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COMBINED FINANCIAL RISKS MANAGEMENT HABITS, AND PERFORMANCE OF REAL ESTATE CONSTRUCTION HOUSING PROJECTS IN KENYA: A CASE OF REAL ESTATE CONSTRUCTION HOUSING PROJECTS IN BUSIA COUNTY, KENYA

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ABSTRACT: *The study established how Combined Financial risk management habits influenced the performance of Real Estate Construction Housing projects in Busia County. Data was collected using questionnaires, focus group discussions and interview schedules and analyzed using descriptive and inferential statistics. Descriptive statistics involves quantitative data analysis while inferential statistics involves testing of research hypotheses using Spearman correlation and regression analysis. The study found that Combined Financial risk management habits influence performance of real estate construction housing projects in Busia County. The overall correlation coefficient for Combined Financial risk management habits and Performance of real estate construction housing projects in Busia County was found to be 0.637 with a p-value of 0.000 < α=0.05 implying that from the views of participants in the study, the results indicated that there was a significant relationship between Combined Financial Risk Management habits and Performance of real estate construction housing projects in Busia County. The simple linear regression coefficients as well as the Pearson correlation results indicated that there was a significant influence of Combined Financial risk management habits on the performance of real estate construction housing projects in Busia County.*

KEYWORDS: Combined Financial risk, Management habits, Performance of Real Estate Construction Housing Projects.

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INTRODUCTION

The real estate sector has effectively contributed to the development and growth of many economies in the world and is often deliberated as the leading indicator of the economic health of any economy. Real estate denotes any physical property or improvements affixed to the land and other developments on it including the land itself. Real estate property development is a complex business, surrounding activities that range from the facelift and release of present buildings to the purchase of fresh land and the sale of developed land or parcels to others for a profit (Ajello, Andrea, Thomas, David & Taiske, 2015). Real estate financing plays a crucial role in delivering job opportunities, shielding households, improving income distribution and easing poverty (International Monetary Fund, 2016). Furthermore, since the real estate construction industry is seen as the most important industry in any economy there is need to rank address of many risks that may lead to enormous financial losses right at the initial stage of the projects or else they will effect on the fruitful completion of these projects within time, budget, in accordance with specification and satisfaction of stakeholders (Nguyen, Ogulana & Lan, 2017).

Background of the study

Internationally, real estate development has performed an extreme role in raising the economies of nations over time. For instance, planned real estate in the United States of America (USA) and Canada is nearly as old as the countries themselves (Svensson, 2019). As it is nowadays, more than half of the world's population stays in urban centers and more than one third of them resides in slums and is estimated to further increase by over one billion in a decade. Shantytowns are expected to grow at an augmented pace unless 35 million housing units are made vacant annually to house the fast growing population (UN-Habitat, 2019). Address of planning and Combined Financial risk management habits has taken a centre stage in the USA real estate projects and must be done alongside with engineering, construction, and other project plans (Bank for International Settlements, 2014). This statement was further supported by Dynan (2016) who argues that poor 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 fast development of national economy in recent years, real estate industry has also begun to develop speedily and is showing a good impetus of development. However, the Combined Financial risk management habits have further increased to higher levels. Therefore, choices about the real estate project venture should foretell the Combined Financial risk management habits accurately but not only consider the profits because the profits and risks exist at the same time since the greater the profits, the greater the corresponding risk (UN-Habitat, 2019).This has made most domestic and foreign scholars and economists develop concern about this problem (Bonnet, Bono, Chapelle & Wasmer, 2019).

Weakening in real estate markets caused by Combined Financial risk management habits across large parts of Europe since 2007/2008 clearly demonstrates the significance of the real estate industry for the world economy resulting from the impact of the financial crisis. Greater part of property sectors in the USA have resulted insignificantly to decreased real estate estimates due to financial crisis lead by failures in the sub-prime mortgage market that revealed itself in the USA in early 2007 (Bonnet et al., 2019). As confirmed in the context of the upshot from Greece, significant hitches in the Eurozone as well as anxieties about sovereign debt really

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dominated the European capital markets in 2012. The impressions of the disaster have been back from investment banks to commercial banks entailing a back-to-basics approach for European real estate commercial loaning going forward as seen from the loaning paradigm which shows greater awareness of Combined Financial risk management habits in real estate development. Therefore, creditors have become extremely aware of delivering debt steering in this tight capital markets. For this reason, real estate development companies will have to demonstrate strong Combined Financial risk management habits not to be shut out of the access to equity or debt sources. On a long term, the global financial emergency may likely act as a reagent to a change of the mindset of real estate development companies making Combined Financial risk management habits culture more entrenched in the industry (Stein, 2018).

As projected by UN-Habitat (2019), by 2050 the population of the world will upsurge to two billion and 60% of them will exist in urban areas. When observed upon the progress in terms of construction, there is indication that cities, all over the landmass, are rapidly growing. Reflecting back by 1950 only two African capitals had a population of more than one million in contrast to 48 capitals today. African capitals are growing rapidly in terms of development as evident in Kampala, Uganda, which is one of the quickest growing capitals in Africa and it has taken all directional growth during the last two decades. As such the urbanization process of Uganda has been blocked by a number of challenges for example in Kampala there is a difficulty of insufficient infrastructure and extension of slum areas are now concealing at least 21% of the city area (Vermeiren, 2019). However, this progress has also contributed to opportunities for the real estate construction sector as the number of construction projects are increasing in the capital. These chances have contributed to a roaring construction industry making it, after agriculture, the second largest company and a major donor to the economic recapture of the country attracting both domestic and international companies (Otim; Alinaitwe; Tindiwensi & Kerali, 2018).

Real estate asset in Kenya has performed very well in terms of delivery of employment chances, advancing shelter to households, improving income distribution and lessening poverty although it has continued to flop to fulfill this basic role due to a number of exclusive factors that affect venture in the sector. First, interest rate rise reduced the development of real family credit by 40% in early 1990s resulting to increase in house prices due to inflation in Kenya and the ratio of household debt to Gross Domestic Product (GDP) therefore affecting performance in this sector (IMF, 2016). In the recent past, Kenya has witnessed a rise in real estate investment because of reduced mortgage loans rate (International Monetary Fund, 2016). This is strongly associated with a go-slow in real house prices and compelled by a number of factors particularly 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 inhabited dwellings, business and agricultural land, office space, go-dawns and warehouses, retail outlets and shopping complexes (Lynn, 2018). Real estate is seen as property with limited liquidity in relation to other investment. Apart from being capital demanding, it is highly cash flow reliant so if the factors affecting the growth in the investment are not well understood and managed by an investor, real estate becomes a risky venture. It is against this background that the researcher carried out a study on Combined Financial risk management habits and performance of real estate construction housing projects in Kenya focusing mainly to real estate construction housing projects in Busia County.

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Research Objective

To examine the extent to which Combined Financial Risk Management habits influence Performance of Real Estate Construction Housing Projects in Busia County, Kenya.

Research Hypothesis H0: There is no significant relationship between combined financial Risk Management habits and Performance of Real Estate Construction Housing Projects in Busia County, Kenya.

LITERATURE REVIEW/THEORETICAL UNDERPINING

Financial risk management practice is a process of identifying a financial risk source, measuring it, and coming up with plans to address it with an aim of influencing performance of Real Estate Construction Housing Projects. It focuses on when and how to hedge financial matters using financial instruments to manage costly exposures to risk (Yakup and Asli, 2017). Combined financial risk management habits is the preparedness and procedures that a company uses to optimize the amount of risk it handles with its financial instruments. In a study conducted by Wanjohi (2019) on the influence of financial ability of real estate entrepreneurs on performance of real estate industry in Kenya, the study found that proper use of financial instruments helps to improve the economic value of the firm. The methodological approach employed during the study was a survey. The target population was 600 real estate entrepreneurs. A sample of 60 real estate entrepreneurs was administered with questionnaires. The data collected was coded and analyzed for descriptive and inferential analyses using SPSS. According to Wanjohi (2019), financial risk management strategy refers to the practice of creating economic value in a firm by using financial instruments to manage exposure to risk, particularly credit risk, inflation risk, interest rate risk and liquidity risk.

Credit risks are factors that can affect a bank's likelihood of receiving repayment as expected for loans financing Real Estate Construction Housing Projects and they include the following: Construction issues, Market conditions, Regulatory changes, Interest rates, and Environmental liability.

In a study conducted by Shafiq and Nasr (2017) on influence of market conditions on performance of real estate development projects in Ethiopia, the study found that as the economic environment deteriorates, tenants may reduce their space or cease operations and the payment of rent altogether. The methodological approach employed during the study was a survey. The target population was 820 real estate tenants. A sample of 82 real estate tenants was administered with questionnaires. The data Collected was coded and analyzed for descriptive and inferential analyses using SPSS. Looking at the market conditions, Shafiq and Nasr (2017) further found that a property's performance can be negatively affected by tenants' deteriorating credit strength and lease expirations in times of softening demand caused by economic deterioration or over-supply conditions. The study finding was further supported by Toni, Robert, Adrian and Jayson (2020) who found that when the general level of credit default rises, that banks typically experience a loss in economic value as 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.

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According to (Toni *et al*, 2020), financial risks negatively influence performance of Real Estate Construction Housing Projects. In a study conducted by (Toni et al, 2020) on influence of economic environment on performance of real estate construction industry in The USA, the study found that when the economic condition of tenants comes down the demand of developed real estate units falls and the value of developed assets equally comes down, but as the economic condition of tenants rises the demand of developed units rises and the value of developed assets rises appropriately. The methodological approach employed during the study was a survey. The target population was 300 commercial banks. A sample of 30 commercial banks was administered with questionnaires. The data Collected was coded and analyzed for descriptive and inferential analyses using SPSS. The study finding was further supported by Natthakon (2017) study which was done in Switzerland on financial Risk Management of Small Real Estate Management Firms which found that many real estate credit Banks counted serious loses in Switzerland during the 2008 US recession period due to defaulting of the loan repayment as it was estimated that 35% of the real estate developers firms did not respond to their debts. Consequently, most real estate projects were abandoned hence affecting their performance.

The level of interest rate risk attributed to the bank's Real Estate lending (credit) activities depends on the composition of its loan portfolio and the degree to which the structure of its loans, such as tenor, pricing, capitation, heterogeneity in interest, and exposure of the bank's revenue to changes in interest rates. Much of the Real Estate financing provided by banks is on a floating-rate basis, meaning that the interest rate sensitivity for the lending bank is relatively low. Banks provide fixed-rate financing for extended terms; however, they expose themselves to interest rate risk to the extent that these loans are funded by shorter-term liabilities. Interest rates have therefore played a major role in the distribution of net housing capital income in real estate projects. Higher nominal interest rates have an adverse impact on corporate profitability and hence corporate savings and investment during the affected period (Government of India, 2013) hence affecting real estate construction housing project performance. Credit risk and interest rate risk cannot operate in isolation of each other for both influence performance of real estate construction housing projects. For example the subsequent decline in nominal interest rates lowered the cost of owning a house and so effectively increased the demand for housing for credit-constrained households (Ellis, 2015) hence affecting real estate construction housing project performance. In addition, there is a direct effect that lower interest rates reduce the debt servicing costs of indebted home owners and increase net profits hence affecting these projects performance. On the other hand, as households are prevailingly averse to risk, prepayment options are correctly priced, and interest rates freely reflect expected inflation.

A high and uncertain rate of inflation could tend to reduce the demand for housing through its effect on the expected cost and risk to the borrower (Harvey and John, 2018) hence affecting real estate construction housing projects performance. Fluctuations in the rate of inflation tend to lead to corresponding fluctuations in construction activity and this rests on the fact 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 (Ralls, 2020) hence affecting Real Estate Construction Housing project performance. The rise in interest in turn raises the annual payment needed to acquire a house of given value. In addition, this higher interest rate and resulting annual payment do not change the real cost of carrying a house in that they are offset

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by the gain to the debtor resulting from the gradual decline in the purchasing power of his debt and of his annual payment (Crowley,2018). Nonetheless the rise in interest rates resulting from inflation has an important effect on the time profile of the stream of annual payments, expressed in terms of constant purchasing power. Consequently, this affects real estate construction housing projects performance. In most cases the interplay of credit risk, interest rate risk and inflation in real estate construction housing projects culminate to liquidity risk.

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. Real estate construction housing projects loans are ordinarily illiquid. The conversion of Real estate construction housing projects credit to liquidity can be accomplished by: refinancing the credits with another lender; through disposing of the credit to an investor by securitizing the credit; through normal repayment by the borrower; or by serving as collateral for borrowings (comptroller's handbook, 2018). Sales of Real estate construction housing projects loans are not easy to implement because of their lack of uniformity. Unlike consumer loans, the due diligence process takes a lot of time and is not cheap for an interested buyer because of differentiation in property type, 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 housing projects loans tend to be difficult to be traded off in times of market stress, especially when prospective financing sources reduce as lenders option fewer funds for real estate. The researcher therefore determined if interplay of credit risk management, interest rate risk management, inflation risk management and liquidity risk management influenced Real Estate Construction Housing Project Performance in Busia County.

The demand for real estate construction housing projects has portrayed a major position in its performance all over the biosphere since it outlines its rate of turn over. In a study conducted in Europe by the European commission (2018) on influence of demand on real estate construction housing projects performance, the study found that increased demand for real estate housing projects increases its performance while decreased demand decreases its performance. According to the study, high flow of income within the economy influences housing demand, hence influencing real estate construction housing project performance. Moreover, Sanders (2019) in a study carried out in Pakistan to evaluate factors influencing performance of real estate construction housing projects, defined quality of construction projects as performance to standards or value paid for the price. According to the study, adopting quality production measures in real estate construction housing projects has significantly promoted positive impact on project victory as project staff is able to spot and take measures to lessen occurrence of risks to a greater extent. Moreover, observation of quality production of real estate construction housing projects, utility of risk management habits and deeply understanding the business area are critical success factors and had a significant impact on project performance. This is seen from clients' increasing use of companies' good image and continuous improvement of service for good quality work as a basis for selecting prospective Project Quality Performance in Developing Countries for customer satisfaction.

Safety in the working place is a compound spectacle and the subject of safety feelings influences performance of the real estate construction housing industry to a bigger extent all over the world. In a study conducted in Nepal to investigate risk management in real estate construction housing projects, the construction industry was found to be bearing five times more casualties than the manufacturing industry (Himalayan News Service, 2016). According

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to the study, lack of project safety negatively affects the project time, cost and quality hence influencing its general performance. Moreover, in a study conducted in Switzerland on Risk Management of Small Real Estate Management Firms project performance. The European commission (2018) found that growth in the price of land in the cities caused an increase in the price of housing. This influenced more people to devote their money in the real estate industry. Therefore, many houses were developed to a level that some houses were left vacant due to poor condition of work that portrayed lack of safety during their construction hence affecting performance of these projects. The study further argued that over construction and lack of safety of real estate construction housing projects were the main cause of poor performance in this area. Finally, in a study conducted in Kenya by Muhoma and Kwasira (2016) on influence of innovative strategy habits on project team effectiveness in real estate construction firms' performance found that, Real estate development was a versatile business, growing swiftly across urban areas. The objective of the study was to find out how project development strategy influences real estate growth performance. A strong positive correlation was found between all the four practices namely; communication planning, technology adoption, project leadership and team cohesion all influencing real estate construction housing project performance.

METHODOLOGY

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 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 n = N 1+N(e)2 . Where N is the target population, n is sample size and e is the error term. In addition key two 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).

A questionnaire was the main data collection instrument, supported with focused group discussions for tenants, interview schedules for real estate housing entrepreneurs and document check list for the documented records for key two personnel officers in charge having prerequisite experience in real estate development, one from KNBS and one from MoH Busia County. 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, mean and 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 dependent variables.

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FINDINGS AND DISCUSSIONS

This section covered the findings and discussions of the study.

Questionnaire Return Rate

Out of the 328 questionnaires administered to the participants in the real estate construction housing projects in Busia County, 320 were dully filled giving a return rate of 97.56%. The questionnaire return rate results are presented in Table 1.

Table 1: Questionnaire Return Rate

Participants	Sampled	Returned	Return Rate%
Real Estate construction housing projects participants (Tenants and real estate entrepreneurs)	328	320	97.56

Source: *Field data work 2021*

The high return rate was attained because the researcher consistently followed up all the sampled respondents during data collection. The high return rate of 97.56% facilitated the gathering of sufficient data that could be generalized to determine the influence of combined financial risk management habits, on performance of real estate construction housing projects in Busia County.

The questionnaire return rate was considered adequate 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 towards gathering of sufficient data that could be generalized to represent the opinions of participants about the study problem in the target population.

Demographic Characteristics of the Respondents

In order to understand the characteristics of the participants the researcher was dealing with in the study, their background 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 provide demographic information. The results are presented and are further discussed in the following subsequent sub-themes.

Distribution of Respondents by Gender

The information sought on whether gender was significant to the county government for policy decision making and planning of real estate construction housing projects. It was imperative to investigate the respondents' gender to establish gender parity in management of real estate construction housing projects in Busia County and its influence on performance in the sector. The respondents were therefore asked to state their gender and the results are presented in table 2

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Table 2: Distribution of Respondents by Gender

Gender	Frequency	Percent
Male	188	58.8
Female	132	41.2
Total	**320**	**100**

Source: *Field data work 2021*

Table 2, shows that over 50% of the respondents totaling 188(58.8%) were male while their female counterparts were 132(41.2%). The findings indicated that male real estate construction housing project participants outstripped their female colleagues, implying that there was still gender parity in real estate construction housing projects. The inference of this result to the study is that majority of men devote their time and financial resources and get preoccupied in real estate construction housing projects development to generate income for self-sustainability and hence improve performance of real estate construction housing projects while their female colleagues dedicate their financial resources to other commitments. This finding was supported by William's (2017) study who found that the social–cultural dimensions of the environment plays a major role in development of real estate construction housing projects in any economy. According to William (2017), the social-cultural dimension consists of customs, lifestyles, and values that characterize a society.

Distribution of the Respondents by Age

Research participants were also asked to provide their age to determine whether they were distributed normally in terms of age group. Age depiction across the age brackets was used to confirm that the results represent views across all the age groups. The implication of this study is to find out which age group was actively involved in real estate construction housing project development and why. The findings were analyzed to show respondents' distribution by age group in terms of frequency and percentage as provided in Table 3.

Table 3: Distribution of Respondents by Age Group

Age group	Frequency	Percent	Cumulative %
Below 20 years	2	0.60	0.60
20-30 years	65	20.31	20.91
31-40 years	159	49.69	70.60
41 years and above	94	29.40	100.00
Total	**320**	**100**	

Source: *Field data work 2021*

Table 3 indicates that 159(49.69%) of the participants were aged between 31 and 40 years, 94(29.4%) were aged above 41years, 65(20.31%) were aged between 20-30 years and 2(0.60%) were aged below 20 years. The findings on age distribution revealed that a majority totaling to 253(79.06%) of the respondents were above 30 years, compared to a minority 67(20.94%) aged 30 years and below. The consequence of this finding to the study is that majority of the real estate housing projects participants were relatively mature enough and had prerequisite experience pertaining financial risk management habits and performance of real estate construction housing projects in Busia County. This finding support Engobo (2019)

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study who found that age, maturity level and life experience of a person influence his/ her ability to save and invest in development projects.

Distribution of Respondents by Level of Education

The respondents were also asked to indicate their level of education. The level of Education of the respondent was significant in providing knowledge for understanding the influence of combined financial risk management habits on performance of Real Estate construction housing projects in Busia County, Kenya. Table 4 provides the respondents' distribution by level of education.

Table 4: Distribution of Respondents by Level of Education

Level of Education	Frequency	Percent
O-level	4	1.25
Bachelor degree	198	61.88
Postgraduate	96	30.00
Others	22	6.88
Total	**320**	**100**

Source: *Field data work 2021*

The study findings indicated that 198(61.88%) of the respondents had Bachelor degree level of education, 96(30%) had postgraduate level of education, 22(6.88%) had other levels of education and finally 4(1.25%) had O- level of education. The implication of these findings to the study is that the majority totalling 294(91.88%) of the participants had bachelor and postgraduate degree certificates, and hence were knowledgeable enough to provide the study with reliable information on the combined financial risk management habits and performance of real estate construction housing projects in Busia County and hence would have an impact positively on the performance of real estate construction housing habits in Busia County, Kenya.

Distribution of the Respondents by Number of Years in the Profession

Research participants were also asked to provide the number of years they have been in real estate construction housing profession. The number of years by the participants in the profession was sought to establish whether they had the prerequisite experience in combined financial risk management habits that are likely to influence performance of real estate construction housing projects in Busia County. The findings were analyzed to show respondents' distribution by number of years in the profession in terms of frequency and percentage as provided in Table 5

Table 5: Distribution of Respondents by Number of Years in the Profession

Length of time in profession	Frequency	Cumulative frequency	Percentage	Cumulative Percent
Less than up to 5 years	48	48	15	15
5-10 years	220	268	68.8	83.8
11-15 years	45	313	14.1	97.9
Over 16 years	7	320	2.2	100

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Total	**320**	**100**

Source: Field data work 2021

Table 5, indicates 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 in the profession for a period between 11 to 15 years and 7(2.2%) of the respondents had been in the profession for a period 16 years and above. These findings indicate that 272(85%) of the participants had been in their respective professions for at least 5 years. The implication of these findings to the study is that the majority of the respondents have been involved in financial risk management habits decision-making of real estate construction housing projects in Busia County for a considerable number of years and hence had the necessary prerequisite background information in matters to do with combined financial risk management strategic decision making of real estate construction housing projects in Busia County.

Combined Financial Risk Management Habits on the Performance of Real Estate Construction Housing Projects

The study sought the perspectives of study participants on the influence of financial risk management habits on the Performance of real estate construction housing projects**.** Combined Financial risk management habits used in this study were Credit risk, inflation risk, Interest rate risk and Liquidity risk. It was important to get the views of the study participants when all the financial risk management habits were combined together. This was the fifth objective the study sought to establish. The results are presented in Table 6.

Table 6: Combined Financial Risk Management Habits' Influence on the Performance of Real Estate Construction Housing Projects

Combined Financial Risk Management *Habits*	**n**	**Mean**	**Standard deviation**
Credit risk	320	3.71	1.16
Inflation risk	320	3.86	1.08
Interest rate risk	320	3.99	0.948
Liquidity risk	320	4.05	0.941
Overall Composite mean & standard deviation	**320**	**3.90**	**1.03**

Source: *Field data work 2021*

Table 6 presents the descriptive statistics of Combined Financial risk management habits influence on the Performance of real estate construction housing projects. The composite mean for Credit risk of 3.71 was lower than the overall composite mean of 3.90; implying that combined Financial risk management habits moderately influence the Performance of real estate construction housing projects, the higher composite standard deviation of the Credit risk of 1.16 than the composite standard deviation of 1.03 indicates that there was a divergent view in opinion among the study participants.

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The composite mean for Inflation risk of 3.86 was lower than the overall composite mean of 3.90; implying that combined Financial risk management habits moderately influence the Performance of real estate construction housing projects, the higher composite standard deviation of Inflation risk of 1.08 than the composite standard deviation of 1.03 indicates that there was a divergent view in opinion among the study participants.

The composite mean for Interest rate risk of 3.99 was higher than the overall composite mean of 3.90; implying that combined Financial risk management habits positively influence the Performance of real estate construction housing projects, the lower composite standard deviation of Interest rate risk of 0.948 than the composite standard deviation of 1.03 indicate that there was a convergence view in opinion among the study participants.

The composite mean for Liquidity risk of 4.05 was higher than the overall composite mean of 3.90; implying that combined Financial risk management habits positively influence the Performance of real estate construction housing projects, the lower composite standard deviation of Liquidity risk of 0.941 than the composite standard deviation of 1.03 indicate that there was a convergence view in opinion among the study participants.

Correlation Analysis of Combined Financial Risk Management Habits and Performance of Real Estate Construction Housing Projects

In order to determine the correlation between Combined Financial Risk Management habits and the Performance of real estate construction housing projects, the Pearson correlation coefficient was run on the scores of each scale. The total scores of the scales were computed as a summation of the individual scores on each item by the respondent at a 95% level of confidence. The results obtained are indicated in Table 7

Table 7: Correlation Analysis of Combined Financial Risk Management Habits and Performance of Real Estate Construction Housing Projects

Combined Financial Risk Management Habits		**Performance of real estate construction housing projects**
Credit Risk	*Pearson Correlation*	*0.580**
	Sig. (2-tailed)	*0.000*
	N	*320*
Inflation risk	*Pearson Correlation*	*0.657**
	Sig. (2-tailed)	*0.001*
	N	*320*
Interest rate risk	*Pearson Correlation*	*0.649**
	Sig. (2-tailed)	*0.000*
		320
Liquidity risk	N	
	Pearson Correlation	*0.662**
	Sig. (2-tailed)	*0.000*
	N	*320*

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Overall Combined Financial Risk Management Habits	***Pearson Correlation***	***0.637****
	Sig. (2-tailed)	***0.000***
	N	***320***

***significant at 0.05 level (2-tailed)**

Source: *Field data work 2021*

To test the extent of the relationship between Combined Financial Risk Management habits on the Performance of real estate construction housing projects; Credit risk, inflation risk, Interest rate risk and Liquidity risk were analyzed based on the following hypothesis; H_0: There is no significant relationship between Combined Financial Risk Management habits on Performance of real estate construction housing projects. The corresponding mathematical model for the hypothesis was identified as follows: Performance of real estate construction housing projects = f (Combined Financial Risk Management habits). The correlation results revealed that all the P-values under significant 2-tailed were found to be significant since the P-values <0.05. Credit risk and Performance of real estate construction housing projects (r=0.580, P-value=0.000<0.05), Inflation risk and Performance of real estate construction housing projects (r=0.657, P- value=0.000<0.05), Interest rate risk and Performance of real estate construction housing projects (r=0.649, P-value=0.000<0.05), Liquidity risk and Performance of real estate construction housing projects (r=0.662, P-value=0.001<0.05).

Similarly, the overall correlation coefficient for Combined Financial Risk Management habits on Performance of real estate construction housing projects was found to be 0.637 with a P-value of 0.000 < 0.05, implying that there is a significant relationship between Combined Financial Risk Management habits and Performance of real estate construction housing projects; leading to rejection of the null hypothesis (H_0: There is no significant relationship between Combined Financial Risk Management habits on Performance of real estate construction housing projects) and acceptance of the alternative hypothesis, and hence the research findings conclude that there is a significant relationship between Combined Financial Risk Management habits on Performance of real estate housing construction projects.

Regression Analysis of Combined Financial Risk Management Habits on Performance of Real Estate Construction Housing Projects

Multiple linear regressions were adopted to investigate Combined Financial Risk Management habits on the Performance of real estate construction housing projects. It was necessary to get the views of the study participants on the influence of Combined Financial Risk Management habits on the Performance of real estate construction housing projects. The rationale of using the multiple regression model was to establish how each predictor significantly or insignificantly predicted the Performance of real estate construction housing projects and; secondly to find out which of the Combined Financial Risk Management habits best-predicted the Performance of real estate construction housing projects. Table 8 presents the regression model summary of the Combined Financial Risk Management habits on the Performance of real estate construction housing projects.

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Table 8: Regression Analysis of Combined Financial Risk Management Habits on Performance of Real Estate Construction Housing Projects

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	0.775[a]	0.600	0.595	0.455
a. Predictors: (Constant), Combined Financial Risk Management Habits				

Source: *Field data work 2021*

Table 8 presents the regression model summary on the relationships between the Combined Financial Risk Management habits and Performance of real estate construction housing projects. The model summary suggests that there was a positive multiple correlation (R=0.775) between Combined Financial Risk Management habits and the Performance of real estate construction housing projects. In addition, 60% of the variance in the Performance of real estate construction housing projects is explained by the Combined Financial Risk Management habits.

Model Summary of Combined Financial Risk Management Habits on Performance of Real Estate Construction Housing Projects

The study sought to find out whether the regression model is the best fit for predicting the Performance of real estate construction housing projects after the use of Combined Financial Risk Management habits.

ANOVA of Combined Financial Risk Management Habits on Performance of Real Estate Construction Housing Projects

The study sought to establish if the regression for the ANOVA model was the best fit for predicting the Performance of Combined Financial Risk Management Habits on the Performance of real estate construction housing projects. The regression ANOVA results are presented in Table 9.

The regression ANOVA output statistics results are shown in Table 9.

Table 9: An ANOVA of the Combined Financial Risk Management Habits on Performance of Real Estate Construction Housing Projects

Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	97.741	4	4.435	118.117	0.000[b]
	Residual	65.165	315	0.207		
	Total	162.906	319			
a. Dependent Variable: Performance of real estate housing construction projects						
b. Predictors: (Constant), Combined Financial Risk Management Habits						

Source: *Field data work 2021*

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The ANOVA results indicated that (F-statistics (4, 315)= 118.117 is significant at P value 0.000<0.05 implying that the regression model results are a significantly better predictors of the Performance of real estate construction housing projects. From the views of the respondents Combined Financial Risk Management habits had a positive influence on the Performance of real estate construction housing projects.

Coefficients for the Regression of Combined Financial Risk Management Habits on Performance of Real Estate Construction Housing Projects

The study sought to establish whether there was an influence of Combined Financial Risk Management habits on the Performance of real estate construction housing projects. The regression coefficient results are in Table 10.

Table 10: Coefficient for the Regression of Combined Financial Risk Management Habits on Performance of Real Estate Construction Housing Projects

Coefficients					
Model		Unstandardized coefficient	Standardized Coefficient	T	Sig
		B	std. Error	Beta	
	Constant	-0.170	0.193	-0.880	0.379
	Credit risk	0.133	0.046	0.136	2.88	0.000
	Inflation risk	0.371	0.054	0.324	6.91	0.000
	Interest rate risk	0.207	0.060	0.187	3.47	0.001
	Liquidity risk	0.341	0.063	0.283	5.38	0.000

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

Source: *Field data work 2021*

The multiple linear regression coefficients result indicated that there was significant influence of Credit risk (Credit risk; β_1=0.133; P-Value 0.000< 0.05, Inflation risk; β_2=0.371; P-Value 0.01< 0.05, Interest rate risk; β_3=0.207; P-Value 0.000< 0.05) and Liquidity risk β_4=0.341; P-Value 0.000< 0.05) on Performance of real estate housing construction projects. The resultant model was $Y=-0.170 + 0.133X_1+0.371 X_2 +0.207X_3 +0.341 X_4$. In terms of the best predictor for the Performance of real estate construction housing projects; the best predictor was Inflation risk; beta=0.324, followed by Liquidity risk; beta=0.283, then Interest rate risk; beta=0.187, and finally credit risk beta=0.136. This therefore indicates that Combined Financial Risk Management habits and Performance of real estate construction housing projects were positively and linearly related.

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CONCLUSIONS

Based on the findings of the study the following conclusions were made:

1. The majority of the people involved in real estate development in Busia County were male mature adults.
2. Most participants in real estate business in Busia County were mature adults beyond the age of 30 years.

IMPLICATION TO RESEARCH AND PRACTICE

Considering the research findings and conclusions, the following implications were made:

1. The majority of the real estate housing project participants were relatively mature enough and had prerequisite experience pertaining to financial risk management habits and performance of real estate construction housing projects in Busia County.
2. Since the performance of real estate development housing projects was found to be majorly influenced by combined financial risks, there was a need for the County government of Busia to advise real estate development personnel to be very observant on financial risk management issues to enable effective performance of real estate development housing projects.

FUTURE RESEARCH

For further research, the study suggests the following:

This study was delimited to influence of combined financial risk management habits on performance of real estate development housing projects in Busia County. A study can be replicated in other counties in Kenya to explain the possibilities of other factors influencing the performance of real estate development housing projects.

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