



7<sup>th</sup> GLOBAL HOUSING FINANCE CONFERENCE



# Housing 2030



*By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums*

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# LEVERAGING CAPITAL MARKETS FOR HOUSING FINANCE

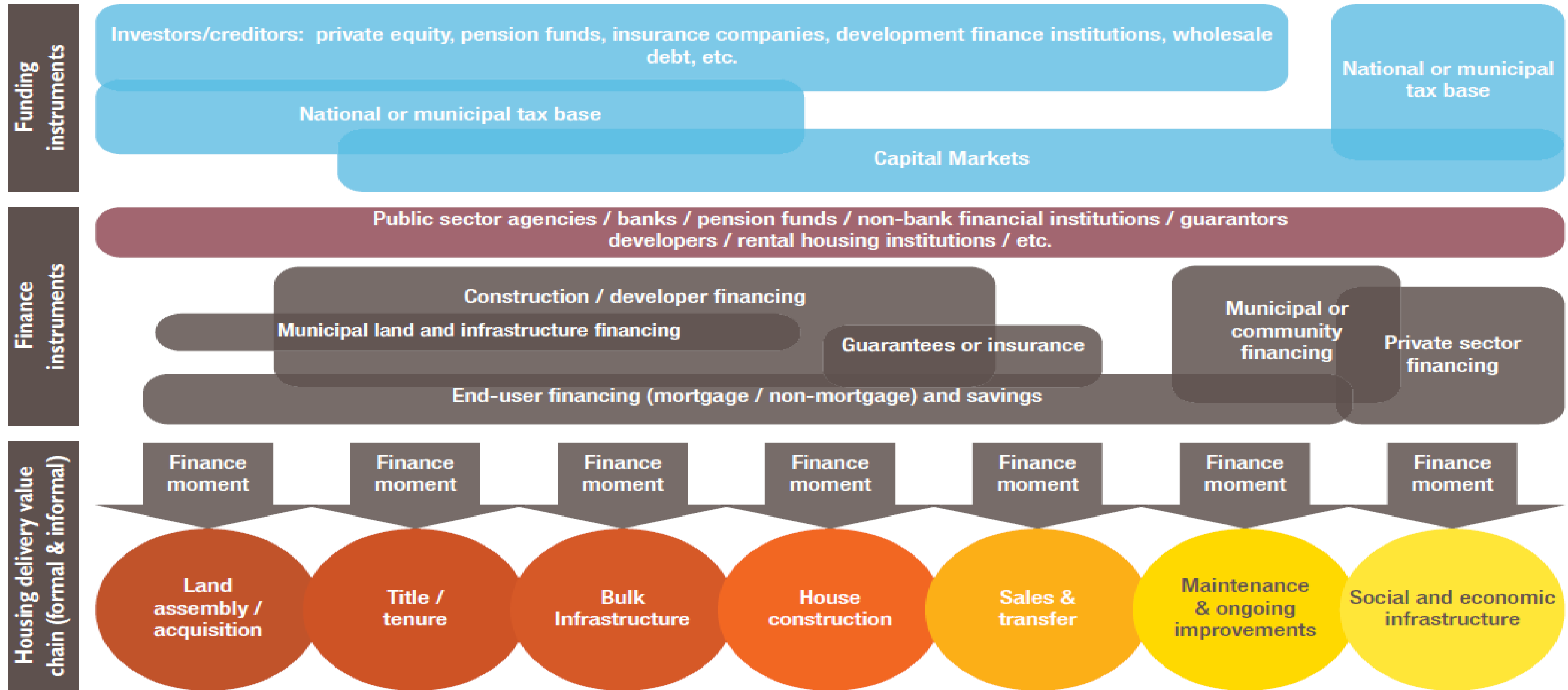
**Charles Inyangete, PhD**

Chief Executive Officer

Nigeria Mortgage Refinance Company (NMRC)

May, 2016

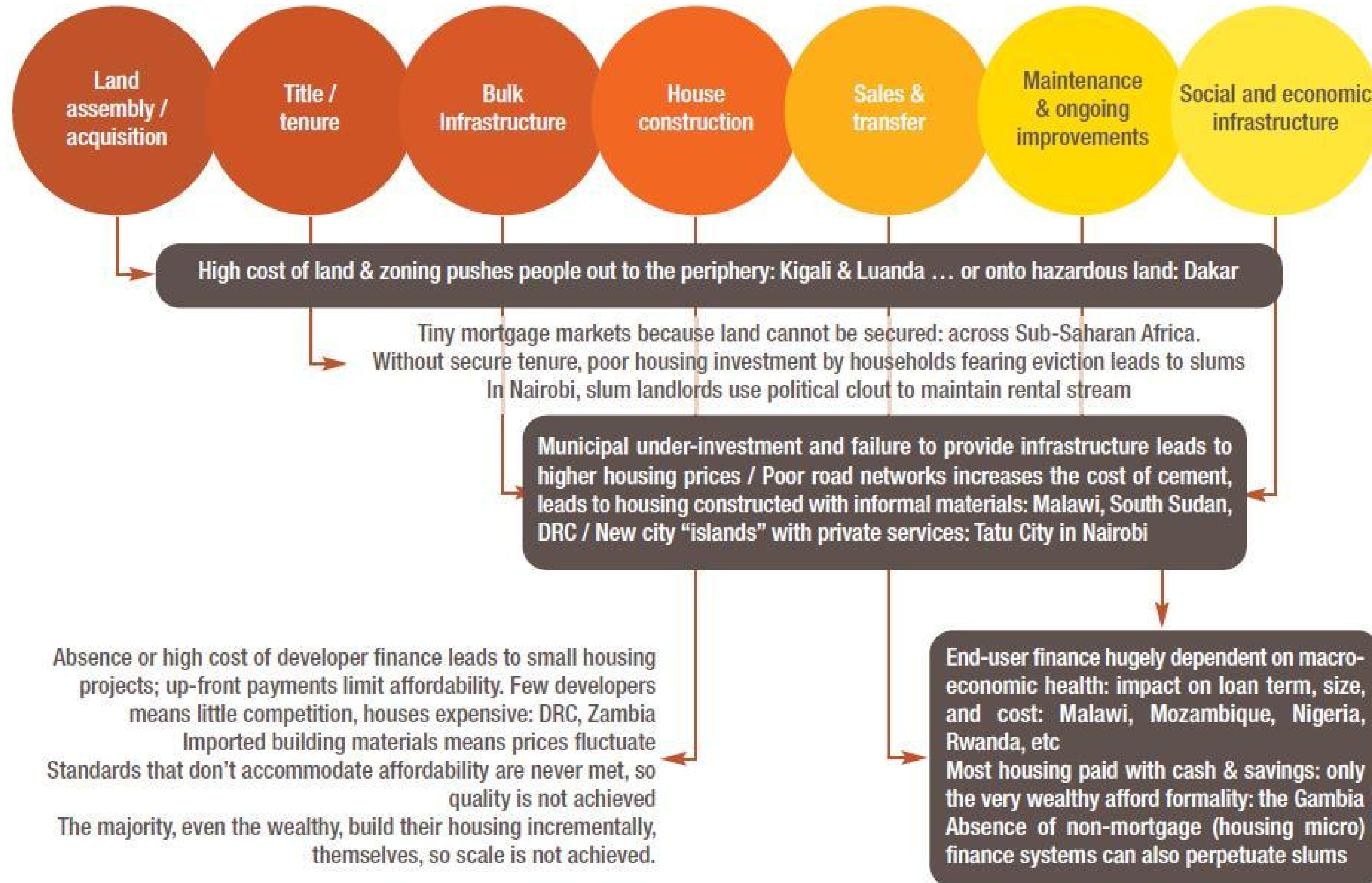
# A Value Chain Approach to Housing Finance



\*Note: different market segments will engage in different housing processes involving different value chains and different finance moments – this diagram is purely illustrative.

(Centre for Affordable Housing Finance in Africa, 2015)

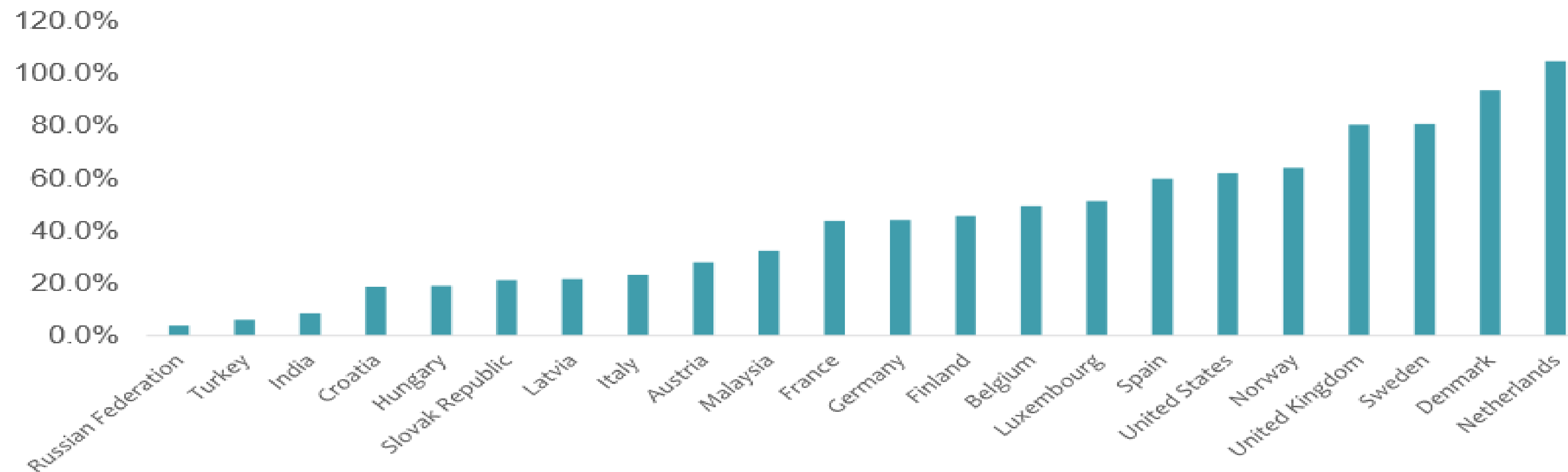
# A Value Chain Approach to Housing Finance



# MORTGAGE (RE)FINANCE and Economic Development

Mortgage finance is a mature and large industry across most developed economies, and is seeing rapid growth in emerging economies

**Mortgage Debt to GDP Ratio (in 2013 across multiple countries)**



**A good correlation is seen between the level of development and size of mortgage finance market**

**There has been a strong push towards increasing homeownership as it is associated with improved saving and investment opportunities for households**

**Mortgage market development is tightly linked with the quality of institutions and particularly the legal framework that governs financial contracts**

# Mortgage to GDP Ratios

Country	GDP Size (\$)	Mortgage / GDP Ratio
+China	+10,380 trn	+21%
+India	+2,050 trn	+9%
+Malaysia	+298 bn	+33%
+South Africa	+329 bn	+30%
+Singapore	+293 bn	+56%
+Nigeria**	+510 bn	+< 3.0%

**Nigeria <1%**

- *Mortgage to GDP ratios* for emerging market economies with functional *Secondary Markets and Mortgage Refinance Facilities* are of significant values with the exception of *Nigeria*.
- It is however expected that Nigeria's GDP to Mortgage numbers will grow in the next 5 years in view of NMRC's activities and proposed partnerships with *State and Municipal Governments* across the country.



# Affordable Housing in Africa The Need for Capital Markets

- 113 African companies listed on the London Stock Exchange (majority on the AIM)
- Total MCAP > \$200bn
- Raised > \$26bn in past 10 years
- London Africa's fourth exchange by capital raised in 2015

Source: Thomson One / Baker & McKenzie

# African Debt – Challenging times

- Sub – Saharan African Debt Credible Investment Option
- African Sovereign Bonds less attractive in past year due to;
  - China's economic slowdown
  - Falling commodity prices
  - Rising US interest rates
- ❖ African Eurobonds yields spread increased from an average of 5.7% in April 2015 to 9.4% in February 2016. yields, in other emerging markets average yields increased from 4.6% to 5.4% over same period. (*Source Bloomberg USD Emerging Markets Sovereign Bond Index*)
- ❖ Effect is adverse impact on new issuance



# Illustrations - Zambia



- Zambia – 2012 Bond Issue 6 times oversubscribed
- Zambia - 2015 Bond Issue 2 times oversubscribed (\$1.25bn offer)
- Kwacha – Worst performing currency in Africa in 2015
- Currency depreciation leads to higher costs of debt repayments
- Initial yield on Zambia's 2012 bond – 5.63%
- Yield on Zambia's 2015 bond – 9.38%

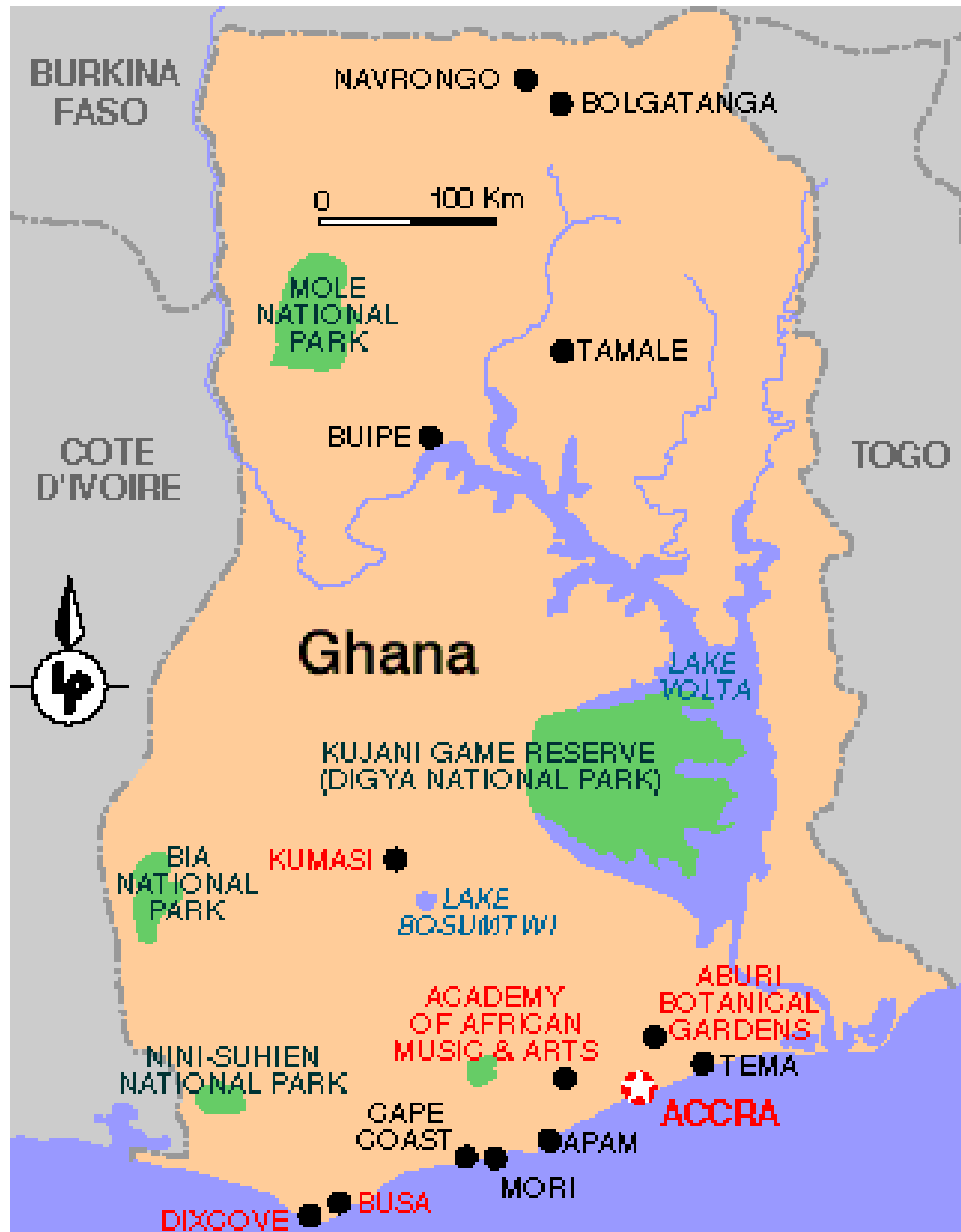
# Illustrations - Angola



- **\$1,25bn Eurobond in November 2015 is a growing risk due to falling oil income and lack of economic diversification, despite large scale infrastructure investment.**
- **Despite estimated GDP growth of 3.5% in 2015, IMF outlook is a widening of current account deficit from 1.5% of GDP in 2014 to 7.6%**
- **Devaluation of the Kwanza twice – Inflation rose to 21.8% by January 2016**



# Illustrations - Ghana



- Ghana's recent Eurobond issue yield 10.75% despite a 40% World Bank Guarantee
- 10 of worlds 20 worst performing bonds in 2015 issued by African Governments

# Debt Profile of top 10 African Countries

Country	Debt Outstanding (Current)	% of GDP 2015	% of GDP 2014
+South Africa	+ \$234.3bn	+ 45.4%	+ 44.8%
+Egypt	+ \$195.2bn	+ 91.7%	+ 93.7%
+Nigeria	+ \$73.6bn	+ 11.7%	+ 10.8%
+Morocco	+ \$50.7bn	+ 73.4%	+ 73.8%
+Kenya	+ \$21.7bn	+ 48.6%	+ 46.3%
+Angola	+ \$20.7bn	+ 56.7%	+ 34.9%
+Ghana	+ \$16.8bn	+ 76.0%	+ 70.9%
+Cote D'Ivoire	+ \$14.2bn	+ 52.3%	+ 45.5%
+Tunisia	+ \$9.7bn	+ 52.6%	+ 50.5%
+Zambia	+ \$8.5bn	+ 60.3%	+ 37.3%

## African Debt Market >\$693bn

- The size of African Sovereign debt market has grown to over \$693bn as at April, 2016.
- Debt outstanding for top ten African countries represents 93.1% of total outstanding debt in Africa for 2015.
- The percentage of debt to GDP for most African countries increased between 2014 and 2015.

# Investor Response

- Cutting exposure to more high-risk debt, reducing demand for African bonds
- Total debt issuance in 2015 was \$15.5 bn with 22% decline from 2014

Debt sustainability concerns. Ghana debt to GDP increase from 18% in 2006 to 41% in early 2016

Planned issues 2016

DR Congo debt \$1bn

# Alternative Investments Opportunities

- **Securitisation Opportunities** – E.g. Solar Power boom –
- In East Africa, residential photovoltaic (PV) units and Solar Kiosks bring electricity to hundreds of thousands of homes.
- Maiden issue raised \$500,000 from 2500 Kenyan contracts with average maturity 30 months
  - - New bonds issued every 3 months in Kenya and Rwanda. Nigeria to follow.
  - - Target \$2bn in financing over 5 years set by UK/s BBOXX
- Niche Market becoming mainstream for both customers and investors. Structuring in a way understandable to institutional investors



- **Islamic Finance**

- Cote D'Ivoire, Gambia, Nigeria, South Africa and Sudan already launched Sukuk. Kenya to join.

*Regional Bond Trading platform in East Africa (East African Securities Association)  
– Mobile Trading Platform for treasury bond and integration of stock exchange to  
Kenya, Ugandan and Rwanda*

# LSE Leading a New initiative to grow Africa's capital Markets

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- African business cannot grow without growing African capital markets.
- At regional / continental level, Africa needs to bring together policy makers, regulators, institutional investors and exchanges to address the challenges

# FMDQ – Listings and Quotation Platform OTC Securities Exchange

- Government securities, corporate bonds, commercial paper
- Gives global visibility through inclusion in FMDQ Bloomberg e-Bond Trading System, transparency and price discovery
- Member of the African Securities Exchanges Association (ASEA) and affiliate of International capital market association (ICMA)
- **Market size** – Turnover value **N104 Trillion (\$520bn)** in **2014** higher than the Nigeria Stock Exchange of N1.3 Trillion (\$6.5bn). In **2015 Turnover N137 Trillion (\$685bn)**
- Adopts **IOSCO**'s principles for financial benchmarks and documented governance standards over **NIBOR**
- CPs quoted N80.4bn (\$402m) (StanbicIBTC, WEMA Bank)
- Established 0.88 correlation of between crude oil price and the Naira

## 2016 Development

- Development and listing of non-interest Islamic (Sukuk) products

# Nigerian Mortgage Market | A Critical Enabler

A sustainable secondary mortgage market requires an efficient primary mortgage market.



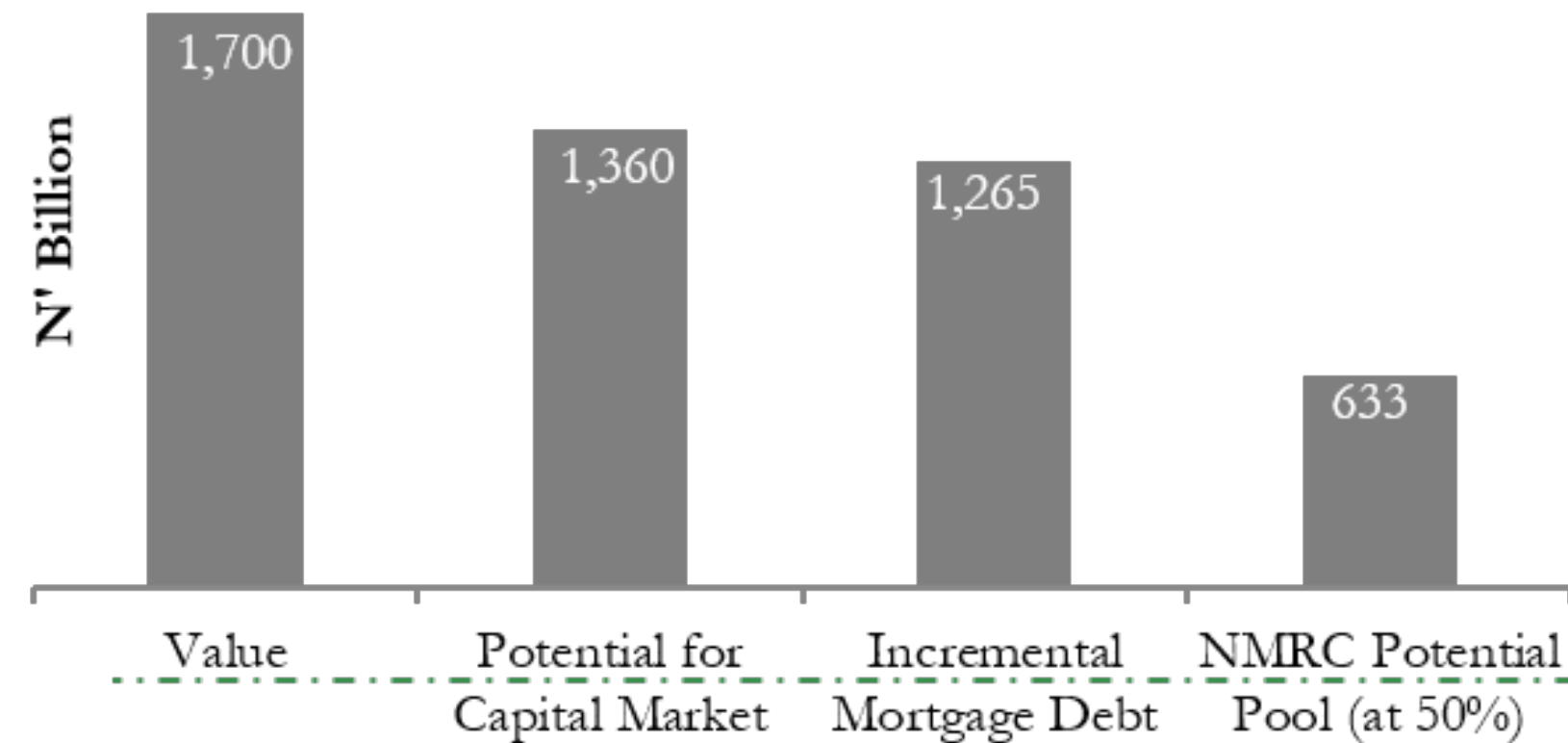
*“NMRC has devoted considerable time to technical activities important in managing the risks inherent in mortgage lending and improving the enabling environment for the long-term benefit of market development and sustainability of the mortgage market”*



# NMRC | Connecting Mortgages to Capital Market

NMRC brings with it huge Catalytic effect on the Capital Market as well as the Nigerian Economy as it creates an efficient primary mortgage market

**0.15%** | N118.5 billion (Current Residential Mortgage Value, CBN 2013)



*“Whilst Mortgage Debt to GDP (Residential & Commercial Mortgage Loans) is c.0.35%, Residential Mortgage Loans to GDP is 0.15%”*

**Residential Mortgage Loan-to-GDP ratio in perspective, 2.0%**

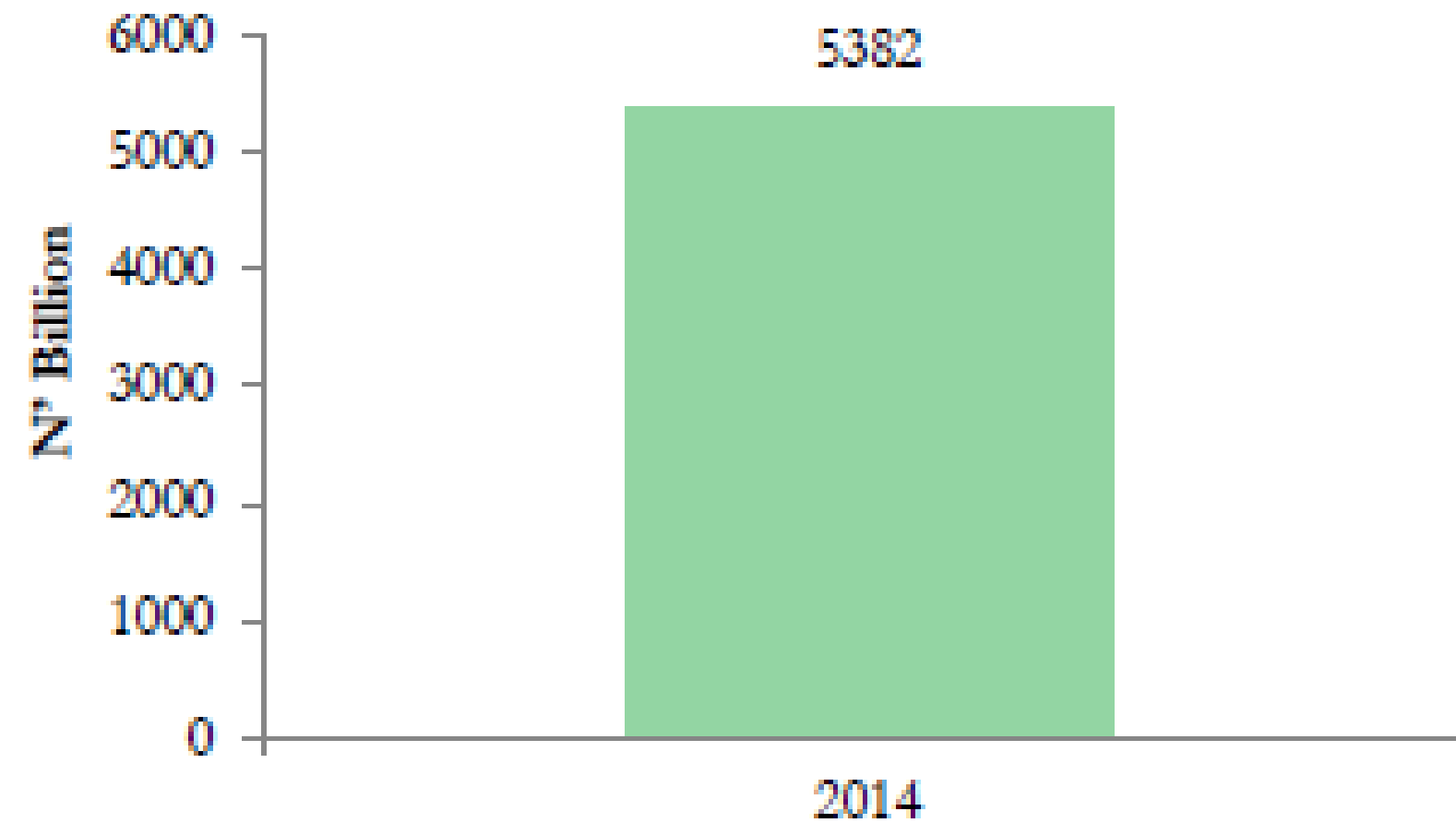
*“If Residential Mortgage Loan-to-GDP ratio is increased from 0.15% to 2%, an additional mortgage loan of N1.2 trillion could be refinanced through the capital markets”*

*Note: The GDP figure is based on 2013 estimate and a GDP rise is expected in future.*

# NMRC | Connecting Mortgages to Capital Market cont'd

Unlike most Emerging Economies, Nigeria has a developed Capital Market, NMRC is leveraging on this to create a new asset class for long term investors

Nigeria's Fixed income Market Size



*“With Potential Pool of investors grossing about thirty trillion naira, NMRC is an intermediation vehicle that will deepen the Nigerian Fixed Income Market”*

## Key Potential Investors

Total Pension Assets

N4.2 trillion

Total Banking Assets

N24.5 trillion

Total Insurance Assets

N0.57 trillion

Total Assets (Potentially)

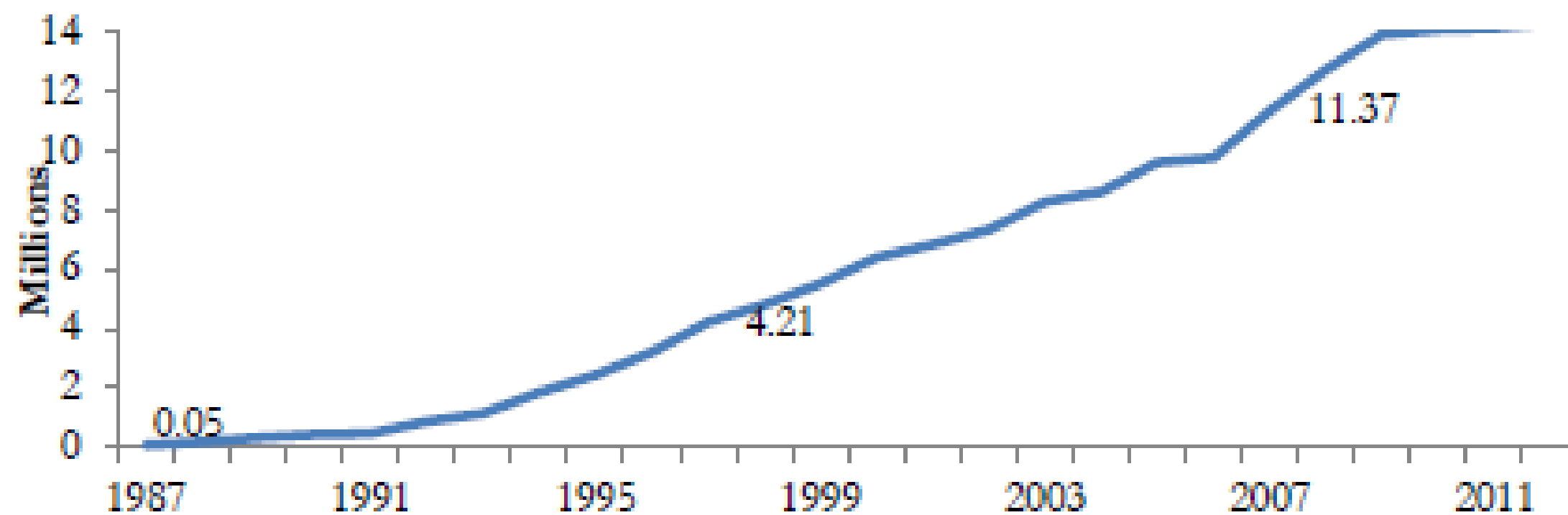
N29.9 trillion



# Diversification from oil | A New Nigerian Economy

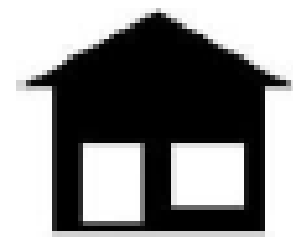
NMRC's successful impact will create a Multiplier Effect on the Nigerian Economy

## Cumulative Number of Houses financed by Cagamas

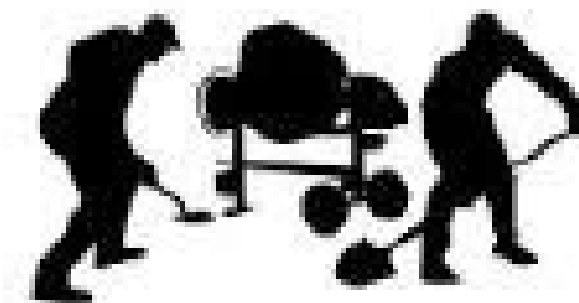


*Cagamas refinanced 50,000 mortgages in 1987 and within 10 years, had refinanced 4.2 million houses.*

*“NMRC can potentially refinance and achieve a similar feat in the Nigerian market”*



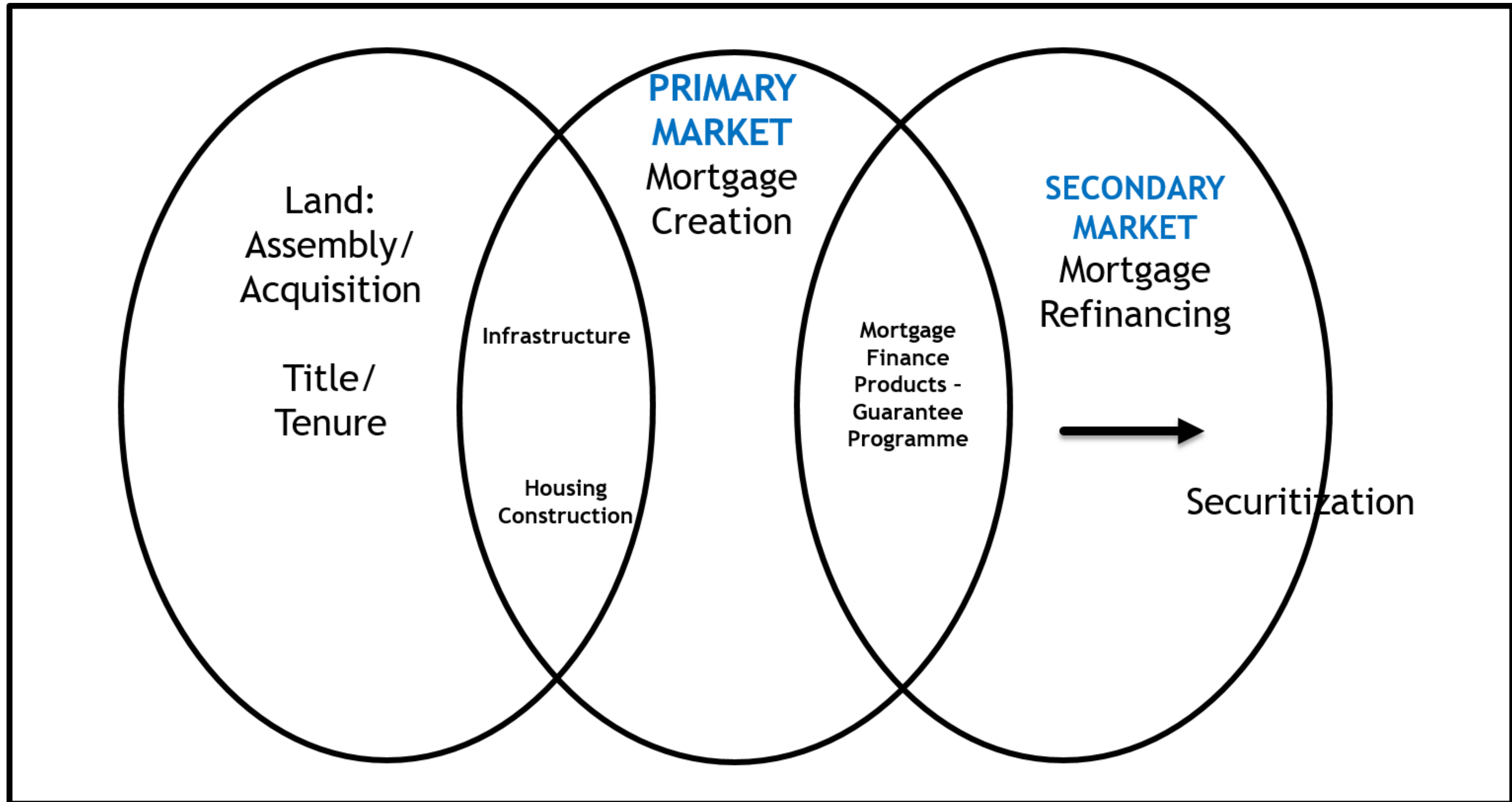
*“For example, building of 100 new houses, will create 80 direct and indirect construction jobs and 42 jobs from other induced efforts”*



*In addition to these “real-time” jobs and economic activity, building 100 social housing units also leads to the long-term creation of 30 new jobs that support the ongoing consumer activity of these homes’ new residents*

*Source: The National Association of Home Builders, U.S (2010)*

# Housing Provision and Housing Finance-Linkages



# Mortgage Development and Refinance Pipeline

**Over 20** *strategic and high profiled project valued at ₦5.73trn (\$17.00bn) have been identified by NMRC for mortgage development*

**20%** (₦1.06trn or \$3.3Bn)

*of Targeted Mortgage development over a 5yr period is Refinanceable by NMRC, which translates to ₦212bn or \$0.66bn yearly*



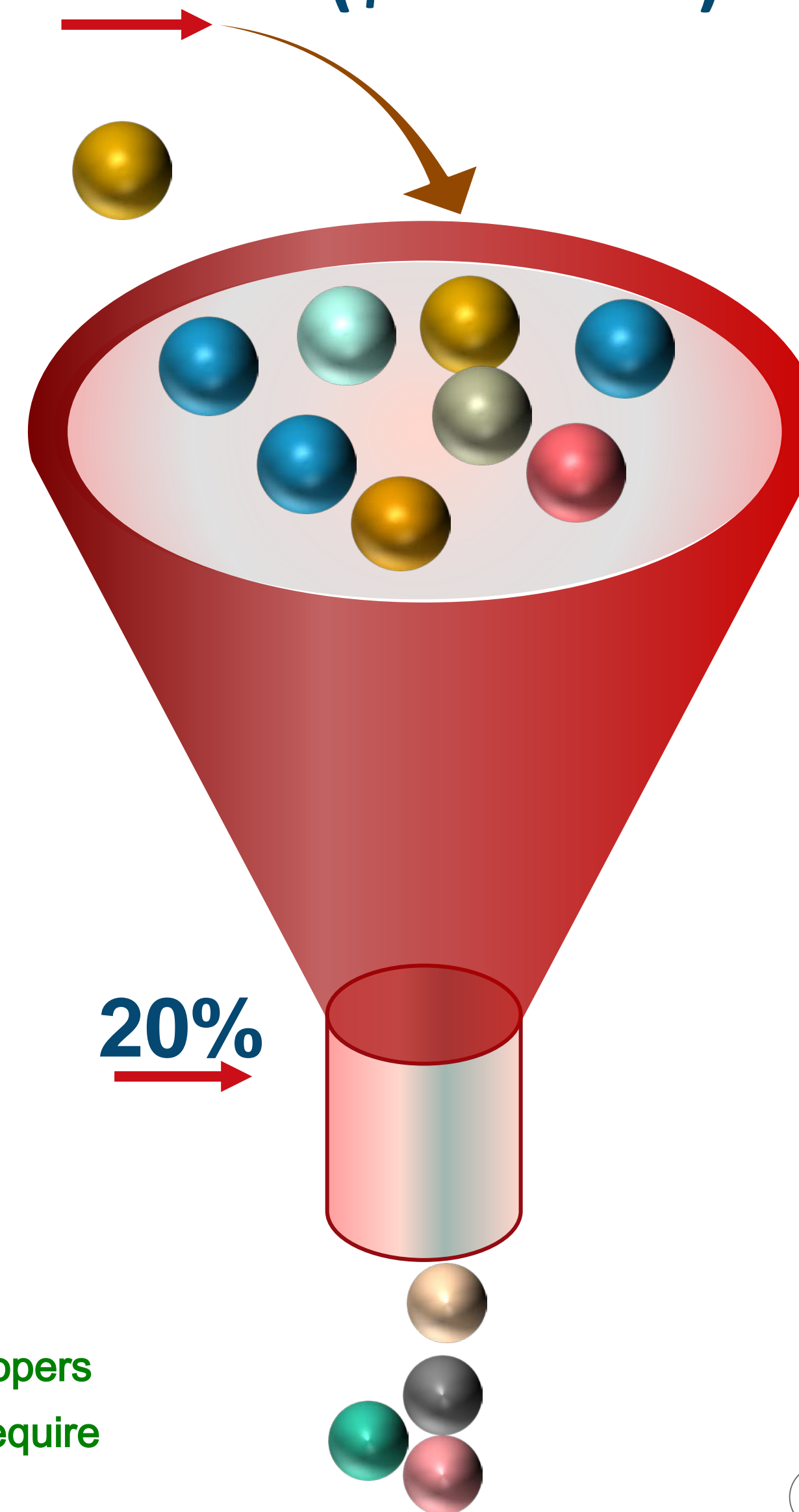
## Estimated Mortgage Development Pipeline

- + Government Developments
- + Private Development
- + Public Private Partnerships

## Assumptions for projected refinanceable Mortgages

- + UUS / MMFL / Title Issues
- + Number of States yet to sign-on
- + Availability of financing for developers
- + Not all Home purchases would require Mortgages

₦5.73trn (\$17.00 Bn)



**Galls Law:** *A complete system that works is invariably found to have evolved from a simple system that worked... You have to start... with a working simple system.*

– John Gall (1975, p.71)

**NMRC IS A WORKING SYSTEM CONNECTING  
MORTGAGES TO CAPITAL MARKETS**



**THANK YOU**



Centre for Affordable  
Housing Finance  
in Africa

# Housing finance in sub-Saharan Africa

Kecia Rust

## Housing 2030

7<sup>th</sup> Global Housing Finance Conference  
25-26 May 2016, Washington D.C.



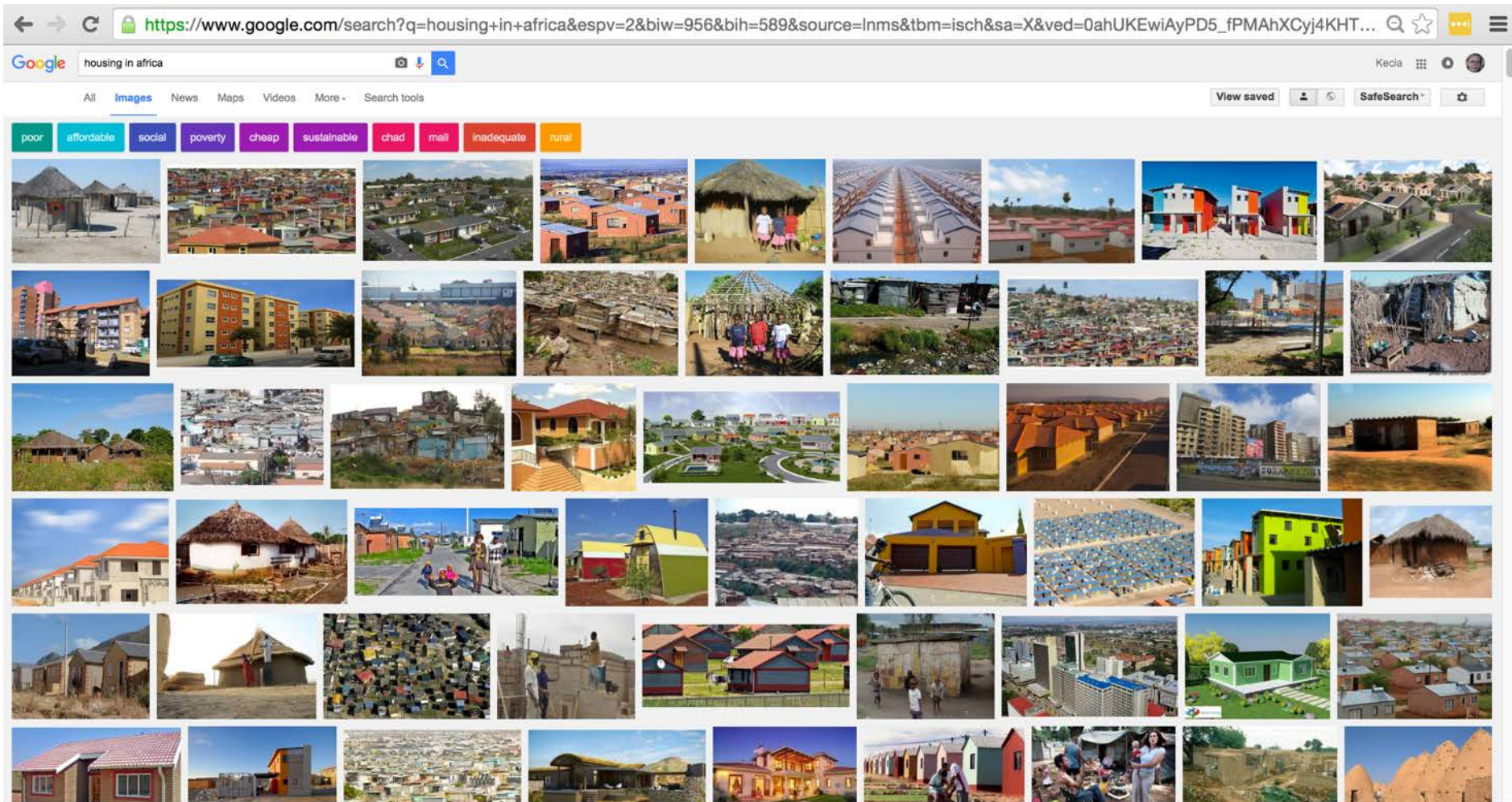
AFRICAN UNION FOR  
HOUSING FINANCE



WORLD BANK GROUP



# What is different about housing today?



... in the face of persistent population growth & urbanisation, deteriorating government capacity and declining resources for subsidisation, and market interest looking for new niches...



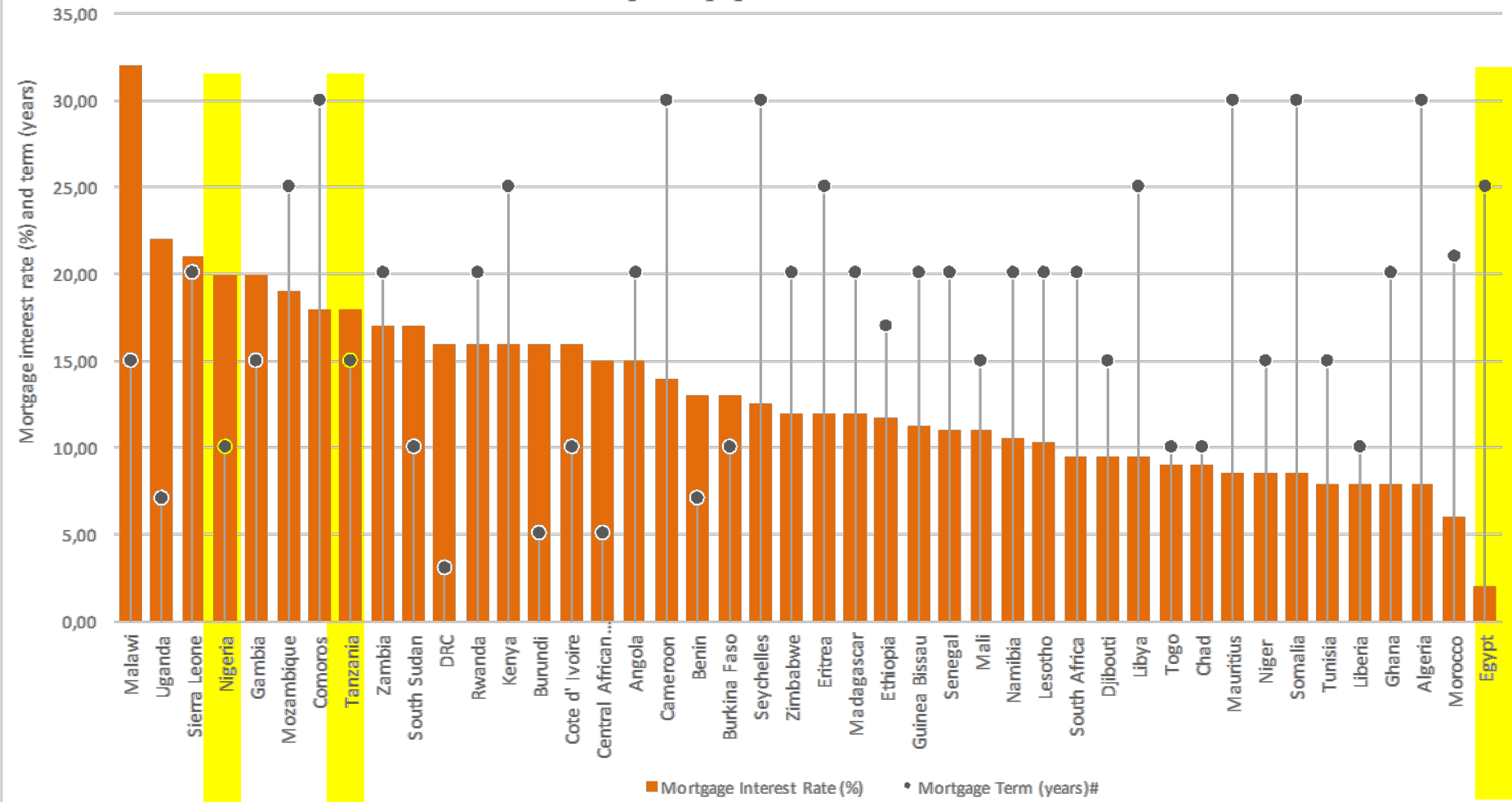
# Mortgage to GDP vs prevailing mortgage rate & term



African mortgage markets are tiny (and data is limited).  
 Lower interest rates seem to correlate with larger mortgage markets.



# Prevailing mortgage interest rates & term



Most countries offer mortgages at rates above 10%, and for less than 20 years, highlighting very real macro-economic issues that challenge housing affordability. In Malawi, one might as well buy a house with a credit card.

C

A

H

F

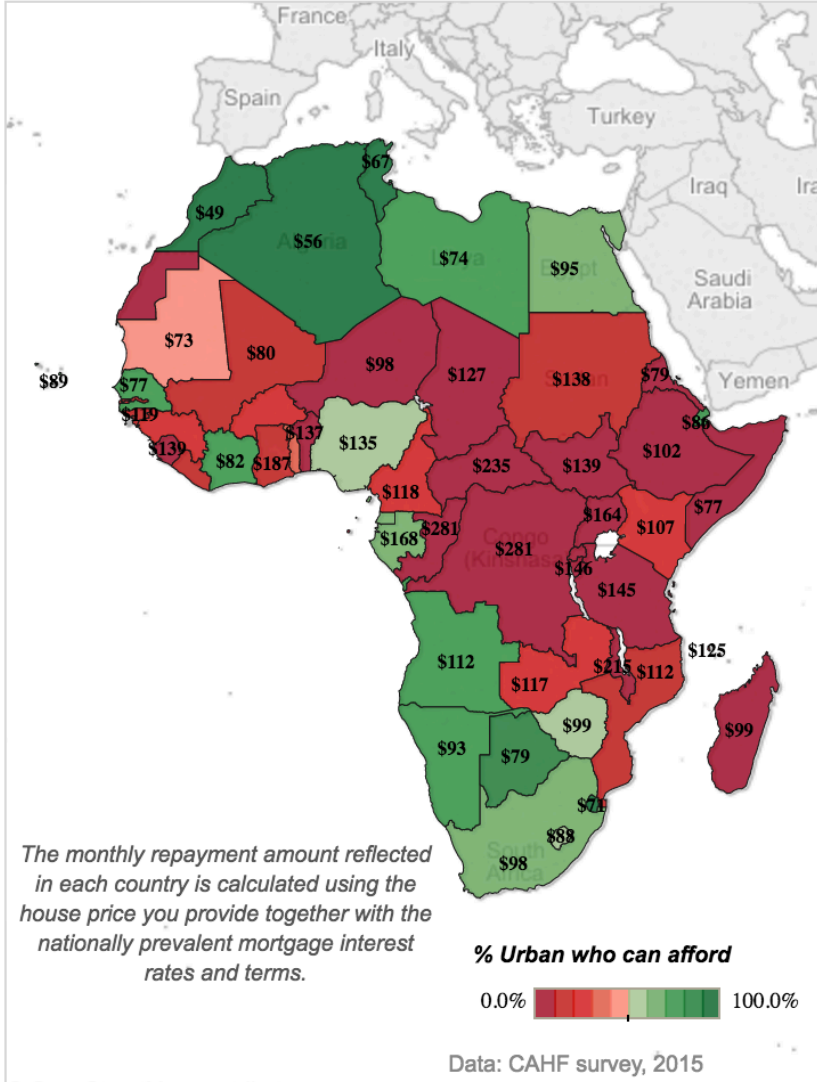


# The limitations of housing affordability for even a \$10,000 house

House Price (USD)

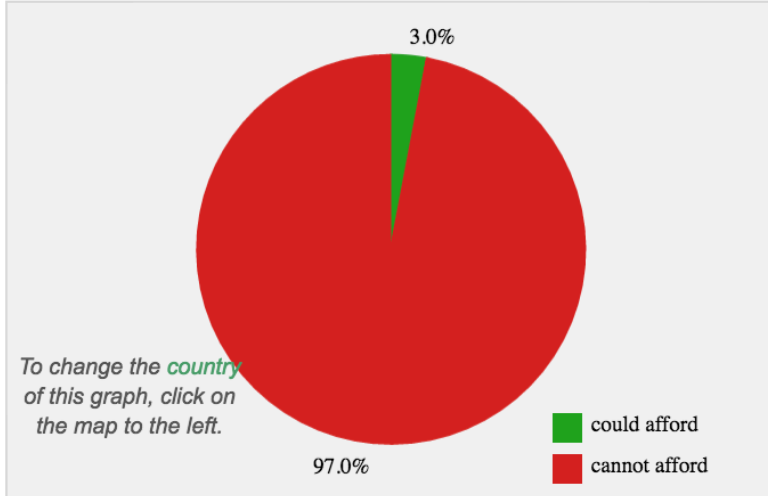
Enter your estimated house price in the box to the left to compare housing affordability across Africa. Click on the map to see country specific data to the right.

## What is the monthly mortgage repayment for this house?

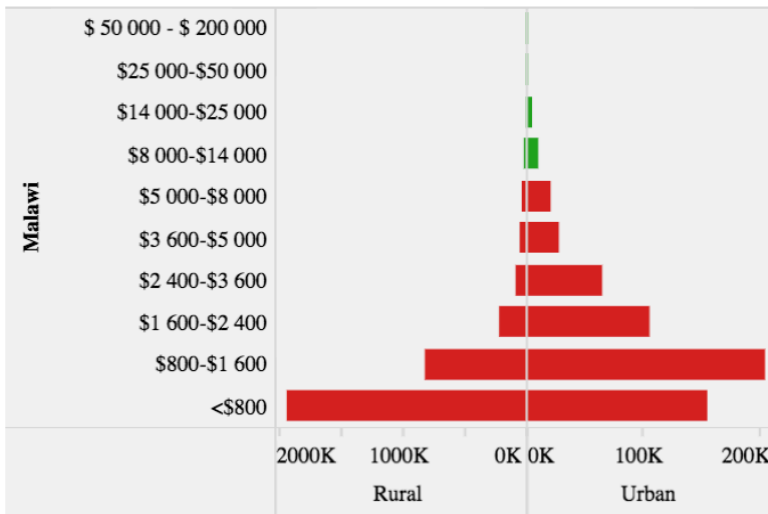


The monthly repayment amount reflected in each country is calculated using the house price you provide together with the nationally prevalent mortgage interest rates and terms.

## How many urban households can afford this house in Malawi?



## What is the annual income distribution of households in Malawi?



<http://www.housingfinanceafrica.org/calculating-mortgage-and-housing-affordability-in-africa/>



# 1 Targeted innovation

## Mortgage liquidity facilities

- EMRC 2007 / TMRC 2010 / CRRH 2012 / NMRC 2014
- Draws investors and lenders into the mortgage market
- Encourages government to engage in market development
- Creates investment precedent and a documented track record
- Signal to the housing sector that finance is available
- Focuses efforts on opportunities for growth

## Real Estate Investment Trusts

- Internationally accepted investment structure
- Aggregators: enabling big money to meet small projects
- In Kenya, Tanzania, South Africa, Zimbabwe: different versions of Development REITs and Investment REITs

## New models to go down market

- Rent-to-buy
- Housing microfinance
- Employer-supported housing
- Social rental & small scale landlordism



Growing track record & investor interest

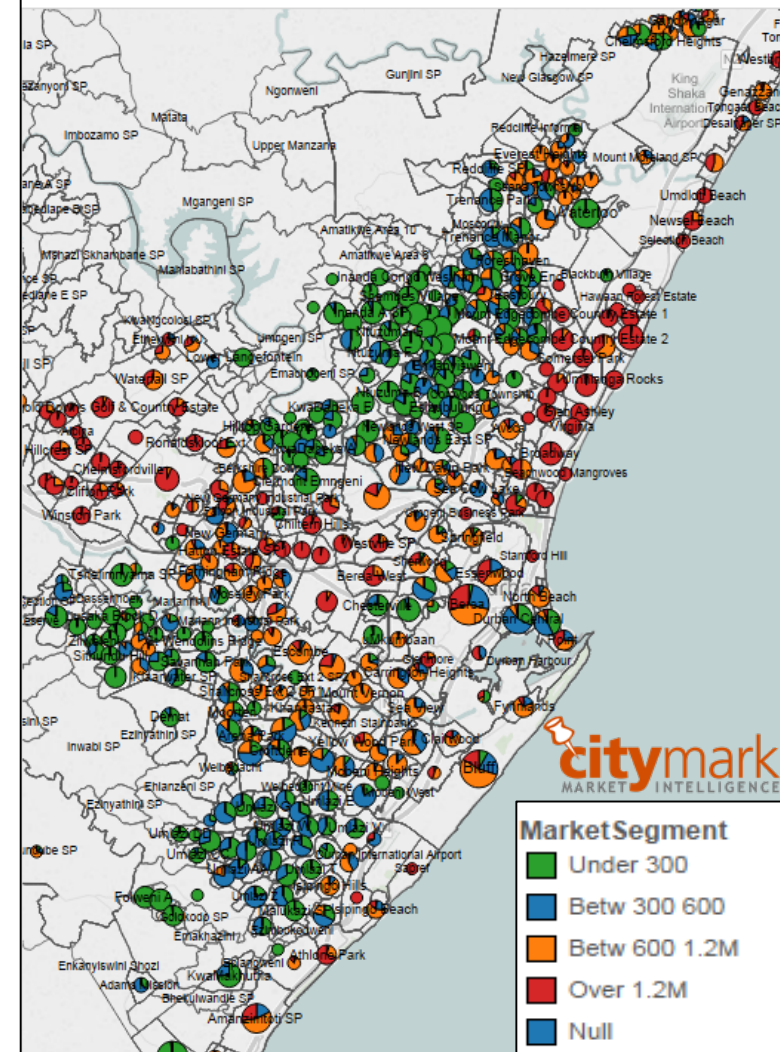


## 2 Better technology

- **Big data** platforms offer a better connection to the target market
- Merging datasets on **GIS platforms** shows spatial investment opportunities
- Innovative “alternative” **building technologies** reduce construction costs and realise other efficiencies
- **Blockchain technology** overcomes issues of recording ownership: Bitnation, in Northern Ghana

### Distribution of Properties and Values by Suburb eThekweni, central north South Africa

By total residential properties per suburb, 2014



New opportunities for efficiency & targeting

C A  
H F



# 3 Sharpening practice

- NGOs and social movements adopting commercial practice
  - REALL, with NGOs in Mozambique, Malawi, Kenya, South Africa, Tanzania
  - Habitat for Humanity
  - Kuyasa Fund, South Africa
  - NACHU, Kenya



- Lenders broadening their business model to accommodate opportunities and engage with constraints

- Select Africa in Malawi, Kenya, Swaziland
- KixiCredito in Angola
- Trust for Urban Housing Finance in South Africa
- Shelter Afrique



- Investors coming better to understand their niche markets

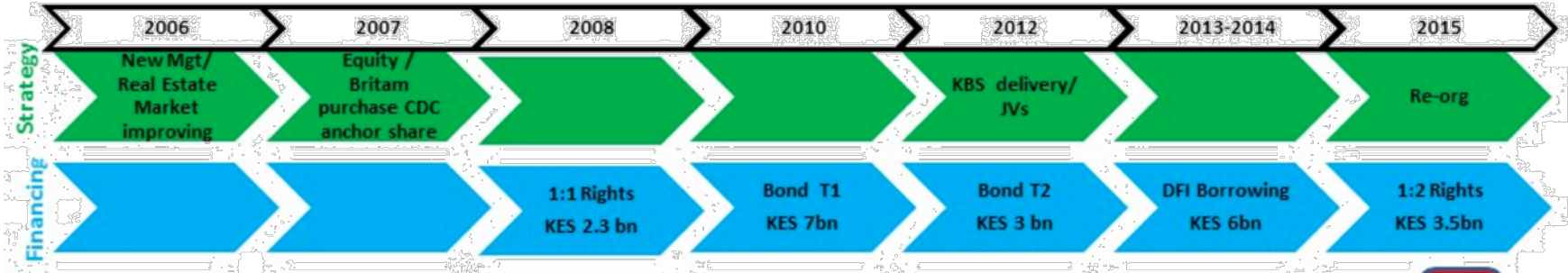
- International Housing Solutions
- Phatisa's Pan African Housing Fund
- Lions Head Global Partners



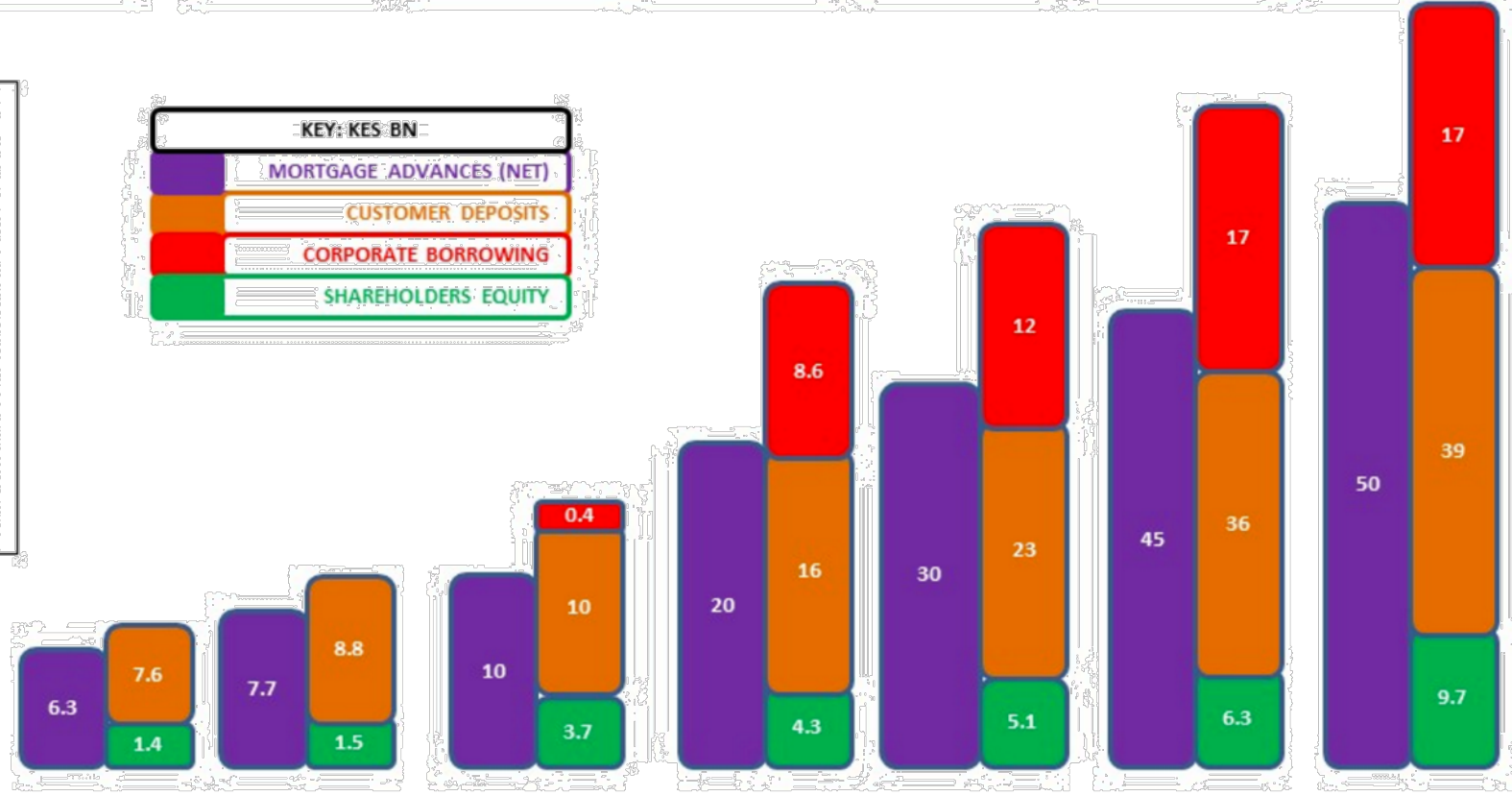
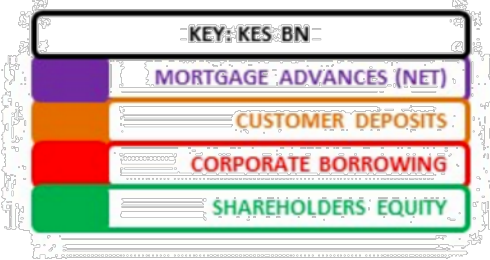
Consolidating the sector



# Housing Finance Kenya's approach to the capital markets 9



Change in Balance Sheet (KES BN)



Source: <http://www.housingfinanceafrica.org/document/case-study-7-the-transformation-of-the-housing-finance-company-of-kenya/>

# 4

## Government interest & reporting

- Kenya Central Bank Report
- Tanzania Central Bank Report
- Nigeria Housing Finance Hub (NMRC)

S/No	Mortgage Lender	No. of Accounts	Amounts in TZS Billion	% Market Share
1	EQUITY BANK TANZANIA LIMITED	82	50.52	20%
2	AZANIA BANK LIMITED	711	46.77	19%
3	STANBIC BANK (T) LTD	132	38.71	16%
4	COMMERCIAL BANK OF AFRICA (T) LIMITED	238	29.76	12%
5	EFC TANZANIA M.F.C LIMITED	990	12.57	5%
6	CRDB BANK PLC	139	11.97	5%
7	BARCLAYS BANK (T) LIMITED	69	8.45	3%
8	KCB BANK TANZANIA LIMITED	57	8.11	3%
9	DCB COMMERCIAL BANK PLC	771	7.94	3%
10	I & M BANK TANZANIA LIMITED	36	7.48	3%
11	BANK OF AFRICA TANZANIA LIMITED	59	7.37	3%
12	AFRICAN BANKING CORPORATION (T) LTD	35	6.55	3%
13	EXIM BANK TANZANIA LIMITED	26	4.94	2%
14	NATIONAL MICROFINANCE BANK (T) PLC.	23	3.13	1%
15	CITIBANK TANZANIA LIMITED	14	2.46	1%
16	AKIBA COMMERCIAL BANK LTD	207	0.61	0%
17	TANZANIA INVESTMENT BANK	3	0.50	0%
18	FIRST NATIONAL BANK TANZANIA LIMITED	5	0.44	0%
19	NIC BANK TANZANIA LIMITED	1	0.08	0%
	<b>TOTAL</b>	<b>3598</b>	<b>248.35</b>	<b>100%</b>

Appendix XIII

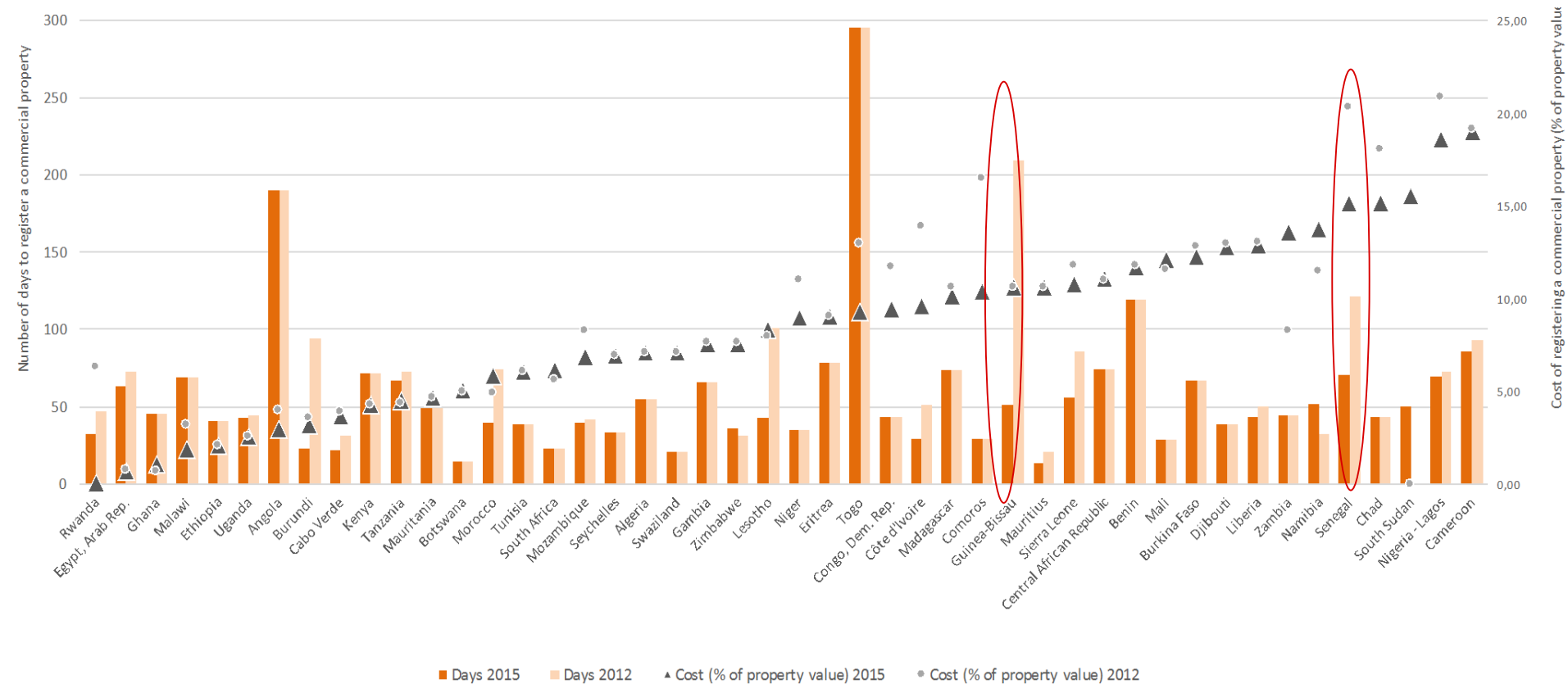
RESIDENTIAL MORTGAGES MARKET DEVELOPMENT SURVEY - DECEMBER 2014								
Institution	Mortgage Outstanding (Ksh. M)	No. of Mortgages Accounts	Dec-13		Dec-14		No. of NPLs Accounts	
			Value of NPLs Mortgage (Ksh. M)	No. of NPLs Accounts	Mortgage Outstanding (Ksh. M)	No. of Mortgages Accounts		
1 Housing Finance Company Ltd	35,279.00	5,402.00	3,209.00	594.00	45,278.00	5,840.00	4,149.00	558.00
2 Kenya Commercial Bank Ltd	34,030.00	5,343.00	2,468.00	291.00	41,327.00	5,914.00	2,521.00	300.00
3 Standard Chartered Bank Ltd	10,098.96	1,385.00	67.06	16.00	13,092.64	1,652.00	142.68	25.00
4 CIC Stanbic Ltd	11,621.05	1,441.00	147.28	36.00	13,039.80	1,678.00	362.48	13.00
5 Equity Bank Ltd	5,277.00	1,091.00	205.00	37.00	6,375.00	1,351.00	162.00	33.00
6 Cooperative Bank of Kenya Ltd	5,911.00	439.00	479.00	50.00	5,694.00	483.00	837.00	75.00
7 Barclays Bank of Kenya Ltd	4,640.30	1,064.00	56.70	13.00	4,922.00	933.00	66.00	14.00
8 Commercial Bank of Africa Ltd	2,889.31	352.00	64.43	11.00	3,929.00	438.00	126.00	84.00
9 Development Bank Ltd	2,710.78	529.00	188.01	56.00	3,314.80	634.00	499.70	80.00
10 I&M Bank Ltd	2,743.00	320.00	12.00	3.00	3,293.00	407.00	32.00	8.00
11 Chase Bank Ltd	1,947.39	156.00	104.34	15.00	3,268.70	176.00	373.30	53.00
12 Consolidated Bank Ltd	3,686.00	523.00	340.00	36.00	3,201.80	299.00	776.05	37.00
13 Family Bank Ltd	392.66	71.00	-	-	2,899.12	399.00	38.28	5.00
14 National Bank of Kenya Ltd	5,149.60	214.00	567.50	44.00	2,311.30	404.00	179.30	70.00
15 Bank of Africa Ltd	1,735.00	113.00	44.00	5.00	1,901.00	116.00	26.90	3.00
16 NIC Bank Ltd	1,618.00	178.00	22.00	2.00	1,621.00	188.00	32.00	7.00
17 Jamii Bora Bank Ltd	626.00	309.00	15.00	1.00	1,052.00	277.00	57.00	44.00
18 Fidelity Bank Ltd	117.33	19.00	25.87	4.00	1,052.00	70.00	46.00	7.00
19 African Banking Corporation Ltd	2,075.00	137.00	42.00	8.00	904.00	86.00	68.80	10.00
20 Gulf African Bank Ltd	1,196.68	178.00	36.04	4.00	885.84	109.00	30.86	3.00
21 Zobo Bank Ltd	1,393.00	254.00	311.00	42.00	701.00	170.00	65.00	30.00
22 Trans-National Bank Ltd	98.02	18.00	2.97	3.00	619.00	26.00	-	-
23 Imperial Bank Ltd	459.00	52.00	39.00	4.00	605.73	67.00	157.45	4.00
24 Diamond Trust Bank of Kenya Ltd	442.40	47.00	-	-	574.99	60.00	4.17	1.00
25 Prime Bank Ltd	473.00	36.00	-	-	517.00	33.00	-	-
26 Bank of Baroda Ltd	394.00	54.00	1.97	3.00	468.45	57.00	1.87	3.00
27 Guardian Bank Ltd	257.10	19.00	-	-	389.00	30.00	-	-
28 Giro Commercial Bank Ltd	393.48	41.00	2.47	2.00	209.96	29.00	-	-
29 Paramount Universal Bank Ltd	55.99	18.00	-	-	190.36	26.00	25.75	1.00
30 Bank of India	91.00	21.00	-	-	174.34	17.00	-	-
31 First Community Bank Ltd	129.19	30.00	-	-	101.43	27.00	14.90	6.00
32 Equatorial Commercial Bank Ltd	144.70	14.00	-	-	46.24	7.00	-	-
33 Middle East Bank Ltd	13.90	2.00	-	-	28.00	3.00	-	-
34 Victoria Commercial Bank Ltd	9.00	2.00	-	-	5.41	1.00	-	-
35 Oriental Commercial Bank Ltd	9.31	5.00	-	-	4.70	3.00	-	-
36 Dubai Bank Ltd	3.40	2.00	-	-	3.40	2.00	-	-
37 Charterhouse Bank Ltd	-	-	-	-	-	-	-	-
38 Citibank N.A.	-	-	-	-	-	-	-	-
39 Credit Bank Ltd	-	-	-	-	-	-	-	-
40 Guaranty Trust Bank Ltd	-	-	-	-	-	-	-	-
41 Habib Bank A.G. Zurich	-	-	-	-	-	-	-	-
42 Habib Bank Ltd	-	-	-	-	-	-	-	-
43 K-Rep Bank Ltd	-	-	-	-	-	-	-	-
44 UBA Bank of Kenya Ltd	-	-	-	-	6.28	1.00	-	-
<b>Total</b>	<b>138,111</b>	<b>19,879</b>	<b>8,451</b>	<b>1,280</b>	<b>164,007</b>	<b>22,013</b>	<b>10,795</b>	<b>1,474</b>

Source: Commercial Banks

Enabling environment – housing part of a growth agenda



# Number of days, and cost, to register a commercial property: 2015 vs 2012



Source: World Bank Doing Business Indicators, 2012 & 2015 ([www.doingbusiness.org/data/exploretopics/registering-property](http://www.doingbusiness.org/data/exploretopics/registering-property))

The time and / or cost is coming down in many countries:

**Time:** Rwanda, Burundi, Morocco, Lesotho, Cote d'Ivoire, Guinea Bissau, Sierra Leone, Senegal. Up in Namibia

**Cost:** Rwanda, Malawi, Angola, Mozambique, Niger, Togo, DRC, Cote d'Ivoire, Comores, Sierra Leone, Senegal, Nigeria. Up in Zambia, Namibia



# Thank you!

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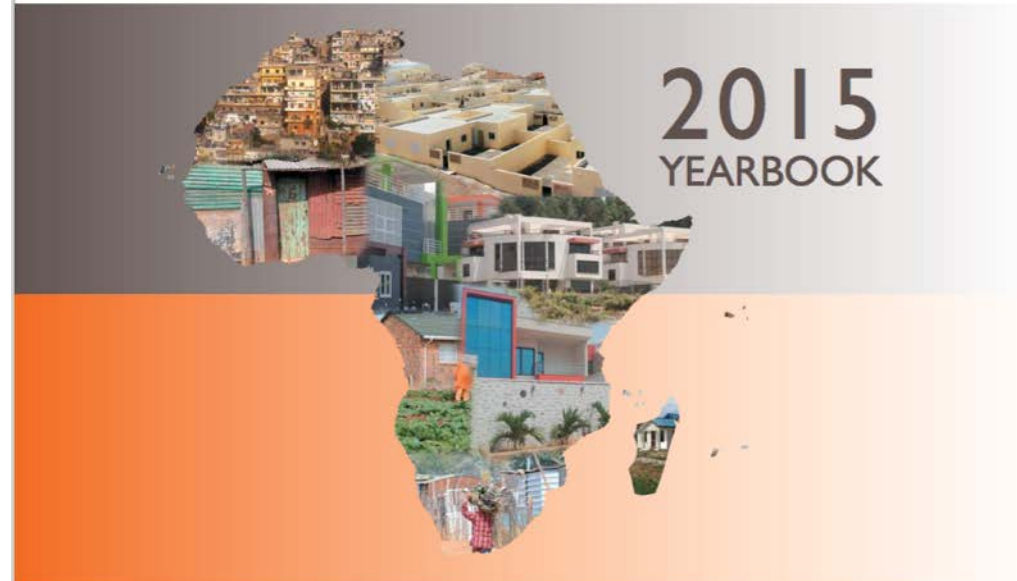
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