the following incentives influence private sector developers' participation in supplying residential properties valued between R116 703 to R483 481?</b> |  |                                |   |   |   |   |
|--|--|--------------------------------|---|---|---|---|
| <b>Item</b>  |  | <b>Very poor.....Excellent</b> |   |   |   |   |
| 3.9.14   | Access to finance (from Banks, NURCHA, TUHF and other equity lenders). | 1                              | 2 | 3 | 4 | 5 |
| 3.9.15   | Profitability  | 1                              | 2 | 3 | 4 | 5 |
| 3.9.16   | Energy and electrical supply   | 1                              | 2 | 3 | 4 | 5 |
| 3.9.17   | The ability of clients to obtain a building loan.                      | 1                              | 2 | 3 | 4 | 5 |
| 3.9.18   | Access to basic municipal services                                     | 1                              | 2 | 3 | 4 | 5 |
| 3.9.19   | Affordable municipal rates (e.g. township establishment fees, etc.)    | 1                              | 2 | 3 | 4 | 5 |
| 3.9.20   | Affordable residential land  | 1                              | 2 | 3 | 4 | 5 |
| 3.9.21   | Tax and rates relief   | 1                              | 2 | 3 | 4 | 5 |
| 3.9.22   | Risk level   | 1                              | 2 | 3 | 4 | 5 |
| 3.9.23   | Zoning regulations and possible re-zoning                              | 1                              | 2 | 3 | 4 | 5 |
| 3.9.24   | Production costs   | 1                              | 2 | 3 | 4 | 5 |
| 3.9.25   | Town planning regulations and restrictions                             | 1                              | 2 | 3 | 4 | 5 |
| 3.9.26   | Feasibility  | 1                              | 2 | 3 | 4 | 5 |
| 3.9.27   | Demand   | 1                              | 2 | 3 | 4 | 5 |
| 3.9.28   | Viability  | 1                              | 2 | 3 | 4 | 5 |

| <b>Item</b> |   | <b>Minor.....Major</b> |          |          |          |          |
|-------------|---|------------------------|----------|----------|----------|----------|
| <b>3.10</b> | <b>On a scale 1 (Minor) to 5 (Major), to what extent do you rate the relationship between incentive and the participation of the Private-sector Developer to supply properties valued between R116 703 to R483 481?</b> | <b>1</b>               | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |

| <b>Item</b> |   | <b>Minor.....Major</b> |          |          |          |          |
|-------------|---|------------------------|----------|----------|----------|----------|
| <b>3.11</b> | <b>On a scale 1 (Minor) to 5 (Major), to what extent do you rate the relationship between risk and the participation of Private sector Developers to supply properties valued between R116 703 to R483 481?</b> | <b>1</b>               | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |

| <b>Item</b> |  | <b>Minor.....Major</b> |  |  |  |  |
|-------------|--|------------------------|--|--|--|--|
|             |  |                        |  |  |  |  |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <b>3.12 On a scale 1 (Minor) to 5 (Major), to what extent do you rate the relationship between the participation of Private-sector Developers and the supply of properties valued between R116 703 to R483 481?</b> | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|

General comments on the gap-housing development scheme

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# ANNEXURE F

E-MAIL TO REALTOR RESPONDENTS



**Nelson Mandela  
Metropolitan  
University**

*for tomorrow*

**Summerstrand North Campus  
Department of Construction Management**  
Tel. +27(0)41 504 3446/3995 Fax. +27(0)41 504 9871/1855  
E-mail: [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com)  
Contact person: Mr D.D. Ludidi  
20 October 2015)

**Re: MSc Study – Home ownership in the gap-housing market in South Africa**

Dear Sir/Madam,

I am conducting research for an MSc in Built Environment: Property Economics and Valuation treatise, which is investigating the residential property market in South Africa.

As a person involved in property development, your inputs would be extremely important and valuable for this study. It would therefore be truly appreciated if you can assist me by completing the attached questionnaire survey.

Please feel free to be candid with your answers; as all the data collected will remain confidential; and your anonymity is assured.

If you are not able to complete the survey yourself, please feel free to forward this email to a colleague or subordinate who would be able to complete it on your behalf.

The study focuses on home ownership in the gap-housing market in South Africa. Issues considered include:

- The participation of financial institutions in the gap-housing market;
- The participation of property developers in the gap-housing market;
- The participation of Realtors in the gap-housing market.

Please open the attached documents, complete the survey by marking an X in the boxes next to the answers of your choice; and e-mail the completed questionnaire back to me at [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com).

It would be appreciated if you can return the completed survey any time, but not later than the 13 November 2015.

Should you have any queries, please contact Daniel Ludidi, as indicated below.

Thanking you in anticipation of your response. Your time and input are valued and appreciated.

Yours faithfully,

**Mr DD Ludidi:** MSc (BE) Student

NMMU E-mail: [danielludidi@yahoo.com](mailto:danielludidi@yahoo.com)

Mobile: 082 733 1247 Tel: 073 266 2260

**Mr J.P. Bekker:** Supervisor

Senior Lecturer, Department Building and Human Settlement Development

NMMU E-mail: [jpbekker@nmmu.ac.za](mailto:jpbekker@nmmu.ac.za)

Mobile: 082 378 5133

# ANNEXURE G

## RESEARCH QUESTIONNAIRE TO REALTORS

Please answer all the questions. Please note that there are no correct answers; and we are only interested in your opinion.

To answer the next set of questions, please mark an X in the box next to the answer of your choice.

Question 1- The type of organisation?

Please indicate the type of organisation you are working for.

|                          |                       |
|--------------------------|-----------------------|
| <input type="checkbox"/> | Government            |
| <input type="checkbox"/> | Financial Institution |
| <input type="checkbox"/> | Property Developer    |
| <input type="checkbox"/> | Estate Agent          |
| <input type="checkbox"/> | Bond Originator       |
| <input type="checkbox"/> | Other                 |

Other, please specify: .....

Question 2- The period of Respondent's involvement in property marketing?

How many years have you been working in an organisation?

|                          |                    |
|--------------------------|--------------------|
| <input type="checkbox"/> | Less than 5 years  |
| <input type="checkbox"/> | 6 to 10 years      |
| <input type="checkbox"/> | 11 to 15 years     |
| <input type="checkbox"/> | 16 to 20 years     |
| <input type="checkbox"/> | 21 to 25 years     |
| <input type="checkbox"/> | 25 to 30 years     |
| <input type="checkbox"/> | 31 to 35 years     |
| <input type="checkbox"/> | 36 to 40 years     |
| <input type="checkbox"/> | 41 to 45 years     |
| <input type="checkbox"/> | More than 45 years |

Question 3- Respondent's gender

Please indicate your gender?

|                          |        |
|--------------------------|--------|
| <input type="checkbox"/> | Male   |
| <input type="checkbox"/> | Female |

Question 4 - Respondent's age

Please indicate your age.

|  |                     |
|--|---------------------|
|  | Less than 20 years  |
|  | 21 to 30 years      |
|  | 31 to 40 years      |
|  | 41 to 50 years      |
|  | 51 to 60 years      |
|  | 61 to 65 years      |
|  | Older than 65 years |

Question 5 - Respondent's position in the organization

Please indicate the position you occupy in the organisation for which you are working?

|  |                           |
|--|---------------------------|
|  | Chief Director/ Executive |
|  | Director/Senior Manager   |
|  | Deputy Director/Manager   |
|  | Assistant Director        |
|  | Supervisor                |
|  | Senior staff              |
|  | Other                     |

Other, please specify: .....

| <b>3.13 On a scale 1 (Minor) to 5 (Major), to what extent are Real Estate Agents' involved in the marketing of the following residential properties?</b> |                        |   |   |   |   |
|--|------------------------|---|---|---|---|
| <b>Item</b>  | <b>Minor.....Major</b> |   |   |   |   |
| 3.13.14 Residential Properties valued below R 116 702  | 1                      | 2 | 3 | 4 | 5 |
| 3.13.15 Residential Properties valued between R 116 702 to R 233 404   | 1                      | 2 | 3 | 4 | 5 |
| 3.13.16 Residential Property valued between R 233 405 to R483 481  | 1                      | 2 | 3 | 4 | 5 |
| 3.13.17 Residential Property valued above R483 482   | 1                      | 2 | 3 | 4 | 5 |

| <b>3.14 On a scale 1 (Not at all) to 5 (Very important), how important are the following incentives in motivating Realtors to participate in the marketing of gap-housing market, for properties valued between R116 703 and R483 481?</b> |                            |   |   |   |   |
|--|----------------------------|---|---|---|---|
| <b>Item</b>  | <b>Not at all.....Very</b> |   |   |   |   |
| 3.14.14 Property rights  | 1                          | 2 | 3 | 4 | 5 |
| 3.14.15 Zoning of property   | 1                          | 2 | 3 | 4 | 5 |
| 3.14.16 Property size  | 1                          | 2 | 3 | 4 | 5 |
| 3.14.17 Property location  | 1                          | 2 | 3 | 4 | 5 |
| 3.14.18 Property appreciation rate   | 1                          | 2 | 3 | 4 | 5 |
| 3.14.19 Property's current use   | 1                          | 2 | 3 | 4 | 5 |
| 3.14.20 Property demand  | 1                          | 2 | 3 | 4 | 5 |
| 3.14.21 Affordability of potential buyers/ positive response from banks  | 1                          | 2 | 3 | 4 | 5 |
| 3.14.22 Property supply  | 1                          | 2 | 3 | 4 | 5 |
| 3.14.23 Property's market value  | 1                          | 2 | 3 | 4 | 5 |
| 3.14.24 Rates and taxes  | 1                          | 2 | 3 | 4 | 5 |
| 3.14.25 Property's current condition   | 1                          | 2 | 3 | 4 | 5 |
| 3.14.26 Property improvement   | 1                          | 2 | 3 | 4 | 5 |
| 3.14.27 Neighbourhood regulations  | 1                          | 2 | 3 | 4 | 5 |

| <b>3.15 On a scale 1 (Very poor) to 5 (Excellent), to what extent do the following incentives motivate Realtors to fully participate in the gap-housing market, for properties valued between R116 703 and R483 481?</b> |                                |   |   |   |   |
|--|--------------------------------|---|---|---|---|
| <b>Item</b>  | <b>Very poor.....Excellent</b> |   |   |   |   |
| 3.15.14 Property rights  | 1                              | 2 | 3 | 4 | 5 |
| 3.15.15 Zoning of property   | 1                              | 2 | 3 | 4 | 5 |
| 3.15.16 Property size  | 1                              | 2 | 3 | 4 | 5 |
| 3.15.17 Property location  | 1                              | 2 | 3 | 4 | 5 |
| 3.15.18 Property appreciation rate   | 1                              | 2 | 3 | 4 | 5 |
| 3.15.19 Property's current use   | 1                              | 2 | 3 | 4 | 5 |
| 3.15.20 Property demand  | 1                              | 2 | 3 | 4 | 5 |
| 3.15.21 Affordability of potential buyers/ positive response from banks  | 1                              | 2 | 3 | 4 | 5 |
| 3.15.22 Property supply  | 1                              | 2 | 3 | 4 | 5 |
| 3.15.23 Property's market value  | 1                              | 2 | 3 | 4 | 5 |
| 3.15.24 Rates and taxes  | 1                              | 2 | 3 | 4 | 5 |

|                                      |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|
| 3.15.25 Property's current condition | 1 | 2 | 3 | 4 | 5 |
| 3.15.26 Property improvement         | 1 | 2 | 3 | 4 | 5 |
| 3.15.27 Neighbourhood regulations    | 1 | 2 | 3 | 4 | 5 |

| Item   | Minor.....Major |   |   |   |   |
|--|-----------------|---|---|---|---|
| 3.16 On a scale 1 (Minor) to 5 (Major), to what extent do you rate the relationship between the <u>participation</u> of Realtors in the marketing and the trading of properties valued between R116 703 to R483 481? | 1               | 2 | 3 | 4 | 5 |

| Item  | Minor.....Major |   |   |   |   |
|---|-----------------|---|---|---|---|
| 3.17 On a scale 1 (Minor) to 5 (Major), to what extent do you rate the relationship between the <u>participation</u> of financial institution and citizen's <u>access</u> to ownership of properties valued between R116 703 to R483 481? | 1               | 2 | 3 | 4 | 5 |

| Item  | Very poor.....Excellent |   |   |   |   |
|---|-------------------------|---|---|---|---|
| 3.18 On a scale 1 (Very poor) to 5 (Excellent), to what extent do you rate the sales performance of properties valued between R116 703 to R483 481? | 1                       | 2 | 3 | 4 | 5 |

| Item  | Very poor.....Excellent |   |   |   |   |
|---|-------------------------|---|---|---|---|
| 3.19 On a scale 1 (Very poor) to 5 (Excellent), to what extent do you rate the mortgage bond approval of applications for properties valued between R116 703 to R483 481? | 1                       | 2 | 3 | 4 | 5 |

General comments about marketing the gap-housing market:

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