Nairobi Metropolitan Mortgage and Rental Affordability Report 2017

"*Nairobi Metropolitan Area Still a Renters Market*"

10th September, 2017

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Cytonn REAL ESTATE

I. Introduction to Cytonn Investments

What We Stand For

Our Mission

We deliver innovative & differentiated financial solutions that speak to our clients' needs

Our Vision

To be Africa's leading investment manager by consistently exceeding clients' expectations

Our Values

People
Passionate and self-driven people who thrive in a team context

Excellence
Delivering the best at all times

Client Focus
Putting clients' interest first at all times

Entrepreneurship
Using innovation and creativity to deliver differentiated financial solutions

Accountability
We take both corporate and personal responsibility for our actions

Integrity
Doing the right things

Strategy is straightforward – just pick a general direction and implement like hell

— Jack Welch

About Us

Cytonn Investments Management Plc is an alternative investment manager with presence in East Africa, Finland and the US. We provide investors with exposure to the high growth East Africa region. Our investors include global and local institutional investors, individual high net-worth investors and the diaspora. We also service retail investors through our Cytonn Co-operative

82 bn Over Kshs. 82 billion worth of projects under mandate

5 Five offices across 2 continents

250 Over 250 staff members

10 10 investment ready projects

A unique franchise differentiated by:

Independence & Investor Focus

Focused on serving the interest of clients, which is best done on an independent platform to minimize conflicts of interest

Alternative Investments

Specialized focus on alternative assets - Real Estate, Private Equity, and Structured Solutions

Strong Alignment

Every staff member is an owner in the firm. When clients do well, the firm does well; and when the firm does well, staff do well

Committed Partners

Strong global and local partnerships in financing, land and development affiliate

Why We Exist

Africa presents an attractive investment opportunity for investors seeking attractive and long-term returns. Despite the alternative markets in Africa having high and stable returns, only a few institutional players serve the market. Cytonn is focused on delivering higher returns in the alternative markets, while providing the best client service and always protecting our clients' interests.

WE SERVE FOUR MAIN CLIENTS SEGMENTS:

- Retail segment through Cytonn Co-operative membership
- High Net-worth Individuals through Cytonn Private Wealth
- East Africans in the Diaspora through Cytonn Diaspora
- Global and Local Institutional clients

WE INVEST OUR CLIENT FUNDS IN:

- Real Estate
- Private Equity
- Fixed Income Structured Solutions
- Equities Structured Solutions

We collect funds from our clients

We invest them in high growth opportunities

We deliver the best possible returns

Our Business

Where We Operate

Our Business Lines

Investments

Alternative investment manager focused on private equity and real estate

Real Estate

We develop institutional grade real estate projects for investors

Diaspora

We connect East Africans in the diaspora to attractive investment opportunities in the region

Technology

We deliver world-class financial technology solutions

Co-operative

Provides access to attractive alternative investment opportunities for members

Our Solutions

To unearth the attractive opportunity that exists in alternative markets in Africa, we offer differentiated investment solutions in four main areas:

HIGH YIELD SOLUTIONS

Our expertise in the alternative markets enables us to offer investors high yielding investments. Our robust credit analysis coupled with our quick dealing capabilities, our extensive research coverage and our innovative structuring helps to ensure consistent and above market returns to investors.

REAL ESTATE INVESTMENT SOLUTIONS

Our comprehensive real estate capabilities enable us to find, evaluate, structure and deliver world-class real estate investment products to our investors in the East African region. Our capabilities include fundraising, market research and acquisition, concept design, project management and agency and facility management.

PRIVATE REGULAR INVESTMENT SOLUTIONS

Attractive returns in the alternative segments have typically been accessible to institutional and high net-worth investors. Our regular investment solutions provide access to the alternative investments to members of the Cytonn Co-operative.

PRIVATE EQUITY

We seek to unearth value by identifying potential companies and growing them through capital provision, partnering with management to drive strategy and institutionalizing their processes. Our areas of focus are Financial Services, Education, Renewable Energy and Technology Sectors.

Cytonn REAL ESTATE

Our Products

We serve three main types of clients namely, high net-worth individuals, institutions and retail, each with diverse needs. Below are the suitability criteria for the various products.

	INSTITUTIONAL CLIENTS	HIGH NET WORTH INDIVIDUALS (HNWI)	RETAIL CLIENTS
Cash Management Solutions	●	●	
Regular Investment Plan • Education Investment Plan • Regular Investment Solution • Co-op Premier Investment Plan • Land Investment Plan	●	●	●
Real Estate Development • Real Estate Developments • Sharpland	●	●	●

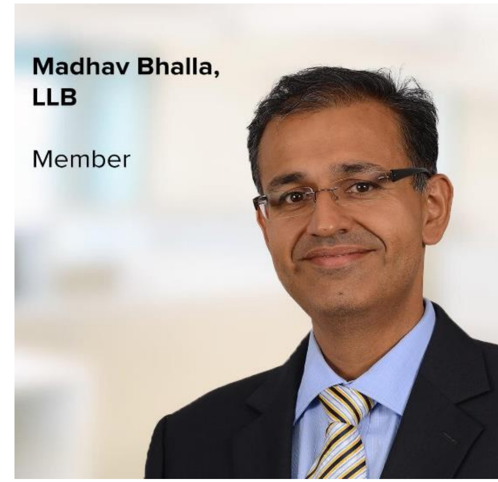
Our People

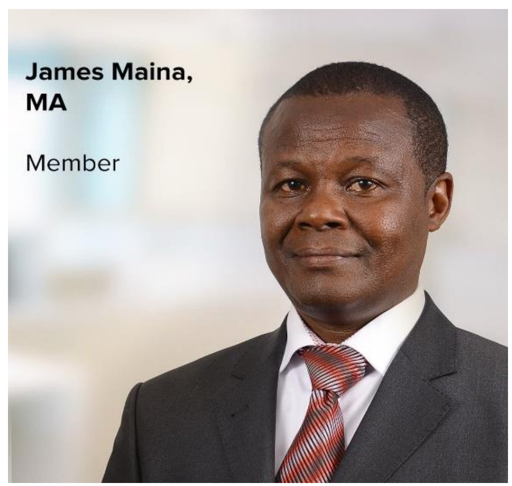
If you could get all the people in an organization rowing the same direction, you could dominate any industry, in any market, against any competition, at any time.

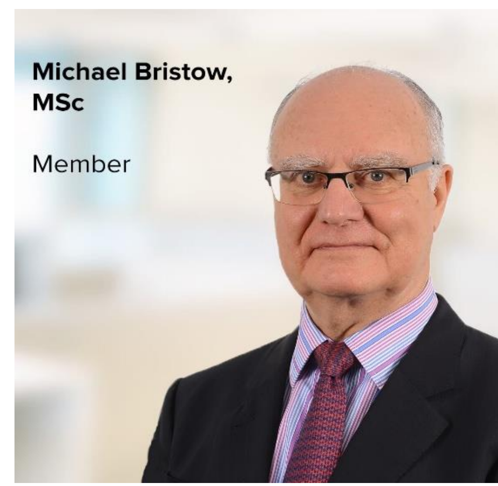
— Patrick Lencioni

Board of Directors

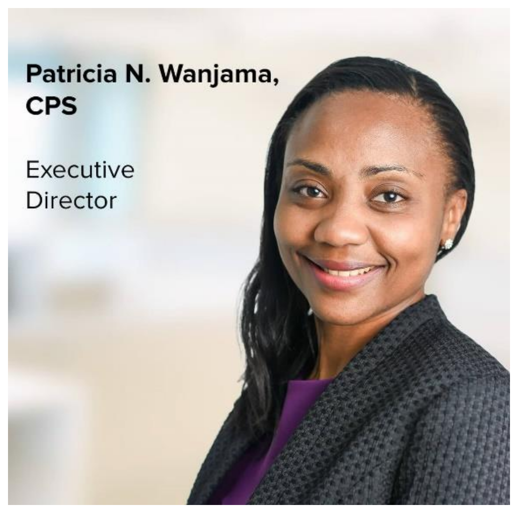
To ensure that we remain focused on the clients' interests, we have put in place proper governance structures. We have a board of directors consisting of 11 members from diverse backgrounds, each bringing in unique skill-sets to the firm.







Board of Directors, continued …



II. Overview of Real Estate in Kenya

Introduction to Real Estate in Kenya

Real estate sector expected to continue growing on the back of developments such as lower financing costs, and the entry of institutional developers to the market

Macro-economic Contribution

- The real estate sector contributed to 8.4% of Kenya's GDP in 2016, and grew by 8.8% in 2016 from a 7.2% growth in 2015. This is according to the KNBS Economic Survey 2017
- A relatively stable political environment, as well as favourable macroeconomic conditions leading to sustained GDP Growth and a stable exchange rate have led to positive development in the sector

High Returns

- Real estate has consistently out performed other asset classes in the last 5-years, generating returns of over 25% p.a., compared to an average of 10% p.a. in the traditional asset classes
- Residential units in Kenya in the last five years have generated an average rental yield of 5.0%, while commercial space have generated an average yield of more than 9.0% p.a

Recent Developments

- The real estate sector has seen entry of more institutional developers such as Saccos, private equity firms and funds such as Taaleri and Actis and foreign institutions such as AVIC of China
- Government initiatives such as digitising of the lands ministry, issuing of title deeds, waiving of the NCA, NEMA and title searching fees as well as a 15% tax cut for large scale developers are creating a conducive investment climate for real estate investment and lowering construction costs

Market Outlook

- We expect continued growth in Real Estate sector on the back of improved macroeconomic conditions, sustainable high returns, and a changing operational landscape as developers strive to satisfy the high housing deficit
- Key challenges include: high land and infrastructure development costs and in 2017 the political environment poses a challenge with investors adopting a wait and see attitude and hence reducing transactions volume in the industry

Introduction to Real Estate in Kenya – RE Contribution to GDP

Real Estate and construction sectors contribution to GDP has been increasing from 10.5% in 2000 to 12.6% in 2010 to 13.8% in 2016

	2000	2010	2016
Agriculture	31.3%	23.7%	23.1%
Manufacturing	17.0%	11.5%	10.4%
Wholesale & Retail Trade	16.5%	7.1%	7.4%
Hospitality & Tourism	16.5%	1.7%	0.9%
Real Estate & Construction	10.5%	12.6%	13.8%

Source: KNBS Economic Survey 2017

Factors Affecting Residential Demand

Increasing incomes, population growth and changing customer preferences are driving the demand for houses

Household Incomes

- Kenya's GDP has grown steadily at above 5.0% for the last 5 years, leading to higher incomes
- Household incomes have increased driven by the fact that most household especially within the middle income class have both partners working and earning a steady income
- This has resulted in increased demand for formal housing, thus pushing prices up
- Increased income has also resulted in differentiated demand for housing that suits different household needs in terms of space, finishing, lay-out

Demographics

- Rapid population growth of 2.65% p.a. is creating increased demand for housing, as families grow and consumer needs change to reflect independent living
- High urbanization rate of 4.4% p.a. in the Nairobi area and the metropolitan area
- The Kenyan 'middle class' have created a huge opportunity for integrated housing developments such as mixed used developments and master planned communities

Access to Mortgages

- Access to mortgages is still relatively low and declined to approximately 2.8% of GDP in 2016 from 3.5% of GDP in 2015
- The Banking Amendment Act 2015 and more stringent borrowing terms by banks made it even more difficult for those wishing to secure mortgages, as banks are unable to factor in 'high risk borrowers' within the stipulated margins
- According to the CBK, mortgages declined by 1.5% to 24,085 in 2016 from 24,458 in 2015

Political Sentiments

- As 2017 is an election year, there has been a slow-down in market prices and sales volumes as investors and prospective buyers adopted a wait and see approach
- This is however temporary and the market is likely to stabilise on the back of relatively strong GDP growth at 5.4% in the last 5-years and an attractive demographic profile

Factors Affecting Residential Supply

Difficulty in access to funding and high construction costs negatively affects the supply of houses, but improved infrastructure is opening up satellite towns for housing development

Availability & Price of Land

- Availability of development land has been low within Nairobi resulting in relatively high prices most especially in the city's suburbs such as Kilimani, Kileleshewa and Westlands
- This has resulted in more apartments coming up in these nodes as opposed to townhouses
- Developers are increasingly shifting focus to the Nairobi Satellite Towns such as Ruaka, Rongai, Kitengela, Ruai and Kikuyu where land is relatively affordable, thus resulting in increased supply

Access to Funds

- Lack of proper funding for real estate developments has resulted in excessive debt financing, resulting in increased financing costs owing to the extended project time frames
- The Banking Amendment Act 2015 and more stringent borrowing terms by banks has also resulted in decline in credit supply in the market and may hinder development of housing

Construction Cost

- Development costs have been relatively high owing to the high costs of construction materials which constitute 70% of the total development costs
- Technological innovations have brought in cheaper alternative construction material such prefabs which reduce construction costs by almost 40% but the market is still at infancy for prefab uptake

Infrastructure Support

- Improved infrastructural developments such as improved roads, the SGR, electrification, and ICT have opened up new development areas in areas such as Athi River, Mlolongo and Ruaka
- Challenges such has sewerage, water supply and proper roads in some areas have greatly hampered supply of housing especially in satellite towns necessitating the need for local government support in the real estate industry

Recent Developments in the Residential Market in Kenya

Government incentives such as reduction of corporate tax are likely to boost development

i. **Government Incentives to Boost Development:** The government has given incentives to boost residential development including the reduction of corporate tax to 15% to firms that develop at least 100 housing units annually. In addition, the government has scrapped the land title search fees, NCA and NEMA levies in an effort to reduce development costs. This is likely to enable more developers including saccos and housing cooperatives provide more affordable housing

ii. **Automation of Land Registries:** Lands Ministry has embarked on automation of land records aiming to improve the ease of doing business through efficiency, reducing corruption and eliminating cases of missing files. Registries in areas such as Mombasa, Nakuru, Kisumu, Kiambu and Nairobi were digitised in 2016. This will ease housing development through a more efficient and transparent land transfer process

iii. **Rise of Masterplanned Cities:** Mater planned communities and cities have picked up in the recent times, and offer a live, work, play environment in a controlled nature. New master planned cities include Northlands and Cytonn's Newtown in Athi River and RiverRun Estates in Ruiru

iv. **Alternative Building Technology:** Although nascent it is starting to gain momentum as they save time in construction and hence have a possibility of reducing financing costs, which will benefit the end consumer as they will pay lower amounts for their residential units

v. **Increased Foreign Participation:** The real estate market in Kenya is increasingly being exposed to international developers and financiers. They include AFDB, Taaleri, Islamic Development corporation, China Africa Development Fund which are focusing on reducing the housing deficit in Kenya

III. Nairobi Metropolitan Mortgage and Rental Affordability Report

Executive Summary

The Nairobi metropolitan Ares remains a renters market with rents being affordable and mortgages unaffordable

- We carried out a research on house rents and prices across 35 submarkets in the Nairobi Metropolitan area. This is in Nairobi and 32,000 square kilometres surrounding it
- Research was driven by the need increase information in the market for potential homeowners and those looking to rent properties
- Affordability indices measure whether the median household income is sufficient to pay for:
    1. Property using a Mortgage Loan: Mortgage Affordability Index (MAI) or;
    2. Rent: Rental Affordability Index (RAI)
- Mortgages were unaffordable in most estates with the Nairobi metropolitan area having an index of 65, a 1 index point decline from 2016 where on average the Nairobi Metropolitan Area had an index of 66
- Similar to 2016, in 2017, Satellite towns had the highest Mortgage affordability index at 82, with the most affordable towns being for both renting and buying being Athi River, Kitengela ,Ruaka, Kiambu, Thindigua, Rongai, Komarock , Juja ,Ngong, Donholm, Thika and Kikuyu, which were also the most affordable in 2016 in addition to Githurai and Kariobangi which were not sampled in 2017 due to low sales volumes
- Rents were affordable in most estates and towns in the Nairobi Metropolitan area
- In 2017, The Nairobi Metropolitan area had a rental affordability index of 124, an 8 index points decline from 2016 where the market had an average rental affordability index of 132 attributable to an average rental appreciation of 5.3% witnessed in the market in 2017
- Like in 2016 Satellite towns also had the highest Rental affordability index in 2017, with an index score of 155 in 2017
- With rents being affordable and mortgages unaffordable, the Nairobi Metropolitan Area remains largely a renters market

Mortgage & Rental Affordability – " Nairobi Metropolitan Area Still a Renters Market"

Nairobi Metropolitan Area is still a renters market as mortgages are unaffordable with an index of 65

Value Area	Summary	Effect on Affordability
Rental Rates and House Prices	• Rental rates in Nairobi Metropolitan Area are lower than the monthly mortgage payments with a household requiring a median house hold income of Kshs 87,000 for rent vis a vis Kshs 220,000 required to service a mortgage monthly	• Rents are affordable in the Nairobi Metropolitan Area with an index of 124 while mortgages are on average unaffordable in the Nairobi Metropolitan Area with an index of 65 against a requisite 100 • The market is thus skewed to renting as opposed to buying
Land Prices	• Land is cheaper on average in Satellite Towns compared to the main suburbs in the Nairobi Metropolitan Area with price ranges of as low as Kshs 5mn an acre compared to the CBD's suburbs where prices can be upto Kshs 500mn an acre especially in zones like Upperhill	• The costs of development are lower in Satellite Towns and thus houses in Satellite Towns have lower prices • This makes them more affordable compared to houses in the main suburbs with an affordability index of 82, the highest in the market and in some Satellite Towns such as Athi River, Thindigua and Kiambu mortgages are affordable with indices higher than 100
Amenities	• Satellite Towns have fewer amenities than those available in the CBD, however with a growing commuter population living in satellite towns, there are increasing number of retail and commercial facilities being developed	• Developments are now being undertaken, which provide retail and commercial facilities, to increase access to amenities • This increased the value of the developments, as well as providing easy access to homeowners / renting families who work in the CBD

We expect the rental market to remain predominant with houses being purchased using cash as opposed to mortgages which are unaffordable

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i. Mortgage Affordability

Introduction to the Mortgage and Rental Affordability Index: Mortgage Status in the Country

In 2016 for the first time in 5 years, the number of mortgages in the country declined by 1.5% from 24,458 to 24,085

- Over the last decade, the residential property market has grown rapidly
- Hass Consult estimates that property values have increased by 357% from the year 2000, and over the last five years, prices have appreciated at a rate of between 4.7% and 10.0% y/y
- The contribution of real estate and construction sectors to GDP has also grown from 10.5% in 2000 to 13.8% in 2016
- The above factors have been attributed to an increase in the number of middle class population, an increase in disposable income, increased rate of urbanisation at 4.4% and excessive demand that far outweighs supply with an annual housing deficit of 200,000 units
- However, the mortgage uptake, has not been reflective of the above. It has remained consistently low despite increased construction and selling of houses
- In 2016 for the first time in 5 years, the number of mortgages in the country declined by 1.5% from 24,458 to 24,085 attributed to less issuance of mortgages by banks who tightened their underwriting standards following the implementation of the Banking Amendment Act 2015

5 Year Mortgage KPI Trends in Kenya

Year	Outstanding Mortgages	Number of Mortgages	Average Mortgage Size	Annual Change in No of Mortgages
2011	90.4 bn	16,029	5.6 mn	
2012	119.6 bn	18,587	6.4 mn	**16.0%**
2013	138.1 bn	19,879	6.9 mn	**7.0%**
2014	164.0 bn	22,013	7.5 mn	**10.7%**
2015	203.3 bn	24,458	8.3 mn	**11.1%**
2016	219.9 bn	24,085	9.1 mn	(1.5%)

Source: Central Bank of Kenya

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Introduction to the Mortgage and Rental Affordability Index: Change From 2016 and 2017

Mortgage and rental affordability in the Nairobi Metropolitan Area declined by 1 index point and 8 index points, respectively between 2016 and 2017 attributed to rental and price appreciations

Factor	2016	2017	Change
Market Mortgage Affordability Index	66	65	(1)
Market Rental Affordability Index	132	124	(8)
Factor	**Most Affordable Suburbs 2016**	**Most Affordable Suburbs 2017**	
Mortgage Affordability	Githurai, Kariobangi, Athi River, Kikuyu, Kitengela, Ruai, Buruburu, Embakasi, Umoja	Athi River, Kitengela ,Ruaka, Kiambu, Thindigua, Rongai, Komarock , Juja ,Ngong, Donholm, Thika, Kikuyu	
Rental Affordability	Athi River , Embakasi, Githurai, Kariobangi, Kitengela, Komarock, Ruai	Athi River, Kitengela ,Ruaka, Kiambu, Thindigua, Rongai, Komarock , Juja ,Ngong, Donholm, Thika	

- In general, the market is less affordable in 2017 as compared to 2016
- The Mortgage Affordability Index for the Nairobi Metropolitan Area decreased by 1 index point from 66 to 65, attributable to price appreciation in the market with average prices increasing by 3.8% between 2016 and 2017
- The rental market despite still being affordable, declined by 8 index points from 132 to 124 also attributable to an increase in rental rates per square metre in the Nairobi Metropolitan Area which increased by 5.3% from Kshs 488 per square meter in 2016 to Kshs 514 per square metre in 2017
- In 2017 like in 2016, Satellite Towns are still the most affordable for both renting and buying a house using a mortgage, with the most affordable suburbs in 2017 being Athi River, Kitengela, Kiambu, Thindigua and Rongai. In 2016 these towns were affordable in addition to Githurai and Kariobangi which we did not sample this year due to low sales volumes

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Introduction to the Mortgage and Rental Affordability Index: Methodology

Index measures whether households can afford a house, assuming 40% of income is used in housing

- The Mortgage Affordability Index is a tool used to measure whether the average income earned by a house hold is enough to enable a household to purchase a house with the mortgage option
- The index is calculated by dividing the income a household earns by the income they need to pay as monthly mortgage payments
- The income required to pay monthly mortgage payments is calculated by taking the monthly mortgage payments divided by 40%
- The assumption is based on the fact that ideally, a household cannot commit more than 40% of their monthly income to mortgage payments
- For the rental affordability index, the assumption is that households can commit up to 30% of their income to pay rent

Interpretation

- If the MAI is more than 100: A typical household has more than enough income to qualify for a mortgage for a median priced house
- If the MAI is equal to 100: A typical household earns exactly the required amount sufficient to pay for a mortgage loan for a median priced house
- If the MAI is less than 100: A typical household earns less than the required income to qualify for a mortgage loan for a median priced single family house

Methodology for the Index, continued…

Nairobi Metropolitan residential areas were classified into four regions

- The Kenya National Bureau of Statistics (KNBS) classifies income groups in Kenya as shown below

Income Group	Level of monthly Income (Ksh)
Low Income	Below Ksh 23,672
Middle Income	Between Ksh 23,673 and Ksh119,999
High Income	Above Ksh 120,000

- For the purpose of this study, income levels were categorized as shown below:

Cytonn's Classification of Income Levels			
Income Group	Income Level	Median Household Income (Kshs)	Location
High Income	Kshs 300,000 and above	1,300,000	Roselyn, Runda, Karen, Kitusuru
Upper Middle Income	Between Kshs 150,000 and Kshs 300,000	450,000	Kilimani, Westlands, Kileleshwa, Riverside, Lavington, Loresho, Lower Kabete, Mt. View, Parklands, Redhill, Upperhill, Ridgeways
Lower Middle Income	Between Kshs 50,000 and Kshs 150,000	200,000	Donholm, Imara Daima, Komarock, Langata, Kasarani, Buruburu, Embakasi, Dagoretti, Kasarani, Lang'ata, Satellite Towns

Mortgage Affordability – Overall Classification

Mortgages are generally unaffordable across all middle to high income regions in the Nairobi Metropolitan area, with households required to earn a median income of Kshs 550,000 to afford houses on mortgages

All values in Kshs unless stated otherwise

Location	Price per SM	Household Monthly Median Income	Monthly Mortgage Payment	Qualifying Income	Mortgage Affordability Index(MAI)
Satellite Towns	66,628	200,000	106,751	266,879	82
Lower Middle	85,745	200,000	138,720	346,800	68
Upper Middle	129,165	450,000	301,139	752,848	62
High Income	197,706	1,300,000	1,156,241	2,890,603	45
Average	**107,455**	**325,000**	**219,930**	**549,824**	**65**

- The median monthly income in for upper middle to high end areas in Nairobi Metropolitan is Kshs 325,000 this is against Kshs 549,824 required to afford a mortgage in the region hence mortgages are not affordable in Nairobi Metropolitan at a median index of 65
- In the high-end market, a median income of Kshs 2.9 Million is required for one to afford to purchase a house using a mortgage, with households requiring Kshs 753,000, 347,000 and 267,000 to afford mortgages in Upper Middle, Lower Middle and Satellite Towns, respectively

Mortgage Affordability - High Income

Households require a median income of Kshs 2.9mn to afford to purchase houses on mortgages in these estates

All values in Kshs unless stated otherwise

Location	Price per SM	Household Monthly Median Income	Monthly Mortgage Payment	Qualifying Income	MAI
Roselyn	182,342	1,300,000	1,056,993	2,642,482	49
Karen	185,856	1,300,000	1,107,822	2,769,554	47
Runda	209,555	1,300,000	1,204,661	3,011,652	43
Kitisuru	235,973	1,300,000	1,453,365	3,633,412	36
Median	**197,706**	**1,300,000**	**1,156,241**	**2,890,603**	**45**

- A median income of Kshs 1.3 million a month is insufficient to afford a mortgage for a single family dwelling unit in the high end suburbs within Nairobi
- This is as the indices for all the estates are less than 100, Roselyn and Karen are the most affordable areas in this class with an indices of 49 and 47, respectively followed by Runda with an index of 43
- Kitusuru comes in last in our sample with an index of 36
- Since these areas are not major rental markets, the unaffordability of mortgages indicates that most houses are acquired through cash transactions as opposed to mortgage purchasing
- Households require a median income of Kshs 2.9mn to afford to purchase houses on mortgages in these estates

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Mortgage Affordability - Upper Middle

A median monthly household income of Kshs 753,000 is required to pay for a house mortgage in this region

All values in Kshs unless stated otherwise

Location	Price per SM	Household Monthly Median Income	Monthly Mortgage Payment	Qualifying Income	MAI
Mountain View	87,572	450,000	137,564	343,911	131
Lower Kabete	94,870	450,000	429,092	1,072,731	115
Ridgeways	152,249	450,000	507,154	1,267,886	88
Upper Hill	141,042	450,000	239,378	598,444	75
Kilimani	129,165	450,000	258,963	647,408	70
Lavington	118,089	450,000	270,466	676,164	67
Loresho	131,780	450,000	506,217	1,265,541	62
Parklands	125,426	450,000	293,264	733,159	61
Kileleshwa	131,745	450,000	300,518	751,294	60
Westlands	125,697	450,000	301,139	752,848	60
Runda Mumwe	146,277	450,000	339,295	848,237	53
Redhill	96,154	450,000	372,918	932,295	48
Riverside	161,914	450,000	560,517	1,401,293	32
Average	**129,165**	**450,000**	**301,139**	**752,848**	**62**

- Mortgages are unaffordable in most areas in this region with Mt. View and Lower Kabete being the only affordable areas with indices of 131 and 115, respectively
- The market has a median mortgage affordability index of 62
- This is as the houses prices are relatively high, with a square metre being sold at a median price of Kshs 130,000. A household therefore needs to earn a median of Kshs 753,000 to afford a house in this region on mortgage

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Mortgage Affordability - Lower Middle

House mortgages are not affordable in this region which has an average Mortgage Affordability Index of 68

All values in Kshs unless stated otherwise

Location	Price per SM	Household Monthly Median Income	Monthly Mortgage Payment	Qualifying Income	MAI
Komarock	74,542	200,000	94,145	235,362	90
Dagoretti	88,812	200,000	94,508	236,269	85
Donholm	82,679	200,000	118,394	295,984	73
Imara Daima	78,072	200,000	159,046	397,616	63
Langata	122,485	200,000	218,297	545,743	45
Kasarani	113,360	200,000	181,347	453,367	44
Median	**85,745**	**200,000**	**138,720**	**346,800**	**68**

- Mortgages are unaffordable in most lower middle areas with the market having a median affordability index of 68
- Komarock is the most affordable with an index of 90 and Langata and Thome are the least affordable with indices of 45 and 44, respectively
- Households require a median income of Kshs 347,000 to afford to purchase houses using mortgages in this market against an estimated median income of Kshs 200,000 hence making mortgages unaffordable
- The unaffordability of mortgages in these regions has led to many of them burgeoning as major rental markets

Mortgage Affordability - Satellite Towns

With a median income of Kshs 200,000 per month, a household can afford a house in Athi River and Thindigua

All values in Kshs unless stated otherwise

Location	Price per SM	Household Monthly Median Income	Monthly Mortgage Payment	Qualifying Income	MAI
Athi River	74,993	200,000	91,026	227,564	108
Thindigua	66,628	200,000	79,271	198,178	101
Kiambu	113,333	200,000	80,829	202,072	99
Thika	52,149	200,000	100,599	251,498	97
Kitengela	65,025	200,000	106,476	266,191	90
Rongai	65,043	200,000	112,033	280,084	82
Ngong	65,650	200,000	134,300	335,751	78
Ruaka	99,284	200,000	106,751	266,879	75
Juja	54,900	200,000	125,347	313,367	73
Kikuyu	79,863	200,000	121,508	303,769	69
Ruiru	82,128	200,000	130,052	325,129	66
Median	**66,628**	**200,000**	**106,751**	**266,879**	**82**

- With a household income of Kshs 200,000 mortgages are unaffordable in Satellite Towns with an index of 82
- They are however affordable in Athi River and Thindigua with indices of 108 and 101, respectively
- Kitengela, Thika and Kiambu also have high affordability indices of more than 90
- This can be attributed to lower land costs in this regions
- To afford to purchase a house using a mortgage households require a median income of Kshs 267,000 per month

Summary Conclusions on Mortgage Affordability

Thindigua, Kiambu, Athi River, Komarock, Dagoretti, Thika, Ruaka Rongai and Donholm are the most affordable mortgage markets with a median household income of between Kshs 150,000-300,000 required to purchase a house using a mortgage

Income Bracket (Kshs)	Affordable Towns
150,000-300,000	Thindigua, Kiambu, Athi River, Komarock, Dagoretti, Thika Kitengela, Ruaka, Rongai, Donholm
300,000- 1,000,000	Kikuyu, Juja, Ruiru , Ngong , Mountain View, Imara Daima, Kasarani, Langata, Upper Hill, Kilimani, Lavington, Kileleshwa, Westlands, Runda Mumwe, Redhill
Above 1,000,000	Lower Kabete, Loresho, Ridgeways, Riverside, Roselyn , Karen, Runda, Kitisuru

- Satellite Towns such as Thindigua, Kiambu, Athi River and Kitengela are the most affordable mortgage market with a household requiring a median income of between Kshs 150,000 – Kshs 300,000 to purchase a house using a mortgage
- Roselyn, Karen, Runda, Muthaiga and Kitusuru are the most unaffordable mortgage markets with households requiring a minimum monthly income of Kshs 1 Million to purchase a house using a mortgage

ii. Rental Affordability

Rental Affordability - Introduction

Rental market is affordable in Kenya with an Index of 124

All values in Kshs unless stated otherwise

Location	Rent per SM (2017)	Household Monthly Median Income	Rent 2017	Qualifying Rental Income	Rental Affordability Index
Satellite Towns	318	200,000	38,708	129,028	155
Lower Middle	400	200,000	47,063	156,875	127
Upper Middle	629	450,000	127,900	426,332	120
High Income	914	1,300,000	424,375	1,414,583	92
Average	**514**	**325,000**	**87,481**	**291,604**	**124**

- Most typical single family households within the Nairobi Metropolitan area can afford the rents they pay for their houses
- In all the residential regions surveyed, the rents charged were affordable relative to the median income earned by the tenants except in the high income areas of Runda, Karen and Kitisuru
- This is an indication that house holds in the high income are living beyond their means as they pay more than one third of their income as rent

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Rental Affordability - High Income

A median monthly household income of Kshs. 1.3 million is not sufficient to rent a house in Runda and Kitisuru

All values in Kshs unless stated otherwise

Location	Rent per SM (2017)	Household Monthly Median Income	Rent 2017	Qualifying Rental Income	Rental Affordability Index
Karen	741	1,300,000	375,000	1,250,000	104
Roselyn	896	1,300,000	417,500	1,391,667	93
Runda	932	1,300,000	431,250	1,437,500	90
Kitisuru	1,007	1,300,000	501,042	1,670,139	78
Average	**914**	**1,300,000**	**424,375**	**1,414,583**	**92**

- For a household with a median income of Kshs 1.3 million, the most affordable rental house market in this zone is Karen
- The other areas sampled were not affordable with Runda having an affordability index of 90 and Kitisuru an index of 78
- The market had an affordability index of 90
- Households in this market require an average income of Kshs 1.4mn to afford to rent a house

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Rental Affordability - Upper Middle

Rents affordable in upper middle areas with a rental affordability index of 120

All values in Kshs unless stated otherwise

Location	Rent per SM (2017)	Household Monthly Median Income	Rent 2017	Qualifying Rental Income	Rental Affordability Index
Mountain View	389	450,000	47,500	158,333	284
Lower Kabete	485	450,000	120,917	403,056	229
Ridgeways	714	450,000	185,889	619,630	165
Parklands	633	450,000	111,333	371,111	121
Loresho	585	450,000	170,660	568,866	120
Redhill	288	450,000	112,857	376,190	120
Westlands	662	450,000	112,917	376,389	120
Kilimani	941	450,000	125,591	418,636	107
Runda Mumwe	704	450,000	130,208	434,028	104
Kileleshwa	625	450,000	140,000	466,667	96
Lavington	558	450,000	150,000	500,000	90
Riverside	772	450,000	197,403	658,009	68
Average	**629**	**450,000**	**127,900**	**426,332**	**120**

- Rents are affordable in the upper middle areas with an affordability index of 120
- In all areas sampled, except Kileleshwa, Lavington and Riverside a median household income of Kshs 450,000 per month is sufficient to pay for the rents

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Rental Affordability - Lower Middle

The Lower Middle Region is a renters market with a median rental Affordability index of 127

All values in Kshs unless stated otherwise

Location	Rent per SM (2017)	Household Monthly Median Income	Rent 2017	Qualifying Rental Income	Rental Affordability Index
Komarock	361	200,000	39,375	131,250	233
Donholm	396	200,000	44,042	146,806	140
Imara Daima	327	200,000	47,875	159,583	134
Dagoretti	558	200,000	46,250	154,167	130
Kasarani	404	200,000	49,333	164,444	122
Langata	423	200,000	58,926	196,421	117
Average	**400**	**200,000**	**47,063**	**156,875**	**127**

- A household with a median income of Kshs 200,000 can afford to rent a house in all these estates, the cheapest being Komarock and the most expensive in Langata
- The zone has a median rent of Kshs 400 per square metre and rental affordability index of 127
- This region is thus a largely a renters market

Rental Affordability - Satellite Towns

Satellite towns have a high RAI of 155, households can afford rents in all the towns

All values in Kshs unless stated otherwise

Location	Rent per SM (2017)	Household Monthly Median Income	Rent 2017	Qualifying Rental Income	Rental Affordability Index
Athi River	333	200,000	31,857	106,190	197
Kitengela	258	200,000	35,389	117,963	196
Ngong	257	200,000	43,000	143,333	172
Ruaka	451	200,000	36,063	120,208	166
Rongai	296	200,000	38,708	129,028	166
Kiambu	656	200,000	37,500	125,000	160
Thindigua	397	200,000	37,500	125,000	160
Juja	271	200,000	42,500	141,667	155
Thika	318	200,000	45,129	150,431	148
Kikuyu	307	200,000	54,046	180,153	126
Ruiru	419	200,000	50,167	167,222	122
Average	**318**	**200,000**	**38,708**	**129,028**	**155**

- In this zone, a household with a median income of Kshs 200,000 can afford to comfortably pay their rent in all the towns
- The zone generally has a high RAI of 155, this is as the towns charge low monthly rents with a median of Kshs 318 per square metre
- Households therefore need to earn a minimum of Kshs 129,028 against a monthly income of Kshs 200,000

Cytonn REAL ESTATE

Summary and Conclusions on Rental Affordability

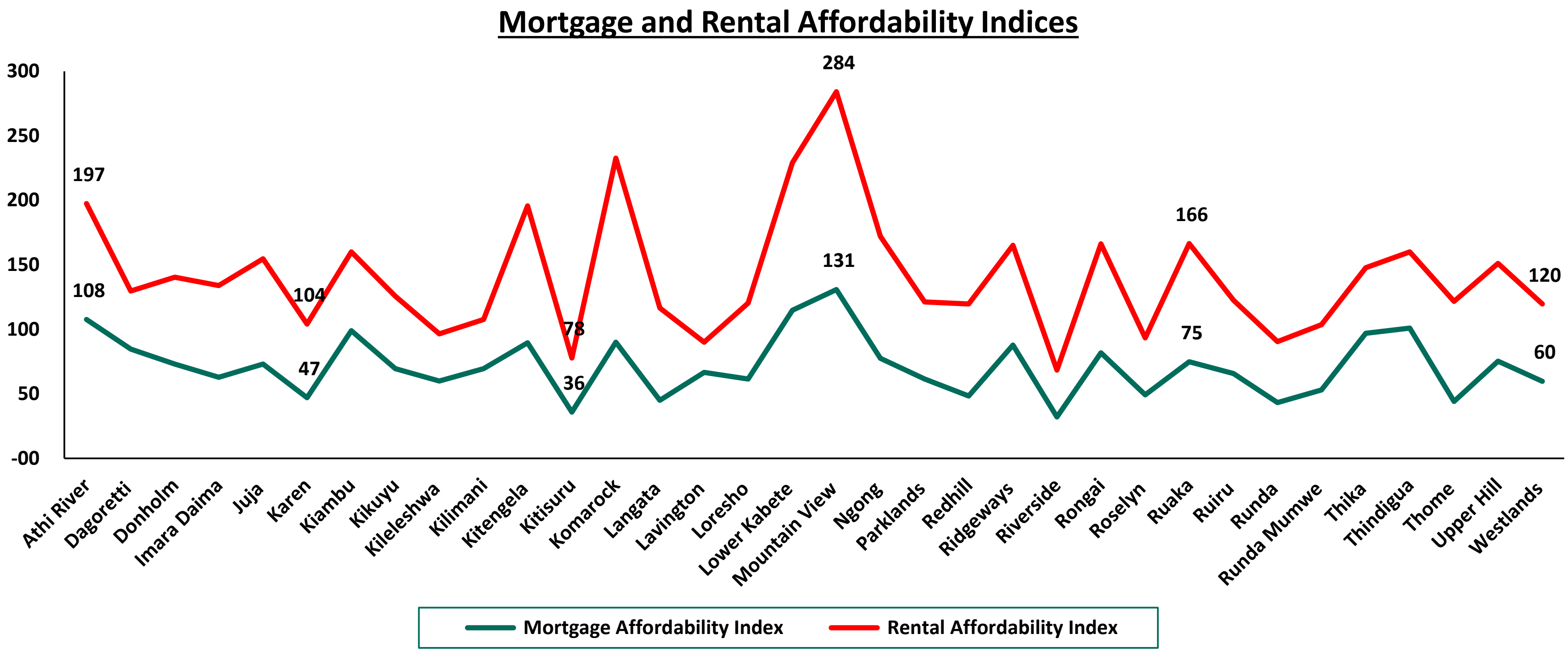
Athi River, Kitengela, Ruaka and Kiambu are the most affordable middle income rental markets in Nairobi Metropolitan area

Income Level (Kshs)	Affordable Towns
50,000-150,000	Athi River, Kitengela ,Ruaka, Kiambu, Thindigua, Rongai, Komarock , Juja ,Ngong, Donholm, Thika
150,000-300,000	Dagoretti, Mountain View, Imara Daima , Kasarani , Ruiru, Kikuyu, Langata, Upper Hill
300,000-1,000,000	Parklands, Redhill , Westlands, Lower Kabete , Kilimani Runda Mumwe, Kileleshwa, Lavington , Loresho, Ridgeways, Riverside
>1,000,000	Karen, Roselyn, Runda, Kitisuru

- Athi River, Kitengela, Ruaka and Kiambu are the most affordable middle class residential areas in Nairobi Metropolitan area. A house hold needs to earn a median income of Kshs 50,000-150,000 to live in these estates
- The most unaffordable rental markets are Karen, Roselyn, Runda and Kitisuru with a household requiring more than a million Kshs to be able to live in these estates

Rental vs. Mortgage Affordability

Rents are more affordable than mortgages in the Nairobi Metropolitan Area



- The Rental affordability Index is consistently higher than the Mortgage Affordability Index
- Mortgage house prices are raised by the high interest rates levied on mortgages
- This thus makes the market more of a renters than a buyers market

IV. Conclusion and Outlook

Conclusion and Outlook

Home buyers purchase houses using cash as mortgages are unaffordable and the market is still skewed renting as opposed to buying as it is more affordable

Affordability

- The areas where mortgages are most affordable are Athi River, Thindigua, Kiambu, Thika, Mt View and Lower Kabete
- This is as these places have lower house prices in comparison to their incomes
- Mortgages are least affordable in Runda, Kitisuru and Riverside due to high house prices as a result of close proximity to social amenities and international schools such as the International School of Kenya
- Rents are affordable in all areas of the Metro except in the some Upper Middle and High End Suburbs
- The market is thus skewed to renting as opposed to buying as it is more affordable to rent houses

Stakeholders

- Relevant stakeholders should work towards making housing affordable to the general population
- The government has tried to address this through the provision of Civil Servants Mortgage Rates with a cap at 5% for a maximum of Ksh 20Million loan which could increase affordability by up to 90%4
- Despite this, less than 30% of civil servants took up loans and the number o mortgages declined in the country by 1.5% from 24,458 to 24,085 between 2015 and 2016

Developers

- Developers have come up with alternative methods of financing such as incorporating group house purchases and paying for houses in instalments to enable people afford houses and hence purchase
- There are a number of investors purchasing developments in order to turn them to rental accommodation

Home Buyers

- Many people in the Nairobi Metropolitan area purchase houses using cash, as mortgages are unaffordable
- The source of cash is mostly savings and loans from Saccos and other financial institutions

Q&A