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Debt Policy and Financial Performance of Commercial Airline Companies in Kenya

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Abstract:

The air transportation sector is important for the development and economic progress of the country. It facilitates many segments of the economy such as tourism, manufacturing, horticulture and hotels. The airline industry contributes billions of shillings to the economy and provides employment to thousands of Kenyans. For example, in 2017 the airline industry in Kenya contributed Kshs. 300 billion to the economy. The airline sector supports 620,000 jobs directly and indirectly (International Air Transport Association (IATA), 2017). However, during the period 2013 -2019 the cumulative performance of the sector were losses of approximately Kshs. 30 billion. Researchers have attributed this poor performance to numerous factors key amongst them is the financing and financing costs. These challenges have led to the closure and/or collapse of a number of local airline companies. This research project investigated the effect of debt policy on the monetary performance of airline firms in Kenya. The main objective was achieved by using sub-objectives which were to establish the effect of debt limits, debt structuring, debt issuance, and debt risk management practices on the financial performance of commercial airline companies in Kenya. The study was anchored on the Modigliani and Miller Theory, Agency Cost Theory, and Pecking Order Theory. The descriptive research design was used to answer the research hypotheses. The target population for the study were all the forty-eight airline companies approved to operate in Kenya as at 31/12/2020 while the target respondents were the finance directors. Census sampling was used. The data was analysed using statistical packages for social sciences. The data analysis consisted of descriptive and inferential statistics. The results showed that the limits on debt had an inverse and insignificant effect statistically on the financial performance of commercial airline companies as deduced from a coefficient of -0.547 and critical level of 0.204. The study established that debt structuring had a positive and statistically insignificant effect on financial performance as suggested by the coefficient of 0.324 and significance level of 0.363. The study found that debt issuance and debt risk management policies had inverse and statistically significant effect on the financial performance of commercial airline companies in Kenya as implied by coefficients of -1.625 and -1.464 and p-values of 0.005 and 0.000 respectively. The study recommends that the management of the commercial airline firms review their debt policy so that it can be effective and yield positive effects on performance.

Keywords: Air transport, economy, performance, debt, limits, debt issuance, debt structuring, risk management

1. Introduction

1.1. Background

The airline industry in Kenya contributes a large amount to the development and economic progress of the country. It facilitates many segments of the economy such as tourism, manufacturing, horticulture and hotel (Kiminyei & Obiero, 2017). The airline industry contributes billions of shillings to the economy and provides employment to thousands of Kenyans. For example, in 2017 the airline industry in Kenya contributed Kshs. 300 billion which is approximately five percent the country's gross domestic product (GDP). Further, the airline industry supports 620,000 jobs directly and indirectly (International Air Transport Association (IATA), 2017).

According to Ringa (2017), the airline industry in Kenya facilitates the transportation of ten billion dollar worth of exports, four billion dollars worth of investment from foreign entities and approximately eight hundred million dollars in inbound leisure and business tourism in Kenya. Consequently, the government has identified the airline industry as key for Kenya to accomplishing its economic blueprint called Kenya Vision 2030 (Republic of Kenya, 2007). In its Medium-Term Development Plans (MTPs), the government of Kenya has given emphasis to the modernization and development of both international and domestic airports and airstrips as a measure to boost capacity of the sector to handle both local and international business. The government hopes that this will increase the economic activity of the airline sector, increase jobs and enhance the revenue generating ability of the aviation sector (Republic of Kenya, 2016). Analysts at the World Economic Forum rank Kenya's transport infrastructure at 6 out of 37 countries in Africa, and 78th globally (Kuuchi, 2016).

Further, the analysts indicate that the country is cost competitive in air transport industry. It is expected that the airline industry in Kenya will achieve annual growth of 5% until 2030.

However, the airline industry in Kenya has not been doing well. This has led to the closure and/or collapse of a number of companies including Aero Kenya, Afrika Aviation, Delta Connection, East African, Eagle Aviation, Flamingo Airlines, Imatong Airlines, Kaskazi Aviation, Kenya Flamingo Airlines, Mombasa Air Services, One Jet one, Silverston, Sunbird Aviation, Trackmarck cargo and Sky Aero. These challenges have also been experienced by the largest airline company in Kenya, Kenya Airways. Following challenges faced by the company, the government set up a task force to assess the near collapse of Kenya Airways. The task force established that one of the key reasons for the KShs. 25.7 billion losses by the airline were poor investment and financing decisions (Gibendi, 2018). Specifically, the task force took issue with the manner in which the company was financing its hedging, acquisition of aeroplanes, and funding its activities. According to Nabosu (2013) financing considerations particularly debt is important for airline companies in Kenya. The funds are used for the acquisition of aircraft fleets, and the expansion of cargo and passenger handling facilities which are critical for survival and growth in the airline companies. Niculescu (2005) indicates that at the firm level, the firm needs to raise significant money to meet its financial obligations, development and expansion, and restructuring.

1.1.1. Debt Policy

In his seminal work, Donaldson (1961) defines the debt policy as being concerned with the decision of the firm of whether to finance its long-term capital needs through debt and, if so, how much is considered to be safe (Grinblatt, 2008). According to Magaretha (2014) in the era of globalization, the debt policy of the company is concerned with the funding structure. The funding structure of the firm is determined by the management when they determine the composition of the capital structure. Ahmad (2016) indicates that the debt policy of the company is one of the most challenging financial questions that faces corporation; it revolves around the questions of how much to borrow and at what rates.

Woodruff (2007) suggests that the debt policy arises from the debt capacity which is determined by the value of the land, assets, factory, machinery, and sales variability. Hatem (2017) established that the debt policy of the firms across five continents is determined by the growth prospects, the profitability, asset tangibility, firm size, and liquidity ratio. Debt policy has been referred to as the rules, guidelines, allowances, and limitations that determine how the firm can obtain debt. The study will adopt this definition of debt policy.

When taking into consideration the debt limits, the managers of the firm consider the acceptable ranges for each category of debt (Landier & Thesmar, 2009). The limits are typically determined by legal restrictions (the law, by-laws, local charter, and referenda) and financial restriction or planning considerations. The debt limits are specific to the type of debt, direct debt such as bonds are determined by the income, property value, expenditure and reserves; revenue debt is based on debt service coverage ratios and anticipated credit ratings effects; conduit debt limitations allow the entity providing the debt to approve the borrower's creditworthiness, and the reason for borrowing (Miwa & Ramseyer, 2008).

Debt structuring practices encompass guidelines that include maximum terms; maturity date; the patterns of debt service such as amount of each payment or principal amortization; use of optimal redemption features that mirror market conditions and/or the requirements of the firm; use of debt with variable or fixed-rate, credit top-ups, derivatives, short-term debt, and restrictions as to the type, and extent of use of each type of debt; and capitalising the interest when the project is being implemented and postponement of principal repayment, and/or other internal financing support measures (Maimako & Oladele, 2012).

The debt issuance practices are determined by the type of debt. The practices include: the decision to use specialist to determine and issue debt; the framework for choosing the method of issuing the debt for example private placement, negotiated, or competitive; use of market indices as benchmarks in negotiating the pricing of debt; benchmark for issuance of advanced refunding; and credit ratings. Debt risk management practices that include the use of derivatives focuses on whether or not the firm should use or can use derivatives, insurance, and retained earnings (Gregory, Brown, Chavis, & Klapper, 2010). The airline companies had borrowings of approximately KSh. 36 billion during the period 2013-2017 (Kenya Wall Street, 2017). Indicating the debt was a significant part of their capital structure.

1.1.2. Debt Policy and Financial Performance

Over the last few decades, various researchers have analysed the amount of different sources of financing and the framework that firms use to decide the modes of financing. Despite their efforts, no coherent theory of the optimal financing structure for the firm has been formulated. According to Ivănescu (2007), the challenge of capital structure, which revolves around the choice between two types of financing namely borrowing or shareholder equity, is determined by the considerations of the shareholders, the lenders, and the firm management. These considerations are important given that they impact the value of the firm. According to Misu and Rusu (2014), the use of credit to finance the operations of the firm has two effects on financial performance, increased levels of risk affiliated with the increased levels of borrowing resulting in the fall in the price of the firms' stocks in the market, this decline is offset by the anticipated higher rate of return leads to an increase in the share prices.

Numerous researchers have evaluated the relationship between firm financing and the profitability/income. Mohammad and Jaafer (2012) when analysing the relationship between credit and income of firms in Jordan, concluded the debt impacted the firms earning negatively. These findings are mirror those found by Wali, Fatima, and Mehboob (2012), Kebewar (2013), and Anandasayanan and Subramaniam (2013). The results are in contrast with those of Huang et al. (2006), Song (2006), Rasheed (2012), and James, Alala, and Douglas (2014) who established that various element of the debt policy increase the profitability of firms. These contradicting results indicate that more research needs to be conducted on the relationship between debt, credit, borrowing and the policies on the profitability of the firm. Research by

Kandi (2015) indicated that the amount of debt held by airline companies in Kenya was not sustainable. Kandi (2015) established that the balance sheets of the companies indicated that the firms were headed towards insolvency.

1.2. Statement of the Problem

In Kenya, air transportation segment is a key source of income and a key supporter of other segments of the economy. The industry enables the performance of other segments of the economy such as tourism, manufacturing, horticulture and hotel (Kiminyei&Obiero, 2017). The airline industry contributes billions of shillings to the economy and provides employment to thousands of Kenyans. For example, in 2017 the airline industry in Kenya contributed Kshs. 300 billion to the Kenyan economy which is approximately five percent of national. Further, the airline industry supports 620,000 jobs directly and indirectly (International Air Transport Association (IATA), 2017). Despite the impressive contributions to the economy, airline companies in Kenya have been found to be under-performing. This has led to the closure and/or collapse of several companies including Aero Kenya, Afrika Aviation, Delta Connection, East African, Eagle Aviation, Flamingo Airlines, Imatong Airlines, Kaskazi Aviation, Kenya Flamingo Airlines, Mombasa Air Services, One Jet one, Silverston, Sunbird Aviation, Trackmarck cargo and Sky Aero. These challenges have been experienced by the largest airline company in Kenya, Kenya airways. It was established that a major reason for the challenges faced by the airline companies in Kenya are due to financing decisions that are determined by the debt policy. According to Guguyu (2020), airline firms in Kenya have a debt burden of more than Kshs 30 billion. Most of the debt issued to the airline companies is in foreign currency, the depreciation of the Kenyan shilling over the period 2019/2020 has seen the debt burden faced by the airline industry grow significantly.

The findings of numerous studies have not provided a clear insight on the effect of the debt policies used by firms and the financial outcomes. Mohammad and Jaafer (2012), Wali, Fatima, and Mehboob (2012), Kebewar (2013), and Anandasayanan and Subramaniam (2013) found that the use of debt increases the loss realised by firms. Huang and Song (2006), Rasheed (2012), James, Alala, and Douglas (2014), and Isaac (2014) established that various element of the debt policy help to increase the income of the firm. In order to increase what is known about the impact of the financing and debt policies adapted by the firm, this study will focus on the airline industry in Kenya.

1.3. Objectives of the Study

The general objective of the study was to establish the effect of debt policy on the financial performance of airline companies in Kenya. The specific objectives of the study were:

- To establish the effect of debt limits on the financial performance of commercial airline companies in Kenya.
- To establish the effect of debt structuring practices on the financial performance of commercial airline companies in Kenya.
- To establish the effect of debt issuance practices on the financial performance of commercial airline companies in Kenya.
- To establish the effect of the use of debt risk management practices on the financial performance of commercial airline companies in Kenya.

2. Literature Review

2.1. Introduction

In this chapter a review of the theories that hypothesise the relation between the study variables is given. The findings of prior studies that focus on the study variables is also presented.

2.2. Theoretical Literature

2.2.1. Modigliani and Miller Theorem

This theory is an important part of economic and financial arguments. It forms the basis for the modern approach to financing structure of the firm. In this theory, it is postulated that in a world where there are no taxes, insolvency costs, agency costs, and asymmetric information and the markets are efficient, the value of the firm will not be affected by how that firm is financed. The value of the firm is not dependent on the decision to pay or not to pay dividend, nor the decision to raise capital by issuing equity or the debt policy. The theory implies that the expected cash flows which can be referred to as profits are proportionally divided between the company stakeholders in compliance with the capital structure, whereas the firm's value remains unaffected by the proportion by which the profits are shared (Popescu&Sorin, 2011).

With taxation present, the cost of borrowing with interest is deducted from the tax liability of the firm, thus the value of the firm increases as the level of borrowing increases. The debt policy involves the discounting of tax-deductible interest payments (Grinblatt, 2008). The MM approach advocates for a perpetual issuance of debt by the firm given the benefits that accrue to the firm. Therefore, the debt limits which take into account the financial restrictions and planning considerations; the structuring of debt which includes the terms, maturity, service patterns, and redemption; the debt issuance specifically the determination of interest to be paid, and; the debt risk management which focuses on the retained earnings support provides a framework for the implementation of the MM approach. The capital irrelevance proposition is relevant to this research as it provides an explanation of the relationship between the financing decisions of the firm and the financial performance.

2.2.2. Agency Theory

Jensen and Meckling (1976) argued that the optimal debt, equity, and borrowing mix stimulates the best possible performance. The best capital structure is formulated to take into consideration the agency costs that come about due to the clash between the managers and owners' interests. The capital structure reduces these conflicts by having debt as the largest proportion of the firms' financing mix. The reducing of agency cost by using debt leads to increased performance of the firm. Financing the firms' operations through debt are measures that can be used to monitor and control managers.

The solution to the conflict between the agents and principal requires the use of corporate governance mechanisms namely the dividend and debt policies (Alwi, 2009). The debt policy can be a solution to the agency problem as it forces the agents to use the firms' money efficiently. The debt policy stipulates the debt limits, the debt issuance, debt structure, and debt risk management through external monitoring therefore, the management act to improve the financial outcomes (Alwi, 2009). Yusuf et al. (2015), agree with the observations of Jensen and Meckling (1976), they established that debt stimulates the managers to increase performance and profitability so that there are sufficient funds to meet the debt obligations as and when they become due. The current study sought to find out whether the debt policies have an influence on the profitability of Airline Companies in Kenya.

2.2.3. Pecking Order Theory

Myers and Majluf (1984) assert that stocks/equity is not the optimal means of raising finances for the firm because when managers, who know everything about the firm, offer the market new shares, the market interprets this move to mean that the company is overvalued and the firm is trying to profit on this overvaluation. Consequently, the market revises lower the share price of the firm. In this theory, asymmetric of information determines the cost of capital. The preferences of internal sources of finance over external sources of finance are attributed to assumption that internal sources of capital are less expensive than external sources of capital due to transaction costs. This makes firms to prefer to use internal sources of capital so as to have a positive effect of shareholder wealth.

According to this theory, financing is supposed to be derived from three types of funds namely, internal funds which includes retained income, issue of shares, and through debt. In the process of searching for funds, firms will prefer their sources of financing in the following order; the first consideration should be given to funds that the firm has internally, then second consideration should be borrowed funds, lastly issuing new capital stocks (Fauzi, Basyith & Idris, 2013). This theory also states that businesses should give preference to internal financing when available, and further, debt should be preferred over equity. It is assumed that the issue of equity capital would bring external ownership into the company and thus dilute the ownership of present shareholders.

The Pecking Order theory shows that the financing decisions affect financial outcomes. The use of internal funds such as earnings that are retained is most preferred because the firm does not incur financing costs. The use of debt has costs associated with it including issuance fees, interest rates, and default risks. Similarly, the cost of issuing equity has costs which include issuance costs, costs of transaction management, costs to meet the listing requirements amongst others. The managers often prefer to use debt over equity because the costs of debt are less than the costs of equity (Fauzi, Basyith & Idris, 2013).

This theory has some limitations that challenge its application. First, it does not provide for taxation, managerial and agency costs, bankruptcy and financial distress. The second limitation is that the theory is an argument of what the firm practices are without specifying what they should do (Ramirez 2012). The arguments of the theory are in line with the debt policy because when the firm's internal funds are exhausted, they turn to debt and then they issue hybrid securities such as convertible bonds (Byoun & Rhim, 2003). This theory will be applied in this research work when assessing whether the airline companies in Kenya select to use debt over equity and the effects on profitability.

3. Research Methodology

2.1. Introduction

This section of the research project provides the framework that guided the process of data collection and data analysis.

2.2. Research Design

This is the outline that provides the process that the researcher followed (Vosloo, 2014). It is the framework that details the step-by-step procedures that are combined to ensure that the data collected is valid and reliable (Creswell, 2009). This ensures that the data collected is based on empirical principles. The descriptive research design was used in this study. This research design was considered appropriate as the study sought to explain the current situation.

2.3. Target Population

Mugenda (2008) explains that the population of target is the group of objects, persons, events, items or households that are of interest. Mugenda (2008) further states that these populations have a number of identifying characteristics that the findings are generalised over. In this research project the identified target population was all the forty-eight local airlines operating in Kenya (IATA, 2020). The target respondents were the finance directors of the 48 airline companies.

2.4. Sampling and Sample Size

The population of a study can be evaluated using two methods: using the sampling process or taking a census. In the census approach, every element that forms the target are used while in sampling a subsection of the total population is chosen to represent all units in the population of interest. Given the magnitude of the sample census approach was used. Data for study was obtained from all the 48 airline companies in Kenya. The respondents of the study were all the 48 finance directors of the airline companies.

2.5. Data Collection Instrument

Primary data used in the study was obtained using the identified data collection tool while secondary data obtained from financial statements provided by the respondents. The study elected to use questionnaires as they are cost effective particularly given that some airline companies are based in different regions of the country. Additionally, the study used questionnaires because it was ease to analyse the responses given using computer software; and the questions asked were similar for all respondents thus reducing the bias.

4. Data Analysis and Presentation

4.1. Introduction

This section provides the findings of the research and a discussion of the findings.

4.2. Response Rate

This is an indicator of the actual number of the identified sample that actually took part in the study. It is computed by dividing the number of participants by the number of persons in the study sample. This ratio is important as it indicates the possibility of non-response bias (Frey, 2018).

Respondents	Number	Percentage
Responses	31	64.6%
Non-Replies	17	35.4%
Sum	48	100%

Table 1: Response Rate
Source: Study Data (2021)

The study sought to sample 48 directors of various airline firms in Kenya. The researcher was only able to receive responses from 31 (64.6%) respondents. According to Mealing, Banks, Jorm et al. (2010), a response rate of 50% or more is excellent. The information provided is sufficient to provide data for drawing conclusions. 4.3 Descriptive Statistical analysis

4.3. Descriptive Statistical Analysis

The researcher aimed at determining the effect of debt policy on the financial performance of airline companies in Kenya. This part of the research presents a description of the debt policies used in the respective firms. The responses given in this stage were based on a five-point Likert scale.

4.3.1. Effect of Debt Limits on the Financial Performance of Airline Companies in Kenya

The researcher sought to understand the debt limits that are in place in the various airline companies in Kenya. Table 2 provides a summary of the debt limits.

Dimension	Mean	Std. Deviation
Legal restrictions determine the amount of debt the company can obtain	1.81	.402
The company has guidelines of the kind of debt that can be obtained	4.65	.486
Debt levels of the company are determined by the growth levels	3.81	1.108
Financing challenges arising from the reduction of use of one type of credit due to change in market and financial conditions determine company's debt limits	4.13	.562
The management plan and set the appropriate debt limits for each fiscal year	4.45	.506
The company adheres to the set debt limits	3.16	.820
Aggregate	3.67	.640

Table 2: Debt Limits
Source: Study Data (2021)

The mean of 1.81 and standard deviation of 0.402 shows that for most of the firms, legal restrictions did not determine the debt that the company obtained. The means of 3.81 and 3.16 indicate neutrality on the part of the respondents on the issue of debt levels of the firm determine growth levels and the companies' adherence to the set debt limits. The standard deviation of 1.108 and 0.820 imply that there was significant dispersion in the responses. Indicating that for the different firms' debt affected growth levels differently and that the degree of adherence to debt limits varied significantly across the firms. According to Iqbal, et al. (2012), the effects of borrowing and credit on growth varies significantly across firms, because the firms are interested in risk associated with debt, thus most firms prefer equity to finance growth. According to Rosters (2021), the debt limits are determined by the type of loans taken, thus adherence to limits is subject to the terms and conditions of the loan.

The average of 4.65, 4.13, and 4.45 and SD of 0.486, 0.562, and 0.506 suggest that there was agreement that the company has guidelines of the kind of debt that can be obtained; financing challenges arising from the reduction of use of one type of credit due to change in market and financial conditions affect the company's debt limits; and management plan and set the appropriate debt limits for each fiscal year respectively. The average 3.67 and SD of 0.640 indicate that there was agreement that the firm uses the debt limits policies.

4.3.2. Effect of Debt Structuring Practices on Financial Performance of Airline Companies in Kenya

The study sought to determine the use of debt structuring policies by airline firms in Kenya. The Table 3 shows the debt structuring elements used by the firms.

Elements of Debt Structuring	Mean	Std. Deviation
The maximum term of debt is determined by productive/useful life of the company's assets	4.45	.506
The credit repayment patterns are such that there are standard payments or standard principal amortization	4.00	.632
The debt is structured in such a manner as to the best redemption options that prevail in the market	3.13	1.024
The company uses comparative pricing and average market rates when negotiating transactions	3.97	.605
Average Score	3.89	0.692

Table 3: Debt Structuring

Source: Study Data (2021)

The mean of 3.13 indicates that those who participated in the study were neither agreed nor disagreed with the assertion that the debt was structured in a manner as to the best redemption options that prevail in the market. The SD of 1.024 shows that there were significant differences in opinions of the responses given. The findings indicate that the respondents agreed with the assertion that the maximum term of debt is determined by productive/useful life of the company's assets; the credit repayment patterns is such that there are standard payments or standard principal amortization; and the company uses comparative pricing and average market rates when negotiating transactions as implied by means 4.45, 4.40, and 3.97 respectively.

The overall mean was 3.89 and SD of 0.692 indicates that there was agreement on most of the elements of debt structuring that are implemented by the respective firms. The findings by Faulkender and Petersen (2006) and Colla and Li (2019) suggest that irrespective of the size of the firm, the firms have a given debt structure. The debt structure is informed by the business' characteristics such as ratings and size.

4.3.3. Effect of Debt Issuance Practices on Financial Performance of Airline Companies in Kenya

Table 4 presents a summary of debt issuance measures used by the respective airline companies in Kenya.

Elements of Debt Issuance	Mean	Std. Deviation
The company selects and uses specialists including credit and financing advisors to help with deciding the most appropriate method of issuing debt method and the type of debt	3.55	.961
The company prefers debt issued by commercial banks to other providers	2.00	.856
Aircrafts are the underlying assets and are global in their usage making them good securities for debt issuance	4.03	.657
The company's debt issued in other countries	3.29	1.596
Average Score	3.22	1.018

Table 4: Debt Issuance

Source: Study Data (2021)

The means of 2.0 and standard deviation of 0.856 suggests that the companies do not prefer debt issued by commercial banks to other providers. This outcome is similar to that of Misati and Kamau (2015) that a consequence of financial liberalisation in Kenya was the use of foreign denominated loans rather than local loans mostly driven by the fact that international markets provided a wider array of financial assets and products. The means of 3.29 and 3.55 suggest that there was no consensus with the contention that the company selects and uses specialists including credit and financing advisors to help with deciding the most appropriate method of issuing debt method and the type of debt and the company's debt issued in other countries. These findings suggest that some firms use debt specialists and borrow from abroad.

The average of 4.03 and SD of 0.657 suggests that aircrafts are the underlying assets and are global in their usage making them good securities for debt issuance. The overall score of 3.22 suggests that the respondents there was no consensus with the use of debt issuance strategies. The SD of 1.018 implies that there was a lot of variation in the answers implying that the debt issuance strategies vary significantly across the different firms.

4.3.4. Effect of Debt Risk Management Practices on Financial Performance of Airline Companies in Kenya

The results given in Table 5 indicate the elements of risk management used by the respective airline companies in Kenya.

Elements of Risk Management	Mean	Std. Deviation
Debt means risk for the firm	4.39	.667
Debt means less flexibility because a portion of income must be diverted to debt service	4.74	.445
The company has debt risk management practices	4.19	.703
The company uses derivatives for debt risk management	4.26	.773
The company prefers to use retained earnings in order to avoid debt and the risks associated with debt	3.10	1.491
Average Score	4.14	0.816

Table 5: Elements of Risk Management

Source: Research Data (2021)

The average of 3.10 shows that there was no consensus with the proposition that firms preferred retained earnings. The SD of 1.491 shows that there was a lot of variances in the answers given. The findings suggest that the firms use retained earnings to a varying degree. These findings violate the hypothesis of pecking order theory which argues that companies strictly favour retained earnings to other forms of financing.

The means of 4.39, 4.74, 4.19, and 4.26 suggest that the respondents agreed that debt means risk for the firm; debt means less flexibility because a portion of income must be diverted to debt service; the company has debt risk management practices; and the company uses derivatives for debt risk management. The overall mean is 4.14 and standard deviation suggests that the respondents agreed with the elements of risk management stated in Table 7. According to Reinhard and Rogoff (2008) firms use various credit risk management measures because the consequences of default are severe.

4.3.5. Financial Performance of Airline Companies in Kenya

The researcher sought to understand the level of financial performance of the respective firms during the period 2014-2019. Financial performance was indicated using ROA. The findings summarised displayed in Figure 1 indicate that most of the firms (45%) disclosed that they had posted losses during the period 2013-2019 given by the fact that their ROA was less than 0. Forty-two percent of the firms indicated that had return on assets 0.00 to 0.50. Only 13% of the firms disclosed that they realised ROA of above 0.50. These findings suggests that there are challenges of profitability in the airline firms in Kenya.

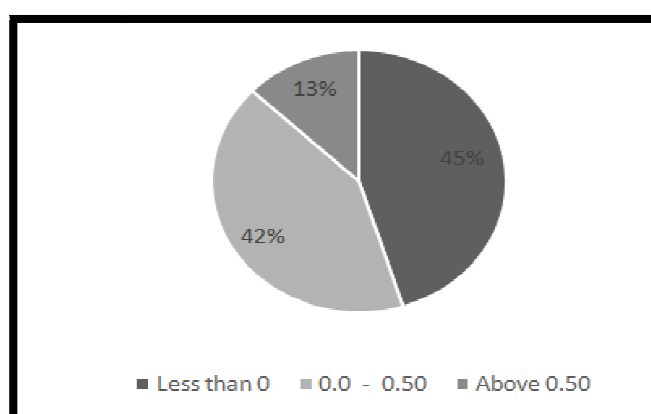


Figure 1: Financial Performance

4.4. Inferential Statistical Analysis

This analysis was conducted to determine the relationship between financial performance and debt policies used by the firms.

4.4.1. Correlation Analysis

Table 6 shows the correlation between the study variables.

		Financial Performance	Debt Limits	Debt Structuring	Debt Issuance	Debt Risk Management
Pearson Correlation	Financial Performance	1.000	.046	.172	.034	-.346
	Debt limits	.046	1.000	.108	.006	-.257
	Debt structuring practices	.172	.108	1.000	.324	-.358
	Debt issuance practices	.034	.006	.324	1.000	-.713
	Debt risk management practices	-.346	-.257	-.358	-.713	1.000
Sig. (1-tailed)	Financial Performance		.403	.178	.428	.006
	Debt limits	.403		.282	.487	.081
	Debt structuring practices	.178	.282		.009	.024
	Debt issuance practices	.428	.487	.009		.000
	Debt risk management practices	.006	.081	.024	.000	

Table 6: Correlation Analysis

Source: Study Data (2021)

The Pearson correlation coefficient showed the strength of the relationship between the variables. Coefficients greater than 0.8 or less than -0.4 suggest variation from the line of best fit. The results presented in Table 6 show that the level of correlation is not a cause of concern (Laerd Statistics, 2021).

4.4.2. Regression Analysis

Table 7 shows the appropriateness of the model used.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.645 ^a	.416	.326	.857
a. Predictors: (Constant), Debt risk management, Debt limits, Debt structuring, Debt issuance				

Table 7: Model Summary

Source: Study Data (2021)

The findings indicated that the adjusted r-squared was 0.326. These findings suggest that thirty-six point six per cent of the variation in the income of airline companies in Kenya was due to debt policy. The results also imply that sixty-seven-point four percent in variation in the firm's monetary performance could be attributed to variables accounted for in this study. The analysis of variance (ANOVA) was used to show the quality of the model used.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.603	4	3.401	4.628	.006 ^b
	Residual	19.107	26	.735		
	Total	32.710	30			
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Debt risk management, Debt limits, Debt structuring, Debt issuance						

Table 8: ANOVA

Source: Study Data (2021)

The computed F statistic was 4.628 with a significance of 0.006. The computations suggest that estimation model is appropriate. The computation in Table 9 shows the effect of the debt policies on financial performance.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.576	4.053		3.597	0.001
	Debt limits	-0.547	0.42	-0.21	-1.303	0.204
	Debt structuring	0.324	0.35	0.154	0.926	0.363
	Debt issuance	-1.625	0.529	-0.707	-3.071	0.005
	Debt risk management	-1.464	0.354	-0.949	-4.133	0
a. Dependent Variable: Financial Performance						

Table 9: Regression Coefficients

Source: Study Data (2021)

The findings suggest that debt limits have a negative and statistically insignificant effect because the computed coefficient is -0.547 and the critical value was 0.204 which is greater than the critical level of five per cent. These findings contradict the findings of Harelimaana (2017) who showed a strong positive correlation between the amount of borrowing and net profits of banks. The variance was occasioned by the fact that in the work of Harelimaana (2017), the levels of interest were low which stimulated borrowing which increased investments thus profits.

The findings in Table 9 show that debt structuring practices had a positive and statistically insignificant effect on firm performance as implied by $\beta = 0.324$ and p-value 0.363. These findings contradict the findings of Ikapel and Kajirwa (2017) who established that there was a negative and statistically significant relationship between the debt structure and firm financial performance. The contradictions can be attributed to the fact that Ikapel and Kajirwa (2017) focused on the sugar sector which in Kenya has challenges of profitability.

A beta coefficient of -1.625 and p-value of 0.005 suggests that a unit increase in debt issuance would result in a 1.625 unit decrease in the level of financial performance of airline companies in Kenya. These findings confirm the findings of Gabbrijelčič, Hermaan, and Leenarčič (2016) who established that an increase in debt issuance would result in a decline in the firm's profitability. The respondents indicated that some of the debt is issued in foreign countries. In their study, Gabbrijelčič, Hermaan, and Leenarčič (2016) found that although debt issuance had a negative effect on performance, the effects were lower for firms who issued foreign debt.

The findings in Table 9 suggest that debt risk management practices have a negative and statistically significant effect on firm performance. The findings indicate that an increase in debt risk management strategies will result in a 1.464 unit decrease in firm performance. These findings contradict the findings of Mohammed and Knapkova (2016) who established that there was a positive relationship between firm performance and risk management. The findings summarised in Table 11 suggest that equation 3.1 can be written as

$$FP = 14.576 - 1.625DI - 1.464DR \dots\dots\dots 4.1$$

5. Summary, Conclusion and Recommendations

5.1.Introduction

This chapter of the study provides a summary of the major findings of the study, provides conclusions based on the findings, and makes recommendations.

5.2. Summary of Findings

The general objective of the study was to determine the effect of debt policy on the financial performance of commercial airline firms in Kenya. In the study debt policy was indicated using debt limits, debt structure, debt issuance, and debt risk management. The financial performance was indicated using return on assets. The study established those legal restrictions did not determine the amount of debt the company could obtain. The study also established that the debt levels did not necessarily determine the growth levels and the companies did not strictly adhere to debt limits. The study found that the companies had guidelines that determined the kind of debt that could be obtained, the firms experienced financing challenges arising from the reduction of the use of one type of credit due to change in market and financial conditions which impacted the company's debt limits, and that the management planned and set appropriate debt limits for each fiscal year. The regression analysis showed that debt limits had a negative and statistically insignificant effect on financial performance.

The second objective of the study was to determine the effect of debt structuring practices on the financial performance of commercial airline companies in Kenya. The study also established that the maximum term of debt was determined by the productive/useful life of the company's assets, the credit repayment patterns used by the firms were such that there are standard payments or standard principal amortization, and the commercial airline companies' use comparative pricing and average market rates when negotiating transactions. The regression analysis showed that debt structuring strategies had a positive and statistically insignificant effect on firm financial performance.

The third objective of the study was to determine the effects of debt issuance practices on the financial performance of commercial airline companies in Kenya. The study found that the firms did not prefer debts issued by commercial banks to other providers. The study found that some of the companies had issued debt in other countries.

Further, the study found that the companies select and use specialists including credit and financing advisors to help with deciding the most appropriate method of issuing debt and type of debt and that the aircrafts were the underlying assets and are global in their usage making them good securities for debt issuance. The study established that debt structuring policies have a negative and statistically significant effect on financial performance.

The fourth objective of the study was to determine the effect of debt risk management practices on the financial performance of commercial airline companies in Kenya. The study found that not all the airline companies preferred to use retained earnings as a means of avoiding debt and the risks associated with debt. The study further established that debt meant risk for the firms, debt meant less flexibility because a portion of the income had to be diverted to debt service, the companies had debt risk management practices, and that the companies used derivatives for debt risk management. The regression analysis showed that debt risk management policies had a negative and statistically significant effect on financial performance.

5.3. Conclusion

The study established those legal restrictions did not determine the amount of debt the company could obtain. The study thus concludes that the firms do not have legal restrictions or are not subject to legal restriction when it comes to debt. The study also established that the debt levels did not necessarily determine the growth levels and the companies did not strictly adhere to debt limits. The study thus concludes that growth in airline companies is due to other factors rather than the debt policy. The fact that the firms do not adhere to debt limits leads to a conclusion that either the limits are too low or circumstances are dynamic making it difficult to conform. The study established that debt limits had a negative and statistically insignificant effect on financial performance. The study concludes that the debt limits policies are not adequate.

The study also established that the maximum term of debt was determined by productive/useful life of the company's assets, the credit repayment patterns used by the firms were such that there are standard payments or standard principal amortization, and the commercial airline companies' use comparative pricing and average market rates when negotiating transactions. The study concluded that debt structuring practices are in use by the firms.

The study found that the firms did not prefer debts issued by commercial banks to other providers. The study concludes that the loans provided by commercial banks are not adequate for some firms. The study found that some of the companies had issued debt in other countries. Further, the study found that the companies select and use specialists including credit and financing advisors to help with deciding the most appropriate method of issuing debt and type of debt and that the aircrafts were the underlying assets and are global in their usage making them good securities for debt issuance. The study concludes that foreign debt and debt management agencies are important to the airline firms. The study established that debt structuring policies have negative and statistically significant effect on financial performance. The study concludes that debt structuring policies reduce the profitability of the firm.

The study found that not all the airline companies preferred to use retained earnings as a means of avoiding debt and the risks associated with debt. The study concludes that the propositions of the pecking order theory are not valid for some airline companies in Kenya. The study further established that debt meant risk for the firms, debt meant less flexibility because a portion of the income had to be diverted to debt service, the companies had debt risk management practices, and that the companies used derivatives for debt risk management. The study concludes that debt risk management is critical for the firms. The regression analysis showed that debt risk management policies had a negative and statistically significant effect on financial performance. The study concludes that the risk management practices might be in place to reduce risks but they also reduce profits.

5.4. Recommendations

The main goal of this academic work was to determine the effects of debt policy on the profitability of airline businesses in Kenya. It was determined that firms use of various elements of debt limits and debt structuring varies with some elements not being used. The study recommends that the management review the debt limits and debt structuring policies and formulate some that are relevant to the current operations. The study established that debt issuance and debt risk management have an adverse effect on the financial performance. It is thus recommended that managers of the airline firms need to review their policies on debt issuance and debt risk management.

5.6. Recommendations for Future Studies

It was found that 32.6 per cent variation in the level of ROA of the selected airline companies in Kenya was attributed to debt policies. The remaining 67.4% is attributed to items not taken into consideration such as policy, global economic situation, exchange rates, interest rates, and cost of operations. The researcher recommends that more studies should be undertaken using the variables that have been left out so as to enhance the understanding of the factors that affect the financial performance of commercial airline firms in Kenya. Further, the study only focused on commercial airline firms in Kenya. The researcher suggests that studies should be included to focus on firms in other sectors of the economy.

7. References

- i. Aglionby, J. (2018, July 6). Kenya's skies. *Financial Times*. Retrieved from <https://www.ft.com/content/006aacfe-4f44-11e6-8172-e39ecd3b86fc>
- ii. Ahmad, A. (2016). *Firm debt Part (2): Theory of how to borrow*. Retrieved from www.coursera.org/lecture/finance-debt/firm-debt-part-2-theorizing-how-much-to-borrow-9ZLCp

- iii. Alwi, S. (2009). Dividend and debt policy as corporate governance mechanism: Indonesian Evidence: *JurnalPengurusan*, 29,111-127.
- iv. Anandasayanan, M., &Subramaniam, V. (2013). The determinants of leverage of the listed companies in Sri Lanka: An empirical study. *International Journal of Research in Commerce & Management*, 3(6)
- v. Arnold, T., & Emerson, J. (2011). Nonparametric goodness-of-fit tests for discrete null distributions. *The R Journal*. 3(2), 34-39.
- vi. Bolarinwa, A. (2015). Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. *Niger Postgraduate Medical Journal*, 22, 195-201.
- vii. Brigham, E., & Houston, F. (2005). *Fundamentals of financial management (9thed.)*. San Diego: Harcourt Brace College
- viii. Chechet, I. L., &Olayiwola, A. B. (2014). Capital structure and profitability of Nigerian quoted firms: the agency cost theory perspective. *American International Journal of Social Science*, 3 (1), 139 – 158.
- ix. https://www.researchgate.net/publication/228703258_Debt_Structure/link/02e7e53304b8b44623000
- x. Cooper, D., & Schindler, P. (2006). *Business research methods*. New York: McGraw-Hill Irwin.
- xi. Cox, D. (2018). Aviation industry loans: financing for aviation companies. *GudCapital*. Retrieved from <https://gudcapital.com/aviation-industry-loans-financing-for-aviation-companies/>
- xii. Creswell, J. (2009). *Research design: Quantitative, qualitative, and mixed methods approaches*. New York: Sage Publications.
- xiii. Cronbach, L., &Shavelson, J. (2004). My current thoughts on coefficient alpha and successor procedures. *Educational and Psychological Measurement*, 64 (3), 391-418.
- xiv. Deogun, S., Kratsch, D., &Steiner, G. (1997). An approximation algorithm for clustering graphs with dominating diametral path. *Information Processing Letters*, 61, 121-127.
- xv. Dubes R., & Jains, A. (1988). *Algorithm that cluster data*. Englewood Cliffs, NJ: Prentice-hall.
- xvi. Easterbrook, F. (1984). Two agency cost explanation of dividend. *American Economic Review*, 74(4), 650-569.
- xvii. Erasmus, P. (2008). Evaluating value based financial performance measures. *Journal of Finance*, 6(3), 93-117.
- xviii. Faccio, M., Lang, H., & Young, L. (2001). Dividends and expropriation. *American Economic Review*, 91(1), 54-78.
- xix. Fauzi, F., Basyith, A., &Ildris, M. (2013). The determinants of capital structure: An empirical study of New Zealand listed firms. *Asian Journal of Finances and Accounting*, 5(2), 1-21.
- xx. Faulkender, M., & Petersen, M. (2006). Does the source of capital affect capital structure? *Review of Financial Studies* 19, 45-79.
- xxi. Frey, B. (2018). Response rate. *Sage*. Retrieved from: <https://methods.sagepub.com/reference/the-sage-encyclopedia-of-educational-research-measurement-and-evaluation/i17902.xml>
- xxii. Gabrijelčič, M., Herman, U., &Lenarčič, A. (2016). Firm performance and foreign debt financing before and during the crisis. Evidence from firm level data. *SSRN Electronic Journal*. Retrieved from: www.researchgate.net/publication/272260960_Firm_Performance_and_Foreign_Debt_Financing_before_and_during_the_Crisis_Evidence_from_Firm-Level_Data
- xxiii. Gilchris, M. (2013). Influence of bank specific and macroeconomic factors on the profitability of 25 commercial banks in Pakistan during the time period 2007 -2011. *American Journal of Business and Finance*, 14(2), 25-30.
- xxiv. Gregory, W., Brown, G., Chavis, L., & Klapper, L. F. (2010). A new lease on life: Institutions, external financing, and growth. Retrieved from enani.institute.unc.edu/ki/wp-content/uploads/2017/.../Inst_ExtFinancing_Growth.pdf
- xxv. Grinblatt, M. (2008). Debt policy, corporate taxes, and discount rates. *Journal of Economic Theory*, 14(1), 225-254.
- xxvi. Guguyu, O. (2020, Nov 13). KQ state-backed debt rises on weak shilling. *Business Daily*. Retrieved from: www.businessdailyafrica.com/bd/markets/capital-markets/kq-state-backed-debt-rises-on-weak-shilling-3019830
- xxvii. Gujarati, D., & Porter, D. (2009). *Basic Econometrics (Fifth ed.)*. Boston: McGraw-Hill Irwin.
- xxviii. Harelimana, J. (2017). Effect of debt financing on business performance: A comparative study between I&M bank and Bank of Kigali. *Global Journal of Management and Business Research*, 17(2), 36-45.
- xxix. Hatem, B. (2017). Factors explaining debt firm policy: A comparison between five intercontinental countries. *Business and Economic Research*, 7(1), 285-297.
- xxx. Huang, G., & Song, F. (2006). The determinants of capital structure: Evidence from China. *China Economic Review*, 17(1), 14-36.
- xxxi. Iqbal, A., Hameed, I., & Ramzan, N. (2012). The impact of debt capacity on firm's growth. *American Journal of Scientific Research*, 59, 109-115.
- xxxii. Laerd Statistics. (2021). Pearson product moment correlation. Retrieved from:
- xxxiii. <https://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical-guide.php>
- xxxiv. Mealing, N., Banks, E., Jorm, E., Steel, D., Clements, M., & Rodgers, K. (2010). Investigation of relative risk estimates from studies of the same population with contrasting response rates and designs. *BMC Med Methodology*, 10 (26).
- xxxv. Misati, R., & Kamau, A. (2015). Local and international dimensions to credit provision by commercial banks in Kenya. *Kenya Bankers Association Working Paper/04/2015*
- xxxvi. Reinhart, C., & Rogoff, K. (2008). Is the 2007 US sub-prime financial crisis so different? An international historical comparison. *American Economic Review*, 98(2), 339-344.
- xxxvii. Rosters, M. (2021). Debt management policies. Retrieved from: <https://mrsc.org/Home/Explore-Topics/Finance/Debt/Debt-Management-Policies.aspx>