Factors Influencing the Use of Lease Financing in Public Institutions in Kenya: A Case of the National Treasury of Kenya

Faith Asha Munga¹, Caro Ayuma²

¹MBA Student: Jomo Kenyatta University of Agriculture and Technology, Kenya
²Lecturer: Jomo Kenyatta University of Agriculture and Technology, Kenya

Abstract: As governments’ institutions continue the search for ways of improving efficiency and achieving cost reduction, more are considering equipment leasing as an alternative to buying everything from equipment, autos to fire trucks and airplanes. However, various studies offer mixed results in relation to federal and private companies leasing. This study therefore sought to establish the various factors that influence the government to adopt lease financing and whether it reduces cost or not. The study also sought to determine the influence of availability of financial resources, cost reduction, agency cost and cost of borrowing on the use of lease financing in public institutions in Kenya. This research study used a case study design and a descriptive research design. The target population of this study was 293 staff working in the National Treasury of Kenya. The study made use of stratified random sampling to select 30% of the target population from the target population. The sample size of this study was therefore 88 respondents. This study used primary and secondary data. Structured questionnaires were used in this study to collect primary data. The questionnaire was administered by use of a drop off and pick up later method. Qualitative data was obtained from the open-ended questions. Content analysis was used in processing qualitative data and results were presented in prose form. On the other hand, the quantitative data in this research was analyzed by descriptive statistics and inferential statistics using Statistical Package for Social Sciences (SPSS version 21). Descriptive statistics included mean, standard deviation, frequencies and percentages. Data was then presented in tables, charts and graphs. The study also used correlation analysis to establish the relationship between the dependent variable and independent variables. The study established that availability of financial resources and agency cost had an inverse influence on the use of lease financing in public institutions. On the other hand, cost reduction and cost of borrowing had a positive influence on the use of lease financing in public institutions. The study therefore recommends that public institutions should adopt lease financing in obtaining properties and equipment like offices, machines and vehicles. In addition, the government should come up with policies that will guide how and when public institutions should lease to reduce costs of running public institutions and consequently reduce government expenditure.

Keywords: Lease Financing, Tax Shelter, Financial resources, Cost reduction, Agency and administrative cost, Cost of borrowing

1. Introduction

Leasing is an important and widely used source of financing. It enables entities, from start-ups, multinationals to public institutions to acquire the right to use property, plant and equipment without making large initial cash outlays [1] [2]. Entities currently account for leases as either operating leases or finance leases. Leasing is referred to as asset based financing. As lessors retain ownership of the assets they lease throughout the life of the contract, these leased assets are therefore an inherent form of collateral in such contracts (compared to traditional bank lending which will either be unsecured or make use of different types of collateral and typically not physical assets such as equipment, which are inherent in leases). Conventional bank lending focuses on the loan repayment by the borrower from two sources: a primary source, the cash flow generation, and a secondary source, credit enhancements and collateral [3]. Leasing is focused on the lessee’s ability to generate cash flows from the business operations to service the lease payments, as the lessor retains legal ownership of the asset [4].

The countries of Central and Eastern Europe (CEE) are engaged in a process of radical economic restructuring. The economic transition from a centrally controlled structure to a system of market economy must be undertaken against a background of severe economic, social and political problems [5]. Poland is the first country in CEE to pull out of the deep post-communist recession, which hit the entire region. Output began rising from mid-1992, and the upturn has continued to gain strength. Ernst & Young has recently changed its rating for Poland and regards the country as a more favorable investment option than either the Czech Republic or Hungary [6]. However, the emergence of the international debt problem in the 1980s and the early 1990s resulted in constraints on commercial bank lending for Poland, and as a result, there is a severe shortage of capital investment in the economy. This, together with the underdeveloped Polish capital market, has made leasing an attractive and valuable tool to deal with the financing and investment problem in the country [7]. Leasing is a form of debt whereby a lessee (or borrower) acquires the use of an asset under an agreement to compensate a lessor who is the owner of the asset (and the lender). Leasing has established itself throughout the world as an important form of financing and has expanded considerably in developed and some developing countries [8].

Leasing provides worldwide more finance than Eurobonds, Euro-commercial paper, medium-term notes, Euro notes or international equities [9]. In the USA, leasing provides more finance than the corporate bond and commercial mortgage markets put together [8]. During the past 25 years, leasing has grown at a faster rate than any other forms of finance in Western Europe. However, leasing is a very new kind of financing instrument in Poland, and has not yet caught on.
The establishment and growth of the domestic leasing market is only a recent phenomenon, as prior to 1990 no such market had existed in Poland. Although leasing has been one of the most interesting subjects among academics since the 1960s, research on leasing in CEE has been exceptionally scarce [10].

Leasing has also been adopted by various countries in Africa. In addition, South Africa as one among the lead lease industries (markets) of the world is likely to continue to do better than Nigeria in spite of the economic population and growth in the oil and gas industrial sector of Nigeria [11]. The Nigeria lease market showed a declining growth rate of 63.7%, 50.60%, and 24.0% for 2001, 2002 and 2003 respectively and growth of 31.8% in 2004 over 2003. For South Africa no growth was recorded in 2002 over 2001; however 2003 recorded 22.2% growth while 2004 experienced 15% declined in growth rate [3]. In the year 2013, the Ugandan government developed a plan to lease out X-ray and scanning machines in the public hospitals to private investors because they have become too expensive to maintain [12].

1.1 Statement of the Problem

As state and local governments continue the search for efficiency and cost savings, more are considering equipment leasing as an alternative to buying everything from equipment, autos to fire trucks and airplanes [1] [13]. The asset-based financing industry provides access to capital outside the banking sector. Through leasing, the lessee acquires the right to use the asset for a fee over time, but the lessor retains ownership [7].

Because the asset secures the borrower’s unconditional obligation to make payments over the term of the agreement, leasing typically finances a higher percentage of the capital cost of an asset than debt financing [14]. In addition, leasing is often perceived as a more flexible way to finance assets than traditional lending because it can be custom-tailored in a number of ways. For instance, payment schedules can be adjusted to accommodate cash flow needs. Other attractive features of lease financing include the possibility of upgrading equipment during or at the end of a lease contract as well as sales-tax deferral [14] [15].

However, various studies offer mixed results in relation to federal and private companies leasing. While some authors outline the benefits of leasing for a public institution, other authors indicate otherwise. For instance, debt capacity is valuable to taxable entity because it permits a firm to add to its capital structure and thereby gain the associated tax shelter [8]. They conclude that savings taxes seem to be the only motive that is substantial in leasing and hence in the absence of taxes there is no difference between buying and leasing.

If there are any tax shelters transferred to the lessor as a result of the lease, these tax shelters will be a cost to the government, but they will be realized by lower tax collections to the Treasury [14]. This means that by adopting the lease financing the government may be losing on taxes and hence lease financing can end up being more costly than purchasing. In addition, lease financing involves other costs like agency and administrative costs. This study therefore sought to establish the various factors that influence the government to adopt lease financing and whether it is reduces cost or not.

1.2 Research Objectives

The general objective of this study was to assess the factors influencing the use of lease financing in public institutions in Kenya.

1. To establish the influence of availability of financial resources on the use of lease financing in public institutions in Kenya
2. To determine the influence of cost reduction on the use of lease financing in public institutions in Kenya
3. To determine the influence of agency cost on the use of lease financing in public institutions in Kenya
4. To find out the influence of cost of borrowing on the use of lease financing in public institutions in Kenya.

2. Theoretical Review

This study focused on two theories, which include Modigliani–Miller theorem and financial contracting theory.

2.1 Financial contracting theory

Traditionally, the theory of financial leasing has focused on the differential tax position of the lessee and the lessor as the primary rational for leasing [16]. The fundamental argument is that, if a firm is not in a full tax-paying position purchasing and depreciating an asset may be costly because it can use only a low capital or depreciation tax allowance [15]. However, by leasing the asset, the lessor would claim the tax allowances, and the tax benefits could be transferred indirectly to the lessee through lower lease payments.

There has been an increasing tendency to view leasing in the broader context of financial contracting [17]. While not denying the potential importance of taxes and the substantiality between leasing and debt, newer literature has placed greater emphasis on the relative abilities of different types of financial contracts to control agency costs [18]. Financial contracting theory suggests that company characteristics such as business risk and the nature of the investment opportunity should affect contracting costs and thus the choice to lease rather than to buy asset. Conflicts raised by the agency costs are referred to as the asset substitution problem which arises from the possibility that the borrowed funds may be used to finance other more risky projects [19].

2.2 Modigliani–Miller theorem

The Modigliani–Miller theorem (of Franco Modigliani, Merton Miller) forms the basis for modern thinking on capital structure [20]. The basic theorem states that, under a certain market price process (the classical random walk), in the absence of taxes, bankruptcy costs, agency costs, and asymmetric information, and in an efficient market, the value of a firm is unaffected by how that firm is financed. It does not matter if the firm's capital is raised by issuing stock.
The federal government does not have a capital budget, which does not matter what the firm's dividend policy is. Therefore, the Modigliani–Miller theorem is also often called the capital structure irrelevance principle [21].

The Theorem makes two fundamental contributions. In the context of the modern theory of finance, it represents one of the first formal uses of a no arbitrage argument (though the “law of one price” is longstanding) [22].

Modigliani and Miller also assumed that each firm belonged to a “risk class,” a set of firms with common earnings across states of the world, but this assumption is not essential [23]. The relevant assumptions are important because they set conditions for effective arbitrage: When a financial market is not distorted by taxes, transaction or bankruptcy costs, imperfect information or any other friction that limits access to credit, then investors can costlessly replicate a firm’s financial actions. This gives investors the ability to ‘undo’ firm decisions, if they so desire. Attempts to overturn the Theorem’s controversial irrelevance result were a fortiori arguments about which of the assumptions to reject or amend. The systematic analysis of these assumptions led to an expansion of the frontiers of economics and finance.

3. Conceptual Framework

![Conceptual Framework](image)

Figure 1: Conceptual Framework

The amount of available resources appears to have both negative and positive effects on opportunity identification by entrepreneurs [24]. On the one hand, abundant resources enable experimentation, resulting in more ideas that are new and more innovation. For instance, experienced administrators or finance managers can advise a firm on whether to go for credit or lease financing. On the other hand, resource constraints can spur necessity-driven creativity and lead to identifying promising opportunities. For instance, when a company has insufficient finances, it can explore all avenues to meet its needs and in the process get information on lease financing. One major motive for leasing in the federal government derives from spending restrictions imposed by the budget process [12]. Examples of the budget functions are defense, agriculture and health among others. The budget constraints present a substantial problem when an agency makes a capital investment [16]. The federal government does not have a capital budget, which will finance capital or investment type programs separately from current expenditures. Therefore, capital projects must compete for funds with current expenditures. Therefore, capital projects must compete for funds with current spending projects such as operations, maintenance, and research and development. When an agency decides to purchase a capital asset, it will incur substantial outlays in the year of the acquisition. Because of the spending constraints, the capital outlay will affect the ability of the agency to obtain and expend funds for other worthwhile projects competing for those limited funds [16].

If there are, any tax shelters transferred to the lessor as a result of the lease, these tax shelters will be a cost to the government, but they will be realized by lower tax collections to the Treasury [14]. They will not be reflected in the leasing agency's budget. Hence, these costs are not suffered by the agency. In November 1982, the US Navy announced that it had awarded contracts to lease/charter 13 cargo ships to provide sealift support for the rapid deployment of forces [16]. The Navy estimated that the cost of purchasing the ships would be $178.2 million per ship but by arranging for the lease/charter the actual cost to the Navy would only be $141.2 million per ship. The Navy would save $37 million per ship for a total saving of approximately $0.5 billion. The Navy planned to pay for the 25-year lease by making regular lease payments out of its yearly operations and maintenance accounts [14]. The Navy would not have to ask for the money needed to build them. By leasing the ships, the Navy would pay for the ships as it used them and avoid the massive up-front capital investment. It was argued that the Navy would save money by leasing, and the government would avoid the addition to the national debt that would be necessary to finance the construction of the ships.

There will be administrative and agency cost arising from a lease agreement in which the federal government in the lease. Both governments and the lessor need to write the lease contract to limit opportunistic behavior [24]. The government must employ auditors, procurement specialist and lawyers to draw up the lease contract. The lessor must incur costs to ensure performance by the government. Penalties for nonperformance by either party must be agreed upon. The parties must agree on the questions regarding liability if the asset is damaged by misuse or war in the case of an asset used by the military. Finally each party must bear the risk and costs associated with an incomplete lease contract. After all of these costly activities have been undertaken, the government must still bear the risk of anticipated agency cost and or agency costs that arise from the lessors activities that are difficult or impossible to monitor [18].

The lessors cost of capital is the same as the government cost of borrowing [5]. Callahan argues that because of the cash flow to the lessor have the same risk characteristics as the government debt, i.e. free of the default risk, it is appropriate to use the government-borrowing rate to capitalize the lessors’ cash flows. While interest payments on the federal government’s debt are free of the state taxes, interest payments on the lessors’ debt are subject to the state taxes. Thus, a lender subject to taxation at the state level.
would prefer to lend to the federal government rather than the lessor. Accordingly, the lessor will be willing to accept a lower return for the government debt.

4. Research Gap

Several studies have been conducted on lease financing both globally and locally. Globally, a study was conducted on the impact of leasing on lenders’ evaluations of firms’ debt levels [18] and another study was done on the problems of equipment leasing in Nigeria. Locally a study was conducted on determination of the factors influencing the growth of finance leases in Kenya [25] and another study was conducted on the determinants of lease financing decisions by non-financial firms quoted on Nairobi Securities Exchange, Kenya. However, none of these studies focused on how financial resources, cost reduction, agency and administrative cost and cost of borrowing influence the use of lease financing in public institutions in Kenya. This study however dealt with the factors influencing the use of lease financing in public institutions in Kenya.

5. Research Methodology

This study used a descriptive research design. A descriptive study attempts to describe or define a subject, often by creating a profile of a group of problems, people, or events, through the collection of data and tabulation of the frequencies on research variables or their interaction. Further, the study made use of both qualitative and quantitative data. In addition, this study was a case study as it only focused on the National Treasury of Kenya.

The target population of this study was the staff working in the National Treasury of Kenya. According to the National Treasury of Kenya 2013 annual report, there are approximately 293 employees working in the National Treasury of Kenya. This excludes the subordinate staff like drivers, cleaners, messengers and cooks. The target population of this study was therefore 293. This study made use stratified random sampling, which is a probability sampling, to select 30% of the target population from the target population. A 30% sample size is a good representation of the target population [26]. Stratified Random Sampling involves dividing the population into homogeneous subgroups, known as strata, and then taking a simple random sample in each subgroup. The strata in this study were the various departments in the National Treasury of Kenya. The sample size of this study was therefore 88 respondents.

<table>
<thead>
<tr>
<th>Department</th>
<th>Target Population</th>
<th>Sample Size (30%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directorate of Public Procurement</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Budgetary Supplies</td>
<td>25</td>
<td>8</td>
</tr>
<tr>
<td>External Resources</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>Accountant General</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Information Technology Services</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Pensions</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>Economic Affairs</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Debt Management Department</td>
<td>21</td>
<td>6</td>
</tr>
</tbody>
</table>

This study used primary and secondary data. Structured questionnaires were used in this study to collect primary data. This study utilized both unstructured and structured questions. On the other hand, secondary data was obtained from the National Treasury of Kenya annual reports, journals and audits. The questionnaires were administered by use of a drop off and pick up later method to the sampled respondents.

This study generated both quantitative and qualitative data. Qualitative data was obtained from the open-ended questions. Content analysis was used in processing qualitative data and results were presented in prose form. On the other hand, the quantitative data in this research was analyzed by descriptive statistics and inferential statistics using Statistical Package for Social Sciences (SPSS version 21). Descriptive statistics included measures of central tendencies (mean), measures of dispersion (standard deviation), frequencies and percentages. Data was then presented in tables, charts and graphs. The study was also used correlation analysis to establish the relationship between the dependent variable and dependent variables.

6. Results and Discussion

6.1 Availability of Financial Resources

The study established that availability of financial resources influences the use of lease financing in public institutions in Kenya. The study also revealed that resource constraints influence the use of lease financing to a great extent. The study also revealed that revenue is the main source of financial resources in the organization. However, government institutions can at times get funds from donors or even borrow. In addition, resource constraints lead to slow development as well as time and cost overrun and hence lead to adoption of lease financing. Further, the study revealed that insufficient finances influence the use of lease financing to a great extent. Government institutions do not have enough resources to meet their budgets and hence lease financing becomes a better option in obtaining the required equipment and properties. It was further established that unbudgeted emergencies spending restrictions influences the use of lease financing to a moderate extent.

When financial resources are available, strategic decision can be made and risks undertaken in leasing. Availability of financial resources guarantees that the institution will be able to meet its obligation and that it helps to cut down the costs.
6.2 Cost Reduction

The study established that the use of cost reduction influences the use of lease financing in public institutions in Kenya. The study also found that through cost reduction the leased assets can be used when needed instead of purchasing asset which will not be used after the expiring of the project. In addition, cost reduction keeps the running cost minimal and ensures availability of options. It also influences the use of lease financing in public institutions considering resource constraints and unbudgeted emergencies that come up. Leasing allows the public institutions to focus on their care business. However, cost reduction leads to delay in development of infrastructure and that instead of leasing the institution can purchase in advance instead of waiting for the last minute of completion of the project. The study also found that purchasing, maintenance cost, depreciation of the equipment and insurance cost influences the use of lease financing in public institutions in Kenya.

6.3 Agency Cost

The study established that agency cost influences the use of lease financing in public institutions in Kenya. Lease financing involves administrative and agency cost arising from a lease agreement in which the federal government in the lease. Both governments and the lessor need to write the lease contract so as to limit opportunistic behavior. It was also revealed that the main agency or administrative costs involved in lease financing contracts in public institutions in Kenya include costs of insurances, hidden liability, cost sharing and rental cost, legal fees, transaction cost, inspection cost, consultation costs, fuel cost, contractual costs, unduly cost, administrative cost, procurement costs and performance evaluation costs. Other administrative and agency cost that are suffered by the lessor include a cost of the lease and will be conveyed to the government in the price of the lease.

The study found that employment of procurement specialists influence the use of lease financing in public institutions in Kenya. The study also revealed that legal cost, employment of auditors and penalties for nonperformance influence the use of lease financing in public institutions in Kenya.

6.4 Cost of borrowing

The study established that cost of borrowing influences the use of lease financing in public institutions in Kenya. Government leases assets, then the lessor provides the financing either out of his equity, or by borrowing it in the price of the lease and must be paid by the government in the lease payments. The study also found that leasing will not have huge financial commitment as borrowing to purchase.

The study also revealed that high interest rates influence the use of lease financing in public institutions in Kenya to great extent. Further, the study found that conditional lending influences the use of lease financing in public institutions in Kenya to a great extent. Additionally, the study established that mode of repayment influences the use of lease financing in public institutions in Kenya to a great extent. Further, the study revealed that government borrowing rate influences the use of lease financing in public institutions in Kenya to a great extent.

7. Correlation Analysis

A correlation is a number between -1 and +1 that measures the degree of association between two variables. A positive value for the correlation implies a positive association. A negative value for the correlation implies a negative or inverse association.

<table>
<thead>
<tr>
<th>Table 4.1: Correlations Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of lease financing</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Pearson Correlation 1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Availability of financial resources</td>
</tr>
<tr>
<td>Pearson Correlation 1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Cost reduction</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Agency cost</td>
</tr>
<tr>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Cost of borrowing</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N 77</td>
</tr>
</tbody>
</table>

According to the correlation analysis, the study found that there is a negative association between availability of financial resources and use of lease financing in the Kenyan public institutions, where the correlation coefficient was 0.460 and a p-value of 0.000. It was also established that there is a positive association between cost reduction and the use of lease financing in the Kenyan public institutions where the correlation coefficient was 0.310 and a p-value of 0.010. The study further established that agency cost correlates negatively with the use of lease financing in the Kenyan public institutions where the correlation coefficients were 0.245 and a p-value of 0.011. As well, the study established that cost of borrowing correlates positively with the use of lease financing in the Kenyan public institutions.
where the correlation coefficients were 0.164 and a p-value of 0.006.

From these findings we can infer that availability of financial resources and agency cost have an inverse influence on the use of lease financing in public institutions. On the other hand, cost reduction and cost of borrowing have a positive influence on the use of lease financing in public institutions.

8. Conclusion

The study concludes that there is an inverse relationship between availability of financial resources and use of lease financing in the Kenyan public institutions. The study found that resource constraints, insufficient finances, unbudgeted emergencies and spending restrictions influence the use of lease financing in public institutions. Government institutions do not have enough resources to meet their budgets and hence lease financing becomes a better option in obtaining the required equipment and properties. The study concludes that there is a positive correlation with the use of lease financing in the Kenyan public institutions. The study established that purchasing cost, maintenance cost, depreciation of the equipment and insurance cost influences the use of lease financing in public institutions in Kenya.

The study concludes that agency cost correlates negatively with the use of lease financing in the Kenyan public institutions. The study revealed that legal cost, employment of auditors and penalties for nonperformance influence the use of lease financing in public institutions in Kenya. Other agency costs include hidden liability, cost sharing, transaction cost, inspection cost, consultation costs, fuel cost, contractual costs, procurement costs and performance evaluation costs.

The study concludes that there is a negative correlation between costs of borrowing and the use of lease financing in the Kenyan public institutions. The study found that high interest rates, conditional lending, mode of repayment and government borrowing rate influences the use of lease financing in public institutions to a great extent.

9. Recommendations

1. The study established that resource constraints and insufficient finances influence the use of lease financing in public institutions. This study therefore recommends that public institutions should adopt lease financing in obtaining properties and equipment like offices, machines and vehicles. In addition, the government should formulate policies to make the leasing process easier and transparent.

2. Given the dire need to reduce costs in any given organization, this study recommends that all public institutions takes up leasing as a mechanism of risk and cost minimization. The government should come up with policies that will guide how and when public institutions should lease to reduce costs of running public institutions and consequently reduce government expenditure.

3. The study found that the cost of borrowing influences the use of lease financing. This study therefore recommends that public institutions should avoid borrowing at high interest rates and conditions and instead adopt lease financing.

4. Despite the many benefits of lease financing, there are agencies and administrative costs involved, which may increase the cost of leasing. This study therefore recommends that the government of Kenya should formulate policies to reduce agency and administrative costs like transaction cost, inspection cost, consultation costs, fuel cost, contractual costs, procurement costs and performance evaluation costs.

10. Future Scope of the Study

This study was limited to the Ministry of Finance. This study therefore recommends further studies in public institutions as they are stakeholders in leasing. In addition, the respondents had different views in relation to the influence of availability of financial resources on the use of lease financing in public institutions. The study therefore recommends further studies on the effect of availability of financial resources on the use of lease financing in public institutions in Kenya.

References


