

# **LEGAL AND REGULATORY FACTORS INFLUENCE ON FUNDING OF THE SUPPLY-SIDE OF HOUSING IN KENYA**

## **A CASE STUDY OF NAIROBI, KENYA**

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### **Abstract**

*Housing plays a very important role in the socio-economic development of any nation. One set of factors that impacts on the funding of the supply-side of housing are legal and regulatory factors. This paper sets to establish the relationship between these factors and funding of the supply-side of housing in Kenya and also the effect of the major stakeholders on such a relationship if it exists. Using a survey research design, primary data was collected by self-administered questionnaires from a random sample of 212 branches in Nairobi of financial institutions drawn from a population of 43 commercial banks, 9 deposit-taking MFIs and three major financiers of housing development. Factor analysis, correlation analysis and ordinal logit regression were used. Results indicated a positive relationship between legal and regulatory factors and funding of housing development and a negative moderating effect of stakeholders on the relationship. The implication being the legal and regulatory framework should be effective enough to allow enforceability of contracts so as to improve efficiency of the systems in place and the suitability of stakeholders in their area of expertise in the construction industry is important.*

*Keywords: Housing, Funding, Financial Institutions, Legal and Regulatory Factors*

## INTRODUCTION

With the tremendous growth in the building and construction industry in Kenya, and the fact that banks are lending only 4.94% of their total loans and advances to this sector (CBK Report, 2013), there is a need for greater understanding of the factors influencing funding of housing in the Kenyan market.

UNEP (2013) observes that the housing sector has been one of the fastest growing sectors attracting a lot of players into the industry. Mondejar, Cheung and Suen (2007) point out that construction industry is one of the pillars of the world's economy and it is characterized by its temporary multiple organization nature, in that people from different countries with different skills and expertise come together to form a team for the duration of a project in order to achieve a common goal.

Gevorgyan Ataya, Khachatryan, and Baghdasaryan (2006) and Warnock and Warnock (2008) concur that the existence of strong legislative and regulatory framework both creates a strong housing finance market and strengthens the financial sector and that countries with stronger legal rights for both lenders and borrowers via collateral and bankruptcy laws have well developed housing finance systems. It was also reported in AfDB (2013) and UN-HABITAT (2014) that property rights that include land tenure and registration regulations are paramount in attracting private developers in the market with lack of master planning undermining the sustainability of housing developments.

Warnock and Warnock (2012) in their study showed that the lack of legal protection for creditors has been the single most important regulatory limitation for the development of credit markets in some emerging markets. Galindo, Rebucci, Warnock and Warnock (2012) pointed out that crucial weaknesses in many emerging markets include the duration of legal proceedings in protecting creditor rights, which can take more than three or four years and in addition the excessive number of appeals allowed on behalf of the debtor during the process; and the lack of political will to protect such rights.

Kenya's annual housing deficit is above 200,000 and annual supply is 50,000 (UN-HABITAT, 2010; AfDB, 2013). Based on the population growth and the rate of urban migration the annual increase in demand is projected to grow to 156,000, compounding the problem as there already exists a two million-unit backlog (AfDB, 2013). UN-HABITAT (2013) attributes the growth to the desire of most Kenyans to own property, particularly residential houses.

Legislation pertaining to the banking sector complicates the problem of availing of funding to the building and construction industry in Kenya. The Banking Act, Building Societies Act as well as the Donde Act (The Central Bank of Kenya (Amendment) Act 2000, popularly called the Donde Act - enacted to regulate commercial bank interest rates), do not provide

adequate incentives to banks to enter the housing finance market and instead place constraints on the diversification of mortgage products to low-income populations (UN-HABITAT, 2010). Banking regulations calling for the increase in core capital according to Mwega (2014) is important for financial sector stability and may lead to cost reduction from economies of scale which may lead to lower lending rates, however, a further increase the capital requirement will only create more concentration, making the banking sector more oligopolistic.

There are three major land tenure systems in Kenya, namely: public ownership, communal (customary) ownership and private ownership (Constitution of Kenya, 2012; Anjarwalla & Khanna, 2012). While a substantial portion of land in the country is either under communal tenure or under public ownership, most of the land in the country is under private tenure on freehold or leasehold terms. In Kenya, the public regulation of land use is exercised by three institutions, namely: the government, local authorities and local management institutions (Sifuna, 2009).

Building codes provide a set of uniform building regulations and standards for acceptable health and safety conditions in buildings (Investment Climate, 2013). Currently in Kenya the building code (Ministry of Local Government, 1969) which is in force is being regulated by the Local Government Authority and the content was formulated from the then existing British Imperial Codes and the main objective of the building codes is provision of minimum standards that should be followed to ensure building standards, safety, health and security of the property from all hazards that may occur to the structure (Kabando and Wuchuan, 2014). Efforts have been put forward to come up with new building codes in Kenya, in 1995, Code 95 was developed and the parliament approved it, Kabando and Wuchuan (2014) but its adoption and implementation in the construction industry has not been serious. Jha and Duyne, (2010); Majale, (2003) and Yahya, Agevi, Lowe, Mugova and Musandu-Nyamayaro (2001), have indicated that the use of Code 95 which was performance based reduced the cost of building by 30%, a clear demonstration of how a good building code can have an effect on funding of housing. The proposed KSCode (2009) is still not implemented and it has its hindrances specifically on the Section of Structures and Materials since most of the particulars were borrowed from adoptive laws of 1969 (BSI, 2014).

Few studies have looked at the effect of legal and regulatory factors exclusively on the funding of the supply-side of housing. Olusegun, Ogunbode, Ariyo and Olumuyiwa (2011), looked at corruption in the construction industry in Nigeria, Kimani and Musungu (2010); Sifuna (2009); Kameri-Mbote, (2002), looked at the legal and regulatory issues in the construction industry in Kenya. Gacheru and Diang'a (2015) studied on challenges faced by the NCA (statutory body mandated to regulate building industry in Kenya) in the implementation of its

mandate and the effectiveness of the NCA regulatory framework. Mathenge (2012) looked at the engineering practice in the construction industry in Kenya and ethical issues arising therein. The above mentioned studies demonstrate the need to carry out a study tying legal and regulatory factors to funding of housing development.

## LITERATURE REVIEW

### Theoretical Framework

The two main theories underpinning this study are Institutional-centric Theory of Finances and the Stakeholders Theory; the former explaining the legal and regulatory environment that may impact funding of housing and the latter looking at the role and effect that stakeholders may have on the relationship between legal and regulatory factors and funding for housing. The Institutional-centric Theory of Finances was proposed by Arestis, Nissanke and Stein (2005a) as an alternative to the flawed financial liberalization theory that increased the instability of developing countries during the 90s. It is based on the theory of imperfect markets; and it acknowledges the existence of imperfect information and informal and formal institutions, which efficiency is the engine of development (Arestis, Guglielmo, Cipollini, and Spagnolo 2005b; Dornbusch and Fischer, 2003). The theory advocates that financial systems must become legitimate entities in the sense that they are embedded in the circuits of social and economic production. Banking systems therefore need to be developmental, and absorbed into the consciousness of the general population, which is more likely to happen when structures are diverse, participatory and accessible (Arestis et al., 2005a). The international financial architecture seemed to provide convincing empirical support to claims about the effectiveness of promotion of regulatory cooperation among states by trans-governmental networks (Gadinis, 2008; Verdier, 2009). Pan (2010) observes that effective global financial regulation, however, requires more powerful international legal frameworks and instruments that go beyond trans-governmental networks. The underlying philosophy of the Stakeholder theory emphasizes the "joint-ness" of the stakeholder interests and the need for all stakeholders to benefit over time through their cooperation (Freeman, 1984; Freeman, Harrison and Wicks, 2007). Value-creation both economic and non-economic should emanate from such a relationship (Argandona 2011; Bosse, Phillips and Harrison, 2009). This study concurs with these theories 1) that the legal and regulatory mechanisms of in an industry needs to be in place and sensitive to the internal and external environment 2) highlighting the importance of the major stakeholders in the construction industry to the relationship between economic factors and funding of housing development.

## Review of Related Studies

### *Effect of Legal and Regulatory factors on Funding of Housing Development*

According to the Comptroller's Handbook (2013) one of the key elements of risk in Commercial Real Estate (CRE) lending is the cyclical nature of real estate markets where, as markets peak and decline, banks with large concentrations of CRE loans may suffer considerable distress. While the banking industry cannot accurately predict or control the timing of the real estate business cycle, banks that demonstrate faithful adherence to prudent lending practices and regulatory guidance can keep losses from CRE lending to a manageable level, even when markets experience significant stress. Investment Climate (2013), reports that in the construction industry the degree of information asymmetry between the buyer and seller is so high and so potentially harmful to the public that the only alternative is for governments to establish a good-practice regulatory framework with very robust and efficient compliance mechanisms.

Sometimes regulations can be too restrictive too has a negative impact on housing. Glaeser, Gyourko and Saks (2005a), and Cheshire and Hilber (2008) have highlighted that huge costs of land use regulations that are experienced in metro areas such as New York, San Francisco or London caused by tight land use controls that severely constrain the supply of space made available for new construction and these in turn raises property prices enormously. Kimani and Musungu (2010) showed the failure in enforcement of already existing regulations has dire consequences in the construction industry in Kenya by pointing out that hardly 30 percent of the urban centers are planned and even where plans are available they are rarely enforced. They also observed that the building and construction industry is also guided by a multiplicity of institutions. Gacheru and Diang'a (2015) while studying the regulation of contractors and challenges of enforcement of NCA mandate reported that contractors felt that the integrity of the Authority is compromised by corruption and other malpractices; recommending enforcement of integrity, ethics and punishment of corrupt NCA officers and also increase awareness of good practice through print and electronic media, presentations in institutions, public forums and lectures, and frequent road shows. The report 15<sup>th</sup> Scorecard (2014) on the status of the land registries in Kenya reported that reforms are needed in the land registries across the country so as to improve efficiency in service delivery, these being; computerization of land records, civic education on the various land reforms processes and implementation strategy, capacity building for the Lands Ministry staff, ease of accessing information from the land registries, reduction of transaction costs, timeliness in carrying out transactions, and creation of transparency by doing away with corrupt practices.

Alternative Dispute Resolution (ADR) is a technique to settle disputes outside a courtroom. There are a number of ways to use ADR in real estate cases; but the ones mostly used are negotiation, mediation, and arbitration (Taylor and Brown, 2014; Lebovits and Hidalgo, 2010). Most conflicts in the construction industry are resolved by use of ADR for most of them are complex (Lebovits and Hidalgo, 2010). They aver that construction disputes commonly involve technical issues that, if tried in court, would require serious efforts to educate the judge and in arbitration, parties can choose industry specialists as neutrals who can have experience as arbitrators, experts, or both. A robust institutional conflict resolution and appeal system is essential for providing procedural fairness.

There are three major land tenure systems in Kenya, namely: public ownership, communal (customary) ownership and private ownership (Constitution of Kenya, 2012, Anjarwalla & Khanna, 2012) aver that with the introduction of the new Constitution a raft of changes were introduced that do have impact on the provision of funds for construction of housing affecting both the financier and the developer. A significant change on ownership of land by foreigners in that, freehold land cannot be owned by a non-Kenyan citizen and a leasehold interest of over 99 years cannot be held by a non-Kenyan citizen. Under the Land Registration Act (2012), a spouse will acquire an interest in their spouse's land if the spouse contributes by labor or other means to the productivity, upkeep and improvement of the land. Anjarwalla and Khanna (2012) point out that with eviction, if it is deemed unlawful, a tenant who is evicted contrary to the terms of his lease is immediately relieved of the obligation to pay rent or other monies due under the lease or from performance of any covenants of the lease. The Land Act (2012) then implies that a tenant is considered as having been evicted if on the commencement of the lease the tenant is unable to obtain possession of the land or buildings or part thereof as a result of any action or non-action of the landlord contrary to the express or implied terms of the lease. A tenant who is aggrieved as a result of unlawful eviction may commence an action against the landlord for remedies. Landlords and financiers of new developments need to be careful of this provision (Anjarwalla and Khanna, 2012). Public regulation of the use of privately owned land in Kenya is exercised in three major ways, namely: land planning and zoning; outright prohibition of harmful activities; and licensing processes (Sifuna, 2009). The necessity of land planning and zoning is to ensure efficient and sustainable utilization and management of land and land-based resources (Kameri-Mbote, 2002).

Legislature that govern the banking industry in Kenya are the Constitution of Kenya, Banking Act 2010, Prudential Guidelines 2012, The Prevention of Terrorism Act 2012, Proceeds of Crime and Anti-Money Laundering 2012 (CBK, 2012; KSL, 2013; KLR, 2012 and Kenya Gazette Supplement, 2012). Pitschke and Bone-Winkel (2006) in their empirical analysis that

comprised a survey of a total of 205 banking institutions pertaining to commercial real estate financing while using a deductive approach observed that the laws governing the banking sector play a big role in dictating how finance is available to real estate industry that comprises housing development. One of those global laws recently introduced being the Basel Accord in 2004. The Basel Accord II intention was to align capital adequacy assessment more closely with the key elements of banking risks and to provide incentives for banks to enhance their risk measurement. Basel III is the new global regulatory standard governing banks' capital and liquidity whose aim is to improve the resilience of banks. The importance of implementation and closer supervision of the banking systems as they are spelt out by the Basel II and Basel III came to the fore after the recent global financial crisis, that showed that the whole monetary transmission mechanism has changed (Gambacorta and Marques-Ibanez, 2011) due to deregulation, financial innovation and the increasing role of institutional investors leading to changes in banks' business models and the more intensive use securitization market.

The study then sought to test the effect of Legal and Regulatory factors on Funding of housing. Thus the following hypothesis was specified.

**H<sub>0</sub>:** Legal and Regulatory factors do not influence the funding of housing

**H<sub>1</sub>:** Legal and Regulatory factors do influence the funding of housing

### ***Effect of Stakeholder Factors on Relationship of Legal and Regulatory Factors and Funding of Housing***

The moderating role of stakeholders in making decisions in investment which in effect touch on financing, was empirically shown by Roberts and Henneberry (2007), that in France, Germany and the UK the decision-making process, as perceived by institutional investors, tend to "collapse down" the decision-making process, taking shortcuts that potentially leave the decision-making process open to the influence of bias, judgment and sentiment.

Abdul-Rahman et al. (2010) came to the conclusion that the issue of professional ethics plays an important role in quality-related problems in a construction project for in their questionnaire survey that they conducted in the construction industry in Malaysia. This is not unique to that market for even in Kenya we have the same with many reported cases of collapsing buildings (MFCP, 2011; Mathenge, 2012) and in Nigeria the construction industry is plagued with corruption and fraudulent practices (Olufemi, Fniob and Omolayo,2013). Jordan (2005) stated that unethical behavior is taking a growing toll on the reputation of the construction industry.

The main stakeholders in the construction industry are the developers, contractors, consultants, suppliers, financiers, the government, buyers and sellers in real estate and they do

influence financing differently due to their unique interests. Chalevas and Tzovas (2010) empirically demonstrated that the mandatory corporate governance mechanisms introduced in the Greek market decreased firms' weighted average cost of capital, and increased firm's financial leverage, this can be construed to mean that corporate governance issues will have an effect on the accessibility of finances to the developers in the Kenyan market.

The study also sought to examine the moderating effect of stakeholders on the relationship between Funding of housing and Legal and regulatory factors. The following hypothesis was tested:

**H<sub>0</sub>:** Stakeholders do not have a moderating influence on funding of housing

**H<sub>1</sub>:** Stakeholders have a moderating influence on funding of housing

## RESEARCH METHODOLOGY

A random sample of 212 financial institutions comprising commercial banks and micro finance institutions (MFIs) was drawn from a population of 451 branches in Nairobi got from 43 commercial banks, 9 deposit-taking MFIs and three other financiers (Shelter Afrique, East African Development Bank and International Finance Corporation) of housing development in Kenya. The researcher designed a questionnaire whose majority of the questions were Likert-type scales, and the respondents were asked to respond to each of the statements in terms of five degrees of agreement or disagreement. The dependent variable funding was ordinal in that different categories of funding were provided ranging from less than KES 100 million to greater than KES 400 million with intervals of KES 100 million.

One hundred and fifty eight (158) useable questionnaires were collected, which translated to a response rate of 74.5 per cent. They were considered useable in that they had less than 5% missing items. Factor analysis was used to see whether any data reduction was appropriate; descriptive analysis was used to draw out the characteristics numerically of both the respondents and the financial institutions, and correlation analysis to establish if there exists any relationship between the independent variable (legal and regulatory factors) and the dependent variable (funding of housing). Several diagnostic tests were carried out to establish the suitability of the multiple regression analysis to be used, these are; multicollinearity to test the correlation of the independent variables, test of parallel lines to examine the equality of the different categories and whether the assumptions of the correlation between independent variable and dependent variable does not change for dependent variable's categories, also parameter estimations do not change for cut-off points held, the last diagnostic test was test of goodness of fit to test how well the model fits the data. The results of these diagnostic tests



indicated that it was appropriate to use the ordinal logit regression analysis which was used to test the relationship between the dependent and independent variables.

## ANALYSIS AND FINDINGS

### Descriptive Analysis – General Information

#### *Education of the Respondent*

The study found that 98.7% of the respondents had a first degree and higher therefore highly educated.

#### *Total Amount Lent out for Housing Development*

The study found that majority at 43% of the financial institutions Nairobi branches advance loans worth less than KES. 100 million per branch, as shown in Table 1 below, while 21% advance loans between KES. 100 – 200 million and 14% between KES. 201 – 300 million. Only 22% advance loans for housing development of more than KES. 300 million.

Table 1: Total Amount Lent out for Housing Development

TOTAL AMT. LENT OUT (KES.)	Frequency	Valid Percent	Cumulative %
<100m	66	42.9	42.9
100-200m	33	21.4	64.3
201-300m	21	13.6	77.9
301-400m	6	3.9	81.8
>400	28	18.2	100.0
Total	154	100.0	

#### *Percentage of Total Loans Advanced, Average Default Rate and Average Lending Rate*

The study found out that the average of the total loans advanced for housing development by the Nairobi branches is 32.9% with a median and mode of 30% of the total loans for housing development as shown in Table 2 below. The average default rate on housing development loans was 6.3%. The average lending rate for housing development was found to be 16.33%.

Table 2: Percentage Total Loans Advanced, Average Default Rate and Lending Rate

	Percentage of total loans advanced from your branch for housing development	Average default rate observed in housing development in your branch	Average Lending Rate for Housing Development
Mean	32.9	6.30	16.33
Median	30.00	3.00	16.00
Mode	30.00	0.00	15.00
Std. Deviation	23.1	10.60	

## Factor Analysis

### ***KMO and Bartlett's Test***

As shown in Table 3, KMO value is 0.784 (greater than 0.5) and the chi square for Bartlett's Test is 1133.115 with a p value of 0.000. These two tests suggest that factor analysis is appropriate for legal and regulatory factors.

Table 3: KMO and Bartlett's Test for Legal and Regulatory Factor Construct

KMO Measure of Sampling Adequacy.		0.784
Bartlett's Test of Sphericity	Approx. Chi-Square	1133.115
	df	171.000
	Sig.	0.000

The value of KMO for stakeholders constructs was 0.743 (greater than 0.5) implying that stakeholders construct can be factor analyzed (Table 4). The chi square for Bartlett's test was 242.532 with a p value of 0.000 that was significant at 1 percent level indicating that factor analysis is appropriate.

Table 4: KMO and Bartlett's Test for Stakeholders Construct

KMO Measure of Sampling Adequacy		0.743
Bartlett's Test of Sphericity	Approx. Chi-Square	242.532
	df	6
	Sig.	0.000

### ***Factor Analysis Results***

Table 5 presents the rotated component matrix for legal and regulatory factors. The results show that all items under this construct had factor loadings greater than 0.5 (rounded off to one decimal place) suggesting that the items are strongly correlated with either component one, two, three, four, five or six, representing, Dispute Resolution Mechanisms, Legal and regulatory efficiency, Banking regulations, Limitations on Lending, Changes in Land Legislature, and Construction regulations. Under component Dispute Resolution Mechanisms, *Efficient Law Enforcements in place*, *Efficiency of Regulation of Security Exchange*, *Efficiency in Resolving Commercial Disputes*, *ADR for Property Disputes and Awareness of Existence of ADR* had factor loadings of 0.477, 0.856, 0.865 and 0.767 respectively. Component Legal and regulatory efficiency had *Reporting as per Anti-Terrorism Act*, *Reporting as per Anti-Money Laundering Act*, *Number of regulatory bodies*, *Efficient Law Enforcements in place*, *Efficiency of Regulation*

of Security Exchange and Efficiency in Resolving Commercial Disputes had factor loadings of 0.577, 0.516, 0.457, 0.854, 0.708, and 0.569 respectively. Under component Banking regulations, *Effect of Prudential Guidelines 2012*, *Reporting as per Basel II & Basel III*, *Reporting as per Anti-Terrorism Act* and *Reporting as per Anti-Money Laundering Act* had factor loadings of 0.770, 0.810, 0.515, and 0.602 respectively. *Low income loans - Government Financial Management Act*, *Minimum Liquid Assets - Banking Act 2012* and *Limit on Interest recovered - Banking Act 2012* had factor loadings of 0.880, 0.619, and 0.640 respectively all under component Limitations on Lending. Those items that were strongly correlated with component Changes in Land Legislature were *Charge of matrimonial home*, *Reporting on Variation of Interest Rates*, and *State of the lands registries* which had factor loadings of 0.647, 0.683, and 0.704 respectively. With component Construction regulations, there was *NEMA regulations*, and *Building Codes* which had factor loadings of 0.799 and 0.764 respectively. The findings indicate that laws and regulation factors can be measured using six components.

Table 5: Rotated Component Matrix for Legal and Regulatory Factors

Legal and Regulatory Factors	Dispute Resolution Mechanisms	Legal & Regulatory Efficiency	Banking Regulations	Limitations on Lending	Changes Land Legislature	Construction Regulations
Charge of Matrimonial Home	0.094	-0.078	0.126	-0.028	0.647	0.14
Reporting on Variation of Interest Rates	0.138	0.102	-0.037	0.195	0.683	-0.003
State of the Lands Registries	-0.033	0.097	0.114	0.024	0.704	0.192
NEMA regulations	0.098	-0.028	0.238	-0.048	0.300	0.799
Building Codes	0.199	0.232	-0.026	0.258	0.162	0.764
Low income loans - Govt. Fin. Management Act	0.087	-0.004	-0.066	0.880	-0.016	0.061
Min. Liquid Assets - Banking Act 2012	0.181	0.097	0.339	0.619	0.121	0.145
Limit on Int. recovered - Banking Act 2012	-0.071	0.274	0.323	0.640	0.214	0.012
Effect of Prudential Guidelines 2012	0.286	-0.077	0.770	0.003	0.260	0.025
Reporting as per Basel II & Basel III	0.195	0.181	0.810	0.179	0.084	0.066
Reporting as per Anti-Terrorism Act	0.022	0.577	0.515	0.240	-0.091	0.350
Reporting as per Anti-Money	0.008	0.516	0.602	0.244	-0.115	0.321

Legal and Regulatory Factors	Dispute Resolution Mechanisms	Legal & Regulatory Efficiency	Banking Regulations	Limitations on Lending	Changes Land Legislature	Construction Regulations
Laundering Act						
No. of regulatory bodies	-0.025	0.457	0.374	0.161	0.344	0.074
Efficient Law Enforcements in place	0.218	0.854	-0.051	0.073	0.060	-0.056
Efficiency of Regulation of Security Exchange	0.327	0.708	0.160	0.078	0.019	0.197
Efficiency in Resolving Commercial Disputes	0.477	0.569	0.090	-0.015	0.098	0.004
Specialized Courts for Property Disputes	0.856	0.199	0.174	0.090	-0.012	0.110
ADR for Property Disputes	0.865	0.157	0.043	0.125	0.003	0.170
Awareness of Existence of ADR	0.767	0.170	0.201	-0.003	0.264	0.009

As shown in Table 6, all items under stakeholder construct had factor loadings greater than 0.5 indicating that the items are strongly correlated with component one which sought to find their suitability in their fields. Factors Contractors are *Knowledgeable and Competent*, *Consultants are Competent*, *Developers are Competent & Trustworthy* and *Existence of Skilled Labor & Good working conditions* had loadings of 0.790, 0.852, 0.854 and 0.741 and all are heavily loaded to component one. This finding suggests that these items can be used as a good indicator of stakeholders.

Table 6: Component Matrix for Stakeholders Construct

Stakeholder	Suitability in Their Field
Contractors are Knowledgeable & Competent	0.790
Consultants are Competent	0.852
Developers are Competent & Trustworthy	0.854
Existence of Skilled Labor & Good working conditions	0.741

## Descriptive Analysis

### ***Respondents on Extent Effect of Legal and Regulatory factors on Funding of Housing***

The responses in Table 7 were given as Strongly Agree and Agree combined to give a percentage when it came to measuring effect of legal and regulatory factors on funding of housing.

Table 7: Extent Legal and Regulatory factors have on Funding of Housing

	<b>Strongly Agree &amp; Agree</b> (%)
<b>Dispute Resolution Mechanisms</b>	
Efficiency in Resolving Commercial Disputes	46
Existence of Specialized Courts for Property Disputes	47
Existence of ADR for Property Disputes	53
Awareness of Existence of ADR	44
<b>Legal &amp; Regulatory Efficiency</b>	
No. of regulatory bodies	70
Efficient Law Enforcements in place	68
Efficiency of Regulation of Security Exchange	50
<b>Banking Regulations</b>	
Effect of Prudential Guidelines 2012	73
Reporting as per Basel II & Basel III	61
Reporting as per Anti-Terrorism Act	51
Reporting as per Anti-Money Laundering Act	60
<b>Limitations on Lending</b>	
Loaning to the poor as per Govt. Fin. Management Act	51
Min. Liquid Assets as per Banking Act 2012	63
Limit on Interest Rate recovered as per Banking Act 2012	72
<b>Changes in Land Legislature</b>	
Charge of Matrimonial Home	83
Reporting on Variation of Interest Rates	72
State of the Lands Registries	80
<b>Construction Regulations</b>	
NEMA regulations	81
Building Codes	82

**Respondents on Effect of Moderating Stakeholders Factors on Funding of Housing**

The responses in Table 8 below were given as Strongly agree and Agree combined to give a percentage when it came to measuring moderating factors effect on the Relationship between Funding of housing and Legal and regulatory factors.

Table 8: Extent Moderating Factors have on Funding of Housing

	<b>Strongly Agree &amp; Agree</b> (%)
Suitability in their Fields	67
Contractors are Knowledgeable & Competent	83
Consultants are Competent	83
Developers are Competent & Trustworthy	69
Existence of Skilled Labor & good working conditions	67

## Correlation Analysis

### ***Correlation between Legal and Regulatory factors and Funding of Housing***

The results shown in Table 9 indicate that the Pearson correlation coefficient between Fund of housing and Legal and Regulatory factors was -0.005 with a p value of 0.951. This indicates that Funding for housing is negatively related with Legal and Regulatory factors but the relationship is not statistically different from zero.

Table 9: Correlation between Legal and Regulatory factors and Funding of Housing

	<b>Legal and Regulatory Factors</b>	
<b>Funding of Housing Development</b>	Pearson Correlation	-0.005
	Sig. (2-tailed)	0.951
	N	153

### ***Correlation between Funding of Housing and Stakeholders***

Table 10 presents the correlation results between stakeholders and funding of housing development. Pearson correlation coefficient for the relationship between stakeholders and funding of housing was -0.107 with a p value of 0.187. This indicates that Funding for housing is negatively related with Stakeholders factors but the relationship is not statistically insignificant.

Table 10: Correlation between Funding of Housing and Stakeholders

	<b>Stakeholders</b>	
Funding of housing development	Pearson Correlation	-0.107
	Sig. (2-tailed)	0.187
	N	154

## Regression Analysis

### ***Regression Analysis - Legal and regulatory factors and Funding of Housing***

The results for effect of legal and regulatory factors on funding of housing show that the coefficient for legal and regulatory factors was 2.154 with a p value of 0.047 (Table 11). The significant p value implies that legal and regulatory factors do significantly influence funding of housing. The positive sign of the coefficient indicates that the relationship between Legal and regulatory factors and Funding of housing is positive.

According to the findings, the study rejects the null hypothesis that legal and regulatory factors do not influence funding of housing.

Table 11: Effect of Legal and regulatory factors on Funding of Housing Development

Parameter	Estimate	Standard Error	Significance
Legal and regulatory factors	2.154	1.085	0.047

### ***Moderating influence Stakeholders have on Relationship between Funding of Housing and Legal and Regulatory factors***

To test for the moderating effect the study used the regression method independent variable (Legal and regulatory factors) was interacted with the moderator. The results Table 12 show that the coefficient between stakeholders construct and legal and regulatory factors was -1.087 with a significant p value of 0.032, thus significant at 5%. This finding suggests that stakeholders moderate the relationship between legal and regulatory factors and funding of housing.

Table 12: Moderating influence Stakeholders have on Funding of Housing and Legal and Regulatory factors

Parameter	Estimate	Standard Error	P value
Stakeholders	0.153	1.709	0.929
Legal and Regulatory factors and Stakeholders	-1.087	0.507	0.032

## **DISCUSSION OF RESULTS**

The regression analysis results show that there exists a positive relationship between legal and regulatory factors and funding of housing development and the coefficient was significant at 5 percent. Improvement in the items under the legal and regulatory factors construct increases the probability of a lender moving to higher financing tier, thus the positive effect. This is because of the fact that improvement in these factors means that the contracts can be enforced in a timely and efficient manner, there is alternative and faster means of dispute resolution, money laundering is kept at bay, and all this will encourage banks to lend out more. Efficiency in the two industries is paramount and this can only be ensured by the laws and regulations therein. The report by The World Bank Group (2013) concurs with this when it ties accessibility of funds by developers to regulations or practices in the construction industry in that one negative outcome associated with inefficient and corrupt construction-permit and inspection systems is the loss of a significant opportunity for existing or would-be entrepreneurs to mortgage their buildings to access development funds.

Regulations in the banking industry presented by the study due to their being launched recently, did have a fair effect on the funding for housing development, these are the Prudential

Guidelines 2012, while the others did not have much influence on funding for housing development, these are reporting demands as per Basel Accords, as per the Anti-money Laundering Act and as per Anti-Terrorism Act respectively, with reporting as per Anti-Terrorism Act having the lowest influence.

This study found that the default rate on housing development loans stood at 6.3%, which has been a matter of concern since NPLs have been rising steadily over the years. Key improvement in the banking sector in Kenya between 2000 and 2012 was the large reduction in non-performing loans (NPLs) which saw the NPL ratio fall from an average of 37% in 2000 to 5% in 2012, this being attributed to the stricter regulatory regime that was put in place after 2000, the introduction of credit reference bureaus and consistent economic growth over the period (CBK Supervision Report, 2000; 2012). The banking sector in Kenya is deemed stable as level of non-performing loans is one of the measures of stability in the banking sector together with capitalization, and liquidity (Upadhyaya and Johnson, 2015).

Concerning regulation in the construction industry, the study found that the respondents think highly of what is in place, for example, NEMA, and the building codes. This may be because there are such efforts in the industry, they feel comfortable advancing loans knowing that there are in place regulatory bodies in charge of the environmental and building issues, though this was with no indication of the efficiency of the bodies. Bowen et al (2007), pointed out that performance and service delivery in the construction industry can be hampered by negative practices such as lack of ethical codes of conduct, corruption and bribery, favoritism, unfair conduct, strict rules and overriding of the audit process which can be avoided by existence of good laws and regulations.

The study found that efficient law enforcement mechanisms are fairly in place, however according to UNEP (2013) the greatest legislative impediment in the building industry today is the law enforcement procedures. The administration of the various statutes is carried out by several agencies that are not well coordinated such that if one fails it holds up the functions in other areas. Most financiers felt that Alternative Disputes Resolutions mechanisms do not exist and there's lack of awareness of their existence by all parties involved.

Recent changes introduced in the Land Act 2012, seem to have a big influence on funding for housing development as expected, when it comes to charges on matrimonial homes. State of the land registries seems to be of paramount importance to the financiers when it comes to advancing loans for housing development. An adequate property registry allows potential lenders to evaluate the track record and the liens that rely on the properties they would finance, and hence, by increasing transparency, enhance the value of the mortgage-backed assets (Warnock and Warnock, 2012).



The moderating effect of the stakeholders was shown by the study; it was negative at 5% significance level indicating that their suitability in their areas of operation can have a negative effect on the relationship between funding of housing development and legal and regulatory factors in that if they do not abide in the laws and rules in place this will affect that relationship negatively.

## **CONCLUSIONS**

The results show that there was a significant positive relationship between legal and regulatory factors and funding of housing development in Kenya. The main reason for this is that legal and regulatory factors dictate the risk enforceability of contracts. Loans being a form of contract, the strength of the legal environment to ensure that there is minimal default and efficient ways of dispute resolution will increase funding towards housing development, and hence the positive relationship.

Building standards and legal and institutional infrastructure allowing for issuance of titles and a system for recording the ownership of property through a publicly accessible title registry will go a long way in spurring growth in the housing sector. The positive coefficient indicates that the probability of more funds being borrowed to finance housing development (moving from one tier to another) increases with increase or improvement in Legal and regulatory factors. Enough laws and regulations are in existence, area of improvement according the study is efficient implementation.

## **RECOMMENDATIONS**

Government and policymakers should strive to improve the legal environment in order to boost funding to housing development. The legal and regulatory framework should be effective enough to allow enforceability of contracts because this would improve efficiency of the systems in place. On its part the government needs to harmonize the various laws and regulations that govern the construction industry as the study found that this may impede efficiency in the systems therein.

Due to the restrictive nature of the recently implemented laws in the banking sector, there is a demand of costly administrative procedures and the housing development sector ought to look for alternative methods of funding. Pitschke & Bone-Winkel (2006) posits that these can be; private equity, or strategic alliances that are inter-firm co-operative arrangements with real estate public companies, pension funds or insurance companies, whose core competence is not real estate development but have the necessary capital.

The government can come up with regulations that specifically support the housing sector to work with collaboration with financial institutions as pointed out by Saunders and Cornett (2011) that credit allocation regulation are used to support the financial institutions' lending to socially important sectors.

The government and the professional bodies should enhance education on ethics so as to bring down the cases of malpractices reported in the construction industry. Harrington and Moussalli, (2005) and Polo (2008), highlighted the need of continuous training of professionals by their affiliate registration institutions and also employers on how to diagnose potentially problematic situations, this forming also the code of ethics providing clear definitions of wrongdoing.

Policy makers in the building industry ought to revise the Building Codes and especially move from formulation stage to implementation so that innovative building materials can be adopted and revolutionize the construction industry thus bringing down cost of construction and time period of construction.

## **LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FURTHER RESEARCH**

One major limitation of this study was its confinement to only legal and regulatory factors; other factors need to be studied together with this. The other limitation is the use of cross-sectional data. The effects of factors that do have an effect on funding in the housing development sector needs to be studied over longer time periods thus need of use of longitudinal data. In-depth research should be carried out on efficiency of the legal and regulatory efforts put in place and their effect on funding of housing development in Kenya. This can be done using research methodology like data envelop analysis.

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