Affordable Housing in Kenya, & Cytonn Weekly #16/2018

Focus of the Week

On December 12th, 2017, the President, H.E Uhuru Kenyatta, launched 'The Big Four' plan for economic development of Kenya, focusing on:

i. **Food and Nutrition Security** – The government plans to achieve 100.0% food security through enhanced large-scale production, boosting SME productivity and reduction of food costs,
ii. **Manufacturing** – The aim is to grow the contribution of manufacturing to GDP from 9.2% in 2016 to 20.0% by 2022 through establishment of industrial parks, Special Economic Zones and implementation of policies to boost processing of textiles, leather, oil, gas, construction material, foods, fish, iron and steel,
iii. **Affordable Healthcare** – This aims to increase the current universal health care coverage in Kenya from 36.0% to 100.0% by 2022 through scaling up NHIF uptake, increased budgetary allocation to health and adoption of low cost service delivery models, and,
iv. **Affordable Housing** – The government plans to deliver 1 mn units over the next 5-years out of which, 20.0% will be social housing while 80.0% will be affordable housing.

In his speech, the President promised that through the delivery of 1 mn housing units, half a million more Kenyans will own homes by the end of his second term in the year 2022. Out of these units, 800,000 will be affordable houses costing between Kshs 0.8 mn and Kshs 3.0 mn and 200,000 will be social housing units costing between Kshs 0.6 mn and Kshs 1.0 mn, according to the Big 4 Agenda Blueprint. It must not be lost on us, however, that this is not entirely a new initiative and that previous plans and proposals for the same have not been realised to date. For example, Kenya's first medium-term goal (2009-2012) of the Vision 2030 strategy had a target of increasing housing production from 35,000 units annually to 200,000 units annually for all income levels. However, the Kenyan Government delivered approximately 3,000 units only during that period, compared to a target of 800,000 houses, according to the World Bank Economic Update of 2017. This then begs the question of whether the delivery of affordable housing can be a reality this time around. This week, we examine affordable housing with the aim of establishing the viability of the government's project by looking at the following:

A. What is Affordable Housing?
B. The Kenyan Context: Demand and Supply of Affordable Housing – Drivers and Limitations
C. The Case of Singapore
D. The Case of South Africa
E. The Kenyan Government Affordable Housing plan

A. **What is Affordable Housing?**

According to The Economic Times, affordable housing are units that are reasonably priced for that section of society with the median household income or below. The National Affordable Housing Summit Group of Australia defines it as housing that is reasonably adequate in standard and location for lower or middle-income households and does not cost so much that a household is unlikely to meet other basic needs on a sustainable basis. Different institutions have different views on what affordable housing is but most agree that it should meet the needs of low to lower-middle income households.

Going by the first definition and Kenya National Bureau of Statistics (KNBS) data on income distribution in the formal sector, affordable housing would be units that can be afforded by individuals who earn Kshs 50,000 and below per month, which is a total of 74.4% of persons employed in the formal sector in Kenya. To gauge the price of a house affordable by these income levels, we assume a 20-year mortgage, at a 13.5% interest rate, with a 10.0% deposit and using the rule of the thumb of a maximum of 40.0% of their income being used to pay monthly instalments, then the median income individual can afford a maximum of Kshs 1.8 mn for a house. The very best case scenario would be to assume twice the monthly income where a household has 2 income-earners, then the median income household can afford a maximum of Kshs 3.6 mn for a house. As a result, in our view, at prevailing market conditions, an affordable house would be of Kshs 3.6 mn and below.

As per the Big Four Agenda Blue Print, the Kenyan Government intends to offer affordable housing at Kshs 0.8 mn to Kshs 3.0 mn per unit, at lower interest rates of up to 5.0% and longer mortgage tenors of up to 30 years. Using the affordability method described above, the houses that the government is targeting, at Kshs. 0.8 million to Kshs. 3.0 million per unit, will therefore cater for individuals earning an income of between Kshs 9,700 and Kshs 36,600 per month, at 5.0% interest and a 30-year tenor. So the unit prices, if they can be achieved are clearly within the affordability bracket of below Kshs. 50,000 per month income, assuming two income earners, but assuming 1 income earner, the maximum house price would be Kshs. 1.8 million. If produced, these houses would be clearly affordable, so this leaves two key questions:

i. First, can the government, or private developers or some partnership between the two actually produce houses at a cost that can be sold for between Kshs. 0.6 mn to 3.0 mn? and,
ii. For those who qualify, which entity would provide the mortgage at interest rates of 5.0% per annum?

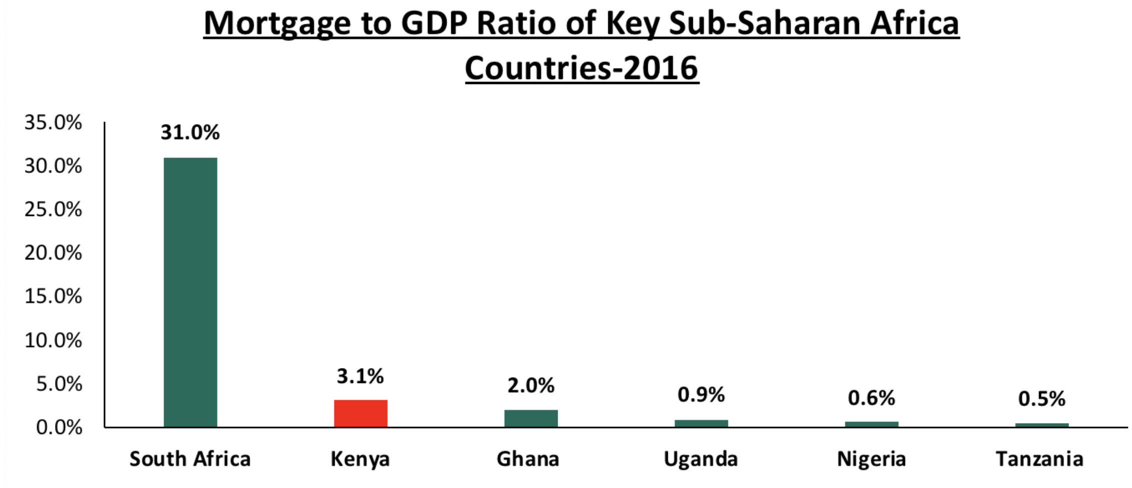
B. **The Kenyan Context: Demand and Supply of Affordable Housing – Drivers and Limitations**

According to the National Housing Corporation, Kenya has a cumulative housing deficit of 2 mn units growing by 200,000 units per year being driven mainly by i) rapid population growth of 2.6% p.a compared to the global average of 1.2%, and ii) a high urbanisation rate of 4.4% against a global average of 2.1%. Supply, on the other hand, has been constrained with the Ministry of Housing estimating the total annual supply to be at 50,000 units. Notably, the Ministry indicates that 83.0% of the existing housing supply is for the high income and upper-middle-income segments, with only 15.0% for the lower-middle and 2.0% for the low-income population. In summary, while 74.4% of Kenya’s working population requires affordable housing, only 17.0% of housing supply goes into serving this low to lower-middle income segment.

The main limitations to the delivery affordable housing have been;

i. **Inadequate Supply of Affordable Development Class Land** - There is an inadequate supply of serviced land at affordable prices due to soaring land prices in urban areas. In Nairobi, for example, land prices have been growing at a 6-year CAGR of 17.4%. This has led to increased development costs as land costs account for 25% - 40% of development costs in urban areas, which consequently impacts on end-user prices. In an area such as Ruaka for example, land that was Kshs 50 mn per acre 5 years ago, currently costs Kshs 100 mn an acre. If a developer puts up 100 units per acre, the land cost alone for each unit would be 1 mn and thus achieving affordable housing would be difficult,

ii. **Costs of Construction** - Mid-level construction costs in Kenya range from Kshs 44,000 - Kshs 64,000 per square metre (SQM) depending on the level of finishes, height and other related factors, and account for 50% - 70% of development costs. Considering a mid-level 2-bed house of 70 SQM, the construction cost alone would be at least Kshs 3.0 mn using a rate of Kshs 44,000 per SQM, meaning the total development cost will range from Kshs 4.0 mn-Kshs 6.0 mn, limiting the affordability of such a house,
iii. **Inadequate Infrastructure -** Several parts of Kenya lack the requisite infrastructure for development, such as proper access roads, power and sewerage services. Developers are forced to incur these costs, which are then passed on to the end buyer,
iv. **Cost and Access to Finance for Development -** Real estate development is a capital-intensive investment and thus developers have to explore alternative sources of capital, which come at a high cost ranging from 14% - 18% per annum. The capping of interest rates at 13.5% has resulted to a decline in credit growth to private sector as banks tighten their underwriting standards and also on a risk adjusted basis, government paper has become more attractive than lending to private sector. Even with the capping of interest rates, the actual cost of credit is still high, averaging between 16.0% and 18.0% due to additional administration fees, which then raise the cost of development. This situation is made worse by the dominance of banks in terms of provision of credit facilities in the Kenyan economy. In a developed market, bank funding accounts for only 40.0% of total funding, with the balance of 60.0% being non-bank funding from avenues such as the capital markets and other alternative funding such as high yield investment instruments. In Kenya, 95.0% of all funding is from banks, with only 5.0% from non-bank funding, limiting the supply of capital to developers,
v. **Preferential Treatment of Banking Sector Relative to Alternative Funding Sources:** Related to access to financing discussed above, the banking sector enjoys preferential treatment for interest income from banking sector fixed deposits. A fixed deposit in the bank incurs a final withholding tax of 15.0% compared to other instruments such commercial paper issued by a developer, which will incur a total tax of 30.0%. This differences in tax treatment then drive individuals to purchase bank fixed deposit papers, compared to commercial paper or privately issued notes, which will incur higher tax rates. A symmetric treatment of taxation of interest earned will likely spur more savers to be steered to private commercial paper that can be used for affordable housing development,
vi. **Access to and Affordability of Mortgages -** Access to mortgages in Kenya remains low mainly due to i) low-income levels that cannot service a mortgage, ii) soaring property prices, iii) high interest rates and deposit requirements which lock out many borrowers, iv) exclusion of employees in the informal sector due to insufficient credit risk information, and v) lack of capital markets funding towards real estate purchases for end buyers. According to Central Bank of Kenya, there were only 24,085 mortgages in Kenya as at December 2016 out of a total adult population of approximately 23 mn persons, with the mortgage to GDP ratio standing at 3.1% in 2016 compared to countries such as South Africa and USA, which have a ratio of above 30.0% and 70.0%, respectively,



vii. **General Bureaucracy and ineffective policy actions:** To deliver the high numbers of affordable housing units required, the process of land and real estate transactions needs to be much faster and less susceptible to rent collection by gate keepers. Policy actions, such as the reduction of income tax for developers producing 100 affordable units annually from 30.0% to 15.0%, need to be clear and accessible, and,

viii. **Ineffectiveness of Public-Private Partnerships (PPPs) for Housing Development -** The government has previously enlisted the help of the private sector for financing and development of affordable housing. This has however not achieved the intended objective as a result of:

a. Regulatory hindrances such as lack of a mechanism to transfer public land to a Special Purpose Vehicle (SPV) to facilitate access to private capital through the use of the land as security,
b. Lack of clarity on returns and revenue-sharing,
c. The extended time-frame of PPPs while private developers prefer to exit projects within 3-5 years, and,
d. Bureaucracy and slow approval processes.

C. **The Case of Singapore:**

We took Singapore as a case study given that it is said to be a country with one of the best housing solutions in the world. In 1960, just after acquiring independence, Singapore had a cumulative housing requirement of 147,000 units for the 10-year period that ended in 1969 for a population of 1.6 mn people, which was growing at 6.4% per annum. The private sector only had the ability to provide 2,500 units per year and at price levels out of reach for the low-income segment. The government, therefore, put in place policies and strategies to promote home-ownership for its residents. Currently, according to the World Bank, 80.0% of Singaporeans live in houses built by the government, through the Housing Development Board (HDB) (the equivalent of the National Housing Corporation in Kenya), with 90.0% being owner-occupied, yet when they attained self-government in 1959 only 9.0% lived in public housing. The following are the main types of housing provided under the HDB:

a. **Build to Order (BTO):** These are flats constructed by the HDB usually sold off-plan with a tender for construction being called only when the number of applicants reaches at least0% of the total number of apartments in a specific contract,
b. **Design Build and Sell Scheme (DBSS):** Flats built under this scheme were for public housing but developed private developers. Buyers bought houses directly from the private developer and on completion, the projects were handed over to the HDB to manage. The scheme was suspended after 2015 due to the unsatisfactory spaces of units and high prices charged by developers which led to poor reception, and,
c. **Executive Condominiums (EC):** These are more executive apartments built and sold by private developers to buyers who can exceed HDB income ceilings but cannot afford private homes.

Through the production of different classes of housing with different eligibility criteria, Singapore has managed to match housing with need based on income and below we look at ways through which housing for majority of Singapore's population have been achieved;

i. **Strong Policies on Home Ownership:** The government has set up priority schemes meant to improve the chances of first-time home buyers being allotted new houses. For example, 95.0% of flats supply under the DBSS scheme were set aside for first-time families during the first month after its launch. In addition, priority is granted to married couples, while the unmarried can only apply for flats of their own if they are unwed by age 35. There are also household income ceilings set for each type of housing as a way of matching every type of housing with those who can afford it,
ii. **Minimum Occupation Period Policy:** In order to limit speculative purchases, there are set occupation periods before a home-owner can resell a unit. For example, for all units purchased from HDB, the minimum occupation period is 5-years,
iii. **Use of Social Security Payments to Pay for Housing:** Citizens of working age are required to make monthly contributions of 20.0% of their income to the Central Provident Fund (CPF) (the equivalent of the NSSF). They are then entitled to draw down a portion of their savings as down-payment for housing and to service monthly mortgage instalments,
iv. **Efficient Urban Planning and Green Building Requirements:** With a population of approximately 5.6 mn and a land size of 719 SQKM, Singapore is classified as one of the most densely populated cities in the world at 7,909 people per square kilometre (Nairobi's is 4,850/km2). Due to land scarcity, urban planners sought to maximise land use through construction of high rise and high-density buildings. The government then implemented a mandatory code in 2008 with requirements to ensure environmental sustainability of buildings leading to a higher quality of life for its residents,
v. **Government Land Ownership:** In Singapore in 1967, the Land Acquisition Act empowered the government to acquire land at a low cost for public use and thus today 90.0% of land is government-owned. In this way, the government was able to acquire land that was not under its control and use it for housing development,
vi. **Strong Government Support:** There is a high level of public subsidies to the HDB at USD 1.19 bn as at 2017 highlighting the strong government commitment to public housing. In addition, the government gives housing grants to lower and middle-income families to make house purchase affordable. These are usually inversely related to one's income and thus a lower income qualifies for a higher grant amount, and,
vii. **Public-Private Housing**: The government launched public-private housing, which comprises of the Executive Condominiums, which are built and sold by private developers but at lower prices than private homes because the land prices are subsidized by the government. These units are subject to the same regulations as those of the HBD. In this way, the government was able to provide housing for those who exceeded HBD's income ceilings but couldn't afford private properties,

The above factors clearly show-case how Singapore has been able to provide housing for majority of its population. For Kenya, the lessons are:

i. First, we need a more comprehensive, well thought out and sustainable plan that integrates a set of solutions since there is no silver bullet. We think the current affordable housing plan can be more comprehensive and the government may want to consider taking a little bit more time to flesh it out to include more and better integrated sets of solutions,
ii. Provision of subsidies beyond just bringing in current stock of government land,
iii. Efficient urban planning to not only meet housing demand but to also do so in a sustainable manner; it will be challenging to deliver affordable housing without a comprehensive urban plan, of which housing is just one component,
iv. A clear eligibility criterion to boost home-ownership, flexible solutions that match individuals'

income, and minimum occupation periods for those who qualify, and,

v. Use of social security payments as down-payment for housing.

D. **The Case of South Africa**

We also looked at a case study of affordable housing in South Africa, a middle-income country in Africa with a large housing deficit, but with significant government efforts towards addressing the same. Since 1994, the government's efforts have resulted in the building of 2.8 mn units by 2015 (approx. 133,000 units annually). The housing deficit reduced from about 3.0 mn units in 1994 to about 2.1 mn units, out of a population of 57.3 mn people as at 2018. Below we look at how the government has implemented the affordable housing programme and the challenges it faces;

i. **Subsidies for Low-income Populations –** Under the Reconstruction and Development Programme (RDP) all households earning a gross income of approximately USD 295 (Kshs 30,000) per month or less qualify for housing subsidies worth USD 13,515 (Kshs 1.4 mn) with preference given to those of 40-years and above and those with special needs. According to the Centre of Affordable Housing Finance Africa (CAHF) subsidy beneficiaries get a freehold title to a 180-250 SQM serviced plot with a 40 SQM structure for free, and this helps in increasing home-ownership,
ii. **Access to Finance for House Purchase -** With a 30.4% mortgage to GDP ratio, South Africa has the highest mortgage penetration in Africa driven by i) relatively low lending rates with a Monetary Policy Rate of 6.8% and average lending rates of 10.3% per annum, ii) presence of a secondary mortgage market with the first residential mortgage-backed securitization being issued in 1999 and currently about 5.0% of the outstanding mortgage loans are securitised, iii) longer tenors by the Government Employees Scheme providing 30-year mortgages, iv) growth of pension-backed housing loans that enable employees to obtain home loans with their retirement fund savings as security, and v) a relatively high private credit bureau coverage at 64.4% of adults compared to Kenya at 30.4%, thus there's ease of access to information to enable financial institutions determine the credit-worthiness of individuals,
iii. **Minimum Occupancy Period -** Similar to Singapore, government subsidised houses in South Africa cannot be sold for the first 8-years. This encourages home ownership and limits speculative purchases,
iv. **Public-Private Partnerships –** The national government has partnered with private developers in the bid to deliver affordable housing. A case in point is the Fleurhof Project, a USD 350.0 mn (Kshs 35.4 bn) residential development in Johannesburg, near Soweto. The project targeting low-income households started in 2009 was done through a partnership between International Housing Solutions (IHS), a private equity firm, and Calgro M3, the developer. It comprises of a total of 10,882 units, out of which 66.0% were affordable, costing between USD 37,000 and USD 60,000 (Kshs 3.7mn - Kshs 6.1mn), while the rest were subsidized. The project is approximately 52.7% complete with 5,733 units done by 2017. The development was a Public-Private Partnership but with the government providing land only. The City of Johannesburg also participated through funding some of the bulk and link infrastructure worth approximately USD 21.0 mn (Kshs 2.1 bn). Around 5,000 residents currently live at the Fleurhof Project, and,
v. **Compact Unit Sizes -** The government, through its provision of subsidised housing, and private developers targeting the low-income spectrum develop compact units, which result in lower prices. For example, at the Fleurhof Project, unit sizes range from 40 SQM for a 2-bed unit to 120 SQM for a 4-bed unit. Effectively, private developers are able to achieve higher revenues per SQM either through selling or renting. At Fleurhof, for example, for the 40 SQM 2-bed unit costing Kshs 3.7 mn, the selling price is Kshs 92,500 per SQM which is higher than the average price of apartments in lower-middle satellite towns in Nairobi at Kshs 81,286 per SQM as at Q3'2017.

While the South African Government has made significant steps in providing housing for the low-income segment, the underserved segment in South Africa is the middle-income population who earn more than the USD 295.0 threshold for subsidies but not enough to service a mortgage and thus a lot more needs to be done to address the shortage. Nevertheless, we can learn lessons from the case study including;

i. Use of capital markets as a way to access funding for house purchases eg mortgage-backed securities,
ii. The role of private equity investors and the government in enabling Public-Private Partnerships, and,
iii. Optimisation on unit sizes as way of lowering house prices while maintaining revenue margins for developers.

E. The Kenya Government Affordable Housing Plan

We now look at the Kenya Government’s strategy in relation to the main limitations to affordable housing and analyse the feasibility of the strategy. The government intends to deliver 1 mn homes in the next 5-years, out of which 800,000 are affordable housing (bedsitters, 1, 2 and 3-bed units costing Kshs 0.8 mn - 3.0 mn) while 200,000 are social housing, which involves redevelopment of slums (1-2 room units costing Kshs 0.6 mn- 1.0 mn). This is expected to be implemented on 7,000 acres in 5 cities, namely Nairobi, Mombasa, Nakuru, Kisumu, and Eldoret. The following are the main ways through which the Kenyan Government intends to achieve affordable housing:

No.	Key Issues	Government’s Proposed Strategies	Feasibility
1.	**Affordable Development Class land**	i. Partnering with private developers through availing of public land for development ii. Undertaking land-swaps, which involve the transfer of public land to private developers in exchange for more suitable land for development, but of equal value iii. Establishment of a land bank - A task force has been formed to explore and set aside land from excess land holdings by corporations and parastatals including East African Portland Cement, Kenya Broadcasting Corporation, Kenya Prisons as well as the Ministry of Agriculture and Livestock iv. Approval of idle land tax as a way of discouraging speculative land purchase and unlock land that is suitable for affordable housing development **<u>Our take:</u>** This will avail strategically located land for investors and other government projects. It will enable development of affordable housing as investors will reallocate funds that would have otherwise been used for land purchase, to construction of more units. In addition, it will enable making use of lands in prime and convenient locations that would have otherwise been inaccessible, that will attract buyers. Finally, this will also provide suitable decantation sites for relocation of families from slums and other areas targeted for redevelopment to social housing	**High**
2	**Construction Costs**	i. Development of local construction technology sector ii. Standardizing design elements, cost effective procurement and fast project delivery iii. Negotiation for low rates for key construction inputs for developers iv. Setting up a central procurement unit for key construction input materials to facilitate bulk purchases **<u>Our take</u>:** The government is likely to use Alternative Building Technology(ABT) such as Expanded Polystyrene to enable fast project delivery as it is known to lower the construction period by up to 50.0%. The government is also likely to benefit from economies of scale through the bulk purchases for mass housing developments. The key limitation for ABT would be on the requirement for training of both the personnel and the public to appreciate its use, and that costs tends to be similar to the traditional brick and mortar costs. Nevertheless, we have seen projects such as buildings for the National Police Service by the NHC taking shape and within a short period, and thus we are of the view that this has a moderate feasibility	**Medium**
3	**Developer Financing**	i. Partnerships with the private sector to obtain 60% of the required funding ii. Funding from the National Social Security Fund (NSSF) through reviewing the RBA Act to allow the NSSF to invest more than 30.0% of its funds in real estate, operationalization of NSSF Act to increase minimum contributions from employees and leveraging on the NSSF balance sheet for funding iii. Off-plan sales from housing units through regulated escrow accounts **<u>Our take</u>:** There is a huge opportunity in funding from not only the NSSF but also the entire pension industry with assets worth Kshs 963.1 bn as at the end of June 2017 and growing at a 7-year CAGR of 13.5% from Kshs 396.7 bn in June 2010. The current allocation to real estate stands at 21.3% with only 0.12% in private equity and REITs. Increased allocation to alternative assets will not only diversify their pension funds’ portfolios and generate stable returns, but also provide the much-needed real estate development financing and exit for developments. The key limitation to investment is the relatively low rental yields from the residential market which range from 5%-6%, which in our view, can be increased through the development of compact units which cost lower, but generate attractive rents. We are sceptical about funding from the private sector given underlying issues such as the cost of debt versus the long-term nature of government projects, lack of clarity on guarantees to investors and how they will be implemented, and the unfavourable PPP framework	**Medium**

No.	Key Issues	Government's Proposed Strategies	Feasibility
4	**Home-Buyer Financing**	i. Extension of lines of credit from institutions such as World Bank to enable borrowing for as low as 5% interest rate ii. Extension of background checks to include the informal sector iii. Incentives to first-time buyers such as a waiver on stamp duty iv. Tenant-purchase scheme for social housing v. Provision of multi-generational mortgages that have long tenors and can be passed on to one's heir vi. Setting up of National Housing Development Fund whose role will be management of funds set aside for planning and provision of social housing. It will also enable potential home-buyers to save towards home-ownership and consequently offer offtake for housing developments vii. Setting up a Mortgage Refinancing Company (MRC) to enable longer-term and affordable loans. The purpose of the MRC is to provide liquidity to financial institutions by allowing them to refinance illiquid mortgage assets thus enabling mortgages to be issued at longer tenors and with lower rates given the reduced liquidity risk. **Our take:** We commend the provisions of incentives to first time buyers, the extension of lines of credit from the World Bank and AfDB and plans to enable longer-term mortgages as they will reduce the financial burden for buyers. However, we are the view that the MRC will indeed increase liquidity, hence access to credit, but not necessarily reduce cost. Investors are likely to buy into the long-term mortgage-backed bond at a minimum of the risk-free rate for a 10-year bond, which currently stands at about 12.9%. Inclusive of a 1.0% spread to the MRC and a minimum risk premium that will be charged by banks of 4.0%, the cost of debt is likely to be at least 17.9%, which is still high and will lock out many low to middle-income earners. In addition, banks are likely to raise the risk premium for employees in the informal sector due to the undefined and irregular incomes. In order for the MRC to be effective, we need to put more effort toward the attainment of stable and lower interest rates environment and especially on government instruments, which may crowd out MRC from accessing the needed funding.	**Medium**
5	**Public-Private Partnerships**	i. The government intends to review the PPP framework to enable fast-tracking of approval processes and accommodate new approaches such as Joint Ventures and Land Swaps. **Our take:** There is still uncertainty regarding revenue-sharing and the returns to private investors in PPPs, as well as policies that will curtail corruption and bureaucracy associated with government projects. In addition, private developers are likely to shy away from projects of more than 5 years given the uncertainty associated with transitioning to a new government after the end of the current term	Low
6	**Infrastructure**	i. The government will utilise its funds to provide off-site and social infrastructure ii. Proposed deductions of 25.0% of the cost, from taxable income, where infrastructure has been provided by a developer **Our take:** This will have a positive impact as it will ease accessibility to undeveloped areas with lower land prices and reduce the overall development costs a developer would otherwise incur. However, developers are likely to shy away given the slow processes of approval for compensations from the government. In addition, in projects of lengthy time-frames of beyond 5 years, there is a risk of changing policies with the entry of new governments	**Medium**

Having looked at the 6 key challenges facing affordable housing and the strategies the government has put in place to address them, 1 has a high likelihood of materializing, 4 have a medium likelihood of materializing, and 1 has a low likelihood of materializing. We are thus of the view that the government has a moderate likelihood of meeting its targets with the success depending on its execution. Borrowing lessons from the case studies in Singapore and in South Africa, the following are required in order to increase the likely of affordable housing coming to fruition in Kenya;

1. **A better integrated framework** that brings together a wider set of comprehensive solutions to addressing the problem, with the government at the centre as the driver of the initiative. As aforementioned there is no silver bullet for the affordable housing – the government, the Capital Markets Authority, NSSF, Retirement Benefits Authority, Kenya Revenue Authority, private sector finance and development, all have a role to play and the specific solutions need to be wider,
2. **Increase the Sources of Funding which may Include the Deepening of Capital Markets & Access to Non-Bank Funding –** There needs to be concerted effort to look into ways of deepening the capital markets as a means to raising capital for funding real estate development, and below are some ways that can be used to achieve this:

    a. The first is through the development of Structured Products in the Kenyan market. As mentioned in our Cytonn Weekly #43/2017 , Structured Products have been a welcome alternative to banks for businesses seeking capital for growth, and the same can be applied to real estate financing. Structured Products have been better received in developed markets where the ratio of bank funding versus capital markets funding is 40.0% to 60.0%; which means banks finance up to 40.0% of business funding, the balance comes from capital markets. In developing markets such as Kenya, capital markets – whether public / regulated capital markets or private capital markets – remain under-developed, hence businesses are forced to source up to 95.0% of funding from banks, leaving only 5.0% of funding with other alternative funding. In fact, the entire 5.0% of funding from capital markets comes from regulated capital markets such as Capital Markets Authority registered offerings and SACCOs, with local private capital markets providing negligible funding. As such, real estate development and investment is not being provided with adequate access to this source of capital, which if provided at competitive rates can increase the development of affordable housing. Given the need for funding businesses in a growing economy where SMEs create majority of jobs, private markets such as Structured Products offer a compelling alternative for developers to seek financing,

b. There is need for lobbying and tax law amendments to have the tax rates on Structured Products and non-bank funding to be given the same tax treatment as interest earned on commercial bank deposits, where withholding tax is the final tax, rather than an advance tax like in the case of Structured Products and non-bank funding. This will spur the development of alternative sources of funding at competitive rates available to the real estate development sector and encourage the development of affordable housing, and,
c. There is currently only one REIT on the stock exchange and it is currently trading at 40.3% below its listing price due to negative investor sentiments. We need to have a candid review as to why REITs have not picked up in Kenya.

3. **Strong Government Support** - It is evident from the case studies that government involvement and commitment is imperative for the realisation of affordable housing. This is needed in the following ways:
   a. **Budgetary Allocation for Housing** - During the Budget reading of 2017/18, the Cabinet Secretary allocated only Kshs 2.9 bn for housing for civil servants, whereas the funding requirement for proposed projects in 2018 alone is Kshs 1,580.9 bn according to the Big Four Agenda document, with the government intending to rely mainly on the NSSF and Public-Private Partnerships for funding. There's need for increased budgetary allocation for the affordable housing effort given that the NSSF has a set statutory maximum for allocation to real estate whereas the funding from PPPs is largely dependent on the financial muscle of the private developer and investors who would like to participate,
   b. **Guarantees for Offtake** - If there are guarantees for offtake of developments, this will be an incentive to private developers as they will be assured of exit from projects, and hence spur the development of affordable housing,
   c. **Legislative Reviews**- There's need for amendment of laws to allow people to use their pension to guarantee house purchases, so they may not require the deposit, or to access a portion of pension funds for use as down-payment. Currently, Section 38 of the RBA Act of 2009 allows members to attach up to 60.0% of their accumulated benefits as collateral for mortgage but this has not had a significant impact on mortgage uptake.

4. **Strict Housing Policies-** In order to boost home-ownership, it is necessary to set up and adhere to strict rules and eligibility measures for house-purchase such as minimum occupancy periods and housing to income ceilings, so as to restrict to prospective home-owners only as opposed to speculative buyers. This will also ensure equitable allocation of housing based on income and need,
5. **Efficient Urban Planning** – There's need for efficient planning to allow the best use of land in a sustainable manner to cater for the growing population with key considerations on the provision of services such as water, power, garbage and sewage disposal. We encourage the development of master-plans with a work-play-live environment as it will spur the growth of towns, create employment away from the main urban nodes and will produce fully-integrated communities,
6. **Getting Cheaper Materials for the Alternative Building Technology and Adequate**

Training on the Same- There's need to explore cheaper building technology to lower construction costs. Training of labour on the use of ABT is essential so as to boost its application. In addition, the public need to be sensitized on the functionality of ABT so they are more receptive,

7. **Compact House Units-** Currently in Nairobi, the average size of a mid-level 1-bedroom unit ranges from 45 SQM - 50 SQM, while that of a 2-bedroom unit ranges from 70 SQM - 80 SQM, whereas the minimum set standards according to the Ministry of Housing for low to middle-cost house size ranges from 36 SQM-60 SQM for units with 2 to 3 habitable rooms. Developers may have to optimise on unit spaces to reach the bare minimum in order to charge lower prices but maintain sustainable revenue margins. This will also lead to higher rental yields per SQM which would attract capital investments.

The following is a sample model of 2-bedroom apartments in Mavoko, Athi River where the government intends to deliver 150,000 homes. Currently, the average size of a 2-bedroom unit in Athi River is 77 SQM with prices ranging from Kshs 4.8 m to Kshs 6.0 m. The model showcases the expected savings on costs from the government's proposed strategies and the required exit price for a private developer to still achieve ideal returns.

All figures in Kshs unless stated otherwise						
Case Study: Developing 2-bedroom apartments on 1 Acre in Athi River						
Standard House in Athi River			Affordable House in Athi River			
Unit Size: 80 SQM			Unit Size: 50 SQM (we have assumed smaller units)			Narrative
Total Units: 106			Total Units: 170			
Project Period: 2-years			Project Period: 2-years			
Particular	Costs	% of Total	Particular	Costs	% of Total	
Land Acquisition Costs	16.5m	3.1%	Land Acquisition Costs	0.0m	0.0%	Savings on land costs from the provision of serviced development land by the government
Construction Costs at Kshs 40,000 per SQM (VAT Inclusive)	400.0m	75.7%	Construction Costs at Kshs 35,000 per SQM (VAT Inclusive)	350.0m	82.9%	Savings on construction costs due to bulk procurement, large economies of scale and provision of infrastructure by the government
Licenses, Surveys & Approvals	9.7m	1.8%	Licenses, Surveys & Approvals	1.6m	0.4%	Savings on architectural and civil works submission fees
Professional Fees	38.1m	7.2%	Professional Fees	18.8m	4.4%	Savings on professional fees due to standardization of designs
Marketing and Sales	14.0m	2.6%	Marketing and Sales	5.0m	1.2%	Savings on marketing and sales commissions with guaranteed offtake by the government
Disbursements	6.8m	1.3%	Disbursements	6.8m	1.6%	We have kept disbursement the same
Contingencies	9.4m	1.8%	Contingencies	7.6m	1.8%	Contingency calculated at 2.0%
Financing Costs	34.7m	6.4%	Financing Costs	29.5m	7.6%	Savings on financing costs due to lower project costs
Total Costs (106 units)	529.2m	100.0%	Total Costs (170 units)	419.3m	100.0%	
Cost per Single Unit	5.0m		Cost per Single Unit	2.5m		Total Cost divided by number of units built
Developer Margin	6.0%		Developer Margin	6.0%		For the developer to still achieve a 3.0% annual return on investment and a cumulative margin of 6.0%, the required exit price is Kshs 2.6 mn per unit
Selling Price per Unit	**5.3m**		Selling Price per Unit	**2.6m**		
Developer Annual ROI	**3.0%**		Developer Annual ROI	**3.0%**		
The following are the key assumptions used in the model; ***The land value in Athi River is Kshs 15 Mn per acre** ***Stamp duty at 2.0% and legal conveyancing at 1.0% of land value** ***The standard house developer pays professional fees at 8.0% of construction costs** *** The affordable house developer pays professional fees at 4.5% of construction costs** ***A fixed amount of Kshs 6.8 mn has been assumed for disbursements and site personnel costs** ***A contingency amount of 2.0% of project costs has been provided** *** Funding is obtained from pre-sales and debt at 50:50 ratio**						

Source: Cytonn Research

Take-aways from the model above:

i. From the model above, the minimum exit price is Kshs 2.6 mn for a 2-bedroom house against the government-proposed price of Kshs 2.0 mn for a house,
ii. At Kshs. 2.6 million per house, we would need a household income of at least Kshs 70,000, at the prevailing market conditions, to afford these houses; and this is the cheapest market-based house we could calculate, as compared to the currently discussed price of Kshs 2.0 mn for a 2-bedroom house,
iii. The main areas that still need addressing are the costs of construction as well as financing costs which make up 82.9% and 7.2% of costs, respectively. It is evident that private developers will still require further incentives, beyond just free land, to provide the affordable house according to the government standards. Exemption of VAT on construction costs, for example, will reduce the construction cost by at least 13.8%,

iv. Our point here is that to attract private sector partnership, we could lay out the assumptions better so that private capital can come onboard with reasonable certainty in terms of the risks they are taking. If we look at current private sector players around the initiative, it is currently attracting mainly service providers those looking to earn a fee income from the initiative rather than private capital looking to commit capital to fund the initiative, we ought to get the initiative to a point where it can attract capital.

In conclusion, the government has taken a bold and important initiative to deliver on affordable housing. The initial plan has very useful and constructive elements, but some key elements discussed above – such as an integrated framework, a wider set of solutions, eligibility criteria, flexibility to fit varied incomes, details on how the assumptions are arrived at, private capital participation, comprehensive urban plan, etc need to be addressed to increase the likelihood of success of the affordable housing initiative.
