

**EFFECT OF FINANCIAL RISK ON FINANCIAL PERFORMANCE OF FIVE  
STAR HOTELS IN KENYA**

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COMMERCE (FINANCE AND INVESTMENT) IN THE SCHOOL OF BUSINESS  
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**SEPTEMBER, 2021**

**DECLARATION**

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged..

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And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

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# **EFFECT OF FINANCIAL RISK ON FINANCIAL PERFORMANCE OF FIVE STAR HOTELS IN KENYA**

## **ABSTRACT**

Kenya's hotel industry faces many challenges such as total revenue per available room in the country has been declining over the last five years. In spite of this, there is scarcity of empirical information on the same. This study therefore sought to investigate the effect of financial risk on the financial performance of five star hotels in Kenya. Specifically, the study examined the effect of liquidity risk on financial performance of the five star hotels in Kenya, determined the effect of solvency risk on financial performance of the five star hotels in Kenya, established the effect of interest rate risk on financial performance of the five star hotels in Kenya, determined the effect of exchange rate risk on financial performance of the five star hotels in Kenya. The study was guided by four theories: risk management theory, wreckers theory, liquidity preference theory and interest rate theory. The target population was all the 25 five star hotels in Kenya. The study employed a descriptive research design. Secondary data was extracted from financial statements (annual reports). Data processing and analysis was done using statistical software of STATA. Both descriptive and panel data regression were carried out. The study found that an increase in liquidity risk would cause financial performance of five star hotels in Kenya to decrease by ( $\beta=-0.3308$ ,  $p<0.05$ ), solvency risk has negative significant influence ( $\beta=-2.4744$ ,  $p<0.05$ ) on financial performance of five star hotels in Kenya. The study also found that a unit increase in interest rate risk would cause a decrease ( $\beta=-1.6431$ ,  $p<0.05$ ) in financial performance of five star hotels in Kenya and that a unit increase in foreign exchange rate risk will result to a decrease ( $\beta=-0.0186$ ,  $p<0.05$ ) in financial performance of five star hotels in Kenya. The study therefore recommends five star hotels in Kenya to ensure they maintain optimal liquidity to ensure organizational efficiency and effectiveness and upholding of good relations with stakeholders. There is also need for the five star hotels to embrace effective solvency risk systems that have a suitable solvency risk environment operating under a sound credit administration that involves monitoring and proper solvency risk controls; this would help in minimizing possibilities of firm failure. Also, the companies should engineer effective strategies to address solvency risk issues carefully this is because poorly designed solvency risk policies would compromise asset quality and expose the company to financial distress.

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I acknowledge the combined effort of the great team of scholars responsible for making this research project successful. My special credit is directed to my supervisor. I sincerely acknowledge the moral support I received from my classmates and my family members that propelled me to move forward and complete the highly demanding master's course work.

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## **DEDICATION**

I dedicate this research project to my daughters and family who are my strong pillar and my source of inspiration, for their love, prayers, encouragement and support throughout the entire research period. I also dedicate this to my friends who encouraged me and for their understanding during the research period.

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## ACRONYMS AND ABBREVIATIONS

<b>ADF</b>	Augmented Dickey-Fuller
<b>CAR</b>	Capital Adequacy Ratio
<b>CAGR</b>	Compound annual growth rate
<b>CBK</b>	Central Bank of Kenya
<b>COMESA</b>	Common Market for East and Southern Africa
<b>EBIT</b>	Earnings before Interest and Taxes
<b>GMM</b>	Generalized Methods of Moments
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>NPLR</b>	Nonperforming Loan Ratio
<b>NSE</b>	Nairobi Securities Exchange
<b>ROE</b>	Return on Equity
<b>ROI</b>	Return on Investment
<b>USA</b>	United State of America

## TERMS AND DEFINITION

**Solvency risk:** this is the risk of default on the principal and interest or inability by clients or counterparties for any reason to fulfill their financial contractual obligations to the company triggering total or partial loss (Olabamiji & Oseni, 2018).

**Financial performance:** is the company's ability to generate revenues in excess of cost, in relation to its capital base. It means the management efficiency in the use of company resources in adding value to the firm and it is measured by return on equity (ROE). ROE measures the efficiency of a firm in generating profits from each unit of stockholders equity and indicates how well the firm uses investments to generate earnings growth (Georges, 2013).

**Financial risk management:** this involves assessing the financial risk exposures facing an organization and developing management strategies consistent with internal priorities and policies to reduce costs emanating from cash flow volatilities associated with them (Waitherero, Wanyoike & Muriu, 2019).

**Foreign exchange risk:** this is the exposure of company's cash flow to the potential impact of movements in foreign exchange rates and the adverse fluctuations in exchange rates which may result in a loss to the company (Parlak & Ilhan, 2016).

**Interest rate risk:** this is the potential effect on a firm's incomes and net asset values due to movements in interest rates. It occurs when the company's principal and interest cash flows including final maturities both on and off-balance sheet have mismatched repricing dates. The magnitude and direction of interest rate changes and the size and maturity structure of the mismatch position is the amount at risk (Gitonga, 2010).

**Liquidity risk:** is the possibility that a company would be unable to generate enough cash receipts to meet required payments leading to premature liquidation of assets and crystallization of losses (Olalekan, Olumide & Iromi, 2018).

**Financial Risk:** it is the possibility of an organization losing money on an investment or business venture. The financial risks that will be examined in this study will include: liquidity risk, solvency risk, interest rate risk and foreign exchange rate risk.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of Study**

The hotel industry is a major sector of the global economy and currently accounting for upto 10% of the global GDP (Sang, 2017). At the global level, United States, United Kingdom, France, Spain and China form the leading pack in ownership of globally renowned hotel chains, with South Africa, Egypt and Morocco leading the way in the African continent (Jones et al., 2016). World over, the hotel industry has been recognized as one of the most important sectors that have a significant positive correlation to tourism industry and therefore no country or region can expect to attract tourists unless it has a robust and efficient hospitality industry (Segal, 2015). Hotels are known as being accommodation away from home; they however do not only offer accommodations alone but also provide other facilities. Medliks and Ingram (2000) explained that aside from hotels providing accommodation, they also have various facilities for business transactions and meetings, areas for entertainment and recreational purposes.

The hotel industry is said to be powered by the Tourism industry, this is due to their close relation, and any change in either of the two industries will have an almost relative change in the other. The tourism industry draws the clientele into the country or certain regions and the hotels have to provide accommodation services (Sang, 2017). Globally, the tourism sector considers hotels to be very important part of it and the role of employees in service delivery plays a crucial role towards its success. All over the world, the demand for service is increasing and service dominance is increasing too. Service sector is growing tremendously so is its contribution towards the economy and this has led to increased focus on the challenges and issues affecting this sector. Globally hotel industry has grown and has the world becomes a

global village in terms of how business is conducted so has the demand for better service (Segal, 2015).

Tourism in many countries is major contributor to exports through cross-border flows of people and capital. The hotel industry is one of the major employer and one of the largest traders of foreign currency. Through the movement of human capital, the industry plays an important role in bring people together (Segal, 2015). The industry also helps countries with trade imbalances to bridge the gap. The industry has also opened up in term of employment in other parts of the world especially for the developing countries that moves to other countries in search of hotel jobs. This is witnessed especial in recent years where huge movement to Arab countries especially Dubai (ROK, 2017). World travel and tourism council (WTTC) in its most recent research in collaboration with oxford economics, it was evident that travel and tourism contribute significantly towards the global GDP and in 2016 it contributed 10.2% of world's GDP (\$7.6 trillion). The sector now supports more than 292 million people in employment – that's 1 in 10 jobs on the planet. Regionally the hotel industry has grown and has opened African to the rest of the world in terms of tourism (Segal, 2015). The African region has a lot to offer in terms of tourism as compared to other continent in the world. This is due to the fact that each country in Africa has many tourist destinations offering e.g. World class hotels game parks the world famous animal migration which is in the world book of record and many plantations which are only found in Africa. Due to the growing demand for professionals in hotel industry many schools are offering courses in order to close the gap and have only qualified personnel in hotels (Adiele & Gabriel, 2013)

### ***1.1.1 Financial Risk***

As defined by Napp (2017), financial risk is the risk that a company like hotels won't be able to meet its obligations to pay back its debts which could mean that potential investors

will lose the money invested in the company. The more debt a hotel has, the higher the potential financial risk. Financial risks and activities of five star hotels like any other organization are inseparable for reasons that the environment in which most firms operate is highly volatile and uncertain (Napp, 2017). The levels of financial risks continually escalate since firms have to make new financial related decision and every business decision and act is connected with financial risk (Lopatina, 2016). With market imperfections, and ever increasing financial risks, organizations need to have in-depth knowledge of the financial risks they face. The knowledge is important in enabling the organizations to secure their business continuity. Further, such knowledge can enable organizations to add additional value by avoiding or reducing transaction costs and cost of financial distress or bankruptcy (Wanjiru, 2016).

Global concerns about financial risk have been increasing. In this climate, firms of all kinds and sizes are looking to develop robust financial risk management frameworks that satisfy compliance demands, contribute to better decision making, and enhance performance. According to Mudge (2020) a consistent framework for evaluating firm wide risk and return across diverse financial activities is a key to evaluating the benefits of potential mergers among firms. Firms can transfer the payment delays and the solvency risk among producers, or between producers and outside investors (Demirguc-kunt &Huzinga, 2020).

Financial risk entails those risks that threaten the financial health and stability of the company both in its short and long run life (Kungwani, 2014). Financial risk management has four basic principles: the cost of capital and its availability, the capacity to meet cash flow requirements and commitments in a timely manner, the ability to absorb short term financial shocks and the capacity to maintain and expand company equity (Crane et al., 2013). Al-Rdaydeh, Matar and Alghzwai (2017), Jianu et al. (2017), Nishimura (2016) and Voronova (2012) decompose financial risks into foreign exchange rate risk, liquidity risk, interest rate

risk and solvency risk. Liquidity risk is further classified into funding and market liquidity risks. Funding liquidity risk highlights the company's inability to efficiently cope with expected and unexpected cash outflows. Market liquidity risk is associated with incapacity of trading at a fair price on the spot (Jianu et al., 2017).

The financial risk is signified by the failure of financial performance. The fact of increasingly aggressive and dynamic competitive environment, various companies including hotel industry are always experiencing the financial risks from multi-dimensional problems. Corporate incompetence and weakness are mainly caused by lagging and failure of financial risk identification. The financial risk is basically generated in the process of financial activities, accumulation and amplification. This can eventually lead to financial crisis of a company (Ginoglou *et al.*, 2016). Thus, financial risk identification is the key and core of corporate competitiveness (Zhang *et al.*, 2018).

Financial risk may be caused by variation in interest rates, currency exchange rates, variation in market prices, default risk and liquidity gap that affect the cash flows and, therefore its financial performance and competitive position in product markets. Indeed most five star hotels outline solvency risk, liquidity risk, market risk, interest rate risk and foreign exchange risk as the most important types of financial risks they face (Jorge & Augusto, 2015). Financial Risk management can therefore be defined as a set of financial activities that maximizes the performance of these hotels by reducing costs associated with the cash flow volatility. In addition, risk management manages the potential risks by identifying, analyzing and addressing them. The process can help to reduce the negative impact and emerging opportunities. The outcome may help to mitigate the likelihood of risk occurring and the negative impact when it happens (Shafiq & Nasr, 2016).

A 2015 survey of major firms in United States of America (USA) revealed that at least 90% are using some form of financial engineering to manage market risks which are interest rates, foreign exchange or commodity price risks (Bodnar, et al., 2016). Although the types of risks confronting managers vary across industries, there is substantial commonality in the underlying rationale for the use of derivatives and the financial engineering techniques that are employed.

Voronova (2012) study in Croatia concludes that the capability to assess and estimate the effect of financial risks on various problems is of a great significance to hospitality and financial companies both in matured and upcoming economies of the world. It allows the companies to launch appropriate risk management strategies that would help to contain them. Fernando, Hosseini, Zavadskas, Perera and Rameezdeen (2017) and Jianu, Pircoveanu and Tudorache (2017) emphasize the need for hospitality companies including hotels to develop financial risks safeguards to help protect them from financial distress and bankruptcy. This is important especially in the developing economies in Africa where the effects of financial risk are very pronounced due to high levels of inflation and economic uncertainties. Fernando et al. (2017) claim that scholars and practitioners should conduct more research on the effect of financial risk management in hospitality sector rather than continue lifting the conclusions made in developed economies to developing economies of Africa, where there is scarcity of studies focusing in this area.

Kumar and Yadav (2013) lends credence to the significance of financial risk management when they argue that proper management of liquidity risks is vital for both financial and non-financial industries to ensure market stability. Effective liquidity risk will minimize chances of companies becoming insolvent and bankrupt. Where liquidity risk materializes, government bailout becomes inevitable resulting in erosion of company

reputation. The study encourages companies to carry out liquidity risk profiling, establish company specific liquidity risk practices, establish risk governance structures, set up liquidity contingency plan to manage crises scenarios and strive for a stable cash management system (Bank of Japan, 2010).

Dey et al. (2018) investigated how financial risk disclosure affected performance of manufacturing companies in Bangladesh, Asia. They developed financial risk disclosure indices through content analysis of the firms' annual reports. The study employed regression analysis to examine the association between financial risk disclosure and the firm's attributes. Their study found no common practice in companies disclosing their financial risks into their reporting process.

Isiaka (2018) assessed how liquidity risk affected insurance companies' performance listed in Nigeria. Liquidity risk was the independent variable with the measure being claim loss ratio, premium growth and leverage. For firm performance, return on assets (ROA) was used as the proxy. The study adopted panel multiple regression techniques. The findings revealed that leverage had a significant negative effect on return on assets. This study instead used Return on Equity (ROE) as a measure of performance and current ratio as the measure of liquidity risk.

Businesses in Kenya are exposed to various risks which originate from both the internal and external environment. Financial risk threaten their financial viability and long-term sustainability. Risk is the potential that events, expected or unanticipated, may have an adverse impact on the institutions' capital and earnings. The role of risk management in firms has evolved far beyond the simple insurance of identified risks, to a discipline that centers on complex econometric and financial models of uncertainty. The hospitality sector is very

important in respect of country's GDP (Eken et al., 2018; Ongore, 2017). In performing and sustaining these functions, good financial performance must be generated from which financial risk may not be avoided.

Financial risk management should not only assist the hotel to identify the risk but they should facilitate the computation of the effect of the risk, monitor and control its interactions in the organizational activities and suggest measures that can enable the organization to mitigate the effects (Oehmen, Olechwsky, Kenley & Ben-Daya, 2014). Mitigation measures require the managers to tradeoff the bad influence of the risk and the accompanying opportunities. The opportunities are given prominence while the undesirable effects are prevented from thriving to their fullness (Benta, Podean & Mircean, 2011; Oehmen *et al.*, 2014). Risk management magnitude which encompasses optimization of the expected returns associated with a given portfolio becomes meaningful if the impact of financial risks is particularly known to facilitate the estimation of risk tolerance for non-financial companies (Crane, Gantz, Isaacs, Jose & Sharp, 2013). The knowledge of the effect of financial risk management is useful to star rated hotels as it helps in the computation of the probability of the negative impact and the potential of the risks to disrupt normal business operations (Kumar, 2015).

Proper management of financial risks may have the effect of improving company stock and market prices especially if their effects are well understood (Nguyen & Li, 2012). Anton, Rodriguez and Lopez (2011) insist that financial risks in hospitality companies are not only associated with negative ramifications but great opportunities as well. Hence adequate information on their impact would promote their efficient and effective management. Thus a study on the effect of financial risk management in hospitality companies would find its roots and grounding in the wider realm of risk management (Oosterhof, 2001).

Many hotel failures around the world, in the recent past, have been partly attributed to internal control failures. It is common knowledge that the collapse of some companies across the world, notable among which are hospitality organisations (HOs), especially hotels, in Rivers State which were known to be performing excellently in financial terms collapsed irrespective of the existence of internal controls (ICs) (Gross & Siklos, 2018). Hospitality organisations in Rivers State like Hotel Olympia, Port Harcourt International Airport Hotel, Erijoy Hotels and Illusions Night Club, etc., are no more in existence; some others like Delta Hotels Ltd and Mr. Biggs are merely existing. Proper risk management are expected to assist organisations, whether profit making or not, achieve their objectives. However, the collapse of these organisations has raised concerns about the relevance and influence of financial risk, especially as it affects the financial performance of an organisation (Jorge & Augusto, 2015).

Solvency risk is meant to reduce the adverse effect of risks resulting from default, or inability by clients to fulfill contractual obligations. Important practices would constitute identification, measuring, matching, mitigation strategies, monitoring and controlling of the inherent risk position (Raad, 2015). According to Kessey (2015), Olabamiji and Oseni (2018) and Tetteh (2012) management of solvency risks in many companies in Africa has been a critical issue that few research would afford to sideline as this enhances company success. Kessey (2015) and Tetteh (2012) propose sound practices of value as credit policies, credit standards, proper credit procedures and efficient credit framework management. Credit policies are rules that direct the company on how to assess, monitor and control solvency risks (Kessey, 2015).

Interest rate risk affected the value of hospitality companies through variations in cash flows generated by operations emanating from interest rate direct effect on the cost of funding. There are also indirect influences of interest rate risk generated from the hospitality company's

competitive position affecting their cash flows. The impact of financial risk in hospitality companies including the sugar companies permeated the entire company system through variations in the quality of their financial assets and liabilities (Kumar, 2015). The study by Jorge and Augusto (2010) finds no significant difference in using either a trade weighted exchange rate index or a bilateral currency exchange rate risk factor.

In sum, Enterprise Risk Management helps hotels get to where it wants to go and avoid pitfalls and surprises along the way (Nocco & Stulz, 2016). Proper risk management is important in the daily operations of any tourism related business because of the turbulent nature of the industry. To avoid financial losses and bankruptcy it is paramount to take a precautionary course according to Jolly (2017). Serrasqueiro and Nunes' (2018) investigation on relationship between risk and capital structure, particularly in small and medium sized hotel companies in Portugal, clearly shows a high risk of hotel business and the need for managing them. Jason and Vorono (2016) in their research clearly indicate an increase of business risks during the global financial crisis. Waikar, Desai, and Bordeaux (2016) have explored the existence of risks in the Indian hotel industry and how it is managed as well as the influence of business entities and managers on managing them. Williams and Baláz (2018) show that there is a need for a better research of the concept of risk management and measurement of uncertainty in hotels which this current study sought to assess.

### ***1.1.2 Financial Performance***

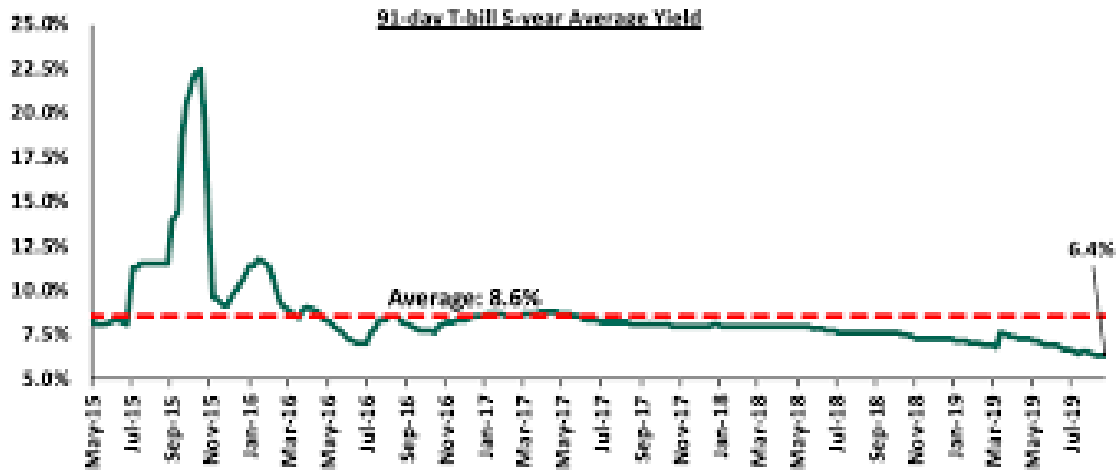
According to Nandan (2010), financial performance is considered to be individual measure of how well a company can apply assets from businesses' primary mode for revenue generation. It is generally applied in measuring the general financial wellbeing of a company over a particular span of time and is applicable in making comparison of performance in the same companies that operate in the same industry. Financial performance of companies can be

measured by use of accounting information or stock market values in a financial management practices context. When performance is measured using the value of stock, one's interest is to analyze how the market value will change. Overtime, the performance of a company is determined with the use of average change in value of stock over the years. To obtain the value, change in price of stock is calculated over time. Maseko and Manyani (2011) explains that accounting system can be used as a source of information to any business despite the industry they operate in and this information can be used to measure its performance financially. Therefore, it is important for accounting activities of star rated hotels to use relevant information required for improving entrepreneurs' economic decisions.

In the context of hotel industry which is the focus of this research, financial measures of performance have been considered. A performance indicator is a measure capable of generating a quantified value to indicate the level of performance taking into account single or multiple aspects (Parida & Kumar, 2016). Performance indicators could be used for financial reports, for monitoring the performance of employees, tourist satisfaction, the health safety environment rating and overall equipment effectiveness as well as many other factors. The factor used in this study is financial performance (Kutucuoglu et al., 2017).

Yun, (2017) explained that profits, liquidity, solvency, efficiency in finances and repayment are common measures of performance. Profits made by a company are measured using profitability and uses measures of liquidity, asset productivity; the ability of a company to meet its obligations when they are use is determined using liquidity. Most common ratios used is Return on Assets (ROA). ROA is used to measure profitability of a company in relation to its overall assets. It measures the level of management's efficiency in using assets for earning generation. To calculate ROA, the annual earnings of a company is divided with its total assets and presented in percentage (Banafa, 2016). Wanyama, Okello and Otinga, (2019) explain that

financial risk management is aimed at maximizing owners wealth in a company. The company aims at maximizing shareholders' value.



Better performance through improved measurement and accountability can be achieved through Risk Based Supervision. RBS helps reveal the sources of success and failures in regulatory decision making and evaluation can feed back into improvements to future decisions (Temtime, 2016). RBS ensures more information is required to make decisions and hence better decisions are achieved based on more accurate and complete assessment of its consequences (Tetteh, 2012). Therefore, adoption of RBS is expected to have a positive impact on the financial performance of hotel industry.

Hospitality industry in Kenya has had difficult times over the years, particularly prolonged period of lackluster performance in the 1990s (Ikiara, 2001). Ikiara, for example, describes performance in the 1990s as erratic. A post-election period of civil unrest in 2008 and the global economic crisis in 2008 only made inbound international tourism business more challenging. Then in the recent past is the threat of terrorism in which Kenya has lost both its citizens and the tourists to the Al-shabab from Somalia. This has resulted to frequent travel

advisories from the source countries like Britain, USA, Australia and Europe in general (Mayaka & Prasad, 2012). This has brought down the tourism sector in Kenya to its lowest point ever. The prolonged poor operations have characterized the last two decades, raising the concern of key stakeholders. It is important to investigate and find out the risk management practices that are being employed and how this has impacted on the performance of the sector.

Hotel performance is believed to be the most influential facets hotel operation, affecting a hotel's competitiveness among competitors and long-term effects on the financial sustainability of hotel (Pnevmatikoudi & Stavrinoudis, 2016). The financial performance of hotels is usually quantified from the total revenue per available room (Schwartz, Altin & Singal, 2017). Other metrics include the gross operating profit per available sq ft, revenue per available room (Kimes, 2017). These metrics are used as financial performance indicators for hotels and may be construed in returns (Ivanov, 2018). Returns on investment may be used to measure performance (Luo & Lam, 2017).

Even though financial performance may be the focal impetus for embracing FRM practices in hotels, empirical studies examining how FRM practices are related to the financial performance of hotel have been limited. This study therefore sought to add to existing literature by investigating the effect of financial risk on the financial performance of five star hotels in Kenya.

### ***1.1.3 Overview of Hotel Industry in Kenya***

Hotel is a major enterprise in modern economy and in Kenya; its history is not long. It started at the Coast initially by the Arabs and later due to the railway line construction workers (Kamau & Waudo, 2012). The Government of Kenya after independence was motivated by the numbers, and undertook to construct hotels to encourage more visitors into the country.

Consequently, hotels like Milimani, Panafric, Ambassador, Sunset in Kisumu, Sirikwa in Eldoret, Mombasa Beach Hotel, Kilaguni Lodge and Maasai Mara were built but the Structural Adjustment Program (SAP) imposed by the International Monetary Fund (IMF) in 1990s pressurized the government to divest from the industry triggering privatization of the hotels. As government built hotels, private developers realized the importance of the industry and began to invest in. Hotels such as Serena Hotel Group, Sarova Hotel Group, Hilton Hotel International and Intercontinental Hotel were started. From a humble beginning, the industry today prides to have some of the big names in the country (Hassan, 2018).

By end of 2015, Kenya's supply of beds stood at about 58,000, of which most are located in the coastal regions whose market share is 39.8% roughly 22,000 beds. Nairobi follows with a market share of 23.7% roughly 13,104 beds. Therefore, the annual bed capacity is 21 million but the beds that are actually occupied are around 5.8 million which is occupancy rate of 29.1% an indication that supply is more than demand (Cytonn, 2016).

Classification of hotels is done for the purpose of analyzing the market sector which is useful in drawing comparisons, performance analysis, market gap identification, customer desires and marketing plans. In addition, hotels are classified to define the kind of hotel for promotion and advertising tenacities centered on locality, ownership type, amenities, nature of customer, standard, star rating and size. The classification exercise is overseen by a Tourism Regulatory Authority's, Standardization and Classification Committee, encompassing associates from both the public and private segments. It is built on the east Africa community classification criteria, schedule 4a. The Committee develops minimum standards for regulated tourism enterprises with other relevant agencies.

These entrants have increased the competition in the market as they all try to get a piece of the clientele. In addition, all of them are sourcing from a limited labor market. Further, the international chains like Villa Rosa Kempinski and Hemingway bring in their international experience that means that changes in the already existing players in the industry. New hotels mean new state of art rooms and restaurant services and the old players have to look for ways to remain competitive by undertaking initiatives like renovations that are competitive.

Currently, businesses operating in the hospitality industry are operating in dynamic and turbulent environment that most of the time strategies render yester-years inappropriate (Monday, Akinola, Ologbenla, & Aladeraji, 2017). Adverse effects of contingency factors such as seasonality and internal determinants within the sector will continue to influence Kenya's hotel industry, denying hotels not only stable occupancy rates but also chances to achieve the maximum possible hotel room rates and total revenues. In their environment, returns vary or fluctuate unexpectedly. This usually leads to the collapse and underperformance of financial institutions if they are not handled.

Financial risks normally lead to financial crisis if they are not managed which leads to poor performance of firms and lowers the economy of a country and hence the living standards of people. These risks should be managed and regulated by firms and institutions so as to improve profitability and reduce losses. It is however important for institutions to manage risk so as to prevent uncertainties on the returns and profits to expect. Hotels are exposed to financial risk hence they should take the necessary steps to prevent it. They should for instance take the necessary precautions to avoid experiencing financial crisis, which may lead to the loss of customers. These will enable the hotels to operate on a longer period without running into debt (Diffu, 2017).

Cytonn (2016) observed performance in the hospitality sector was affected by low rates of occupancy because the supply is more than the demand. Further, Cytonn (2018) noted the overall revenue for each room in the country has been reducing over five years; with a Compound annual growth rate (CAGR) of 5.8% as at 2018 averaging at USD 81. In light of these challenges, the adoption of financial risk among hotels in the country is a matter of necessity for their survival, enhanced performance and achieving a competitive edge (Coopers, 2017). Due to the decline in financial performance, it is important to understand how financial risk affects financial performance of five star hotels in Kenya.

#### ***1.1.4 Five Star Hotels in Kenya***

A hotel that is rated five star is pictured as luxury hotel that offer excellent lodging and additional facilities perhaps cookery for holiday creators and holiday fascinated individuals. A five star hotel are anticipated to provide excellent quality of provision. In Kenya there only twenty five star hotels. Nairobi County has eleven five star hotels which is the largest number compared to all other regions (PwC, 2017). They include; Intercontinental Nairobi, Radisson Blu Hotel Nairobi, The Sarova Stanley, Villa Rosa Kempinski, Fairmont The Norfolk, Sankara Nairobi, The Boma Nairobi, Crowne Plaza Nairobi Airport, Tribe Hotel, Dusit D2 and Hemingway's Nairobi. Only six hotels in the entire coastal stretch are classified as five-star. They are Diani Reef Resort, Leopards Beach Hotel, Hemingways Watamu, Swahili Beach, Medina Palms and Pride Inn Paradise. additionally, in the south rift region, there are five five star hotels only, these includes; Enashipai Resort and Spa, Mara Serena Safari Lodge, Lake Elementaita Serena Camp, Cottars Nineteen Twenties Safari Camp and Olare Mara Kempinski. Concisely, Panari Resort, Nyahururu and Segera Retreat Lodge are the only five star hotels in the central region. Surprisingly, there are no five star hotels in western and Eastern regions (PwC, 2017).

These five star hotels provide quality service in relation to day and night housekeeping, providing guests with information and discounts and many local attraction sites. Some requirements for five star hotels are valet parking, health centers and fitness center (PwC, 2017). The building is located in areas that are of high standards and most of the time they are detached. Other services offered in these hotels include casino, nightclub and lounge. Features in the room include decorations and furnishes that are of extremely high quality (Cyton, 2018). Employees are also expected to be the best. The ratio of employees to guests should also be high. The expectations of clients on five star hotels are high and they expect quality services. Clients are given a brief review of what services to expect in these hotels. The rating standard extends key requirements of qualitative and intangible services (room service, concierge, security, among others), that allows the hotel to make comparisons with additional stuffs. Communicating quality of a hotel is determined using symbols of grading like stars, diamonds, suns, crowns and letters. Stars are the most recognized symbol all over the world and most nations have embraced stars as their rating system to signify quality ratings (Cyton, 2018).

## **1.2 Statement of Problem**

The hotel industry in Kenya plays a critical role in the country's economic growth, particularly given its complementing role to the country's tourism sector and job creation. However, the industry faces a myriad of challenges that negatively impact on its performance including declining numbers of foreign tourists, stiff competition, continuously changing consumer demands, difficulties in finding and keeping valued clientele, utilization of new and changing technologies, instabilities due to violence, world pandemic such as COVID-19 and shortage of skilled staff, poor infrastructure, insecurity, inefficient organizational processes and management issues such as improper risk management strategies. For example, recently, an international five-star hotel in Kenya, Intercontinental Hotel, which has previously been the

subject of a looming auction in early 2019 over unpaid debt has winded up its operations sighting operational reasons (Agutu, 2020). This is an indication of poor financial management which resulted in business failure, thus calling for the need for research to be conducted on the effect FRM has on performance of hotels in Kenya.

Currently, businesses operating in the hospitality industry are operating in dynamic and turbulent environment that most of the time strategies render yester-years inappropriate (Monday, Akinola, Ologbenla, & Aladeraji, 2017). Financial risks normally lead to financial crisis if they are not managed which leads to poor performance of firms and lowers the economy of a country and hence the living standards of people. These risks should be managed and regulated by firms and institutions so as to improve profitability and reduce losses. Hotels are exposed to financial risk hence they should take the necessary steps to prevent it. They should for instance take the necessary precautions to avoid experiencing financial crisis, which may lead to the loss of customers. These will enable the hotels to operate on a longer period without running into debt (Diffu, 2017).

Cytonn (2016) observed performance in the hospitality sector was affected by low rates of occupancy because the supply is more than the demand. It is approximated that there was a supply of about 58,000 beds which is equivalent to 21 million but those occupied are only 5.8 million which translates to 29.1% meaning supply is more than demand (Cytonn, 2018). Further, Cytonn (2018) noted the overall revenue for each room in the country has been reducing over five years; with a Compound annual growth rate (CAGR) of 5.8% as at 2018 averaging at USD 81. In light of these challenges, the adoption of financial risk among hotels in the country is a matter of necessity for their survival, enhanced performance and achieving a competitive edge (Coopers, 2017). Due to the decline in financial performance, it is important to understand how financial risk affects financial performance of five star hotels in Kenya.

Wanyama (2016) investigated on financial risk management in hospitality companies in Kenya. Kiptisya (2017) scrutinize the influence of currency risk management on performance of banks in Kenya. Runo (2013) evaluates the effect of currency risk on performance of oil firms listed in the Nairobi Securities Exchange (NSE). Kambi (2016) did a study on the effects of financial risk on financial performance of listed banks at the Nairobi Securities Exchange in Kenya. Juma (2018) tested whether financial risk management has an effect on performance in Kenya. All these studies have not determined the relationship financial risk and financial performance of five star hotels in Kenya. This study aimed to fill the gap by investigating the effect of financial risk on financial performance of five star hotels in Kenya

### **1.3 General Objective**

The general objective of this research was to investigate the effect of financial risk on the financial performance of five star hotels in Kenya.

#### ***1.3.1 Specific Objectives***

To achieve the overall objective, the specific objectives of the research were:

- i. To establish the influence of liquidity risk on financial performance of five star hotels in Kenya
- ii. To establish the influence of solvency risk on financial performance of five star hotels in Kenya.
- iii. To establish the influence of interest rate risk on financial performance of five star hotels in Kenya

- iv. To determine the influence of foreign exchange rate risk on financial performance of five star hotels in Kenya

#### **1.4 Research Hypotheses**

The research was guided by the following null hypothesis:

***H<sub>01a</sub>**: Liquidity risk has no significant influence on financial performance of five star hotels in Kenya*

***H<sub>01b</sub>**: Liquidity risk has significant influence on financial performance of five star hotels in Kenya*

***H<sub>02a</sub>**: Solvency risk has no significant influence on financial performance of five star hotels in Kenya*

***H<sub>02b</sub>**: Solvency risk has significant influence on financial performance of five star hotels in Kenya*

***H<sub>03a</sub>**: Interest rate risk has no significant influence on financial performance of five star hotels in Kenya*

***H<sub>03b</sub>**: Interest rate risk has significant influence on financial performance of five star hotels in Kenya*

***H<sub>04a</sub>**: Foreign exchange rate risk has no significant influence on financial performance of five star hotels in Kenya*

***H<sub>04b</sub>**: Foreign exchange rate risk has significant influence on financial performance of five star hotels in Kenya*

## **1.5 Justification of the Study**

As evidence shows, financial risk is a sophisticated issue. It has important role in facilitating progression and organization performance. When organizations do not have sufficient knowledge about their financial risk and its dimensions and indices, they face abundant problems like decline in profits, lack of organizational coherence and performance reduction. Therefore, recognition of role of financial risk management by managers is vital because they can use its strength and apply it to the prevailing situations in the organization and predict the necessary measures and stratagems.

## **1.6 Significance of the Study**

The research benefits several stakeholders like the scholars and academicians, Hotel Managers and Consultants, Manufacturing, Health, Service and other sectors and Tourism Industry Policy makers.

### ***1.5.1 Academicians***

The members of the academia are the first beneficiary of this research, because little have been researched in hotel industry in relation to financial risk management practices. This research enables members of the academia understand the field of tourism and hospitality sector and how it operates and create a motivation for further research.

This research adds more information to the body of knowledge on the effect of financial risk on the financial performance of five star hotels in Kenya. The study specifically provides information on how liquidity risk, solvency risk, interest rate risk and foreign exchange rate risk affect financial performance. To researchers and academicians, the study provides data and insights that can be used as research material and literature review in related studies. Further,

the research forms a basis on which additional and future research can be undertaken on financial risk and financial performance.

### ***1.5.2 Management of the Five Star Rated Hotels***

Five star rated hotels shall be the second beneficiary of this research, because according to empirical research it is possible to improve firm performance. This is because financial risk management is expected to improve organizational performance. These firms can compete competitively in the global market for hospitality and tourism services which is growing at rate of 7.4 percent.

The study is beneficial to the managements of hospitality firms in the country as it provides them with insights and additional knowledge on the significance of financial risk on their financial performance. This may in turn inform their reasoning and decisions on the application of financial risk management to improve their firms' financial performance in light of the challenges and threats.

### ***1.5.3. Tourism Industry Policy Makers and the Government***

PricewaterhouseCoopers (2017) explains that decade ago; domestic tourism was barely anything but recently, its gaining popularity in hospitality sector in the country as the income level of the middle class increases. It was established that there is rapid growth in business travel and commercial practices in town. Devolution is considered to be a great driver of local tourism.

The Government may be interested in the findings of this study as it highlights the significance of financial risk to financial performance in the hotel industry in Kenya. This may in turn inform government policy formulation in relation to financial risk within the sector. The

Tourism Regulatory Authority (TRA) may find the finding relevant to its development and implementation a code of practice for the tourism sector. The Kenya Tourism Federation may also be interested in dissemination of the findings of this study to its members with the purposes of industry development.

#### ***1.5.4 Investors***

Finally, this study also helps investors in making appropriate decisions when considering investing in hospitality industry as critical driving force to spur economic growth of the country and the region as whole. According to OECD (2014), investors are willing to commit more money in companies that are managed well because they provide security for their money. Investor's decisions and interventions in hospitality industry that are viable for the development on enhancement of growth and give indication of how hospitality industry benefit from the improved financial performance and this in turn enhance hospitality sector and the general performance of the firms.

#### **1.6 Scope of the Study**

The objective of this study was to establish the effect of financial risk on the financial performance of five star hotels in Kenya. Specifically, the study focuses on the effect of liquidity risk, solvency risk, interest rate risk and foreign exchange rate risk on the financial performance of hotel industry in Kenya. The study surveyed (25) five star hotels in Kenya. The classification was as per the Tourism Regulatory Authority classification conducted in 2019. The study was conducted from March (2020) to April (2020).



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews literature derived from the research works of other scholars. It also lays down the, empirical review, conceptualization and operationalization as relates to the study of financial risk, critique of existing literature and research gaps. It also presents theories that seek to predict financial risk in relation to financial performance of five star hotels in Kenya.

#### 2.2 Theoretical Review

A theory is considered to be a statement that is developed to clarify facts or situations especially those that are tested repeatedly or are accepted widely and can be applied in predicting natural phenomenon (Popper, 2007). This subsection provides an insight into theories revolving around financial risk that enhances the foundation of this study. Theories anchoring this study were: risk management theory which is linked with Liquidity risk; wreckers theory linked with solvency risk and liquidity risk; liquidity preference theory linked with liquidity risk and interest rate risk and Interest parity theory linked to foreign exchange rate risk.

##### *2.2.1 Liquidity Preference Theory*

Keynes (1936) advanced this theory with the role of interest rate in the determination of liquidity at the center stage of this proposition. The proposition holds that interest rate is price equilibrating the wish to preserve wealth of liquid assets with accessible amount of cash. When the rate of interest is high a surplus of cash would be supplied while at lower rate of

interest firms would hoard a lot of cash and supply less. Liquidity preference is a functional tendency which regulates the amount of money the public is willing to hold at a given level of interest. Keynes (1936) decomposes liquidity into three functional motives: the transaction, precautionary and speculative motives. Liquidity preference originating from transaction and precautionary demand is presumed to absorb cash that is insensitive to changes in the rate of interest but are income elastic. The purpose of the transaction motive is to bridge the gap between incomes received and expected expenditures. Precautionary cash balances would be used to fund unexpected expenses while speculative demand for cash reveals the desire to hold liquid assets with expectations that the interest rates on alternative assets would raise causing capital losses (Ogiriki & Andabai, 2014).

Ogiriki and Andabai (2014) asserts that liquidity preference is the degree of risk aversion and the anticipated return on alternative financial assets while interest rate is the price paid for obtaining credit which is expressed as a ratio of the cost of securing credit to the total quantity of credit procured. The rate of interest essentially communicates price signals to borrowers, investors, lenders and savers who are key players in the market. For example, higher rates of interest will attract higher volumes of savings and loanable funds while declining lending rates result in a surge in borrowing and investment expenditures in the economy promoting growth. The demand for loanable funds originates from the government, consumers and businesspeople who utilize the funds to finance investment programmes. Cash balances have zero interest rate risk and liquidity risk compared to bonds and other alternative securities (Ogiriki & Andabai, 2014).

Kagunda (2018) elaborated that a rise in the rate of interest might imply increase in profitability and hence firms would be unwilling to hoard more liquid assets currently. Low interest rate would attract more investments in bonds to benefit from the increased yields while

higher rates are likely to force investors to divest from bonds so as to avoid capital losses when interests fall and save more (Tiller, 2004). Investment in long term assets attracts higher risks and therefore investors would ask for higher premiums on their investment. The theory ascertain that long term securities have to generate more income compared to short term investments as shareholders have to sacrifice a little profit to make investment in short maturity debts to avoid high cost of rigidity of long maturity which take longer to liquidate and carrying with them the increased risk of losing the principal investment (Kagunda, 2018).

Muthoga (2019) argues that the demand for higher premiums for long term maturing securities stems from the fact that they are associated with high risks unlike more liquid securities that can be easily sold in the market without loss of value. Investors would be more comfortable trading in securities that carry lower liquidity risks than those carrying higher financial risks. The lower the liquidity risk the higher the profitability of an asset. Kagunda (2018) emphasizes that the fear to lose the investment capital compels the stockholders and the management to institute proper financial risk management measures in order to minimize the effect of financial risks such as liquidity risk and interest rate risk.

Buiter (2003), Ogiriki and Andabai (2014) and Tillers (2004) appreciate the developments made on liquidity preference theory by James Tobin in his portfolio balance proposition. Tobin sought to cure the limitations associated by Keynes's speculative desire for cash which did not envision a portfolio diversification possibility as among the options available but assumed that individuals would oscillate between holding bonds or cash in an effort to minimize risks. According to Ogiriki and Andabai (2014), Tobin addressed the topic of financial risk management head on when the study illustrated that those differentials in portfolio composition caused by efforts to eliminate risk lead to an inverse relationship between demand for cash and the rate of interest. In Tobin's diversification model, individuals are risk

averse and would strive to avoid risk by choosing to hold diversified portfolios or cash and bonds together (Ogiriki & Andabai, 2014).

Buiter (2003) claim that Tobin's contributions in financial risk management climaxed when the study came up with three classes of investors based on their risk appetite positions. The risk averse investors who would manage risk in a way that they minimize portfolio volatilities or avoid risks associated with holding bonds or other long term investments. The risk neutral stockholders who are willing to accept risk, so that they can generate returns on investments and therefore their risk management strategies would entail portfolio diversification whose composition would include cash, liquid assets and bonds. The risk embracing investors who adopt a conservative approach to risk management by investing all their wealth in long term investments which is not limited to, but including bonds (Ogiriki & Andabai, 2014). Investment in long term assets such as bonds increases transaction costs such as cost related to holding cash, brokerage fee and the cost of offsetting insufficient cash with the returns from long term investments. This transaction cost increases the financial costs and therefore subjecting the firm to shocks of liquidity risk and interest rate risk which may erode the firm's profitability (Tillers, 2004).

Ogiriki and Andabai (2014) and Tillers (2004) hypothesize that the prospects of anticipated return on investment compels stockholders to willingly accept to absorb risk up to the level where the marginal disutility of the risk is equated to the marginal utility of expected earnings. Ogiriki and Andabai (2014) assertions are corroborated by Emmerling, Jarrow and Yildirim (2016) who observe that a fundamental channel through which investors purchase long term assets such as mortgage backed securities and treasury bonds on a large scale facilitates adjustments in returns which is achieved through fluctuations in market price of risk causing shifts in market equilibrium. Risk premium must therefore adjust to reduce the

aggregate demand to satisfy the decreased asset supply in the market. This behaviour is what Tobin describes as the portfolio balance effect of liquidity preference, since the mechanism by which these investment purchases generate impacts is driven by portfolio switches between investments with different financial risk (Emmerling *et al.*, 2016).

The study therefore adopted liquidity preference theory to explain the influence of liquidity risk on financial performance of five star hotels in Kenya. It helps to understand the liquidity choices made by the five star hotels and how it affects their performance.

### ***2.2.2 Wreckers Theory***

The wreckers theory was developed initially by Campbell, Hilscher, and Szilagy (2005) suggested that stocks of distressed firms perform in a manner which is vastly inferior to stocks of financially healthy firms. It conjectures that in circumstances where a company's business operations decline to a level where it fails to honour its financial obligations, it is said to be in financial distress. Salloum and Azoury (2012) indicate that the first year into financial distress, firms will exhibit features such as declining liquidity which is associated with assets and liability maturity mismatch. Under normal circumstances, companies are expected to generate cash flows in excess of their financial obligations for them to be able to pay their creditors as they fall due. In cases where they fail to live up to their contractual obligations, they are assumed to be courting financial distress. Baldwin and Mason (1983) and Maniagi (2018) identifies declining sales volume, reduced investment in new projects, inability to operate to full capacity, failure to pay dividends, violation of debt covenants, loss of markets to competition, reporting of losses in consecutive financial periods, shrinking allocations to research and development as major symptoms of financially distressed companies.

Muriithi (2016) claim that wreckers theory attributes the origin of distress among companies from solvency risk and liquidity risk affecting their operations. Olalekan *et al.* (2018) group the causes of financial distress into two main classes: internal weaknesses and external vagaries. Internal firm weaknesses are those that the firm is wholly or partly responsible by cultivating an environment which allows them to thrive. The most significant weakness is failure by companies to properly manage their solvency risk and liquidity risk. Improper management of financial risk may drive the management into making costly mistakes that erodes the profitability of the company (Olalekan *et al.*, 2018).

Salloum and Azoury (2012) contends that difficult economic conditions and widespread credit crunch as some of the macro-environmental factors that may compound an already worsening situation of inefficient financial risk management systems. Muriithi (2016) and Sporta (2018) concur that emphasis on proper risk management would go a long way in assisting firms to avoid cases of financial distress as they minimize the impact of credit and liquidity risk in wiping out the value of the firm. Sporta (2018) recommends to financial managers to utilize intangible assets in securing short term funding. This will minimize financial costs generated by use of debt hence helping companies to reign in on factors that would lead to financial distress. Muriithi (2016) finds wreckers theory an appropriate theory to anchor financial risk management and profitability. Its propositions provide an objective perspective and a strong platform for a conclusive analysis and understanding of this relationship in both non-financial and financial sectors (Muriithi, 2016).

The source of this theory is solvency and liquidity risks that a company faces. The theory gives a non-biased viewpoint on the link existing between solvency risk and the aspect of financial performance that is used in this study. Through provision of information that the

impact of financial distress happens before default risk, this theory provided a neutral stand for undertaking an insightful empirical examination on the link existing in five star rated hotels.

### ***2.2.3 Interest Rate Parity Theory***

In the twentieth century, the theory of IRP was formalized by Keynes (1923). The Interest Rate Parity (IRP) is a frequently employed technique in making exchange rates forecasts. Projections are made by recording the spot exchange rates and the interest rates in the domestic and foreign countries respectively. This theory holds that the interest rate differential between two countries is equivalent to the difference between the forward exchange rate and the spot exchange rate. Interest rate parity contributes crucial role in foreign exchange markets, connecting interest rates, spot exchange rates and foreign exchange rates (Roll and Yan, 2000).

The economic theory according to Huang (2009) shows that relating the differences in interest rates among countries to successive exchange rate changes seems to have broken down. Meese and Rogoff (1983) have demonstrated that other economic theories like the purchasing power parity also does not add much to random walk forecasts of exchange rates 13 at horizons of a year or less. These studies have shown that uncovered Interest Rate Parity has been rejected strongly. The studies that followed have also confirmed these results. There is also a theoretical literature which attempts to determine if the failure of uncovered interest parity is due to risk aversion or market segmentation rather than market inefficiency. However, Roll and Yan (2000) suggest that forward exchange rates are unbiased forecasters of subsequent spots and there is really no dilemma with forward premium.

The studies all reported strong rejections of uncovered interest-rate parity. Subsequent studies have confirmed these results. There is also an active theoretical literature, which

attempts to determine if the failure of uncovered interest parity is due to risk aversion or market segmentation rather than market inefficiency. In contrast, Roll and Yan (2000) suggest that forward exchange rates are unbiased predictors of subsequent spot rates and there is really no forward premium puzzle. This study used the theory to explain the relationship between foreign exchange rate risk and financial performance of the star rated hotels.

#### ***2.2.4 Firm Value Maximization Theory***

Firm value maximization theories states that firms can hedge to reduce certain costs or capital market imperfections related to volatile cash flows. There are typically three lines of explanations. First, hedging can reduce deadweight costs of financial distress (Mayers & Smith, 1982). Second, hedging may also be motivated by tax incentives. When firms face a convex tax function, hedging should help reduce expected taxes (Mayers and Smith (1982), Smith and Stulz (1985)). Hedging can also increase a firms's debt capacity, by generating greater tax advantages from greater leverage (Leland (1998)). These two explanations imply that corporate hedging can add value when firms face convex costs such as progressive taxation and bankruptcy costs. Similarly MacKay and Moeller (2007) argue that hedging can add value if revenues are concave in product prices.

This theory is based on the fact that, exchange rate exposure has potentially positive or negative impact on the profitability and value of the firm. This is captured in the valuation process in terms of the firm's stock returns. Thus, the approach to modeling the exchange rate exposure has been to regress the exchange rate on firms' returns. Based on research of Smith and Stultz (1985), the tax structure would influence a company's hedging decision. As long as the cost of hedging is not too large, a firm that can reduce the variability of its pre-tax firm value through hedging would be able to reduce its expected tax liability and increase its expected post-tax firm value. Fisher's (1907) on interest rates made it clear that the value of an

investment project is equal to the discounted cash flow that this investment generates to its owner(s). The most simple and intuitive formula illustrating this principle is the investment formula calculating the present value of a single investment project under certainty.

The Modigliani-Miller Theorem is a cornerstone of modern corporate finance. At its heart, the theorem is an irrelevance proposition: The Modigliani-Miller Theorem provides conditions under which a firm's financial decisions do not affect its value. Modigliani-Miller (1980) explains that with well-functioning markets (and neutral taxes) and rational investors, who can undo the corporate financial structure by holding positive or negative amounts of debt, the market value of the firm – debt plus equity depends only on the income stream generated by its assets as shown in equation.

This study therefore adopted firm value maximization theory to explain how five star hotels in Kenya manage foreign exchange rate risk in their daily business operations. It guides in identifying the efforts made by the firms to monitor and administer the most influential risks for their businesses.

## **2.3 Empirical Review**

Empirical review is an in depth interrogation of extant studies relevant to the research variables hypothesized. It positions the research into the broader community of scholarly work that already exists by highlighting the methodologies employed and their strength and weaknesses (Fwamba, 2017; Kinyua, 2016; Oluoch, 2015).

### ***2.3.1 Liquidity Risk and Financial Performance***

Tabari, Ahmadi and Emami (2013) examine the effect of managing liquidity risk on profitability of hotels. Liquidity risk is measured by net liabilities divided by total assets while profitability by ROA and ROE. The study use panel data regression to test for the effect. Tabari

*et al.* (2013) find that poor management of liquidity risk negatively affected performance of hotels and this was significant. Firms with limited liquidity will always experience funding shortfalls. The increased demand for funding propels the company to utilize the existing equity and their cash assets or approach external creditors for the highly needed finances. On the other hand, companies with extreme liquidity problems and fail to meet their cash requirements from debt are compelled to liquidate their assets and this is done often times by incurring some costs. Under critical liquidity risk situation, this can lead to bankruptcy. This is confirmed by Kumar and Yadav (2013) who claim that sound liquidity management reduces the probability of companies becoming insolvent hence minimizing chances of bankruptcies and financial distress.

Chowdhury and Zaman (2018) scrutinize the effects of liquidity risk and profitability of financial companies. Liquidity risk had liquid asset to total asset ratio and profitability had ROE and ROA as proxies. Descriptive and inferential analyses were done. Liquidity risk proxy showed a positive and insignificant effect on ROA and ROE. Higher levels of liquidity risk attracted higher levels of profitability; lower risk levels diminished company performance. These results are in line with the firm's corporate wealth maximization objective which requires that companies should strive to expand in size by investing in projects that yield positive returns (Gongera *et al.*, 2013). The authors still maintain that exposure to high levels of liquidity risk would run the company into disrepute making stakeholders to lose confidence in its mission and vision. Such loss of faith would ultimately drive the company into receivership. Chowdhury and Zaman (2018) identify two main causes of liquidity risk: failure to control declining asset level matched with increasing liabilities and failure to strike a balance between cash inflows and outflows and contingency liquidity requirements.

Laminfoday (2018) interrogates the impact of liquidity risk on profitability of banks. Liquidity risk is measured by liquid assets to total asset ratio and total liabilities to total asset ratio. Profitability is measured by return on asset (ROA). A sample of 8 banks and the central bank are studied. The study design adopted is descriptive research. Secondary data is obtained from of the central bank of Sierra Leon's publications for 5 years from 2013 to 2017. Laminfoday (2018) findings show that liquidity risk had a negative and significant impact on return on asset. Failure to identify and check liquidity risk may lead a company into many financial problems including inability to meet clients' demands and pending financial obligations which would put the company's performance prospects in jeopardy. Maintenance of optimal liquidity is pivotal for organizational efficiency and effectiveness and upholding of good relations with stakeholders. Liquidity risk is a necessary ingredient of the overall risk management framework. A properly established system would assist the company to identify sources of financial risk and this would help protecting firm value (Bandyopadhyay, 2012).

Gweyi *et al.* (2018) investigates liquidity risk and performance of co-operatives in Kenya. Liquidity risk is measured by liquidity reserve compliance ratio and cash reserve adequacy ratio (total liquidity reserve to total savings deposit ratio) while financial performance by ROE and ROA. Panel data regression and descriptive analysis were used to test the impact. The research reveals a significant negative impact of liquidity risk on profitability. The research advice to stakeholders is that, they should pay a close attention to liquidity risk as it can decrease company performance significantly. Company management should hold enough cash to assist in mitigating liquidity risk (Gweyi *et al.*, 2018).

Waweru (2018) studied the effect of credit management on the liquidity of five star hotels in Kenya. The study was spellbinding in nature and focused on a populace of 33 five star inns in Kenya. Information was gathered utilizing semi organized surveys controlled to the

key credit control office staff in the lodgings to gather both subjective and quantitative data. Information was broke down utilizing distinct insights where measures of focal propensity and measures of scattering were processed to give comes about. The outcomes from the study uncovered a few variables that influenced acknowledge administration, for example, absence of a formal credit strategy, deferred or non-survey of the credit approach manual, irregularity using a loan chance examination methods and heedless variety of credit terms. The study uncovered whimsical variance in the normal gathering time frame and critical measures of terrible obligations discounted. The study suggests that five star lodgings in Kenya ought to make a credit augmentation arrangement which ought to be stuck to dependably and intermittently check on to see when it ought to be changed to coordinate with monetary conditions. Five star inns ought to make a credit accumulation arrangement setting out the systems and practices to be utilized by the lodging to gather past due or reprobate records receivable.

### ***2.3.2 Solvency risk and Financial Performance***

Chen (2016) researched on risk determinants of China's hotel industry. The risks under consideration are systematic risk (beta), unsystematic risk and total risk. The determinants are debt leverage, size, liquidity, operating efficiency, profitability, growth opportunity and state ownership. Given the distinctive features of its stock markets and its rapidly growing tourism industry, China offers a good case study for this research. Moreover, the rapid expansion of the domestic and international tourism markets in China will create a huge demand for hotels and hospitality services; risk management will consequently be a critical task for hotel executives and investors in China. Thus, a good understanding of risk determinants of the Chinese hotel industry will provide valuable information that will allow both local and foreign hotel business managers and investors to adopt wise investment strategies. Panel regression test results show

that debt leverage, size and state ownership are three critical risk determinants of China's hotel industry. Specifically, high debt leverage and state ownership significantly raise all three types of risk for Chinese hotels, whereas large hotels substantially reduce their systematic and total risks.

Alshatti (2015) tested the effect of solvency risk on financial performance. Solvency risk is measured by capital adequacy ratio (CAR), Total Debt to Total Equity Ratio, Non-performing Loans to Gross Loans and Advances Ratio (NPL). Profitability proxies include ROA and ROE. Descriptive and regression analysis are executed to test the effect. The study finds a positive and insignificant impact of NPL on both ROA and ROE; negative and significant effect of total debt to total equity ratio on both ROA and ROE and CAR has no influence on both ROA and ROE. Alshatti (2015) conclude that companies should minimize the use of debt financing as larger debt increases debt services and liabilities attracting more financial risk which may adversely affect performance. Effective solvency risk systems should have a suitable solvency risk environment operating under a sound credit administration that involves monitoring and proper solvency risk controls. This would help in minimizing possibilities of firm failure (Alshatti, 2015).

Serwadda (2018) examines the impact of solvency risk on financial performance in an effort to complement and make the work by studies like those of Alshatti (2015) more relevant to African region. The study will use secondary data from the bank scope database. Solvency risk is measured by NPLR ratio, loan and advances to total deposit, equity to total assets, total deposit to total loans and advances, while performance is measured by ROA. Panel data regression is used to test the impact. The study found that loan loss provision to total loans ratio had a positive and significant impact on ROA, while NPLR had a negative and significant effect on ROA. The study concludes that non-performing loans have a significant effect on

asset quality. A huge proportion of non-performing loans may lead to high level of vulnerability to financial problems driving the company into crisis.

Serwadda (2018) recommends that hospitality and financial companies should engineer effective strategies to address solvency risk issues carefully. Poorly designed solvency risk policies would compromise asset quality and expose the company to financial distress. In a similar African environment in South Sudan, Mogga, Mwambia and Kithinji (2018) interrogates the effect of solvency risk. Solvency risk procedures are measured using risk identification; risk monitoring, credit approval, risk analysis and appraisal. Risk management procedures significantly affected performance. Mogga *et al.* (2018) observe that most firms implemented risk management practices to improve efficiency. The study encourages companies to judiciously employ them to reduce their solvency risk position.

Muthoni (2016) researched on the effect of financial management practices on the performance of SACCOs in hospitality industry: a case study of five star hotel SACCOs in Nairobi. The study sought to establish the effect of solvency risk management on the performance. The study used descriptive research methodology. The target population was the 169 SACCO management committees from the 13 five star hotel SACCOs and a sample size 119 respondents was used. The questionnaire was administered to the respondents through drop and pick method and once collected the data was analyzed using Microsoft Excel to calculate the frequency percentages, mean score as a measure of central tendency and standard deviation as a measure of data dispersion. Statistical Package for Social Science (SPSS) was used to perform correlation analysis that was used to establish the degree of relationship between respondents' opinion on the three research objectives. The study found that majority of the SACCOs had adopted financial management practices that contribute to the performance of the SACCOs. Cash management policies have contributed to enhancing the liquidity of the

SACCOs, ensuring loans are disbursed upon approval resulting to increase in profitability through the interest. The study also revealed SACCOs mainly used guarantee and members shareholding as securities to mitigate solvency risk

### **2.3.3 Interest Rate Risk and Financial Performance**

Hoffman, Langefield, Pierobon and Vuillemeay (2018) evaluate the allocation of interest rate risk with a motive to suggest better financial risk management strategies. The study findings reveal that interest rate risk distribution among European countries is highly heterogeneous. Particularly high levels of interest rates have a tendency to hurt financial institutions in fixed-rate economies and hospitality companies in variable rate economies. The results allude to the fact that if interest rate movements are borne by financial institutions then their net worth becomes vulnerable affecting the supply of credit through the balance sheet. On the other hand, for cases where the interest risk is basically borne by the real sector then the monetary policy transmits it through their balance sheet with stronger ramifications on consumption and investments (Hoffman *et al.*, 2018).

Corgel, (2016) studied the effect of a rise in interest rates on hotel capitalization rates. Capitalization rates for all commercial real estate are affected by changes in the general level of interest rates. Hotel capitalization rates should respond more quickly to interest rate changes than those of other property types because hotels do not experience the “lease friction” found in other commercial properties, with their lengthy leases. This analysis estimates the statistical connection between interest rate changes and cap rates. Holding other important factors constant, the model estimates that at current levels a 100-basis-point increase in the 10-year U.S. Treasury rate will produce a 28-basis-point uptick in hotel capitalization rates. Continuing improvement in the U.S. economy should eventually result in higher interest rates, but any improvement should also bring both compression of the hotel risk premium and stronger NOI

growth, each of which place downward pressure on capitalization rates. With hotel capitalization rates currently in a range of 7.0 to 8.5 percent and an expected slow pace of interest-rate changes, the modeled outcome suggests that hotel property values will remain stable for the foreseeable future. Hotel investors should therefore have ample time to ponder disposition decisions without fear of losing gains while new investors will need to rely on the strong dividend flows currently being produced by hotels for greater shares of total returns.

Ali and Nsenje (2017) studied the impact of exchange rate volatility on hospitality industry –a study in Lusaka province of Zambia. This research aimed to find out the impact of exchange rate volatility on profitability, capacity utilization and the impact of GDP and inflation on profitability of hospitality industry. The study used quarterly secondary data from 2005 to 2015 with respect to three big hotels which had international branding and received over fifty percent revenue in forex. The multiple regression model was used to measure the impact of independent variables on the dependent variable. The study revealed that volatility in exchange rate had significant effect on profitability. But inflation had negative effect on profitability. The GDP growth rate had positive effect on the capacity utilization. The study concluded that the Central Bank of Zambia should take necessary steps to increase the value of domestic currency, i.e., Kwacha, and stop fluctuations in it to safeguard the profitability in the hospitality industry. The study also concluded that through appropriate monetary policy, i.e., increasing the bank rate and reserve ratio and selling the bonds in the market, the inflation could be reduced by controlling money supply

Hoffman *et al.* (2018) and Jorge and Augusto (2011) underline that the financing of long term projects using funds generated from current liabilities itself presents a maturity transformation problem that exposes companies to interest rate risk. Non-financial companies like their financial counterpart would suffer from adverse interest rate movements because the

present value of their assets declines much faster than those of their liabilities. Alternatively, interest rate risk exposure of real sector corporations would be definitely enhanced due to continued rising of interest expense paid on their liabilities compared to interest income received from their assets (Hoffman *et al.*, 2018: Jorge & Augusto, 2010). Interest rate risk is a vital affair to non-financial corporations as it affects their earnings and capital. The company's earnings are affected via its net income, interest sensitive incomes and operating expenses. The value of the firm's assets, liabilities and off-statement of financial position items are susceptible to interest rates volatilities in that, the present value of future cash flows respond to changes in such movements. Hoffman *et al.* (2018) advocates that, hospitality companies should immunize their value against variability in interest rate sensitivity of their assets and liabilities, through proper Financial risk that manage to keep the interest rate risk within prudent levels.

Adow and Ochiri (2018) scrutinize the interaction between interest risk management techniques and profitability using descriptive research design. Findings reveal a high level interest rate risk position. Mitigation techniques used by companies include hedging, diversification strategy, payment netting and leading techniques. Currency swaps, forward contracts, future contracts and currency derivatives are identified as practices used to hedge against interest rate risk in Kenya. The research argues that interest rate risk mitigation efforts in given companies are influenced by the inherent policies, values, operational procedures, informational flow, chain of command, goals, mission and vision. Adow and Ochiri (2018) report a strong association between interest rate risk mitigation techniques and profitability.

The study by Adow and Ochiri (2018) encourage companies in Kenya to make use of hedging as a tool for managing interest rate risk as they have the effect of enhancing currency stability, improvement in cash flow generation and profitability. Diversification as a portfolio

management strategy ensures that interest risks are distributed over different industries to minimize their net effect. The study made a valuable contribution to literature by decomposing the interest risk in Kenya into repricing risk, yield curve risk, risk of interest diversity (optionality risk) and basis risk. The position of Adow and Ochiri (2018) is reinforced by Yun and Xiaosong (2017) study on interest rate risk in China and came up with similar structure of interest risk classification and made similar recommendation on their management. These risks highlight possibilities of mismatch in the characteristics of assets and liabilities on and off-statement position of the company. This represents some of the very important risk position for companies in both the financial and real sectors of the Kenyan economy (Adow & Ochiri, 2018).

The influential findings by Adow and Ochiri (2018) are earlier on confirmed by Gitonga (2010) who study the effect of interest rate risk on performance of banks. Measures used are interest rate sensitivity gap and net interest income for interest rate risk and profitability respectively. Findings by Gitonga (2010) reveal that interest rate sensitive gap and net interest income are positively correlated and this is significant. High sensitivity gaps in short term assets results in reduced revenue. Interest rate risk reduces chances of a company's exposure to risks with increased chances of realizing higher incomes. Companies can take advantage of positive movements in interest rates to generate more revenue and reduce losses when the rates are unfavorable to their operations. They should move their focus on interest rate risk policies and practice and direct their efforts to prudent monitoring of the assets and liabilities mismatch positions in order to help control the effect of changes in interest rates (Maniagi, 2018).

#### ***2.3.4 Foreign Exchange Rate Risk and Financial Performance***

Simakova (2017) examine the influence of exchange rates on the value of firms listed on stock exchange especially in the context of global financial crisis under varying economic

conditions. The study tests the effect of foreign exchange rate using Jorion's model and panel data regression. Results from this investigation revealed a negative association between exchange rate and share value. The negative exposure coefficients suggest that undervaluation of local currency led to a decline in the company's stock returns. The increased ratio of debt denominated in foreign currency in Hungary led to high company exposure to foreign exchange volatilities. Undervaluation of local currencies moved company stock prices to higher levels in the various countries under investigation. Local currency depreciation positively affected the volume of exports while at the same time increased the cost of importing commodities from other countries (Simakova, 2017).

Bodla and Reeta (2013) and Kumar (2015) attribute the increased exposure to financial risks by sugar companies to globalization of world markets. Internationalization has technically made financial risks one of the most difficult problems that financial managers must urgently address. Volatilities in exchange rates, and interest rates remain one of the main sources of uncertainties for sugar companies globally. Financial risks in the sugar sector arises through numerous transactions which are financial in nature including sales and purchase of commodities, investment and debt financing, launching of new projects, mergers and acquisitions, managerial and competitive activities. The introduction of free-floating exchange rate has introduced variability in exchange rates in the sugar sector, carrying with it more currency risks. Currency volatilities affects domestic sugar manufacturers as it increases their risk profile by making foreign sugar producers more competitive relative to the domestic ones allowing sugar import penetration into the local market. Depreciation and appreciation in currencies demands for proper understanding and management of these effects by sugar companies (Kumar, 2015; Moles, 2016).

Findings from Simakova (2017) led to revolutionary conclusions on the currency risk management position that finds practical application in the sugar sector. Hospitality companies' engagement in international trade was one of the primary sources of currency risk exposure but other factors in the domestic economies indirectly resulted into exposure as well. Purely domestic hospitality companies transacting purely in the local currency were equally at risk. Factors that raised the effect of exchange rates were market competition and macro-conditions including but not limited to aggregate demand, level of employment and output (Rajan & Chandrasekaran, 2015). Market competitive forces influence price elasticity of demand and the degree of substitutability of commodities. Domestic currency devaluation has the power of enhancing the competitive ability of hospitality companies whose operations are purely local. Hence sugar companies are potentially exposed to movements in exchange rates and currency risk regardless of their direct financial exposure. Thus currency risk management in the sugar sector is as important as it is in the other sectors of the economy (Rajan & Chandrasekaran, 2015).

Wanjiku (2016) researched on effect of fluctuation in foreign currency exchange rates on financial performance of five star hotels in Nairobi. This study adopted the descriptive research design. The target population was all the five star hotels operating in Nairobi Kenya. The study used secondary data obtained from the monthly management reports of the hotels which was analyzed on quarterly basis for the period between 2012 and 2016. Data relating to exchange rates, economic growth and information was obtained from Central Bank of Kenya. The study used quantitative data analysis techniques where Statistical Package for Social Sciences version 23 was used to analyze data. Test of significance of the results was done using Analysis of Variance. The findings obtained showed that Exchange Rate Fluctuations had a significant positive impact on the performance. Thus, depreciation of Kenya Shilling against

the USD will lead to increased hotel financial performance. Inflation had a negative relationship on the financial performance of five star hotels. GDP on the other hand had a positive relationship. An improvement in the GDP translates to an improvement in other economy sectors. The study concluded that increased depreciation of Kenya shilling against the USD (increased exchange rate fluctuation) will cause an increase in the performance. This could be due to the hotels receiving much of revenues in USD. Further depreciating local currency improves exports and makes imports expensive.

In Kenya, Runo (2013) evaluates the effect of currency risk on performance of oil firms listed in the Nairobi Securities Exchange (NSE). Foreign exchange risk is measured by exchange loss or gain, while profitability by net revenue, turnover and gross profit. The study finds a positive and significant effect between foreign exchange movements and profitability. This result finds empirical support from Mbabazize, Twesige and Ekise (2014) in Uganda using different proxies for currency risk management (currency risk assessment and management strategies) on performance in hospitality companies. Mbabazize *et al.* (2014) result however, contradicts an earlier stand that much of the losses reported by Kenolkobil and Total Kenya were attributed to exchange rate movements even though the impact was not of similar proportions between the two companies. Kenolkobil with greater part of its operations denominated in local currency experienced billions of foreign exchange losses compared to Total Kenya that had much of its operations in foreign countries. Runo (2013) attributes this difference on the hedging techniques adopted by each one of these companies. Mbabazize *et al.* (2014) conclude that careful application of derivative contracts can help minimize the effects of currency risk and promote foreign risk management in organizations.

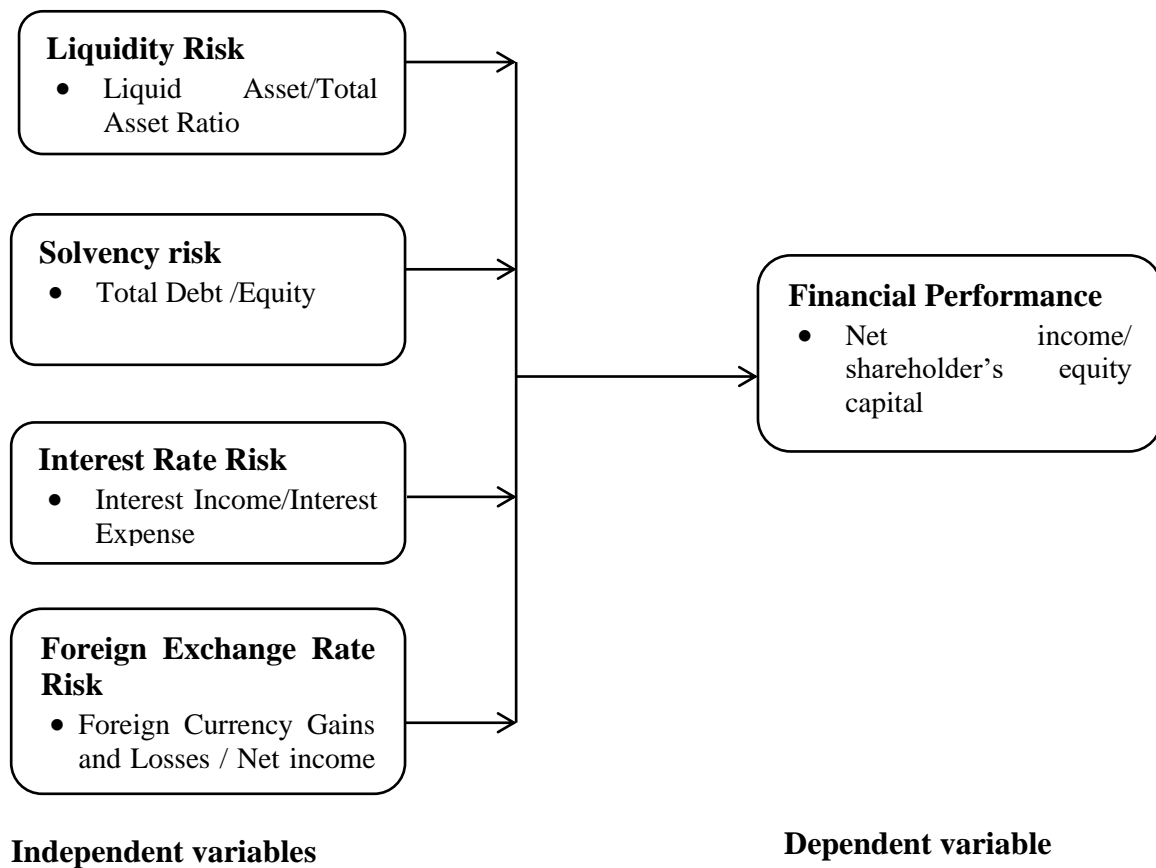
Kiptisya (2017) scrutinize the influence of currency risk management on performance of banks in Kenya. The findings reveal that foreign exchange risk management affected

financial performance positively and this was statistically significant. Furthermore, foreign exchange risk influenced performance negatively and this was insignificant. The findings revealed that financial risk management techniques used in hedging against financial risk include cross currency swaps, options and price adjustments. The study identified several benefits attributed to the application of financial risk to firms as gaining leadership position in the industry, increased asset productivity, increased efficiency and higher profitability. Companies are required to develop risk management for foreign exchange which is a clear indication that the process of assessment of financial risk and implementing of strategies in financial risk management (Kiptisya, 2017).

Onyango (2018) study the influence of exchange rate volatility on stock prices of listed firms on the Nairobi Securities Exchange. Explanatory non-experimental research design is used to execute descriptive and inferential tests. The standard deviation of exchange rate was used to estimate volatility in exchange rate while share prices were measured using market capitalization divide by the number of shares traded. Onyango (2018) employs three tests to highlight the relationship. First the relationship between daily mean exchange rate and stock prices is negative and significant. Secondly, monthly mean exchange rate has a negative significant effect on stock prices. Lastly, the daily and mean monthly exchange rate which reveals a combined negative impact on stock prices and this is significant.

## 2.4 Conceptual Framework

**FIGURE 1: Conceptual Framework**



### 2.4.1 Liquidity Risk

Liquidity refers to the ability of a financial institution to meet its obligation for cash and collateral without having to incur losses that were not acceptable (Tabari, 2013). Acceptable liquidity is reliant on the ability of the organization to meet expected and unexpected flow of cash efficiently and collateral requirements without adverse effects on daily operations or financial state of the company (Sathya, 2016).

Liquidity risk refers to the risk that the financial condition of an institution is exposed to or the safety and soundness that arises from its lack of ability for meeting the obligations it

is contracted to perform. Management of liquidity risk is mainly focused on assessing funds need for meeting its obligations and ensuring that cash or collateral is available for the purpose of fulfilling those needs in time through coordination of various fund sources existing in the organization under stressful and normal conditions (Raad, 2015). Liquidity risk and financial performance presents confounding results which compels for more research (Bandyopadhyay, 2012).

Literature identifies two critical ratios in respect to liquidity risk: liquid asset to total asset ratio and liquid assets to volatile liabilities ratio (volatility coverage ratio) (Kumar & Yadav, 2013). A lower ratio would spell the red line in liquidity risk and thus highlighting poor management of liquidity risk. This implies a higher liquidity risk exposure for the firm. Sam (2015) identifies the main source of liquidity risk to be the imbalances and maturity mismatch between assets and liabilities. This happens especially when short term debts are employed to purchase fixed assets. In such cases, short term liabilities mature earlier before the long term assets begin generating income to the firm hence they cannot be liquidated immediately without loss of value (Sam, 2015).

In as much as Adeusi *et al.* (2013) and Olalekan *et al.* (2018) in Nigeria find a positive and insignificant relationship, Chowdhury and zaman (2018) in Bangladesh insist on an insignificant relationship with a zero net effect between liquidity risk and profitability. On the other hand Laminfoday (2018) in Sierra Leone and Tabari *et al.* (2013) in Iran are of the view that liquidity risk has a negative and significant effect on profitability. Besides, Laminfoday (2018) and Olalekana *et al.* (2018) in their conclusions, suggest further study in the area of liquidity risk and financial risk management.

Laminfoday (2018) insist on doing another study on the impact of liquidity risk in other countries other than Sierra Leon in hospitality sectors for longer periods of more than 5 years to enhance the understanding of the subject. On the other hand, Olalekana *et al.* (2018) recommends further research on financial risk management and profitability in hospitality sectors to broaden the understanding of such influence.

#### **2.4.2 Solvency Risk**

Solvency risk management is the exercise to mitigate the loss through understanding of banks capital adequacy and reserves for loan losses at any particular time; a process which has long been seen to be a challenge for financial institutions (Olalekana *et al.*, 2018). Gongera *et al.* (2013) suggest more study on solvency risk and profitability over a longer period of time with a multifactor model of financial risk management covering more variables of financial risk management and inclusion of more hotels in Kenya; to enable policy makers make informed decisions while tackling challenges in the hospitality sector.

Olabamiji and Oseni (2018) identified several measures to reduce solvency risk exposure. These include use of credit referencing bureaus, credit scoring, default probability, carrying out credit appraisals and solvency risk insurance. High level of bad debts in a firm may have an information signaling effect to stakeholders about the robustness of its funding propensity. Extant studies have identified several indicators of solvency risk: (Ahmadyan, 2018) singles out nonperforming loan ratio and capital adequacy ratio as being among some of the most ideal proxies of solvency risk. Lower nonperforming loan ratio would imply solvency risk is well managed in the corporation while a higher ratio is a signal for poor management of the financial risk (Ahmadyan, 2018).

Gongera *et al.* (2013) study was published in 2013: a time lag that the current research intends to bridge. In addition, Alshatti (2015) scrutiny of the impact of solvency risk on performance of banks in Jordan provides mixed results in the same study. In one measure of solvency risk (Nonperforming loan ratio): the study reveals that NPR has a positive influence on financial performance (Net Income and Shareholder's Equity). In a second measure of solvency risk (Debt to equity ratio): solvency risk is negatively related to profitability (ROE). In another measure of solvency risk (Capital adequacy ratio): CAR has no effect on financial performance (ROE).

### **2.4.3 Interest Rate Risk**

The risk that faces owners of bonds due to fluctuation of interest rates is defined as interest rate risk. The amount of interest rate risk that a bond has is dependent on the level of sensitivity of price to change in rates of interest in the market (Alshatti, 2015). There are two aspects that determine level of sensitivity; the time the bond will mature and bond's coupon rate (Gitonga, 2010). Adow and Ochiri (2018) and Gitonga (2010) research on ways in which interest rate risk mitigation affects profitability of forex companies and interest rate risk on Kenyas bank profitability respectively moots for a multifactor model constituting all variables of financial risk management and profitability in the real sector of the economy to help reveal their combined influence and enrich literature.

Adeusi *et al.* (2013) and Gitonga (2010) equally suggest further research using expanded model variables in financial risk management that includes interest rate risk and profitability to shade more light on the influence of financial risk management. These investigations by Adeusi *et al.* (2013), Adow and Ochiri (2018) and Gitonga (2010) provides a gap where this study will help build more consensus on the ensuing debate on the impact of interest risk management and profitability.

#### ***2.4.4 Foreign Exchange Rate Risk***

Foreign-exchange risk is risk that investment or asset denominated foreign currency will drop its value due to unfavorable fluctuations in foreign currency and domestic currency (Lelgo & Obwogi 2018). Kiptisya (2017) evaluate influence of exchange rate risk management on performance of banks in Kenya. Lelgo and Obwogi (2018) examine the impact of currency risk and performance of micro-finance companies in Kenya.

Besides, Kiptisya (2017) and Onyango (2018) moot for further research on currency risk management and performance variables such as profitability in hospitality sectors of the economy where the sugar sector lies. The research by Kiptisya (2017), Lelgo and Obwogi (2018) and Onyango (2018) leaves glaring literature gap to be filled by these study by examining the financial risk management including exchange rate risk management and financial performance of hotel sector in Kenya.

#### ***2.4.5 Financial Performance***

The term firm performance is considered to be how effective an organization is in its purpose fulfillment (Parlak, 2016). According to Onyango (2018) measures of performance are considered to be good if they have key characteristics like being broad based, structured comprehension of strategy, providing feedback and taking action on results. There are several measures of company performance which determines efficiency of a company is transforming its resources into income (Nishimura, 2016). Usually, companies including financial institutions measure their level of performance using financial measures, measuring performance in contradiction of its budget, benchmarking or combination of all (Mwandia, 2014).

The term profitability is applied in measuring the overall financial health of the company over a particular span of time, and can be applied in comparing performance of companies operating in the same industry or across the same sector (Moles, 2016). The focus of profitability analysis is the relationship between expenses and revenue and profit levels in relation to investment size in the business. The four commonly used measures of profitability ROA, return on equity (ROE), operating profit margin and net income.

ROA is calculated by dividing income with the total assets of the company (Lelgo, 2018). It's a common measure of company profitability and is used in measuring the ability of the company managing to produce income through company utilization at their disposal indicating how efficient the company management was in generation of net income from all institutions resources. Kung'u (2015) explained that when the ROA is high, it implies that the company is more efficient in its use of its resources.

## **2.5 Research Gaps**

A review of literature on financial risk and financial performance has highlighted a spectrum of research opportunities that the current study supposedly intends to utilize. Extant literature highlights glaring knowledge gap on the effect of financial risk on financial performance of five star hotels in Kenya.

Studies by Alshatti (2015), Lelgo and Obwogi (2018), Mwangi et al. (2019), Runo (2013), Serwadda (2018) had several strengths; Alshatti (2015) developed a robust model to study solvency risk effect on performance. Juma (2018) and Lelgo and Obwogi (2018) decompose financial risk management into liquidity, credit, interest rate and foreign exchange rate risk which enhance the understanding of the combined influence of financial risk management. Juma (2018) and Lelgo and Obwogi (2018) result show how multifactor models

comprising financial risk management impacts on performance. Studies by Alshatti (2015) and Jelgo and Obwogi (2018) has improved and enriched literature with knowledge and understanding of the influence of financial risk management in at least three dimensional frameworks. Alshatti (2015), Jelgo and Obwogi (2018) and Serwadda (2018) affinity in carrying out proper model checks in both descriptive and inferential tests strengthens model results and their conclusions are very dependable in financial risk management.

However, Alawattagama (2018), Alshatti (2015), Jelgo and Obwogi (2018), Mogga *et al.* (2018), Runo (2013), Simakova (2017) and Serwadda (2018) have one major weakness: they overwhelmingly overlooked the significant role of financial risk management in the hospitality industry. Alawattagama (2018), Alshatti (2015), Simakova (2017) and Serwadda (2018) on the other hand investigations fail to appreciate the importance of theoretical underpinnings for their studies by failing to anchor their studies on theoretical framework. Some studies such as those of Kiptisya (2017), Mogga *et al.* (2018) and Runo (2013) had extremely very low sample sizes whose results could hardly meet the threshold for the test of generalization to the entire population (Chimaleni, Muganda & Musiega, 2015): 1 bank, 6 banks and 2 oil companies respectively.

Adow and Ochiri (2018) and Gitonga (2010) research on the effect of interest rate risk mitigation on profitability of forex firms and interest rate risk on profitability of banks in Kenya respectively moots for a multifactor model constituting all variables of financial risk management and profitability in the real sector of the economy to help reveal their combined influence and enrich literature. Adeusi *et al.* (2013) and Gitonga (2010) equally suggest further research using expanded model variables in financial risk management that includes interest rate risk and profitability to shade more light on the influence of financial risk management. These investigations by Adeusi *et al.* (2013), Adow and Ochiri (2018) and Gitonga (2010)

provides a gap where this study will help build more consensus on the ensuing debate on the impact of interest risk management and financial performance.

Literature seems to turn a blind eye on the study of exchange rate risk management and profitability in the hospitality sectors of the economy including the hotel industry (Gross & Siklos, 2018; Kumar & Yadav, 2013). A number of these studies mainly focus in the financial sectors of the economy (Gross & Siklos, 2018). Kiptisya (2017) evaluate the effect of exchange rate risk management on performance of banks in Kenya. Lelgo and Obwogi (2018) examine the impact of currency risk and performance of micro-finance companies in Kenya. Besides, Kiptisya (2017) and Onyango (2018) moot for further research on currency risk management and performance variables such as profitability in hospitality sectors of the economy where the sugar sector lies. The research by Kiptisya (2017), Lelgo and Obwogi (2018) and Onyango (2018) leaves glaring literature gap to be filled by these study by examining the Financial risk including exchange rate risk management and financial performance of star rated hotels in Kenya.

## 2.6 Operationalization of Study Variables

This is the process of defining variables into measurable factors in line with the study context, permitting their quantitative and empirical measurement and proxy placement. To be operationalized are financial risk variables such as liquidity risk, solvency risk, interest rate risk and foreign exchange risk. The dependent variable is financial performance.

**TABLE 2.1: Operationalization of Variables**

<b>Variable</b>	<b>Measurement</b>	<b>Formula</b>
<b>Dependent</b>		
Profitability	Return on Equity (ROE)	Net income/ shareholder's equity capital
<b>Independent variables</b>		
Liquidity risk (LQ)	Liquid Asset Ratio	Liquid Asset to Total Asset Ratio

Solvency risk (SR)	Debt Equity ratio	Total Debt to Total equity
Interest rate risk (IR)	Interest coverage	Interest Income to Interest
	ratio	Expense
Foreign exchange rate	Foreign Exchange	Foreign Currency Gains
risk (FX)	Rate currency ratio	and Losses / Net Income

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## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter outlines the processes and strategy that the research adopted to systematically solve the research problem. The chapter covered; research design, population, data collection methods and data analysis methods. The immediate section amplifies and justifies the research design giving justification for the chosen design.

#### 3.2 Research Design

The study adopted a descriptive research design to enable the procurement of data on five star hotels in Kenya. Descriptive research design describes the status of affairs of the five star hotels in Kenya as they are in their natural settings. The purpose of descriptive design is to get answers to questions on what, how and where about of the five star hotels in Kenya. The design identifies present conditions and point to present needs to examine the immediate status of the five star hotels in Kenya, facts and findings to establish relationships between financial risk and financial performance. The justification for descriptive research design is that it provides an accurate account of features of a social event (behaviours, opinion, beliefs and abilities), facilitates systematic analysis of events and it is able to establish relationships between the phenomenon information and the study variables. Chimaleni *et al.*, (2015) singles out merits of descriptive design to include rapid and economical collection of information on a large scale, a high response rate, time saving and high level of respondent support and collaboration.

### 3.3 Target Population of the Study

The target population was all-5 star rated hotels in Kenya licensed and regulated by the Kenya Tourism Regulatory Authority. According to the Kenya Association of Hotelkeepers and Caterers (KAHC), there are 25 five star hotels in Kenya, Kenya (Tourism Regulatory Authority, 2019). The 25 hotels are distributed in greater Nairobi, Coast, South Rift and in Central & Mount Kenya. The distribution of the hotels based on their region is as presented in Table 1.

**TABLE 1: Target Population**

<b>Region</b>	<b>Frequency</b>	<b>Percent</b>
Nairobi	11	44
Coast	7	28
South Rift	5	20
Central & Mount Kenya	2	8
<b>Total</b>	<b>25</b>	<b>100</b>

### 3.4 Sampling Frame

Sampling frame is a list of all the elements in the population from which the sample is to be drawn (Kungwani, 2014). The sampling frame for this study was all five star hotels in Kenya. Due to the small size of population, census was used where study population constituted the sample size. Therefore the study carried out a census of all 25 five star hotels in Kenya. Amariati (2013) recommends for census study for the entire population in circumstances where the population is fairly small. Census studies are the most trusted and reliable route as all the population elements are part of the study (Mwandia, 2014).

### 3.5 Data Collection Instruments

The study involved the collection of secondary data from sampled hotels. A secondary data collection form was used to collect the data. Secondary data was extracted from financial statements (annual reports). Financial statements such as audited comprehensive income

statements, statements of financial position and cash flow statements were used. Since the data is collected from reliable and valid secondary data sources so no need to do any further test for checking their reliability and validity (Windle, 2015). The financial statements were obtained to cover a period of 10 years from 2010 to 2019.

### **3.6 Data Collection Procedures**

This was made possible by obtaining express authority from the National Commission for Science and Technology and Innovation (NACOSTI). Desk search technique was used to obtain financial reports from the finance department of the respective hotels. This information was corroborated by data from audited reports for five star hotels, The Hospitality industry Directorate, Kenya Association of Hotelkeepers and Caterers (KAHC), the registrar of companies and the Central Bank of Kenya (CBK) for statistics on foreign exchange rates. The panel data comprised cross section and time series data. The 25 five star hotels in Kenya comprised the cross section data while the ten year period from 2010 to 2019 is time series data.

### **3.7 Data Processing and Analysis**

Panel data was used. The data was coded and then imported into STATA software for analysis. The 25 five star hotels formed the panels for the data. The data contained columns for liquidity risk, solvency risk, interest rate risk, foreign exchange rate risk and financial performance. Coding consisted of technical events whereby symbols, usually numbers, are used to identify the raw data for the purpose of transforming into format that can be accounted and tabulated with ease (Startz, 2019). It assisted the researcher to reduce the response to few categories that contain information that is needed for analysis. Therefore, codes are assigned to each response. The dataset was then verified if the data correlates with captured data into STATA Version 13.

### 3.7.1 The Model

Multiple regression model was used in the present study to model the linear association between explanatory dependent (economic growth) and independent variables (foreign direct investment, terms of trade, inflation, public debt). The multiple regression analysis was used in the present research for several reasons: to determine the relationship between the each element under investigation and determine the relationship between dependent and independent variables (Russell, 2017). Other studies that have also adopted the use of regression model. For instance, Gachini (2017) used it to determine the relationship between determinants of microeconomic and economic growth in Kenya while Ajmair (2017) used it when studying determinants of economic growth in the state of Pakistan.

The main model for statistical analysis was derived from the main objective of the study which has its variables liquidity risk, solvency risk, interest rate risk, foreign exchange rate risk and financial performance as the study variables.

The main model for statistical analysis was:

$$Y = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon$$

Where;

Y is the financial performance

$\beta_0$ =constant

$\beta_{1-4}$ = Regression coefficient for  $X_{1-4}$

$X_1$  is the liquidity risk,

$X_2$  is solvency risk,

$X_3$  is interest rate risk and

$X_4$  is foreign exchange rate risk,

$\varepsilon$ = error term

### **3.8 Diagnostic Tests**

When performing a panel regression analysis, diagnostic tests are run to detect potential problems with residuals and model specification. In order to rely on the estimated coefficients and consider them accurate representations of true parameters, it is important that the assumptions of linear regressions formulated in the Gauss-Markov theorem should be met. Most of the assumptions relate to the characteristics of the regression residuals. The various diagnostic checks that were conducted to ensure adequacy of the panel regression model include:

#### ***3.8.1 Test of Multicollinearity***

Multicollinearity test was conducted to test if there is high relationship between any two independent variables. If any two independent variables have a strong relationship, then there is a very strong correlation. Multicollinearity was tested using variation inflation factors (VIF). A VIF value of 1-10 indicates no Multicollinearity. When the assumption of multicollinearity is violated, the collinear variables can cause inflation of significant levels which can lead to the model showing high significance while in reality, the significance is less. When multicollinearity exists, one of the variables was excluded in the model.

#### ***3.8.2 Autocorrelation Test***

Test of autocorrelation was conducted to ensure that there is statistical independence of the residuals in successive years in the 10 years' period. Wooldridge test was used to test for autocorrelation. Statistic was chosen where significance less than 0.05 indicated data is not auto correlated. In case there was autocorrelation, the study could have added one lag order to the panel regression model if the violation was not very serious. However, if the violation is serious, the study could have evaluated the transformations that would have been applied to

the independent and dependent variables. The study would then enhanced stationarity of the data through appropriate deflating, logging and differencing.

### ***3.8.3 Stationarity Test***

According to Chandra and Sharma (2013), examining stationary of data is important because if data used is not stationary the regression obtained will be spurious. Also, it's impossible to carry out validity hypothesis tests regarding regression parameters. A series that is stationary can be explained to be one having constant means, auto covariance and variance of each lag. Several unit root tests can be applied in examining stationarity of series. These include Dicey Fuller (DF) test, or augmented DF (ADF) (Suleman, 2014). This study applied the ADT test. ADF tests the null hypothesis that the data has a unit root. This is a negative statistic and the more negative it is, the stronger is the rejection of the null hypothesis. If the data would have had a unit root, this indicates that it is non-stationary. This would have been managed differencing or log linear transformation.

### ***3.8.4 Normality Test***

Normality is a critical assumption in multivariate analysis (Hair *et al.*, 2010). It assumes that the errors in the prediction value of Y (dependent variable) are normally distributed. The normality of the data was tested using degrees of skewness and kurtosis of the study variables. The study used Kolmogorov-Smirnov tests and Shapiro-Wilk tests to check for normality (Ghasemi & Zahediasi, 2012). Furthermore, if the tests are significant, the data is not normally distributed. Therefore, for data to be considered normal, the K-S and S-W tests should not be significant. Similarly, the study used histograms or normal probability plots to check for normality in the data distribution

### **3.8.5 Linearity Test**

It assumed that the relationship between independent and dependent variables is linear. Thus, linearity is acknowledged as the degree to which the dependent variable changes as a result of a change in the predictor variables (Hair *et al.*, 2010). Scatterplots were used to assess linearity between independent and dependent variables in the study.

### **3.8.6 Heteroscedasticity Test**

Heteroscedasticity occur when the error terms do not have constant variances (Knaub, 2007a). Similarly, according to Gujarati (2003) heteroscedasticity in the regression model is present when the disturbances have unequal spread or variance. The problem of heteroscedasticity may affect regression results which eventually lead to inefficient estimates if not corrected (Nyarko & Nakato, 2016) and that standard errors of such estimates will be biased (Baltagi, 2008). White General Tests was used to test for heteroscedasticity. The assumption of this test is that the null hypothesis is that there is constant variance therefore, if the chi-square is it shows that heteroscedasticity is present (Williams *et al.*, 2013). According to Baltagi (2008) if heteroscedasticity occurs then regressions were run using robust standard errors.

### **3.8.7 Hausman Test**

Hausman specification test was employed in the detection of endogenous repressors in a regression model. The null hypothesis is rejected if the value of P is less than the significant level (0.05), meaning that the used data is not from a normal population. The presence of endogenous repressors in a regression model may cause failure in the estimators of OLS. For OLS regression to be computed, the data assumes that there is no correlation between

independent variable and the error term. To decide between fixed or random effects a Hausman test was conducted

The researcher first identified the appropriate model for the study using the Hausman test where the null hypothesis was that the preferred model is random effects, that is if the Prob>chi2 value was greater than 0.05. The alternative the fixed effects if the Prob>chi2 value was less than 0.05. It basically tested whether the unique errors ( $u_i$ ) are correlated with the regressors.

This test was used to choose between the fixed effects model and the random effects model. Taking random effect model as the null hypothesis ( $H_0$ ) and fixed effect model as the alternative ( $H_1$ ), If the result showed a p-value  $< 0.05$  ( $H_1$  is true) then the Fixed Effects model was to be appropriate to use while a p-value  $> 0.05$  ( $H_0$  is true), Random Effects model was to be appropriate to use.

	$H_0$ Is True	$H_1$ Is True
Random Effect Estimator	✓	
Fixed Effect Estimator		✓

Regardless of the outcome of the Hausman test, the researcher was to perform further tests to choose an appropriate model between pooled OLS and either random or fixed effects models. In the event the random effect model was chosen, a Breusch-Pagan Lagrangian Multiplier (BPLM) test was to be used to choose between random effects model and pooled OLS model. Taking the null hypothesis ( $H_0$ ) as random effect (when variance = 0) and alternative ( $H_1$ ) as pooled OLS (when variance  $> 0$ ).

	$H_0$ Is True	$H_1$ Is True
Random Effect Estimator	✓	
Pooled OLS		✓

In the event the fixed effects model was chosen, the researcher was to use the Wald F-test to compare the appropriate model between fixed effect and pooled OLS models. Taking the null hypothesis ( $H_0$ ) as fixed effect (when F-value is less than F-critical) and alternative ( $H_1$ ) as pooled OLS (when F-value is greater than F-critical);

	$H_0$ Is True	$H_1$ Is True
Fixed Effect Estimator	✓	
Pooled OLS		✓

### 3.10 Data Presentation

Data presentation includes representing the data in pictures using charts, maps, graphs etc. This technique assists in adding the aspect of visual to the data making its understanding more comfortable and easily understood. Different techniques of data presentation are applicable in presenting data and facts. In this study, the panel data was analyzed in STATA and presentation done in tables and figures. The study interpreted the research findings from the evidence presented by the data collected.

## CHAPTER FOUR

### FINDINGS AND DISCUSSION

#### 4.1 Introduction

In this chapter, the study presents data analysis, the findings obtained and their interpretations. The main objective of the study was to investigate the effect of financial risk on the financial performance of five-star hotels in Kenya. Secondary data was collected from 25 five-star hotels in Kenya from 2010 to 2019. The data was analyzed using STATA.

#### 4.2 Descriptive Statistics

Descriptive statistics were computed to describe the overall distribution of the collected data. The study computed their mean, standard deviation, minimum and maximum Values. Table 4.1 presents the findings obtained.

**TABLE 2: Descriptive Statistics Tables**

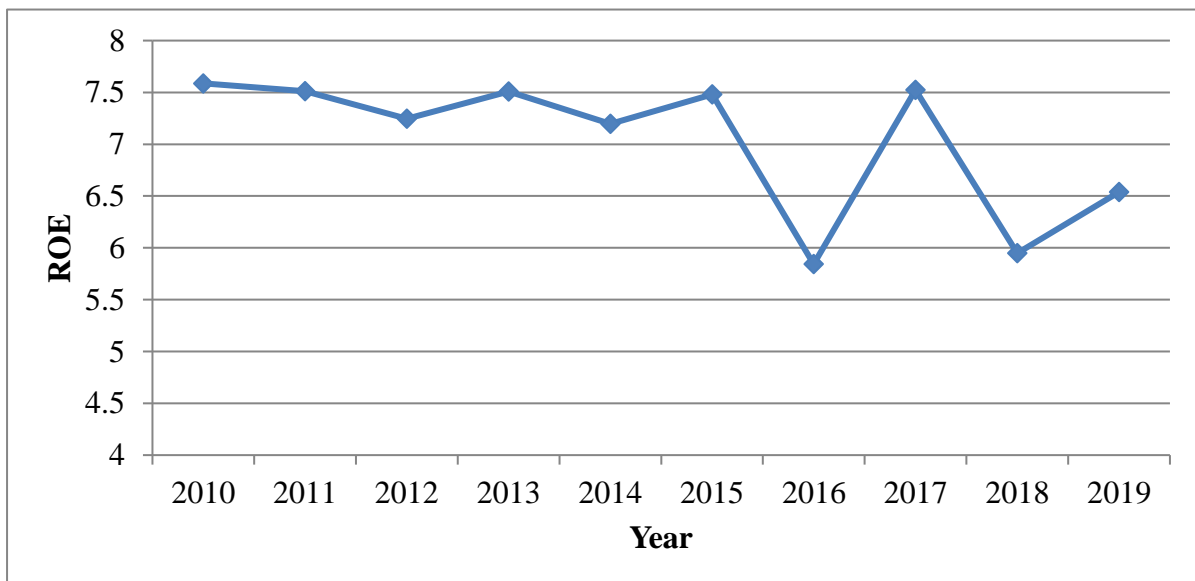
Variable	Obs	Mean	Std. Dev.	Min	Max
ROE	250	7.038484	4.343441	-3.5157	14.6328
SB	250	5.599323	2.36846	1.3807	9.3254
CR	250	1.240002	.6763045	.2021	3.3241
IR	250	2.255725	1.148892	.1258	4.2754
FX	250	3.790417	1.902396	.5505	6.9748

Based on the findings in Table 4.1, the five star hotels in Kenya recorded an average financial performance (ROE) of 7.0384 between 2010 and 2019. There are some five star hotels that over the same period recorded losses at -3.5157 ROE and the maximum value recorded was 14.6328. There was great disparity in the level of financial performance recorded by the five star hotels in Kenya between the year 2010 and 2019 and this is supported by a large

standard deviation value of 4.3434. This simply means that despite some of the five star hotels making profits, there are others that made losses. This is supported by the findings shown in Figure 2.

The trend in ROE shows that fluctuated over the period under study. This could be explained by observations made by Mayaka and Prasad (2012) that in the recent past is the threat of terrorism in which Kenya has lost both its citizens and the tourists to the Al-shabab from Somalia. This has resulted to frequent travel advisories from the source countries like Britain, USA, Australia and Europe in general. This has therefore brought down the tourism sector in Kenya to its lowest point ever.

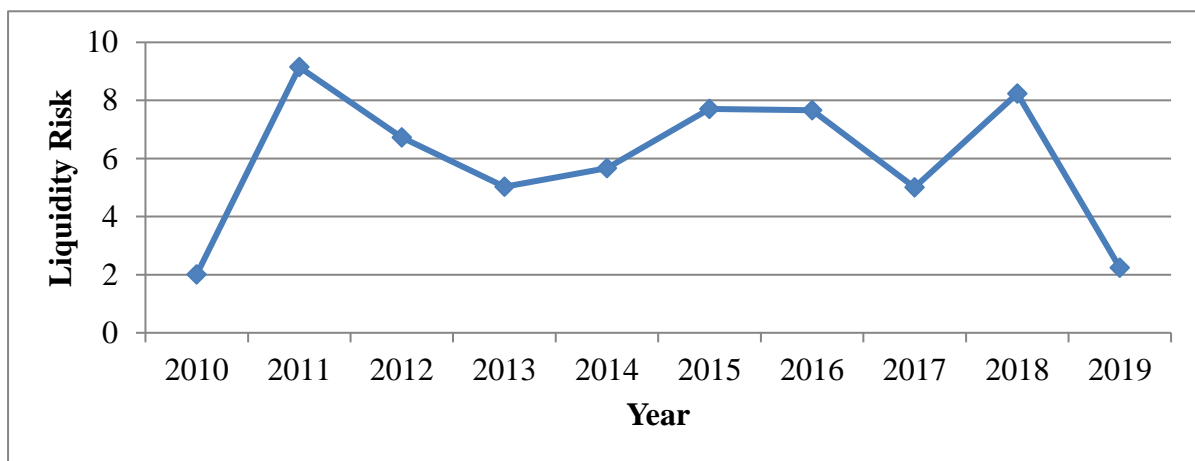
**FIGURE 2: Trend in ROE between 2010 and 2019**



Liquidity risk had a mean of 5.5993 and standard deviation of 2.3684. This suggests that there was great disparity in the level of liquidity risk recorded by the five star hotels in Kenya. The minimum value recorded was 1.3807 and the maximum value was 9.32354. These findings suggest that hotels had different levels of liquidity risk. This is clearly illustrated in Figure 3 which shows that the liquidity risk levels of the five star hotels between 2010 and 2019 fluctuated. According to Kumar and Yadav (2013) sound liquidity management reduces

the probability of companies becoming insolvent hence minimizing chances of bankruptcies and financial distress. Fluctuation in liquidity management could therefore explain the fluctuation in liquidity risk within the hotel industry. Tabari *et al.* (2013) find that poor management of liquidity risk negatively affected performance of hotels and this was significant. Under critical liquidity risk situation, this can lead to bankruptcy. There is therefore need for the hotel industries to ensure their liquidity risk management is efficient to avoid bankruptcy.

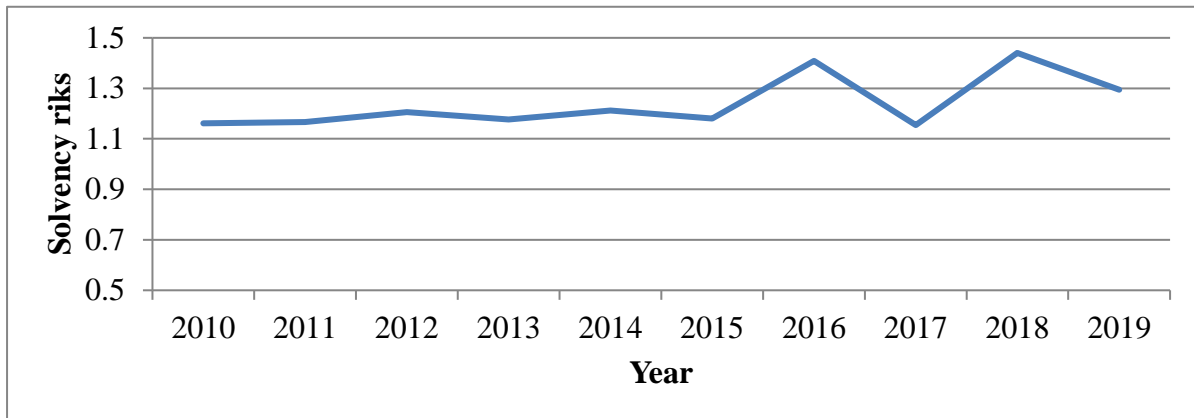
**FIGURE 3: Trend in Liquidity Risk between 2010 and 2019**



The findings also show that on average, the five star hotels recorded a solvency risk of 1.24 between 2010 and 2019. The findings also show that the companies recorded a minimum of 0.2021 and a maximum value of 3.3234. The standard deviation value was (0.6763) suggesting that the solvency risk did not deviate very much from the mean value. This is clearly illustrated in Figure 4 which shows that between the periods in consideration, the level of solvency risk reported by the five star hotels fluctuated. Serwadda (2018) observed that majority of African companies are characterized by poorly designed solvency risk policies would compromise asset quality and expose the company to financial distress. This could explain why hotels in Kenya recorded fluctuation in solvency. As Alshatti (2015) explained,

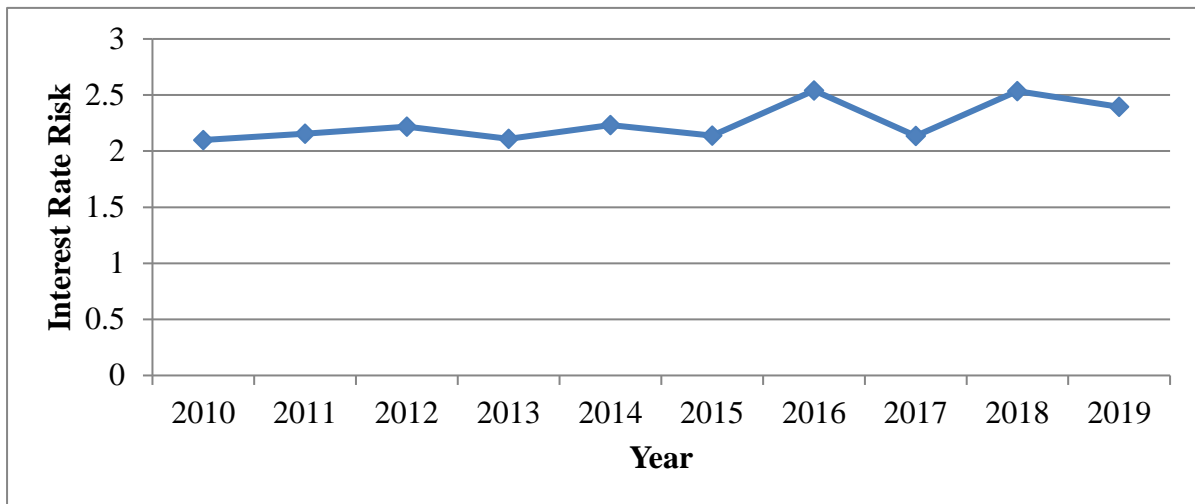
effective solvency risk systems should have a suitable solvency risk environment operating under a sound solvency administration that involves monitoring and proper solvency risk controls. This would help in minimizing possibilities of firm failure.

**FIGURE 4: Trend in Solvency risk between 2010 and 2019**



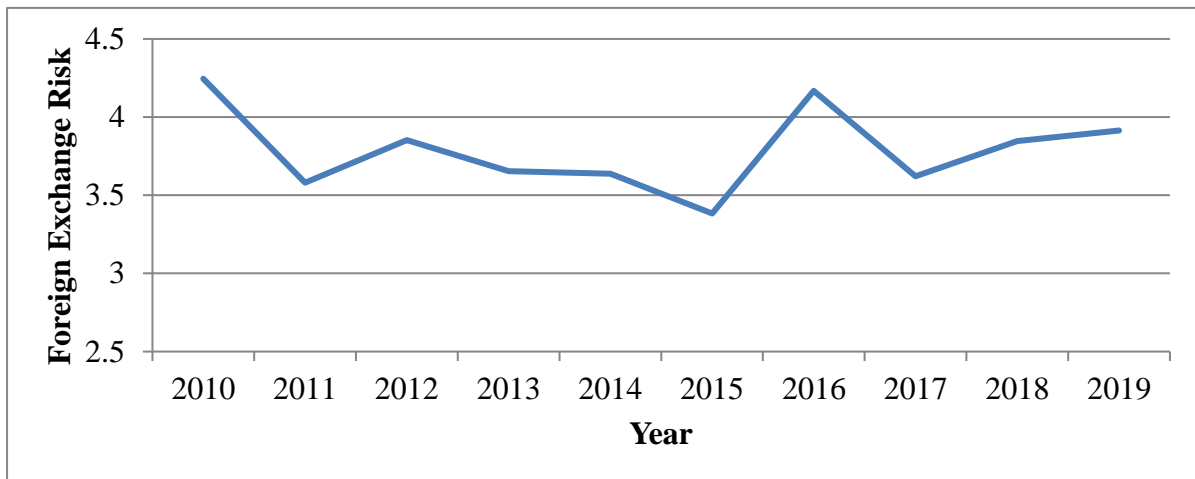
The findings further showed that the five star hotels recorded an average of 2.2557 interest rate risk between 2010 and 2019. The minimum value recorded was 0.1258 and the maximum value was 4.2754. The standard deviation value was 1.1488 suggesting that the interest rate risk recorded by the five star hotels did not deviate very much from the mean value. Also, the findings in Figure 5 show that there were slight fluctuations in the interest rate risk recorded by the five star hotels over the period under investigation. As Hoffman, Langefield, Pierobon and Vuillemeay (2018) explained, interest rate risk distribution is highly heterogeneous. This could explain the fluctuating results. Interest rate movements are borne by financial institutions then their net worth becomes vulnerable affecting the supply of credit through the balance sheet. Therefore, Ali and Nsenje (2017) suggested that through appropriate monetary policy, i.e., increasing the bank rate and reserve ratio and selling the bonds in the market, the inflation could be reduced by controlling money supply.

**FIGURE 5: Trend in Interest Rate Risk between 2010 and 2019**



Finally on foreign exchange, the mean value for the five star hotels between 2010 and 2019 was 3.7904. The findings also show that the minimum value recorded was 0.5505 and the maximum value was 6.9748. In addition, the standard deviation was 1.9023 suggesting that the foreign exchange risk did not deviate very much from the mean value. This is also seen in Figure 6 where fluctuations are seen in the level of foreign exchange risk that was recorded by the five star hotels between 2010 and 2019. Simakova (2017) explained that undervaluation of local currencies moved company stock prices to higher levels in the various countries. He added that local currency depreciation positively affected the volume of exports while at the same time increased the cost of importing commodities from other countries. Therefore, the change in currency valuation explains the fluctuations observed under the period being investigated.

**FIGURE 6: Trend in Foreign Exchange Risk between 2010 and 2019**



### **4.3 Diagnostic Tests**

When performing a panel regression analysis, diagnostic tests are run to detect potential problems with residuals and model specification. In order to rely on the estimated coefficients and consider them accurate representations of true parameters, it is important that the assumptions of linear regressions should be met. The tests performed included multicollinearity, autocorrelation test, stationarity test, normality test, linearity test, and heteroscedasticity test.

#### **4.3.1 Test of Multicollinearity**

Multicollinearity test was conducted to test if there is high relationship between any two independent variables. A VIF value of 1-10 indicates no Multicollinearity. Table 3 presents the findings.

**TABLE 3: Multicollinearity Test**

Var i abl e	VI F	1/VI F
FD	6.66	0.150221
LR	5.41	0.184938
CR	1.78	0.562768
IR	1.26	0.796028
Mean VI F	3.77	

If the value of VIF is more than 10, we can say that the model is suffering from multicollinearity. The findings indicate that the VIF values ranged between 1.26 and 6.66 indicating that the variance of the variables was inflated moderately. The analysis exhibits signs of multicollinearity though low levels. The results indicate that the overall VIF is 3.77 which is less than 10 implying that the study data did not exhibit multicollinearity problem as recommended by (Field, 2018). Thus, all the variables based on the VIF indicators have no severe multicollinearity problem.

#### 4.3.2 Autocorrelation Test

Serial autocorrelation was tested using Breusch Godfrey test. Statistic was chosen where significance less than 0.05 indicated data was not auto correlated. Table 4.3 presents the findings obtained.

**TABLE 4: Breusch-Godfrey LM test for autocorrelation**

lags (p)	chi2	df	Prob > chi2
1	17.768	1	0.87924

H0: no serial correlation

From the findings, the p-value (0.87924), is greater than the significance level (0.05), and hence we accept the null hypothesis. This implies that there is no serial correlation among the study variables.

### 4.3.3 Stationarity Test

This study applied the ADT test. ADF tests the null hypothesis that the data has a unit root. If the P-value is less than a 5% level of significance, then the null hypothesis was rejected, implying stationarity. However, if the P-value is higher than a 5% level of significance, then the null hypothesis is accepted, implying non-stationarity. The study tested for stationarity of each variable.

**TABLE 5: Augmented Dickey-Fuller test for unit root**

<b>Liquidity Risk</b>				
. dfuller LR, lags(1)				
Augmented Dickey-Fuller test for unit root		Number of obs = 248		
Test Statistic	Interpolated Dickey-Fuller			
	1% Critical Value	5% Critical Value	10% Critical Value	
Z(t)	-10.343	-3.461	-2.880	-2.570
MacKinnon approximate p-value for Z(t) = 0.0000				
<b>Solvency risk</b>				
. dfuller SR lags(1)				
Augmented Dickey-Fuller test for unit root		Number of obs = 248		
Test Statistic	Interpolated Dickey-Fuller			
	1% Critical Value	5% Critical Value	10% Critical Value	
Z(t)	-10.217	-3.461	-2.880	-2.570
MacKinnon approximate p-value for Z(t) = 0.0000				

## Interest Rate Risk

. dfuller IR, lags(1)

Augmented Dickey-Fuller test for unit root                      Number of obs    =            248

	Test Statistic	Interpolated Dickey-Fuller		
		1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	- 10.174	- 3.461	- 2.880	- 2.570

MacKinnon approximate p-value for Z(t) = 0.0000

## Foreign Exchange Rate Risk

. dfuller FX, lags(1)

Augmented Dickey-Fuller test for unit root                      Number of obs    =            248

	Test Statistic	Interpolated Dickey-Fuller		
		1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	- 11.768	- 3.461	- 2.880	- 2.570

MacKinnon approximate p-value for Z(t) = 0.0000

## ROE

. dfuller ROE lags(1)

Augmented Dickey-Fuller test for unit root                      Number of obs    =            248

	Test Statistic	Interpolated Dickey-Fuller		
		1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	- 10.118	- 3.461	- 2.880	- 2.570

MacKinnon approximate p-value for Z(t) = 0.0000

The findings show that the p-value for each variable was 0.000 which is less than the selected level of significance (0.05). The study therefore rejects the null hypothesis and concludes that data on liquidity risk, solvency risk, interest rate risk, foreign exchange risk and

financial performance were stationary. This implies that the fitted data would not produce spurious models.

#### 4.4.4 Normality Test

The study used Shapiro-Wilk tests to check for normality. The null hypothesis for this test was that the data was not normally distributed. Therefore, the study accepted the null hypothesis if the p-value was less than 0.05. If the p-value is greater than 0.05, the study rejected the null hypothesis and accepted the alternative that the data is normally distributed. Table 4.5 presents the findings obtained.

**TABLE 6: Shapiro-Wilk W test for normal data**

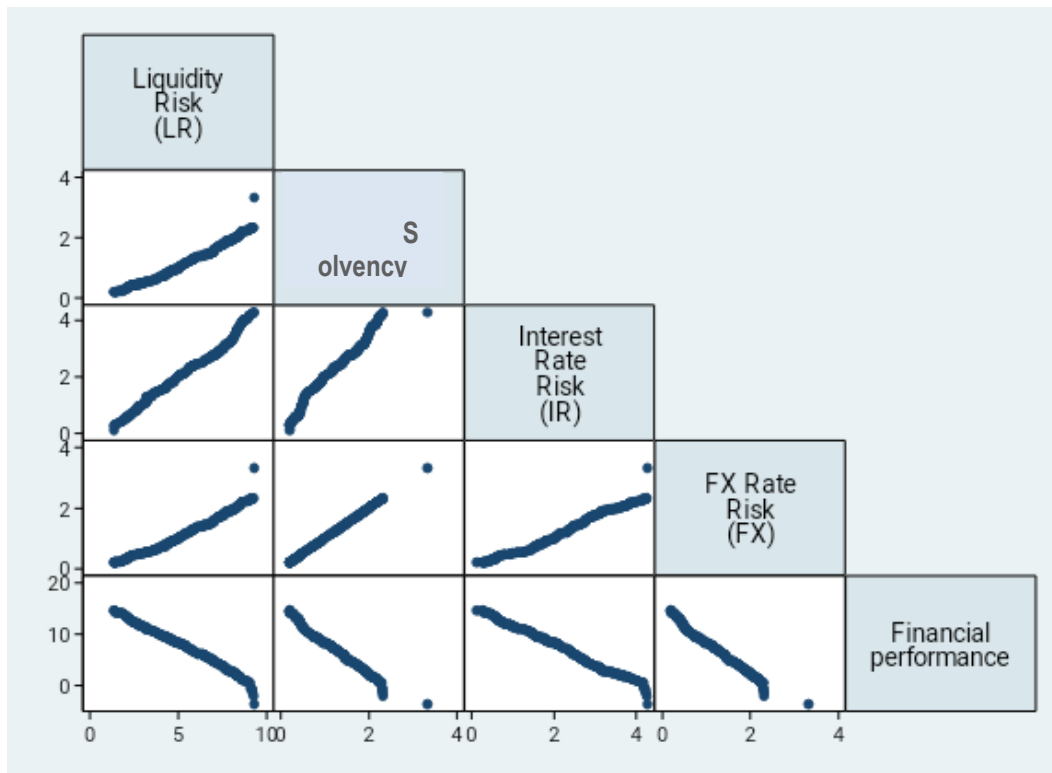
Variable	Obs	W	V	z	Prob >z
LR	250	0.83193	5.342	3.465	0.05027
CR	250	0.96231	1.198	0.374	0.35438
SR	250	0.93945	1.925	1.354	0.08792
FX	250	0.86833	4.185	2.96	0.05154
ROE	250	0.93671	2.012	1.445	0.07421

From the findings, the p values for each variable were as follows; liquidity risk (p-value=0.05027), solvency risk (p-value=0.35438), interest rate risk (p-value=0.08792), foreign exchange rate risk (p-value=0.05154) and financial performance (p-value=0.07421). This shows that all variable were normally distributed and hence the data meets the regression analysis assumption of normality of data.

#### 4.4.5 Linearity Test

Scatterplots were used to assess linearity between independent and dependent variables in the study. The findings obtained were as presented in figure 4.

**FIGURE 7: Scatter Plot Matrix for Linearity Test**



Based on the findings, it is seen that all the variables showed they had linear relationship with the dependent variable (financial performance). The study therefore concluded that the linear assumption is met since the plot follows a linear pattern.

#### **4.4.6 Heteroscedasticity Test**

Heteroscedasticity (the violation of homoscedasticity) is present when the size of the error term differs across values of an independent variable. Breusch-Pagan test was applied in this study to check for existence of heteroscedasticity. The impact of violating the assumption of homoscedasticity is a matter of degree, increasing as heteroscedasticity increases. If the test statistic has a p-value below selected threshold ( $p < 0.05$ ) then the null hypothesis of homoskedasticity is rejected and heteroskedasticity assumed. Table 4.6 presents the findings.

**TABLE 7: Breusch-Pagan / Cook-Weisberg test for heteroskedasticity**

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted val            ROA

chi 2(1)            =        0.10

Prob > chi 2       =        0.7516

From the finding it was revealed that the p- value of 0.7516 was greater than 0.05 implying that the study accepts the null hypothesis of homoscedasticity.

#### ***4.4.7 Hausman Test***

Hausman specification test was employed in the detection of endogenous repressors in a regression model. For OLS regression to be computed, the data assumes that there is no correlation between independent variable and the error term. The null hypothesis was rejected if the value of P is less than the significant level (0.05), meaning that the used data is not from a normal population. The presence of endogenous repressors in a regression model may cause failure in the estimators of OLS.

To decide between fixed or random effects a Hausman test was conducted where the null hypothesis was that the preferred model is random effects, that is if the Prob>chi2 value was greater than 0.05. The alternative the fixed effects if the Prob>chi2 value was less than 0.05. It basically tested whether the unique errors (ui) are correlated with the regressors.

**TABLE 8: Hausman Specification Test**

```
. hausman fixed random
```

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fixed	(B) random		
X1	.0014981	.0020005	-.0005024	.0011812
X2	-.0009897	.0009219	-.0019117	.0017254
X3	-.0012513	-.0006014	-.0006499	.0012197
X4	.0039354	.0008063	.0031291	.0022211

b = consistent under Ho and Ha; obtained from xtreg  
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\text{chi2}(4) = (b-B)'[(V_b-V_B)^{-1}](b-B)$$

= 4.71  
Prob>chi2 = 0.3178

Since the Prob>chi2 value (0.3178) was greater than 0.05 a random effect was preferred and conducted. The findings were in agreement with Green (2018) that the null hypothesis for the test is that the random effect model is preferred to fixed effect model and is to be rejected if the p value is less than 5% to imply that fixed model is preferred.

**4.4.8 Breusch-Pagan Lagrange multiplier (LM)**

**TABLE 9: Breusch-Pagan Lagrange multiplier (LM)**

```
Breusch and Pagan Lagrangian multiplier test for random effects
```

$$Y[\text{number}, t] = Xb + u[\text{number}] + e[\text{number}, t]$$

Estimated results:

	Var	sd = sqrt(Var)
Y	.0018424	.0429229
e	.0015262	.0390669
u	.0003146	.0177362

Test: Var(u) = 0

$$\text{chi bar 2}(01) = 5.38$$

Prob > chi bar 2 = 0.0102

The Breusch-Pagan Lagrange multiplier (LM) was conducted to help decide between a random effects regression and OLS regression. The null hypothesis in the LM test was that

variances across entities were zero. This is, no significant difference across units (i.e. no panel effect) since the Prob>chi2 value (0.0102) was less than 0.05 we rejected the null and concluded that random effect was appropriate. The rationale behind random effects model is that, unlike the fixed effects model, the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model. Random effects assume that the entity's error term is not correlated with the predictors which allows for time-invariant variables to play a role as explanatory variables. This is an assurance that the regression coefficients were stable hence valid significance tests as put by Cooper and Schindler (2016).

#### 4.5 Correlation Analysis

The study computed Spearman correlation analysis to establish the strength and the direction of the relationship between the dependent and the independent variables. The findings were as presented in Table 9.

**TABLE 10: Correlation Analysis**

	ROA	L	CR	I R	FX
ROA	1. 0000				
LR	0. 9600* 0. 0000	1. 0000			
CR	0. 5425* 0. 0020	0. 4761* 0. 0078	1. 0000		
I R	0. 6823* 0. 0000	0. 6291* 0. 0002	0. 3681* 0. 0454	1. 0000	
FX	0. 9592* 0. 0000	0. 9231* 0. 0000	0. 4694* 0. 0089	0. 6120* 0. 0003	1. 0000

From the findings in Table 9, the findings show that liquidity risk and financial performance of five star hotels in Kenya was strongly and positively correlated ( $r=0.960$ ). The relationship was significant since the p-value (0.000) was less than the selected level of significance (0.05). This is in line with the findings of Tabari *et al.* (2013) that poor management of liquidity risk negatively affected performance. Therefore, firms with limited liquidity will always experience funding shortfalls.

The findings also show that solvency risk and financial performance of five star hotels in Kenya have strong relationship ( $r=0.542$ ). The relationship was significant at 5% level of significance since the p-value (0.002) was less than the selected level of significance (0.05). This agrees with Chen (2016) that a good understanding of risk determinants within industry of operation will provide valuable information that will allow business managers and investors to adopt wise investment strategies. Therefore, when solvency risk is kept at minimum, through proper knowledge business performance will increase,

On interest rate risk, the findings showed that there is a strong relationship between interest rate risk and financial performance ( $r=0.682$ ). The influence was significant since at 95% confidence interval, the p-value (0.000) was less than the selected level of significance. The findings agrees with the findings of Hoffman, Langefield, Pierobon and Vuillemeys (2018) that high levels of interest rates have a tendency to hurt financial institutions in fixed-rate economies and hospitality companies in variable rate economies.

Finally, foreign exchange risk is seen to have a strong relationship with financial performance of five star hotels in Kenya ( $r=0.959$ ). The relationship is considered to be significant since the p-value (0.000) was less than the selected level of significance (0.05). This concurs with Simakova (2017) that undervaluation of local currency led to a decline in the

company's stock returns. Undervaluation of local currencies moved company stock prices to higher levels in the various countries under investigation. Local currency depreciation positively affected the volume of exports while at the same time increased the cost of importing commodities from other countries. This shows that change in foreign exchange risk will affect company performance.

#### **4.6 Regression Analysis**

The study computed random effect model to provide information on individual behavior, both across individuals and over time. The rationale behind random effects model is that, unlike the fixed effects model, the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model. Random effects assume that the entity's error term is not correlated with the predictors which allows for time-invariant variables to play a role as explanatory variables. As shown from the findings in Table 11, random effect model was the preferred panel model.

The random effect model is important in the establishment of the strength and nature of a relationship. The main aim is to show how and the extent to which each variable separately influences the dependent variable. The study computed random effects model to test the influence of liquidity risk, solvency risk, interest rate risk, foreign exchange rate risk and financial performance of five star hotels in Kenya. The findings were also used to test the research hypothesis. Table 11 presents the model summary and the ANOVA findings.

**TABLE 11: Random Effect Regression Model**

```

. xtreg ROE LR SR IR FX, re

Random-effects GLS regression           Number of obs   =       250
Group variable: Year                   Number of groups =        10

R-sq:  within = 0.9803                 Obs per group:  min =        25
      between = 0.9954                                     avg =       25.0
      overall  = 0.9813                                     max =        25

Wald chi2(4) = 12833.03
corr(u_i, X) = 0 (assumed)             Prob > chi2     = 0.0000

```

ROE	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
LR	.6145824	.2196331	2.80	0.005	.1841094	1.045055
SR	-2.865679	.8900987	-3.22	0.001	-4.61024	-1.121117
IR	-1.783824	.4710016	-3.79	0.000	-2.70697	-.8606779
FX	-1.03641	.3128508	-3.31	0.001	-1.649586	-.4232334
_cons	15.95242	.1491761	106.94	0.000	15.66004	16.2448
sigma_u	0					
sigma_e	.61137151					
rho	0	(fraction of variance due to u_i)				

The model summary findings were used to show the amount of variation in the dependent variable that can be explained by changes in the independent variable. From the findings in Table 11 above, the value of overall R-squared is 0.9813 which suggests that 98.13% variation in financial performance of five star hotels in Kenya can be explained by liquidity risk, solvency risk, interest rate risk, and foreign exchange rate risk. If the probability is  $< 0.05$  then your model is ok. The findings further showed that  $\text{Prob} > \text{Chi}^2 = 0.000$  was less than the selected level of significance (0.05). This suggested that the model was significant and that the variables liquidity risk, solvency risk, interest rate risk, foreign exchange rate risk are significant predictors of financial performance of five star hotels in Kenya. To further understand the influence of each variable, the coefficients table was computed. Table 11 presents the findings.

From the coefficients table above, the following regression model was fitted;

$$Y = 15.95242 - 0.6145 X_{1it} - 2.8656 X_{2it} - 1.7838 X_{3it} - 1.0364 X_{4it} + \varepsilon$$

The regression equation above shows that when all the variables (liquidity risk, solvency risk, interest rate risk, and foreign exchange rate risk) are held to a constant zero, financial performance of five star hotels in Kenya will be at a constant value of 15.95242.

The findings also showed that liquidity risk has negative influence on financial performance of five star hotels in Kenya ( $\beta=-0.6145$ ). The influence was also seen to be significant since the p-value obtained (0.005) was less than the selected level of significance 0.05. This meant that liquidity risk has negative significant influence on financial performance of five star hotels in Kenya. The study therefore rejects the null hypothesis “ $H_{01}$ : Liquidity risk has no significant influence on financial performance of five star hotels in Kenya” and concludes that liquidity risk has significant influence on financial performance of five star hotels in Kenya. These study findings agrees with the findings of Laminfoday (2018) that liquidity risk had a negative and significant impact on return on asset. Failure to identify and check liquidity risk may lead a company into many financial problems including inability to meet clients’ demands and pending financial obligations which would put the company’s performance prospects in jeopardy.

The findings also show that solvency risk has negative influence on financial performance of five star hotels in Kenya ( $\beta=-2.8656$ ). Also, the influence was found to be significant since the p-value (0.001) was less than the selected level of significance (0.05). This meant that solvency risk had negative significant influence on financial performance of five star hotels in Kenya. The study therefore rejected the second null hypothesis ( $H_{02}$ : Solvency risk has no significant influence on financial performance of five star hotels in Kenya) and

concluded that solvency risk has significant influence on financial performance of five star hotels in Kenya. The findings of the study agrees with Alshatti (2015) who established positive and insignificant impact of NPL on both ROA and ROE; negative and significant effect of total debt to total equity ratio on both ROA and ROE and CAR has no influence on both ROA and ROE. Therefore, large debt increases debt services and liabilities attracting more financial risk which may adversely affect performance.

In addition, interest rate risk was found to have negative influence on financial performance of five star hotels in Kenya ( $\beta=-1.7838$ ). The findings also showed that the influence of interest rate risk on financial performance was significant since the p-value (0.000) was less than the selected level of significance (0.05). This implied that interest rate risk has negative significant influence on financial performance of five star hotels in Kenya. Based on these findings the study rejected the third null hypothesis ( $H_{03}$ : Interest rate risk has no significant influence on financial performance of five star hotels in Kenya) and concluded that interest rate risk has significant influence on financial performance of five star hotels in Kenya. These findings concur with the findings of Ali and Nsenje (2017) that volatility in exchange rate had significant effect on profitability. It also agrees with Hoffman, Langefield, Pierobon and Vuillemeay (2018) that high levels of interest rates have a tendency to hurt financial institutions in fixed-rate economies and hospitality companies in variable rate economies.

Finally, the findings showed that foreign exchange rate risk has a negative and significant influence on financial performance of five star hotels in Kenya ( $\beta=-1.0364$ ). The influence was also found to be significant since the p-value obtained (0.001) was less than the selected level of significance (0.05). This implied that foreign exchange rate risk has negative significant influence on financial performance of five star hotels in Kenya. From these findings, the study rejects the final research hypothesis ( $H_{04}$ : Foreign exchange rate risk has no

significant influence on financial performance of five star hotels in Kenya) and concludes that foreign exchange rate risk has no significant influence on financial performance of five star hotels in Kenya. The findings agrees with Simakova (2017) who revealed a negative association between exchange rate and share value; undervaluation of local currency led to a decline in the company's stock returns. The increased ratio of debt denominated in foreign currency leads to high company exposure to foreign exchange volatilities. Undervaluation of local currencies moves company stock prices to higher levels in the various countries under investigation. Local currency depreciation positively affected the volume of exports while at the same time increased the cost of importing commodities from other countries.

## CHAPTER FIVE

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents summary of findings, draws conclusion from the findings, and makes recommendations there-to. The conclusions and recommendations drawn focused on addressing the major objective of the study. The researcher intended to establish the effect of financial risk on the financial performance of five star hotels in Kenya.

#### 5.2 Summary of Findings

##### *5.2.1 Liquidity Risk on Financial Performance*

From the descriptive statistics, the study established that the five star hotels in Kenya recorded different levels of liquidity risk. The correlation findings further showed that there was a strong significant relationship between liquidity risk and financial performance of five star hotels in Kenya. The findings further established from the regression findings that liquidity risk negatively influences financial performance. This meant that an increase in liquidity risk would result to a decrease in financial performance of five star hotels in Kenya.

##### *5.2.2 Solvency risk on Financial Performance*

Descriptive statistics showed that between 2010 and 2019, the five star hotels in Kenya recorded different levels of solvency risk. The relationship between solvency risk and financial performance was also found to be statistically significant. The findings further established from the regression findings that solvency risk negatively influences financial performance. Therefore, an increase in solvency risk would result to a decrease in financial performance of five star hotels in Kenya.

### ***5.2.3 Interest Rate Risk on Financial Performance***

From the descriptive statistics, the study established that the five star hotels in Kenya recorded different levels of interest rate risks. The correlation findings further showed that there was a strong significant relationship between interest rate risk and financial performance of five star hotels in Kenya. The findings further established from the regression findings that interest rate risk negatively influences financial performance. This meant that an increase in interest rate risk would result to a decrease in financial performance of five star hotels in Kenya.

### ***5.2.4 Foreign Exchange Rate Risk on Financial Performance***

Finally on foreign exchange risk, the study established that the five star hotels had different levels of foreign exchange rate risk. From the correlation analysis findings, the study established that the relationship between foreign exchange risk and financial performance was also statistically significant. The findings further established from the regression findings that foreign exchange risk negatively influences financial performance. Therefore, an increase in foreign exchange risk would result to a decrease in financial performance of five star hotels in Kenya.

## **5.3 Conclusions**

The first objective of the study was to establish the influence of liquidity risk on financial performance of five star hotels in Kenya. The study found liquidity risk has negative influence on financial performance of five star hotels in Kenya. The influence was also seen to be significant. This meant that an increase in liquidity risk would cause financial performance of five star hotels in Kenya to decrease. The study therefore concludes that liquidity risk has negative significant influence on financial performance of five star hotels in Kenya.

The second objective of the study was to determine the influence of solvency risk on financial performance of five star hotels in Kenya. The study findings showed that solvency risk has negative influence on financial performance of five star hotels in Kenya. Also, the influence was found to be significant. This meant that an increase in solvency risk would cause financial performance of five star hotels in Kenya to decrease. The study therefore concluded that solvency risk has negative significant influence on financial performance of five star hotels in Kenya.

The third objective was to establish the influence of interest rate risk on financial performance of five star hotels in Kenya. The study findings showed that interest rate risk has negative influence on financial performance of five star hotels in Kenya. The study also found that the influence of interest rate risk on financial performance was significant. This meant a unit increase in interest rate risk would cause a decrease in financial performance of five star hotels in Kenya. Based on these findings the study concluded that interest rate risk has negative significant influence on financial performance of five star hotels in Kenya.

Finally, the study sought to determine the influence of foreign exchange rate risk on financial performance of five star hotels in Kenya. The findings showed that foreign exchange rate risk has a negative and significant influence on financial performance of five star hotels in Kenya. The study also found the influence to be significant. This implied that a unit increase in foreign exchange rate risk will result to a decrease in financial performance of five star hotels in Kenya. From these findings, the study concludes that foreign exchange rate risk has negative significant influence on financial performance of five star hotels in Kenya.

## **5.4 Recommendations**

### ***5.4.1 Policy Recommendations***

The study recommends that all hotels should have a risk management policy. Hotels can hire risk management experts to guide them in formulation and execution of these policies. The hotels should have a policy that allows employees to be involved from the start in the planning and implementation of the risk management policy. This will motivate them to see risk management as their responsibility for their own good and that of the hotel.

The government through its concerned agencies should enforce statutory requirements of risks management to enhance compliance with risk management. Hotels should select risk management techniques that are in line with the risks they are facing.

### ***5.4.2 Recommendations for Practice***

The study found that liquidity risk has negative influence on financial performance. The study recommends five star hotels in Kenya to ensure they maintain optimal liquidity to ensure organizational efficiency and effectiveness and upholding of good relations with stakeholders. The companies should also embrace properly established system that would assist them in identifying sources of financial risk and therefore protect firm value.

Solvency risk was also found to have negative influence on financial performance of five star hotels in Kenya. The study recommends five star hotels to embrace effective solvency risk systems that have a suitable solvency risk environment operating under a sound credit administration that involves monitoring and proper solvency risk controls; this would help in minimizing possibilities of firm failure. Also, the companies should engineer effective

strategies to address solvency risk issues carefully this is because poorly designed solvency risk policies would compromise asset quality and expose the company to financial distress.

Interest rate risk was found to have negative influence on financial performance of five star hotels in Kenya. The study also recommends five star hotels to move their focus on interest rate risk policies and practice and direct their efforts to prudent monitoring of the assets and liabilities mismatch positions in order to help control the effect of changes in interest rates. The study further recommends five star hotels to immunize their value against variability in interest rate sensitivity of their assets and liabilities, through proper financial risk that manage to keep the interest rate risk within prudent levels. The companies can use hedging, diversification strategy, payment netting and leading techniques.

The study further established that foreign exchange rate risk has negative significant influence on financial performance of five star hotels in Kenya. The study recommends the government through Central Bank of Kenya to take necessary steps to increase the value of domestic currency; this will help to safeguard the profitability of the five star hotels. The study also recommends development of appropriate monetary policy, ones that can reduce inflation which is the main reason causing foreign exchange to fluctuate. In addition, careful application of derivative contracts can help minimize the effects of currency risk and promote foreign risk management. Five star hotels should also develop risk management strategies that will help manage the risk.

### **5.5 Areas for Further Study**

This study was limited to five star hotels in Kenya. The study therefore recommends replication of the study in other stars hotels in the country to facilitate comparison and generalization of the research findings. A study should also be conducted on the influence of

the financial risk factors on non-financial performance of the five star hotels. There is also need to replicate the study in other sectors other than the hospitality industry; i.e. sectors like the manufacturing industry. I further recommend that more study be carried out on effect of commodity price fluctuation on financial performance of five star hotels in Kenya.

### **5.6 Limitations of the Study**

The study was limited to five star hotels in Kenya and data was collected between 2010 and 2019. The study collected only secondary data which was obtained from financial books of the company. The hotels sought were reluctant to provide information needed for the study because of the fear that the sought information may be used in intimidating them or showing a bad image about the company. This was mitigated through having a letter of introduction from the University stating the study objective and giving an assurance that the provided information was to be treated with confidentiality and would purely be used for academic purposes. Secondly, there was likelihood of delay response attributed to the busy schedule of employees. This was mitigated by scheduling meetings with the senior managers where they were encouraged to provide financial statements for the company.

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## APPENDICES

### APPENDIX I: Five Star Establishments (In Kenya)

<b>CLASSIFIED ESTABLISHMENTS- REGISTER</b>					
<b>1. GREATER NAIROBI</b>					
NO	ESTABLISHMENT	COUNTY	CAPACITY		RATING
			ROOMS	BEDS	
1	Intercontinental Nairobi	Nairobi	326	372	*****
2	Radisson Blu Hotel Nairobi	Nairobi	271	354	*****
3	The Sarova Stanley	Nairobi	217	440	*****
4	Villa Rosa Kempinski	Nairobi	200	216	*****
5	Fairmont The Norfolk	Nairobi	170	200	*****
6	Sankara Nairobi	Nairobi	156	167	*****
7	The Boma Nairobi	Nairobi	148	178	*****
8	Crowne Plaza Nairobi Airport	Nairobi	144	209	*****
9	Tribe Hotel	Nairobi	137	154	*****
10	Dusit D2	Nairobi	101	122	*****
11	Hemingway's Nairobi	Nairobi	45	50	*****
<b>COAST</b>					
12	PrideInn Paradise	Mombasa	240	480	*****
13	Leopard Beach Resort and Spa	Kwale	198	396	*****
14	Hemingways Watamu	Kwale	166	200	*****
15	Diani Reef Beach Resort & Spa	Kwale	143	286	*****
16	Swahili Beach Resort	Kwale	125	250	*****
17	Medina Palms Suites and Villas	Kilifi	40	70	*****
18	Sarova Whitesands Beach Resort & Spa	Mombasa	340	453	*****

<b>SOUTH RIFT</b>					
<b>19</b>	Enashipai Resort and Spa	Nakuru	140	215	*****
<b>20</b>	Mara Serena Safari Lodge	Narok	74	148	*****
<b>21</b>	Lake Elementaita Serena Camp	Nakuru	25	50	*****
<b>22</b>	Cottars Nineteen Twenties Safari Camp	Narok	16	40	*****
<b>23</b>	Olare Mara Kempinski	Narok	12	17	*****
<b>CENTRAL &amp; MOUNT KENYA</b>					
<b>24</b>	Panari Resort, Nyahururu	Laikipia	100	200	*****
<b>25</b>	Segera Retreat Lodge	Laikipia	11	20	*****

**Source: Tourism Regulatory Authority, 2019**

## **APPENDIX II: Letter of Introduction**

Dear Sir/Madam,

### **Re: Collection of data**

I am a postgraduate student of the Kenya College of Accountancy (KCA) pursuing a Masters of Science in Finance and Investment. I wish to conduct a study entitled “Effect of financial risk financial on performance of five star hotels in Kenya”. Your firm has been identified as a key player in the Hotel and Tourism sector in Kenya which informs the decision to have you participate in this research. Information will be collected by the use of research survey schedule. I therefore, request you to kindly participate in this project by filling the research survey schedule attached onto this letter. Your cooperation is highly valued. The responses that you provide will be handled with the highest level of confidentiality, ethically and study findings will be utilized exclusively for academic purpose. Results of this project will be available at the KCA library. Please feel free to contact me on. [sgichuru12@gmail.com](mailto:sgichuru12@gmail.com)

Yours Sincerely

**Samuel T Maina**

**APPENDIX III: Secondary Data Collection Form**

<b>Variable/ Measure/ Year</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Liquidity Risk (LR)</b> Liquid Asset/Total Asset Ratio										
<b>Solvency risk (CR)</b> Total Debt/total equity										
<b>Interest Rate Risk (IR)</b> Interest Income/Interest Expense										
<b>FX Rate Risk (FX)</b> Foreign Currency Gains and Losses / Net Income										
<b>Financial performance</b> Net income/ shareholder's equity capital										

**APPENDIX IV: Secondary Data**

Yr	LR	SR	IR	FX	ROE
2010_1	7.8137	1.8894	3.1574	4.8267	3.046
2010_2	4.7333	0.9325	1.8176	6.9201	8.7318
2010_3	9.1007	2.303	4.176	4.5004	-0.4621
2010_4	2.9988	0.5066	1.0177	1.9949	11.5787
2010_5	8.339	2.0225	3.631	5.5635	2.0456
2010_6	8.3411	2.047	3.6552	5.6449	1.998
2010_7	5.1533	1.0669	2.081	3.3708	8.1581
2010_8	8.6441	2.1891	3.9351	4.2598	1.1518
2010_9	3.1904	0.5269	1.1808	1.9896	11.0224
2010_10	6.1355	1.3884	2.4589	4.2334	6.2194
2010_11	7.603	1.7978	3.0855	4.3508	3.6395
2010_12	8.3149	2.0118	3.5502	6.9674	2.324
2010_13	1.9055	0.2818	0.4727	3.1218	13.8633
2010_14	3.1785	0.5173	1.0846	6.1465	11.3905
2010_15	1.5552	0.2222	0.3424	3.9513	14.1787
2010_16	6.7449	1.4651	2.653	4.7739	5.4266
2010_17	2.6662	0.4612	0.8091	6.1661	12.0918
2010_18	1.3807	0.2021	0.1258	1.9479	14.6328
2010_19	3.4982	0.5795	1.3621	4.2953	10.6684
2010_20	2.101	0.336	0.5664	3.123	13.4112
2010_21	6.5607	1.4431	2.5928	5.3248	5.6828
2010_22	8.3398	2.0401	3.6502	1.5765	2.0089
2010_23	7.6552	1.8194	3.1084	3.3446	3.4493
2010_24	2.4807	0.4347	0.742	1.894	12.4121
2010_25	3.1938	0.5353	1.2229	5.8491	11.0078
2011_1	7.6934	1.8417	3.1108	3.5194	3.3399
2011_2	7.8932	1.9012	3.1724	6.4526	2.9713
2011_3	3.9155	0.6902	1.4931	1.7202	9.9559
2011_4	8.4496	2.0617	3.697	2.0621	1.8425
2011_5	3.588	0.6051	1.4192	4.8601	10.491
2011_6	7.3139	1.7047	2.9106	3.3333	4.1442
2011_7	4.0503	0.7211	1.535	2.4818	9.7949
2011_8	8.1903	1.9764	3.4196	2.2041	2.5922
2011_9	8.8435	2.2166	4.0292	6.197	0.9297
2011_10	8.4914	2.077	3.7818	1.3685	1.7622
2011_11	9.0617	2.294	4.1707	6.0675	0.5126
2011_12	1.8315	0.2414	0.4162	1.8811	14.0789
2011_13	4.6165	0.8976	1.7932	0.7676	8.9169
2011_14	2.114	0.342	0.5917	5.0975	13.3427
2011_15	2.2376	0.3925	0.6263	3.2043	12.9784

2011_16	1.8839	0.2704	0.4684	2.5412	13.9939
2011_17	4.1532	0.7396	1.5734	5.1559	9.5815
2011_18	6.6428	1.4513	2.6305	1.6754	5.503
2011_19	2.4015	0.4277	0.7241	0.5734	12.6098
2011_20	5.8531	1.2897	2.3905	6.9748	6.7085
2011_21	5.2832	1.0845	2.0817	4.3761	8.0508
2011_22	3.7776	0.64	1.4662	6.4882	10.2497
2011_23	2.8546	0.4765	0.9621	6.1384	11.7694
2011_24	8.5962	2.1863	3.9282	2.4391	1.213
2011_25	3.7644	0.6216	1.4554	1.9207	10.4381
2012_1	9.1731	2.3048	4.2101	5.7861	-0.5547
2012_2	1.6688	0.2383	0.356	2.8788	14.1211
2012_3	3.052	0.5098	1.0198	5.0502	11.4533
2012_4	8.666	2.2021	3.9711	6.5148	1.0417
2012_5	2.1997	0.3894	0.6237	6.9344	13.0416
2012_6	2.8972	0.4839	0.9841	2.4855	11.7052
2012_7	6.4762	1.4371	2.5715	4.3753	5.9304
2012_8	4.1395	0.7358	1.573	4.1778	9.6064
2012_9	8.7573	2.2058	4.0102	5.7102	0.9462
2012_10	7.9768	1.9046	3.2393	3.5888	2.9074
2012_11	5.8455	1.2814	2.3752	1.0883	6.8275
2012_12	5.4385	1.1468	2.1423	5.7585	7.7571
2012_13	5.8477	1.2886	2.3791	0.925	6.7814
2012_14	8.9377	2.2232	4.0451	4.0795	0.9057
2012_15	7.4444	1.7451	2.978	1.7779	3.8552
2012_16	4.7016	0.9138	1.8081	3.8195	8.8233
2012_17	3.2192	0.5437	1.2866	4.656	10.9166
2012_18	2.3557	0.4165	0.6973	2.8619	12.6948
2012_19	8.311	1.9989	3.5457	4.0397	2.3271
2012_20	5.6247	1.1971	2.3248	2.1841	7.1386
2012_21	2.7704	0.4749	0.95	6.0468	11.7778
2012_22	2.2881	0.4049	0.6401	1.8402	12.8044
2012_23	8.5857	2.181	3.8594	0.9826	1.4098
2012_24	4.8751	0.9475	1.9143	2.5748	8.5013
2012_25	4.9037	0.9595	1.923	6.1899	8.4575
2013_1	7.7006	1.871	3.1199	2.3304	3.2881
2013_2	5.9851	1.3351	2.4221	3.9198	6.5014
2013_3	7	1.5325	2.766	2.2078	4.8068
2013_4	7.9974	1.9178	3.2412	3.5467	2.8525
2013_5	2.0957	0.324	0.561	5.6247	13.4542
2013_6	5.3985	1.1432	2.1279	2.3219	7.7766
2013_7	8.0698	1.9588	3.3402	6.4201	2.7098
2013_8	4.6176	0.9106	1.8031	4.9481	8.8688

2013_9	7.0283	1.578	2.774	6.724	4.7936
2013_10	1.413	0.2048	0.2983	1.9358	14.4699
2013_11	5.6951	1.2156	2.3343	4.215	7.1384
2013_12	5.9038	1.3024	2.41	1.1516	6.6678
2013_13	7.0709	1.6138	2.7818	6.2107	4.6587
2013_14	6.2951	1.3958	2.468	0.6574	6.1743
2013_15	7.5939	1.786	3.0316	2.1104	3.708
2013_16	5.3493	1.1066	2.1061	2.164	7.9161
2013_17	2.1671	0.3537	0.6101	3.654	13.0834
2013_18	6.9578	1.5258	2.7542	6.5705	4.9399
2013_19	3.182	0.5237	1.1359	3.8325	11.0545
2013_20	2.5085	0.4388	0.7583	6.5935	12.3478
2013_21	9.0308	2.2445	4.1427	0.8951	0.594
2013_22	2.0495	0.3128	0.5547	1.2226	13.4739
2013_23	7.0575	1.6049	2.7808	6.4432	4.7112
2013_24	4.2824	0.7759	1.6052	1.5378	9.4954
2013_25	2.6401	0.454	0.8001	4.095	12.2431
2014_1	8.3255	2.0179	3.6221	0.5814	2.056
2014_2	5.9075	1.3137	2.4105	3.5954	6.6675
2014_3	8.9886	2.2291	4.0868	3.6028	0.6973
2014_4	4.3137	0.7984	1.6267	6.0613	9.4771
2014_5	2.9817	0.4983	0.9979	4.5675	11.6328
2014_6	2.441	0.4335	0.7367	2.6018	12.4345
2014_7	4.8319	0.9395	1.8671	4.2195	8.6421
2014_8	4.4319	0.8333	1.7276	3.0343	9.2885
2014_9	2.5595	0.4431	0.7956	6.5235	12.3432
2014_10	8.5381	2.1385	3.8145	3.3128	1.586
2014_11	2.3435	0.4089	0.6564	0.9498	12.714
2014_12	7.0889	1.6166	2.7858	5.9833	4.5908
2014_13	8.6013	2.1882	3.9315	0.5536	1.1609
2014_14	3.6957	0.6063	1.4274	4.6933	10.4539
2014_15	8.6642	2.198	3.9384	2.3859	1.1257
2014_16	7.0093	1.5374	2.7669	4.0307	4.7983
2014_17	8.0633	1.9555	3.3066	3.4004	2.737
2014_18	5.7687	1.27	2.3552	3.5148	7.0343
2014_19	6.916	1.5188	2.7189	6.7395	5.1147
2014_20	4.2773	0.7637	1.5898	3.7815	9.4974
2014_21	6.0398	1.3539	2.4544	4.7953	6.3712
2014_22	4.7405	0.9331	1.8314	6.3273	8.7104
2014_23	4.5517	0.8664	1.7701	4.5883	9.157
2014_24	1.4114	0.2029	0.2787	0.5505	14.5604
2014_25	5.7117	1.2516	2.3405	0.5691	7.0797
2015_1	8.5279	2.1006	3.7995	4.3285	1.68

2015_2	2.8687	0.4782	0.9704	3.3629	11.7617
2015_3	5.2055	1.0814	2.0811	2.8416	8.1172
2015_4	7.8964	1.9042	3.2096	1.1481	2.9697
2015_5	1.7358	0.2397	0.396	1.5595	14.114
2015_6	6.862	1.5084	2.7186	1.8732	5.1989
2015_7	2.6647	0.4562	0.8085	6.2776	12.095
2015_8	7.7352	1.8858	3.1549	4.9315	3.1755
2015_9	5.6146	1.1927	2.306	5.6226	7.1775
2015_10	3.3613	0.5582	1.3081	2.1863	10.8252
2015_11	7.3578	1.7319	2.9171	1.0107	4.1073
2015_12	2.766	0.4728	0.9477	3.0203	11.8642
2015_13	5.0204	0.9721	1.9982	4.8934	8.4104
2015_14	6.9334	1.5213	2.7513	3.1094	4.9425
2015_15	5.583	1.1892	2.2333	0.7786	7.2425
2015_16	7.0826	1.614	2.785	2.4102	4.5988
2015_17	6.5018	1.4395	2.581	4.8018	5.7678
2015_18	6.4578	1.4366	2.535	2.2854	6.0093
2015_19	1.3824	0.2023	0.2624	1.2472	14.6201
2015_20	8.696	2.2021	4.0098	6.3835	1.0249
2015_21	7.5533	1.7628	2.9979	6.1894	3.8528
2015_22	3.1799	0.5188	1.1269	1.5629	11.1985
2015_23	9.0504	2.2832	4.1462	4.561	0.5715
2015_24	1.9404	0.2876	0.4728	1.6418	13.7972
2015_25	2.7283	0.4642	0.9282	6.5553	11.8991
2016_1	8.0268	1.9198	3.2686	2.1068	2.7877
2016_2	8.1993	1.9801	3.4428	3.3134	2.3659
2016_3	8.3196	2.0173	3.5797	0.6293	2.1989
2016_4	7.3147	1.7105	2.9167	1.3718	4.1081
2016_5	4.385	0.8297	1.7035	4.6114	9.376
2016_6	8.571	2.1567	3.8241	6.1199	1.5058
2016_7	9.2412	2.3194	4.2344	3.717	-1.629
2016_8	7.136	1.6377	2.8124	6.5557	4.5177
2016_9	6.7444	1.4547	2.6408	3.7133	5.4272
2016_10	4.4895	0.852	1.7447	1.628	9.1758
2016_11	8.3432	2.0481	3.658	4.0201	1.9925
2016_12	5.0802	0.9757	2.0048	6.1395	8.3292
2016_13	2.1659	0.3459	0.5926	2.0063	13.1448
2016_14	7.036	1.6019	2.7806	5.423	4.7436
2016_15	4.2739	0.7473	1.5881	3.1425	9.5447
2016_16	7.5689	1.7793	3.0297	6.727	3.727
2016_17	7.721	1.8785	3.1529	5.9739	3.1975
2016_18	5.4595	1.1731	2.1993	6.7274	7.4179
2016_19	7.4019	1.7433	2.9399	6.7967	4.0778

2016_20	2.2815	0.403	0.6388	3.5866	12.8537
2016_21	4.1137	0.7301	1.552	6.0728	9.714
2016_22	3.1824	0.5255	1.147	4.0383	11.0304
2016_23	8.5901	2.1812	3.9214	3.0327	1.2211
2016_24	7.2375	1.6675	2.8408	4.9829	4.3413
2016_25	3.3448	0.5457	1.2982	1.7804	10.892
2017_1	9.0083	2.2309	4.136	1.571	0.6008
2017_2	4.595	0.8925	1.774	2.1038	9.1178
2017_3	8.1988	1.977	3.4346	4.2924	2.5012
2017_4	3.8629	0.6658	1.4855	6.8452	10.0643
2017_5	1.472	0.2048	0.3022	1.0007	14.2404
2017_6	5.3916	1.1369	2.1253	5.2012	7.8797
2017_7	7.174	1.6608	2.8155	2.7936	4.4213
2017_8	6.4154	1.4226	2.5209	4.3658	6.0727
2017_9	2.0253	0.3114	0.5143	6.6808	13.5754
2017_10	1.4753	0.2048	0.3105	1.1673	14.2072
2017_11	3.8011	0.6507	1.4817	6.633	10.1619
2017_12	4.0487	0.7184	1.5285	1.7287	9.9413
2017_13	9.2109	2.307	4.2191	6.536	-0.6465
2017_14	4.4665	0.8378	1.7347	2.8415	9.2845
2017_15	7.3104	1.7024	2.8849	0.5505	4.2187
2017_16	5.4542	1.1711	2.1713	6.6252	7.5068
2017_17	5.2889	1.0867	2.0927	6.704	7.9571
2017_18	4.3301	0.8255	1.653	3.3641	9.4374
2017_19	4.7522	0.9343	1.8472	2.3836	8.6956
2017_20	7.6078	1.8117	3.092	1.2714	3.61
2017_21	7.365	1.7418	2.9262	4.6227	4.085
2017_22	8.1126	1.9645	3.3658	0.5518	2.6744
2017_23	3.2038	0.5403	1.2695	1.9045	10.9696
2017_24	3.4554	0.5616	1.3154	2.2832	10.8121
2017_25	5.8691	1.2998	2.4076	6.5198	6.6936
2018_1	6.8595	1.5012	2.6805	1.967	5.2032
2018_2	4.6075	0.8953	1.7859	6.0467	9.0759
2018_3	7.4412	1.7437	2.9697	3.6443	3.9809
2018_4	5.7411	1.2653	2.3529	2.1973	7.0513
2018_5	5.1098	1.057	2.0604	4.474	8.273
2018_6	8.5238	2.0946	3.7924	1.6314	1.6842
2018_7	4.9505	0.9679	1.9686	3.8149	8.4399
2018_8	5.9203	1.3155	2.4148	6.6894	6.5068
2018_9	1.8318	0.2524	0.4261	1.1161	14.0726
2018_10	7.8397	1.8983	3.1667	6.4144	2.9815
2018_11	1.8721	0.2704	0.4576	2.5818	14.0304
2018_12	7.2624	1.6921	2.8792	1.0609	4.2817

2018_13	2.0636	0.3185	0.5589	6.1572	13.4658
2018_14	8.4772	2.07	3.7716	5.8299	1.7938
2018_15	8.4645	2.0679	3.7604	3.4017	1.8331
2018_16	5.0974	1.041	2.0568	1.5136	8.2917
2018_17	9.3254	3.3241	4.2754	3.4006	-3.5157
2018_18	9.2221	2.3154	4.2325	4.9736	-1.2037
2018_19	8.4139	2.0544	3.6743	2.9408	1.8972
2018_20	8.1496	1.9737	3.3889	3.2759	2.6618
2018_21	8.3734	2.0526	3.6702	3.5763	1.935
2018_22	8.2495	1.9988	3.5055	5.1087	2.3295
2018_23	2.6685	0.4626	0.8952	4.6017	11.9793
2018_24	5.0879	1.0342	2.0256	3.9994	8.3272
2018_25	2.1084	0.3384	0.5761	5.7315	13.3697
2019_1	6.7696	1.4798	2.6612	1.8175	5.4022
2019_2	3.0796	0.5156	1.0693	4.0734	11.4378
2019_3	7.5518	1.7582	2.9865	6.0738	3.8534
2019_4	5.5496	1.1746	2.2183	2.4331	7.3048
2019_5	5.7768	1.2749	2.3562	6.3616	6.8303
2019_6	8.8416	2.2066	4.0246	1.8787	0.9314
2019_7	8.3165	2.0156	3.5616	6.7967	2.2311
2019_8	7.2509	1.6851	2.8723	3.3483	4.2893
2019_9	2.1963	0.3604	0.6101	3.8442	13.0509
2019_10	3.4979	0.5627	1.3205	1.1199	10.7205
2019_11	3.9582	0.7028	1.4934	2.8178	9.9513
2019_12	8.5117	2.091	3.7875	4.0754	1.7239
2019_13	4.4191	0.83	1.7044	6.6205	9.3318
2019_14	6.794	1.4991	2.6784	1.7735	5.2649
2019_15	4.2912	0.7869	1.6142	1.4447	9.4815
2019_16	1.957	0.2882	0.5046	2.4267	13.7685
2019_17	7.1231	1.6375	2.7912	4.7372	4.5486
2019_18	3.7217	0.61	1.4387	5.111	10.4475
2019_19	4.842	0.9436	1.9102	5.416	8.5223
2019_20	6.3879	1.4087	2.4922	6.2527	6.1238
2019_21	5.439	1.1626	2.1462	3.2545	7.7552
2019_22	9.2859	2.3222	4.2576	4.5059	-2.1257
2019_23	3.5537	0.581	1.3874	6.7284	10.6295
2019_24	8.5754	2.1627	3.8411	1.8131	1.4393
2019_25	9.073	2.2948	4.1728	3.1291	0.5114