Liquidity Risk Management Practices and Performance of Real Estate Construction Projects in Busia County, Kenya

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Abstract
Although Real estate Housing Industry Projects continue to gain popularity and awareness in Kenya and abroad, many Real Estate Housing Companies do not have effective financial risk management practice systems established. In Busia County, there are problems of lost time and increased costs that cannot be regained occasioned by construction issues which are mostly experienced as a result of land disputes that prolong the completion time of most real estate construction projects in the County. Notunless this problem is addressed, the County will continue lagging behind in terms of performance of real estate construction projects. As such, there will always be a problem of prevalence and incessant abandonment of real estate construction projects creating serious financial risks that if not effectively addressed would influence Real Estate Construction Projects Performance hence creating win –win situation for both the contractor and its customer. The objective of this study was to establish the extent to which liquidity risk management influences performance of real estate construction projects in Busia County. The descriptive research design used in this study helped to explore the link between the independent and dependent variables. The composite mean and composite deviation for the Liquidity Risk Management were 4.05 and 0.941 respectively; implying that using the Likert scale, the respondents agreed that Liquidity Risk Management Influenced Performance of real estate construction projects in Busia County. The overall correlation coefficient for Liquidity Risk Management and Performance of real estate construction projects in Busia County was found to be 0.662 with a p-value of 0.000 < α=0.05. The study found that there was a significant relationship between Liquidity Risk Management and Performance of real estate construction projects in Busia County; leading to rejection of the null hypothesis and acceptance of the alternative hypothesis. The study concluded that there was a significant influence of Liquidity risk management on Performance of real estate construction projects in Busia County. The study recommended that in order to encourage home ownership, the government should use social security payments to pay for housing. Secondly, citizens of working age should be encouraged to make monthly contributions of at least 20% of their income to the central provident fund and are then entitled to draw down a portion of their savings as a down payment for housing and to service monthly mortgage installments. The policy implication to this study is to create awareness to the policy makers that expansion of home ownership is a core element of housing policy since it encourages and promotes economic growth, encourages saving and investment which can best be determined by the level of liquidity in the economy.

Keywords: Liquidity Risk, Management Practices, Performance of Real Estate Construction Projects

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Introduction

The real estate sector has enormously contributed to the development and progress of many countries in the world and is often considered as the leading indicator of the economic health of any economy. Real estate refers to any physical property or improvements affixed to the land and other developments on it including land itself. Real estate property development is a complex business, covering activities that range from the renovation and release of existing buildings to the purchase of raw land and the sale of improved land or parcels to others for a profit (Ajello, Andrea, Thomas, David and Taisuke, 2015). The International Monetary Fund (IMF) (2015) argues that real estate investment plays a crucial role in providing job opportunities, sheltering households, enhancing income distribution and alleviating poverty. Moreover, since real estate construction industry is seen as the most significant industry in any economy, there is need to address a myriad of risks that may lead to massive financial losses right at the initial stage of the projects or else they will impact on the successful completion of these projects within time, budget, in accordance with requirements and satisfaction of stakeholders (Nguyen, Ogunlana and Lan, 2017).

Worldwide, real estate development has played a great role in raising the economies of countries over time. For instance, structured real estate in the USA and Canada is almost as old as the countries themselves (Svensson, 2019). As it is today, more than half of the world’s population lives in town centers and more than one third of them live in shantytowns and is expected to further upsurge by over one billion in a decade. Shantytowns are expected to grow at a faster pace unless 35million housing units are made available yearly to house the fast growing population (UN-Habitat, 2019). Tackling planning risk has taken a centre stage in the USA real estate projects and must be done alongside with engineering, building, and other project ideas (Bank for International Settlements, 2014). This statement was further reinforced by Dynan (2016) who argues that deprived planning cost USA between 20-60% of the real estate investment because of reworks and eventual poor performance during the recession periods of 2008.

With the rapid growth of the national economy in recent years, the real estate industry has also begun to grow rapidly and is showing a good momentum of development. However, the risk of real estate venture has further increased greater and greater. Therefore, decisions about the real estate project investment should predict the risk correctly but not only consider the benefits because the benefits and risks exist at the same time since the more the benefit, the more the corresponding risk. This has made most local and foreign scholars and economists develop worry about this problem. Bonnet, Bono, Chapelle and Wasmer (2019)
point out that deterioration in real estate markets across large parts of Europe since 2007/2008 clearly demonstrate the significance of the real estate industry for the world economy clearly showing the impact of the financial crisis.

**Research Problem**

According to Bonnet et al. (2019), mainstream of property segments in the USA have resulted insignificantly to reduce real estate valuations due to financial crisis preceded by letdowns in the subprime mortgage market that displayed more itself in the USA in early 2007. As confirmed in the context of the fallout from Greece, Significant problems in the Eurozone as well as concerns about sovereign debt actually dominated the European capital markets in 2012. The impacts of the crisis have been back from investment banks to commercial banks entailing a back-to-basics approach for European real estate business lending going forward as seen from the lending paradigm which shows greater awareness of risk and risk management in real estate development. Consequently, creditors have become extremely aware of providing debt leading in this tight capital markets. For this reason, real estate development organizations will have to exhibit strong risk management practices not to be shut out of the access to equity or debt sources. In the long term, the global financial crisis may likely act as a catalyst to a change of the mentality of real estate development establishments making a risk management culture more entrenched in the industry (Stein, 2018).

As projected by UN-Habitat (2018), by 2050 the population of the world will upsurge to two billion and 60% of them will live in town areas. When viewed upon the development in terms of building, there is evidence that cities, all over the continent, are rapidly growing. Returning back by 1950, only two African cities had a population of more than one million in contrast to 48 cities today. African cities are developing quickly in terms of growth as manifested in Kampala, Uganda, which is one of the fastest growing cities in Africa and it has taken all directional growth during the last two decades. As such, the urbanization process of Uganda has been clogged by a number of challenges, for example in Kampala there is a problem of inadequate infrastructure and expansion of slum areas now covering at least 21% of the city area (Vermeiren, 2019). However, this growth has also contributed to chances for the real estate construction sector as the quantity of construction projects are increasing in the capital. These chances have contributed to a booming construction business making it, after agriculture, the second largest employer and a major
donor to the economic revival of the country attracting both domestic and international companies (Otim, Alinaitwe, Tindiwensi and Kerali, 2018).

Real estate venture in Kenya has done very well in terms of delivery of employment chances, offering cover to households, enhancing income supply and alleviating poverty although it has continued to fail to fulfill this basic role due to a number of unique factors that affect investment in the sector. First, interest rate increase decreased the growth of real household credit by 40% in early 1990s causing increase in house prices in Kenya and the ratio of household debt to GDP consequently affecting performance in this sector (IMF, 2015). International Monetary Fund (IMF) (2015) proclaims that, in the recent past, Kenya has seen an expansion in real estate investment because of decreased mortgage loans rate. This is strongly linked with a slowdown in real house prices and driven by a number of factors notably the quest for Kenyans to own homes, rural urban migration, increased diaspora remittances among others (Nzalu, 2017).

Kenyan real estate property covers single and multi-family residential dwellings, commercial and agricultural land, office space, go-downs and warehouses, retail outlets and shopping complexes (Lynn, 2018). Real estate is seen as an asset with limited liquidity relative to other investments. Apart from being capital intensive, it is highly cash flow dependent so if the factors affecting the growth in the investment are not well understood and managed by an investor, real estate becomes a risky investment. It is against this background that the researcher will carry out a study on the influence of credit risk management practices on performance of real estate construction projects in Kenya focusing mainly on real estate construction projects in Busia County.

**Objective of the Study**

To establish the extent to which liquidity Risk Management influences Performance of Real Estate Construction Projects in Busia County, Kenya.

**Research Hypothesis**

\[ H_0: \text{There is no significant relationship between liquidity Risk Management and Performance of Real Estate Construction Projects in Busia County, Kenya.} \]
Literature Review

Liquidity is the ability of the project to satisfy its obligations, mainly of stakeholders. Real estate construction projects loans are ordinarily illiquid. The conversion of Real estate construction projects loans to cash can be accomplished through many ways, among them are: refinancing the loan with another lender and through the sale of the loan to an investor by securitizing the loan or through normal repayment by the borrower; or by serving as collateral for borrowings (Comptroller’s handbook, 2018). Sales of Real estate construction projects loans are difficult to implement largely because of their lack of uniformity. Different from consumer loans, the due diligence process consumes a lot of time and is very expensive for a prospective purchaser due to variations in property type, location desirability, tenant quality and other rent roll characteristics, underwriting, loan structures and, documentation (Hilber and Vermeulen, 2016) and this affects project performance in this sector.

Real estate construction projects loans tend to be difficult to convert into cash in times of market stress, when potential funding sources reduce as lenders set aside fewer funds for real estate. This makes the sale of loans or their refinance by other lenders ineffective. Acquisition, Development, and Construction (ADC) loans are particularly inconvertible because of their short maturity period and because their full collateral value is not realized until the project is completed and reaches a stabilized level of occupancy or is ready for sale (Michalski and Ors, 2018) hence affecting real estate project performance. While securitization can provide liquidity, Real estate construction projects finance emanated for securitization employ underwriting, structures, and documentation that conform to standards established by market participants. Moreover, a more efficient due diligence process permitted by standardization results in better pricing since loans originated to be held in the bank’s portfolio typically do not meet the standards for this market. This makes securitization of these assets inefficient and likely to result in prices that represent a material discount to book value. However, Market disruptions before sale after origination can reduce the liquidity of loans that were originated for securitization (Piketty, 2014).

Although Real estate construction industry projects continue to gain popularity and awareness in Kenya and abroad, many Real estate construction companies do not have effective financial risk management practice systems established. Many critics have proposed that the responsiveness to the importance of implementing effective and efficient financial risk management and management practices which would
give the country more edge in the world market by enhancing effective project performance standards has not been remarkable.

There are problems of lost time and increased costs that cannot be regained consequently, many organizations now select contractors that have implemented financial risk management and management practices programs, as they know that by the contractors reducing its waste and costs, invariably, the cost of their parts will be less costly and lead to improved project performance. As such, there is always a problem of prevalence and incessant abandonment of real estate development projects creating serious financial risks that if effectively addressed, would influence real estate construction projects performance hence creating win–win situations for both the contractor and its customer. This prevalent and incessant abandonment has created numerous negative effects to real property values, not only limited to the owners, but also to residents, the built environment and the economy as a whole as witnessed in Busia county hence affecting these projects performance.

Abandonment of some Real estate construction projects in Busia County has continued to contribute to serious Credit risk since most loan borrowers continue to default repayment of their loans. This may be due to Construction issues, Market conditions, Regulatory changes, Interest rates, and Environmental liability. When the general level of credit default rises, Toni, Robert, Adrian and Jayson (2020) argue that banks typically experience a loss in economic value when the value of assets decreases more than the value of liabilities as mostly experienced by most countries during the 2008 US Recession which made many credit borrowers default the payment of their loans.

In addition, inflation has had an unfavorable effect on the demand for houses financed by mortgages in Busia County. Fluctuations in the rate of inflation tend to lead to corresponding fluctuations in construction activity and this rests on the facts that inflation and the anticipation of its continuation tends to raise interest rates, including mortgage rates, by an "inflation premium" needed to compensate the lender for the anticipated erosion in the purchasing power of the buyer’s claim hence affecting real estate construction projects performance. The increase in interest rate in turn puts high the annual payment needed to purchase a house of given value. This increased interest rate and consequential annual payment do not change the real cost of purchasing a house in that they are offset by the benefit to the debtor resulting from the gradual decline in the purchasing power of his/her debt and of his/her annual payment (Crowley and Kevin, 2017).
However, the increase in interest rates resulting from inflation has an important effect on the time profile of the flow of annual payments, expressed in terms of constant purchasing power. Consequently, this affects the performance of real estate construction projects. The current inflation experienced in the country has culminated in liquidity risk since it has led to gradual decline in purchasing power of potential customers of real estate construction projects in parts of the country including Busia County where only about 20% of housing units that have already been developed have found the market hence affecting its performance.

Liquidity risk comes about when a given security or asset cannot be traded faster enough in the market to prevent a loss or make the required gain. Real estate construction projects in Busia County continue to experience liquidity risk. As such over 80% of the developed units cannot be sold because of lack of liquidity in the market. In addition, these project developers are also experiencing serious asset liquidity since most of the developed units have not been able to find a market. Hence the developers have resorted to renting them out instead of selling as intended hence affecting project performance. Claudiu (2019) in his study found that asset liquidity comes about when an asset cannot be sold because of lack of liquidity in the market and Funding liquidity risk comes about when liabilities cannot be paid for when they are mature but can only be paid for at a lower price. According to the study, liquidity risk determines the level of project performance in real estate projects. Moreover, Dang (2019) further argues that the substantial level of liquidity is positively related with real estate Construction project profitability and hence project performance. These findings have created a glaring research gap worthy investigation in Busia County to find out what is happening in terms of real estate development. The researcher will therefore carry out research on the influence of liquidity risk management practices and project performance of Real Estate Construction projects in Busia County.

**Performance of Real Estate Construction Projects**

The demand for real estate construction projects has played a key role in its performance all over the world since it explains its rate of turn over. In a study carried out in Europe by the European commission (2018) on influence of demand on real estate construction projects performance found that increased demand for real estate construction projects upsurges its performance while decreased demand drops its performance as witnessed in 2008 recession period.
The study points out that, high flow of income within the economy influences housing demand, hence influencing real estate construction project performance. Moreover, Sanders (2019) in a study carried out in Pakistan to evaluate factors influencing performance of real estate construction projects defined quality of construction projects as performance to standards or value paid for the price. According to the study, approving quality production processes in real estate construction projects significantly gave a positive impact on project success as project staff is able to recognize and take measures to alleviate occurrence of risks to a greater extent. Moreover, surveillance of quality production of real estate construction projects, utility of risk management tactics and totally understanding the business area are serious success factors and had a significant impact on project performance. This is realized from clients’ increasing use of companies’ good image and endless improvement service for descent quality work as a basis for selecting prospective Project Quality Performance in Developing Countries for customer satisfaction.

Safety in the working place is a composite phenomenon, and the subject of safety outlooks and safety influences performance of the real estate construction industry to a larger extent all over the world. In a study conducted in Nepal to investigate risk management in real estate construction projects, the construction industry was found to be causing five times more fatalities than the manufacturing industry (Himalayan News Service, 2016). According to the study, lack of project safety undesirably affects the project time, cost or quality hence influencing its general performance. Moreover, in a study conducted in Switzerland on Risk Management of Small Real Estate Management Firms project performance (European commission, 2018) found that increase in the value of land in the cities and consequently the value of housing in real estate made other people invest their money in real estate.

Thus, many houses were established to an extent that some houses were left unfilled due to poor quality work that informed lack of safety during their development hence affecting performance of these projects. The study further argues that overproduction and lack of safety of real estate construction projects are the main reason of poor performance in this sector. Finally, in a study conducted on the influence of innovative strategy practices on project team effectiveness in real estate construction firms’ performance in Kenya, Muhoma and Kwasira (2016) found that Real estate development was a complex business, growing rapidly across urban areas. The objective of the study was to investigate how project development strategy influences real estate development performance. A strong positive correlation was found between all the
four strategies namely; communication planning, technology adoption, project leadership and team cohesion all influencing real estate construction project performance.

**Liquidity Risk Management and Performance of Real Estate Construction Projects**

Liquidity refers to the ability of the project to fulfill its obligations, mainly of stakeholders. Real estate construction projects loans are ordinarily illiquid. The conversion of Real estate construction projects credits to cash can be accomplished by: refinancing the credit with another lender; through the sale of the loan to an investor (either on a participation, whole-loan, or portfolio basis); by securitizing the loan; through normal repayment by the borrower; or by serving as collateral for borrowings (comptroller’s handbook, 2018). Sales of Real estate construction projects credits are difficult to implement largely because of their lack of uniformity. Unlike consumer credits, the due diligence process takes a long period of time and is expensive for a prospective purchaser because of differentiation in property type, property location desirability, tenant quality and other rent roll characteristics, underwriting, loan structures and documentation (Hilber and Vermeulen, 2020) and this affects project performance in this sector. Real estate construction projects credits tend to be difficult to convert into cash especially in times of market stress, when potential funding sources come down as lenders set aside little funds for real estate.

This makes the sale of credit or their refinance by other lenders as a strategy to manage concentrations ineffective. Acquisition, Development, and Construction (ADC) credits are particularly convertible into cash because of their short tenor and because the full collateral value is not realized until the project is completed and reaches a stabilized level of occupancy or is ready for sale (Michalski and Ors, 2018) hence affecting real estate construction project performance. While securitization can provide liquidity, Real estate construction projects loans originated for securitization employ underwriting, structures, and documentation that conform to standards established by market participants. This standardization permits a more efficient due diligence process and results in better pricing. Loans originated to be held in the bank’s portfolio typically do not meet the standards for this market, making securitization of these assets inefficient and likely to result in prices that represent a material discount to book value. Market disruptions after origination and before sale can reduce the liquidity of loans that were originated for securitization (Bonnet et al., 2018).
Liquidity risk is the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss or make the required profit. There are two types of liquidity risk: Asset liquidity which arises when an asset cannot be sold due to lack of liquidity in the market and Funding liquidity risk which arises when liabilities cannot be met when they fall due, but can only be met at an uneconomic price and can be name-specific or systemic (Grace, 2017). In a study conducted by Kinyua, Ogollah and Mburu (2018) on effect of risk management strategies on project performance of small and medium information communication technology enterprises in Nairobi, Kenya, lack of liquidity in the market was found to affect performance of small and medium information communication technology enterprises by over 20% of expected income annually.

The objective of the study was to investigate how liquidity risk influences project performance of small and medium information communication technology enterprises in Kenya. The methodological approach employed during the study was a survey. The target population was 1200 small and medium information communication technology enterprises. A sample of 120 information communication technology enterprises was administered with questionnaires. The data Collected was coded and analyzed for descriptive and inferential analyses using SPSS. The study found that lack of liquidity in the market affects performance of small and medium information communication technology enterprises in Kenya by over 20% of expected income annually. This finding was closely related with the Okuto (2019) study on financial risk exposure of fuel price changes in Airlines, who found that lack of liquidity in the market affects performance in Airlines operation. It was further supported by Dang (2019) study which pointed out that adequate level of liquidity is positively related with real estate construction project profitability and hence project performance.

In another study conducted by Lavinia (2020) in Romania on microeconomic factors affecting banks financial performance, project liquidity was found to be positively affecting the banks financial performance. The objective of the study was to investigate how liquidity risk influences bank performance in Romanian Banks. The methodological approach employed during the study was a survey. The target population was 200 Banks in Romania. A sample of 20 Banks was administered with questionnaires. The data Collected was coded and analyzed for descriptive and inferential analyses using SPSS. This finding was in contrast with (Said and Tumin, 2017) study findings conducted in China and Malaysia who found
that the liquidity level of banks has no relationship with their performance. The researcher will therefore need to determine if liquidity risk influences real estate construction project performance in Busia County.

Ahmed, Akhtar, and Usman (2018) conducted a study on risk management practices in Islamic Banks performance. The study was aimed at determining the firm’s level factors which have significantly influenced the risk management practices of Islamic banks in Pakistan. The study used credit, operational and liquidity risks as dependent variables while size, leverage, capital adequacy and asset management as explanatory variables for the period of four years from 2006 to 2009. The study concluded that the size of Islamic banks have a positive and statistically significant relationship with financial risks (credit and liquidity risk), whereas its relation with operational risk is found to be negative and insignificant. The asset management establishes a positive and significant relationship with liquidity and operational risks. The debt equity ratio and non-performing loans ratio have a negative and significant relationship with liquidity and operational risk. In addition, capital adequacy has a negative and significant relationship with credit and operational risk, whereas it is found to be positive with liquidity risk. The methodological approach employed during the study was a survey. The target population was 800 Banks. A sample of 80 Banks was administered with questionnaires. The data Collected was coded and analyzed for descriptive and inferential analyses using SPSS.

**Research Methodology**

Data was analyzed using descriptive and inferential statistics. Descriptive statistics involved quantitative and qualitative data analysis therefore it used measures of central tendencies such as frequency, percentage, and mean standard deviation, composite mean and composite standard deviation. While inferential statistics involved testing of research hypotheses using spearman correlation and regression analysis. The descriptive research design used in this study helped to explore the link between independent, moderating and dependent variables. The target population for this study was 166 Real Estate entrepreneurs who have already developed housing units in Busia County; 1664 tenants who currently occupy some of the units; two managers; one from Kenya National Bureau of Statistics (KNBS) and another one from the Ministry of Housing (MoH). This gave a total target Population of 1832 participants.
The sample size for this study was 298 tenants and 30 real estate entrepreneurs totaling to 328 drawn from a target population of 1664 tenants and 166 real estate entrepreneurs respectively using Yamane (1967) formula. In addition, two key personnel officers in charge having prerequisite experience in real estate development; one from KNBS and one from MoH Busia County were also included in the study. According to Yamane (1967), the decision about the sample size depends on a number of considerations and there is no one definitive answer, although this is mostly affected by considerations of time, size of the population, cost and the problem of non-response. Since the population for the study is 1832 which is considered large enough for the application of Yamane formula, the sample size of tenants and real estate entrepreneurs was appropriately determined at 95% confidence level (p = 0.05).

Results and Discussions
This section presents the study results which have been discussed based on thematic and sub-thematic areas. The thematic areas include: Questionnaires return rate, Demographic characteristics of the Respondents, Basic Tests for Statistical Assumptions of Regression Analysis, Performance of Real Estate Construction Projects, Liquidity Risk Management and Performance of Real Estate Construction Projects, Correlation analysis of Liquidity risk Management and Performance of Real Estate Construction Projects and Regression Analysis of Liquidity risk Management and Performance of real estate construction projects.

Questionnaire Return Rate
Out of the 328 questionnaires directed to the participants in the Real Estate construction projects in Busia County, 320 were suitably filled giving a return rate of 97.56%. The questionnaire return rate results are presented in Table one below.

<table>
<thead>
<tr>
<th>Table 1: Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
</tr>
<tr>
<td>Real Estate construction projects participants (Tenants and real estate entrepreneurs)</td>
</tr>
</tbody>
</table>

The high return rate was achieved because the researcher steadily followed up all the sampled respondents during data collection. The high return rate of 97.56% facilitated collecting of sufficient data that could be universal to determine the influence of credit risk management practices, on Performance of Real Estate
construction projects in Busia County. The Questionnaire return rate was considered satisfactory as per Mugenda and Mugenda (2003) and Kothari (2004) who recommended that a Questionnaire return rate beyond 50% is acceptable in research and subsequently satisfactory and contributes on gathering of enough data that could be generalized to represent the feelings of participants about the study problem in the target population.

**Demographic characteristics of the Respondents**

In order to appreciate the characteristics of participants the researcher was dealing with in the study, their contextual information was necessary. The study sought information from the participants on distribution by; gender, age, educational level and length of experience. The participants were asked to offer the demographic information. The results are offered and are further discussed in the following subsequent sub themes.

**Distribution of respondents by Gender**

It was essential to investigate the respondents’ gender to establish gender parity in management of Real Estate construction projects in Busia County. The information required on gender was significant to the government for policy decision making. The respondents were therefore asked to state their gender and the results are presented in Table two below.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>188</td>
<td>58.8</td>
</tr>
<tr>
<td>Females</td>
<td>132</td>
<td>41.2</td>
</tr>
<tr>
<td>Total</td>
<td>320</td>
<td>100</td>
</tr>
</tbody>
</table>

Table two above, shows that over 50% of the respondents totaling to 188 (58.8%) were males while their female colleagues were 132 (41.2%). The findings indicated that male Real Estate construction projects participants outstripped their female colleagues, implying that there was still gender parity in Real Estate construction projects. The implication of this result to the study is that the bulk of men devote their time and get engrossed in Real Estate construction projects to generate income for self-sustainability and hence enhance performance of Real Estate construction projects.

**Distribution of the Respondents by Age**
Research participants were also asked to offer their age to ascertain whether they were spread normally in terms of age group. Age representations across the age groups were used to ensure that the results represent views across all the age groups. The findings were analyzed to display respondents’ distribution by age category in terms of frequency and percentage as provided in Table three below.

Table 3: Respondents Age

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20 years</td>
<td>2</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>20-30 years</td>
<td>65</td>
<td>20.31</td>
<td>20.91</td>
</tr>
<tr>
<td>31-40 years</td>
<td>159</td>
<td>49.69</td>
<td>70.60</td>
</tr>
<tr>
<td>41-50 years</td>
<td>94</td>
<td>29.40</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>320</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table three above, shows that 159 (49.69%) of the participants were aged between 31 and 40 years, 94(29.4%) were aged between 41 -50 years, 65(20.1%) were aged between 20-30 years and 2(0.6%) were aged below 20 years. The findings on age spread revealed that a majority totaling to 253(79.09%) of the respondents were above 30 years, likened to a minority 67(20.91%) aged 30 years and below. The connotation of this finding to the study is that majority of the Real Estate construction projects participants were reasonably mature enough and had prerequisite experience pertaining Liquidity risk management Practices, project environmental factors and performance of Real Estate construction projects in Busia County and hence would have an impact positively on performance of Real Estate projects in Busia County, Kenya.

Distribution of respondent by level of Education

The respondents were also asked to show their level of education. The level of education of the respondent was important in providing knowledge for understanding the influence of Liquidity risk management and performance of Real Estate construction projects in Busia County, Kenya. Table four offers the respondents’ distribution by level of education.

Table 4: Respondents level of Education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-level</td>
<td>4</td>
<td>1.25</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>198</td>
<td>61.88</td>
</tr>
<tr>
<td>Post graduate</td>
<td>96</td>
<td>30.00</td>
</tr>
<tr>
<td>Others</td>
<td>22</td>
<td>6.87</td>
</tr>
</tbody>
</table>
The study findings showed that 198(61.88%) of the respondents had Bachelor degree level of education, 96(30%) had postgraduate level of education, 22(6.87) had other levels of education and finally 4(1.25%) had O-level of education. The consequence of this findings to the study is that majority totalling to 294(91.88%) of the participants had degree certificate, secondary level of education and hence were conversant enough to provide the study with reliable information on the Liquidity risk management and performance of Real Estate construction projects in Busia County and hence would have an influence positively on performance of Real Estate construction projects in Busia County, Kenya.

**Distribution of the Respondents by number of years in the Profession**

Research members were also asked to offer the number of years they have been in the Profession. The number of years by the members in the organization was required to establish whether they had the prerequisite experience in Liquidity risk management and performance of Real Estate construction projects in Busia County. The findings were scrutinized to show respondents’ distribution by number of years in the organization in terms of frequency and percentage as provided in Table five below.

<table>
<thead>
<tr>
<th>Length of time in profession</th>
<th>Frequency</th>
<th>Cumulative frequency</th>
<th>Percentage</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than up to 5 years</td>
<td>48</td>
<td>48</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>5-10 years</td>
<td>220</td>
<td>268</td>
<td>68.8</td>
<td>83.8</td>
</tr>
<tr>
<td>11-15 years</td>
<td>45</td>
<td>313</td>
<td>14.1</td>
<td>97.9</td>
</tr>
<tr>
<td>Over 16 years</td>
<td>7</td>
<td>320</td>
<td>2.1</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>320</td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table five, shows that 220(68.8%) of the respondents had been in the profession for a period between 5 to 10 years, 48(15%) of the respondents had been in the profession for a period less than up to 5 years, 45(14.1%) of the respondents had been the profession for a period between 11 to 15 years and 7(2.1%) of the respondents had been in the profession for a period 16 years and above. These findings shows that 272(85%) of the participants had been in their particular professions for at least 5 years. The connotation of this findings to the study is that majority of the respondents have been involved in Liquidity risk management decision making of Real Estate construction projects in Busia County for a considerable
number of years and hence had the necessary prerequisite background information in matters to do with Liquidity risk management decision making of Real Estate construction projects in Busia County.

**Performance of Real Estate Construction Projects**

Performance of Real Estate Construction Projects in this study was the dependent variable. Both theoretical and empirical review in this study showed that number of engaged housing units, Rate of return on project investment, Demand and supply of housing units, Number of Housing units existing, Number of unoccupied housing units are key pointers of Performance of Real Estate Construction Projects. Data was collected to measure ten pointers of Performance of Real Estate Construction Projects. The participants were therefore demanded to respond to the Items in the Likert scale of 1-5 where Strongly agree(SA)=5, Agree(A)=4, Neutral(N)=3, Disagree(D)=2 and Strongly disagree (SD)=1. The results were analyzed and presented using frequencies, percentages, means and standard deviations for each response in each item.

**Liquidity Risk Management and Performance of Real Estate Construction Projects**

Liquidity Risk in this study is defined as the process of controlling the dangers the real estate construction projects firms are likely to experience when addressing the challenge of making sales of their products. The participants were requested to give their opinions on their level of agreements or disagreements with the nine statements of Liquidity Risk on a Likert scale of 1-5 where Strongly agree(SA)=5, Agree(A)=4, Neutral(N)=3, Disagree(D)=2 and Strongly disagree. (SD)=1. The results were analyzed and presented using frequencies, percentages, means and standard deviations for each response in each item.

**Regression Analysis of Liquidity risk Management and Performance of real estate construction projects**

Simple linear regression was adopted to investigate how Liquidity risk influences performance of real estate construction projects. It was necessary to get the views of the participants on the influence of Liquidity risk and performance of real estate construction projects. The rationale of using the simple regression model was to establish how Liquidity risk as a predictor significantly or insignificantly predicted the performance of real estate construction projects.
The model summary sought to establish how Liquidity risk is a predictor that significantly or insignificantly predicted the performance of real estate construction projects. The model summary is presented in Table six below.

**Table 6: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.662</td>
<td>0.438</td>
<td>0.436</td>
<td>0.537</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Liquidity risk*

The model summary Table six indicated that there is a positive correlation (R=0.662) between Liquidity risk and Performance of real estate construction projects, and those predicted by the regression model. In addition, 43.8% of the variation in the Performance of real estate construction projects was explained by Liquidity risk.

The study sought to establish if the regression for ANOVA model was best fit for predicting Performance of real estate construction projects after use of Liquidity risk. The regression ANOVA results are presented in Table seven below.

**Table 7: Model ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>71.334</td>
<td>1</td>
<td>71.334</td>
<td>247.717</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>91.572</td>
<td>318</td>
<td>0.288</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>162.906</td>
<td>319</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Performance of real estate construction projects*

*b. Predictors: (Constant), Liquidity risk*

The ANOVA results indicated that (F-statistics (1,319) =247.717 is significant at P value 0.000< 0.05 implying that the predictor co-efficient is at least not equal to zero and hence the regression model results in significantly better prediction of Performance of real estate construction projects.

The study sought to establish whether there was influence of Liquidity risk and Performance of real estate construction projects. The regression coefficients results are in Table eight below.

**Table 8: Regression Coefficients**

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The simple linear regression coefficients result indicated that there was significant influence of Liquidity risk on Performance of real estate construction projects. The unstandardized coefficient of the constant term ($\beta_0 = 0; p < 0.05$) and Liquidity risk ($\beta_4 = 0.799; p < 0.05$) were statistically significant. Using the standardized beta value (0.476), Liquidity risk stood as the second best predictor among other predictor variables in predicting Performance of real estate construction projects. The regression model Liquidity risk was $y=0.710 + 0.799X_3$ implying that for each unit of interest rate risk, Performance of real estate construction projects marginally changed by 0.799 units. It was therefore concluded that Liquidity risk on Performance of real estate construction projects were positively and linearly related.

Conclusions and Recommendations

The research objective was to examine the extent to which Liquidity risk management influences Performance of real estate construction projects in Busia County. The simple linear regression coefficients as well as the Pearson correlation results indicated that there was significant influence of Liquidity risk management on Performance of real estate construction projects in Busia County. The small p-values; implied that there was a significant influence of Liquidity risk management on Performance of real estate construction projects in Busia County.

In order to encourage home ownership, the government should use social security payments to pay for housing. As such citizens of working age should be encouraged to make monthly contributions of at least 20% of their income to the central provident fund and then entitled to draw down a portion of their savings as a down payment for housing and to service monthly mortgage installments.


