THE RELATIONSHIP BETWEEN OUTSOURCING AND FIRM FINANCIAL PERFORMANCE IN THE BANKING INDUSTRY IN KENYA

BY

ANTHONY K. KAHINDI

A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER 2010
DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the University of Nairobi for academic credit.

Signed…………………………………. Date…………………………

Anthony K Kahindi

D61/P/8925/2006

This project has been presented for examination with my approval as the appointed supervisor

Signed…………………………………. Date…………………………

Mr. L Barasa
Lecturer, Department of Accounting and Finance
University of Nairobi
ACKNOWLEDGEMENTS

I would like to acknowledge the following persons whose contributions facilitated the completion of this project.

First, I thank the Almighty God for the gift of life and for giving me the skills, knowledge and energy to be able to complete this paper and the postgraduate degree of Master of Business Administration.

Second, I give special thanks to my supervisor Mr. Barasa, for providing unlimited, invaluable and active guidance throughout the study. His immense command and knowledge of the subject matter enabled me to shape this research project to the product it is now.

Third, I thank the management of various banks that agreed to take part in the study for their time and support.

To all of you, I say a big THANK YOU!
DEDICATION

To my dear wife Jane and

My beloved Children

Roy

Michelle

Ronald

That you may excel tenfold
ABSTRACT

Industrial organizations are constantly in search of new solutions and strategies to develop and increase their competitive advantage. Outsourcing is one of these strategies that can lead to greater competitiveness. No study is available on commercial banks on what effect, if any, outsourcing of some of their activities has had on their performance. For this reason, the present study sought to fill in the gap by establishing the effect of outsourcing of various activities on the performance of commercial banks in Kenya.

This was an explanatory research design. The target population was all the 43 licensed commercial banks in Kenya operating within Nairobi. Primary data were collected using questionnaires. The questionnaires were constructed in order to establish the extent of outsourcing among commercial banks in Kenya as well as the services outsourced in each of the commercial banks. These instruments were checked for validity and reliability. The secondary data was collected in order to help in the financial performance aspect of the study. As such, data was collected from the company financial statements available on their websites, the Nairobi Stock Exchange market, the Capital Markets Authority and also from the Banking Survey 2010 booklet. Both descriptive analysis and regression analysis were carried out on the collected data.
The study found that the most important reasons for outsourcing was concentration on core activities, improvement of company focus, efficiency improvement and to increase productivity. From the Pearson correlation coefficient, there was a high correlation between outsourcing and financial performance. The $R^2$ revealed that outsourcing influenced up to 96.7% of the variance in financial performance. The adjusted $R^2$ suggested that the least influence of outsourcing on performance was 95.6%. The study concludes that there are many non-core services that banks are outsourcing especially the IT related services. This study recommends urgent measures to institute a regulatory framework in place in the form of an outsourcing guideline to the banking sector.
# TABLE OF CONTENTS

DECLARATION........................................................................................................... i  
ACKNOWLEDGEMENTS .............................................................................................. ii  
DEDICATION................................................................................................................ iii  
ABSTRACT...................................................................................................................... iv  
LIST OF TABLES ........................................................................................................... ix  

CHAPTER ONE ............................................................................................................. 1  
INTRODUCTION............................................................................................................ 1  
  1.1 Background .......................................................................................................... 1  
  1.2 Statement of the Problem ....................................................................................... 5  
  1.3 Objective of the Study ........................................................................................... 6  
  1.4 Significance of the Study ....................................................................................... 7  

CHAPTER TWO ............................................................................................................. 8  
LITERATURE REVIEW ................................................................................................. 8  
  2.1 Introduction .......................................................................................................... 8  
  2.2 Theoretical Review ............................................................................................... 8  
    2.2.1 Resource-based theory .................................................................................... 8  
    2.2.2 Transaction cost theory (TCT) ....................................................................... 10  
    2.2.3 Agency cost theory (ACT) ............................................................................. 13  
  2.3 Concept of outsourcing ....................................................................................... 15  

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4</td>
<td>Financial Performance</td>
<td>25</td>
</tr>
<tr>
<td>2.5</td>
<td>Empirical Studies</td>
<td>27</td>
</tr>
<tr>
<td>2.6</td>
<td>Chapter Summary</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER THREE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>RESEARCH METHODOLOGY</strong></td>
<td>32</td>
</tr>
<tr>
<td>3.1</td>
<td>Introduction</td>
<td>32</td>
</tr>
<tr>
<td>3.2</td>
<td>Research Design</td>
<td>32</td>
</tr>
<tr>
<td>3.3</td>
<td>Population of the Study</td>
<td>32</td>
</tr>
<tr>
<td>3.4</td>
<td>Data Collection Instrument and Procedures</td>
<td>32</td>
</tr>
<tr>
<td>3.4.1</td>
<td>Instrument Validity</td>
<td>33</td>
</tr>
<tr>
<td>3.4.2</td>
<td>Instrument Reliability</td>
<td>33</td>
</tr>
<tr>
<td>3.4.3</td>
<td>Secondary data</td>
<td>33</td>
</tr>
<tr>
<td>3.5</td>
<td>Data Analysis and Presentation</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER FOUR</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>RESULTS AND INTERPRETATION</strong></td>
<td>36</td>
</tr>
<tr>
<td>4.1</td>
<td>Introduction</td>
<td>36</td>
</tr>
<tr>
<td>4.2</td>
<td>Reasons for Outsourcing</td>
<td>36</td>
</tr>
<tr>
<td>4.3</td>
<td>Level of Outsourcing</td>
<td>37</td>
</tr>
<tr>
<td>4.4</td>
<td>Effects of Outsourcing</td>
<td>38</td>
</tr>
<tr>
<td>4.5</td>
<td>Relationship between Outsourcing and Financial Performance</td>
<td>39</td>
</tr>
</tbody>
</table>
CHAPTER FIVE .................................................................................................41

CONCLUSION AND RECOMMENDATIONS ...............................................41

5.1 Summary of Findings ..............................................................................41
5.2 Conclusion .................................................................................................42
5.3 Recommendations ...................................................................................42
5.4 Limitations of the Study .........................................................................43
5.5 Suggestions for Further Research ............................................................43

REFERENCES ................................................................................................44

APPENDICES .................................................................................................53

Appendix 1: Questionnaire ...........................................................................53
Appendix 2: List of Banks .............................................................................56
Appendix 3: Research Data on Outsourcing and Performance ....................58
CHAPTER ONE
INTRODUCTION

1.1 Background

Outsourcing is a common practice among both private and public organizations and is a major element in business strategy. Overby (2009) defined outsourcing as the farming out of services to a third party. Due to widespread outsourcing practices, it has become a frequent topic in the literature. Numerous reasons why outsourcing is initiated have been identified by researchers. Organizations may expect to achieve many different benefits through successful outsourcing. There is an abundance of outsourcing literature where many benefits, risks, motivators, and decision factors have been presented (Kremic et al, 2006).

Outsourcing has been one of the key strategic business issues in recent decades. By specializing on a limited activity structure, outsourcing companies have been able to improve the performance of their in-house activities (Quinn and Hilmer, 1994; Ellram and Billington, 2001; Kakabadse and Kakabadse, 2005). In addition, most cases of outsourcing are based on transfer of activities to suppliers serving a multitude of customers. Since these firms are working on larger scale than the outsourcing firm, also these activities have become more cost efficient. Moreover, access to the technological resources of suppliers has been an important driving force for outsourcing.
Anticipated savings on cost owing to low labour expenditures have put outsourcing at the top of the management agenda. Vestring et al (2005) found that more than 80% of the companies in a survey indicated that shifting activities to low cost countries was a high priority and nearly two-thirds of the firms had launched significant off-shoring initiatives. Substantial increases in actual as well as expected outsourcing arrangements are reported by, for example, Bronfenbrenner and Luce (2004).

In many cases, however, the effects of these attempts have not met expectations (Pedersen, 2004; Venables, 2005; Kennedy and Clark, 2006). A representative example is reported from the information technology industry where it is argued that farming out IT services doesn’t always pay off in lower costs (Totty, 2007). One of the reasons for these shortcomings is the difficulty in foreseeing the long-term consequences, and it is even argued that companies rarely take other costs than labour cost into consideration (Hogan 2004). The problems related to imperfections in terms of strategic analysis are illustrated also by Venables (2005). Based on experience from low-cost off shoring in the pharmaceutical industry it has even been claimed that many companies have outsourced because of ‘groupthink’ rather than because careful investigation showed that it made sense (Kuwahara, 2006).

Much of the literature identifies the desire to save costs as an explanation for why outsourcing occurs (Arnold, 2000 and Fan, 2000). In theory, outsourcing for cost reasons can occur when suppliers’ costs are low enough that even with added overhead, profit, and transaction costs suppliers can still deliver a service for a lower price (Harler, 2000). One may wonder how an organization can achieve enough savings to cover an additional layer of overhead and still meet profit requirements yet
perform a function for less than another organization already doing the function. Specialization and economies of scale are mechanisms used to achieve this level of efficiency (Kakabadse and Kakabadse, 2000). In fact, cost savings due to outsourcing can be quite significant. In a survey of 7500 public organizations in Australia, the outsourcing of cleaning services saved an average of 46 percent over in-house performance of the service (Domberger and Fernandez, 1999).

More recently the main drivers for outsourcing appear to be shifting from cost to strategic issues such as core competence and flexibility (Elmuti and Kathawala, 2000; Wright, 2001). In general, the literature supports outsourcing as a strategy, which may offer improved business performance on numerous dimensions (Dekkers, 2000). Perhaps the most often cited strategic reason for outsourcing is to allow the organization to better focus on its core competencies (Sislian and Satir, 2000). Because of intense competition, organizations are forced to reassess and redirect scarce resources (Ngwenyama and Bryson, 1999).

There are, however, potential pitfalls when outsourcing for strategic reasons. Organizations may “give away the crown jewels” if they are not careful (Gillett, 1994). IBM is used as a frequent example of a company that outsourced the “wrong” things (the operating system). If organizations outsource the wrong functions they may develop gaps in their learning or knowledge base which may preclude them from future opportunities (Earl, 1996). In a study of the aeronautics industry Paoli identifies a limit of the virtual organization concept (Paoli and Prencipe, 1999).
Specifically, in highly integrated and evolutionary technologies, applying the traditional core competence tests may result in outsourcing too many or the wrong functions. Literature also indicates that in industries with complex technologies and systems, internal synergies may be lost when some functions are outsourced. This could result in less productivity or efficiency among the remaining functions (Quinn and Hilmer, 1994).

According to Richard et al., (2008), organisational performance encompasses three specific areas of firm outcomes: financial performance (profits, return on assets, return on investment, etc.); market performance (sales, market share, etc.); and shareholder return (total shareholder return, economic value added, etc.). Organizational performance is the ultimate dependent variable of interest for those concerned with just about any area of management: accounting is concerned with measuring performance; marketing with customer satisfaction and market share; operations management with productivity and cost of operations, organizational behavior with employee satisfaction and structural efficiency; and finance with capital market response to all of the above. March and Sutton (1997) found that roughly 28% of articles in the Strategic Management Journal, the Academy of Management Journal and the Administrative Science Quarterly included some measure of firm performance.

Commercial banks are licensed and regulated under the Banking Act, Cap 488 and Prudential Regulations issued there-under. There are currently 45 commercial banks in Kenya. Out of the 45 institutions, 33 are locally owned and 12 are foreign owned. The locally owned financial institutions comprise 3 banks with significant government shareholding and 28 privately owned commercial. The foreign owned
financial institutions comprised 8 locally incorporated foreign banks and 4 branches of foreign incorporated banks. Of the 42 private Banking institutions in the sector, 71% are locally owned and the remaining 29% are foreign owned (Central Bank of Kenya, 2008).

1.2 Statement of the Problem

Industrial organizations are constantly in search of new solutions and strategies to develop and increase their competitive advantage. Outsourcing is one of these strategies that can lead to greater competitiveness (Embleton and Wright, 1998). Overseas outsourcing of maintenance has especially become a significant element employed by many organizations, (Elmuti, 2003). For instance in outsourcing of aircraft maintenance, competitive advantage and attractive benefits can be reached. These may include labour productivity, reduction of maintenance cost, improved environmental performance, acquired specialist skills unavailable in-house, improved quality of work and to focus in-house maintenance engineers on core activities and many other benefits due to improvements in performances in their operations (Sharpe, 1997 cited in Harlang et al., 2005).

Outsourcing is increasingly being used as a means of both reducing costs and achieving strategic goals (Basle Committee, 2005). Globally, regulators concern is how banks manage risks associated with a third party offering certain key services (Basle Committee, 2005). Outsourcing risk is manifested in loss of control on some key functions and likelihood of opportunistic expropriation by vendor (Lacity and Wilcocks, 1998). While outsourcing has profound benefits, it equally expose firms to serious risks. Beasley, et al., (2004) summarize severity of outsourcing risks as follows: “the mere occurrence of one incident, such as an IT shutdown, can
exponentially increase the enterprise’s risks…” (p.26). Beasley et al., (2004) suggests that outsourcing poses multitudes of risks to a numbers of firm’s functions such as finance, human capital, IT and operations. In Kenya, there is significant rise in outsourcing activities in the banking sector. Surprisingly, in a survey conducted by the Central Bank of Kenya, a number of financial institutions have no risk management frameworks (Central Bank of Kenya, 2005). In addition, there is currently, no regulatory guideline on outsourcing.

A few studies have been done in Kenya on outsourcing among commercial banks. For instance, Serem (2002) did a survey on outsourcing of human resource services by banks in Nairobi. Kipsang (2003) did a survey on outsourcing information technology services by commercial banks in Kenya. Makhino (2006) did a study on the benefits and challenges of outsourcing HR activities in commercial banks in Kenya. Mohamed (2006) did a survey of outsourcing of training services by commercial banks in Kenya while Wandabwa (2006) did a study on the current outsourcing practices by commercial banks in Kenya. As can be seen, no study is available on commercial banks on what effect, if any, outsourcing of some of their activities has had on their performance. For this reason, the present study sought to fill in the gap by establishing the effect of outsourcing of various activities on the performance of commercial banks in Kenya.

1.3 Objective of the Study

The objective of this study was to establish the relationship between outsourcing and financial performance of commercial banks in Kenya.
1.4 **Significance of the Study**

This study will be important to various stakeholders. The management of various commercial banks and other companies that outsource their services will know to what effect outsourcing of services have on the performance of their companies from the empirical evidence provided in the study.

This study makes important contribution to financial services research. To the best knowledge of the authors, to date, there is no study that has examined outsourcing practices of the Kenyan banking sector, and within the wider Africa context. In addition, the findings of the study have important regulatory policy contributions.

The academics and researchers who will use the findings of this study as a basis for further research in determining the sustainability of outsourcing as an approach to the management of organizations. Thus, this study, provide an exploratory finding in this field in the Kenyan context, and presents opportunities for further research.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents a literature review on the subject matter. As such, a theoretical review, a review on the concept of outsourcing and the relationship between outsourcing and firm performance is presented.

2.2 Theoretical Review

The theories of outsourcing reviewed in this sub-section are resource-based view (RBV), transaction cost theory and agency theory.

2.2.1 Resource-based theory

The resource-based view (RBV) is an economic tool used to determine the strategic resources available to a firm. The fundamental principle of the RBV is that the basis for a competitive advantage of a firm lies primarily in the application of the bundle of valuable resources at the firm’s disposal (Wernerfelt, 1984; Rumelt, 1984). To transform a short-run competitive advantage into a sustained competitive advantage requires that these resources are heterogeneous in nature and not perfectly mobile (Peteraf, 1993). Effectively, this translates into valuable resources that are neither perfectly imitable nor substitutable without great effort (Hoopes, et al., 2003). If these conditions hold, the firm’s bundle of resources can assist the firm sustaining above average returns.
The currently dominant view of corporate strategy – resource-based theory or resource-based view (RBV) of firms – is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making (Peteraf, 1993).

Traditional strategy models such as Michael Porter's five forces model focus on the company's external competitive environment. Most of them do not attempt to look inside the company. In contrast, the resource-based perspective highlights the need for a fit between the external market context in which a company operates and its internal capabilities (Kakabadse and Kakabadse, 2000).

In contrast to the Input / Output Model (I/O model), the resource-based view is grounded in the perspective that a firm's internal environment, in terms of its resources and capabilities, is more critical to the determination of strategic action than is the external environment. Instead of focusing on the accumulation of resources necessary to implement the strategy dictated by conditions and constraints in the external environment (I/O model), the resource-based view suggests that a firm's unique resources and capabilities provide the basis for a strategy. The business strategy chosen should allow the firms to best exploit its core competencies relative to opportunities in the external environment (Peteraf, 1993).

According to resource based theory, organisations wish to maintain a distinctive product (competitive advantage) and will plug gaps in resources and capabilities in the most cost-effective manner to do so. Outsourcing of cataloguing is easier to
rationalise using resource-based theory as this emphasises that cost-effective solutions are required to some of the major activities, in order to fulfil the main aim of the organisation (provide organised access to resources) (Wernerfelt, 1984).

2.2.2 Transaction cost theory (TCT)

Ronald Coase set out his transaction cost theory of the firm in 1937, making it one of the first (neo-classical) attempts to define the firm theoretically in relation to the market. Coase (1937) sets out to define a firm in a manner which is both realistic and compatible with the idea of substitution at the margin, so instruments of conventional economic analysis apply. He notes that a firm’s interactions with the market may not be under its control (for instance because of sales taxes), but its internal allocation of resources is: “Within a firm … market transactions are eliminated and in place of the complicated market structure with exchange transactions is substituted the entrepreneur … who directs production.” He asks why alternative methods of production (such as the price mechanism and economic planning), could not either achieve all production, so that either firms use internal prices for all their production, or one big firm runs the entire economy (Kotabe and Mol, 2009).

Coase (1937) begins from the standpoint that markets could in theory carry out all production, and that what needs to be explained is the existence of the firm, with its "distinguishing mark … [of] the supersession of the price mechanism." Coase (1937) identifies some reasons why firms might arise, and dismisses each as unimportant: if some people prefer to work under direction and are prepared to pay for the privilege (but this is unlikely); if some people prefer to direct others and are prepared to pay for this (but generally people are paid more to direct others); if purchasers prefer goods produced by firms (Kremic et al, 2006).
Instead, for Coase (1937) the main reason to establish a firm is to avoid some of the transaction costs of using the price mechanism. These include discovering relevant prices (which can be reduced but not eliminated by purchasing this information through specialists), as well as the costs of negotiating and writing enforceable contracts for each transaction (which can be large if there is uncertainty). Moreover, contracts in an uncertain world will necessarily be incomplete and have to be frequently re-negotiated. The costs of haggling about division of surplus, particularly if there is asymmetric information and asset specificity, may be considerable (Kennedy and Clark, 2006).

If a firm operated internally under the market system, many contracts would be required (for instance, even for procuring a pen or delivering a presentation). In contrast, a real firm has very few (though much more complex) contracts, such as defining a manager's power of direction over employees, in exchange for which the employee is paid. These kinds of contracts are drawn up in situations of uncertainty, in particular for relationships which last long periods of time. Such a situation runs counter to neo-classical economic theory. The neo-classical market is instantaneous, forbidding the development of extended agent-principal (employee-manager) relationships, of planning, and of trust. Coase concludes that “a firm is likely therefore to emerge in those cases where a very short-term contract would be unsatisfactory,” and that “it seems improbable that a firm would emerge without the existence of uncertainty (Kremic et al, 2006).

The author notes that government measures relating to the market (sales taxes, rationing, price controls) tend to increase the size of firms, since firms internally
would not be subject to such transaction costs. Thus, Coase (1937) defines the firm as "the system of relationships which comes into existence when the direction of resources is dependent on the entrepreneur." We can therefore think of a firm as getting larger or smaller based on whether the entrepreneur organises more or fewer transactions (Kakabadse and Kakabadse, 2005).

The question then arises of what determines the size of the firm; why does the entrepreneur organise the transactions he does, why no more or less? Since the reason for the firm's being is to have lower costs than the market, the upper limit on the firm's size is set by costs rising to the point where internalising an additional transaction equals the cost of making that transaction in the market. (At the lower limit, the firm's costs exceed the market's costs, and it does not come into existence.)

In practice, diminishing returns to management contribute most to raising the costs of organising a large firm, particularly in large firms with many different plants and differing internal transactions (such as a conglomerate), or if the relevant prices change frequently (Kuwahara, 2006).

Coase concludes by saying that the size of the firm is dependent on the costs of using the price mechanism, and on the costs of organisation of other entrepreneurs. These two factors together determine how many products a firm produces and how much of each. With TCT, a more conventional economic approach is used. Organisations may buy from the market, or develop in-house, and decisions are based on the relative cost, composed of the costs of production, and costs of the transaction, of the exchange. TCT considers the asset specificity (to what extent can an asset, such as specialised software or product, be redeployed), uncertainty in the environment, as
well as the frequency of the transaction. Taking a very simple example, is it better to use a breadmaker to make bread at home or buy bread in the supermarket? Having invested in the breadmaker, and gained some skills, can these skills (and the breadmaker) be used for other purposes (asset specificity)? How likely is that the supermarket where I would buy the bread would close, or alter its stocklines? And lastly, it would not be worth setting up special arrangements to buy a loaf of particular grade and quality for one individual, although a client with a large and frequent order arrangements might require special contract conditions (frequency of transaction) (Kuwahara, 2006).

For information services and systems the transaction costs concern the costs involved in setting up and monitoring the contract, as opposed to the costs of doing the work in-house and producing the service or product in-house. If the decision is made to outsource, then the aim is to reduce those transaction costs as much as possible, and that can be done by collaborative working with other institutions, who require a similar product or service, to share the work involved in setting up and monitoring the contract. The transaction cost theory (TCT) perspective is useful in examining the contributions to transaction costs, and how these might be reduced (Kremic et al., 2006).

2.2.3 Agency cost theory (ACT)

Agency theory explains how to best organize relationships in which one party (the principal) determines the work, which another party (the agent) undertakes (Eisenhardt, 1985). The theory argues that under conditions of incomplete information and uncertainty, which characterize most business settings, two agency problems
arise: adverse selection and moral hazard. Adverse selection is the condition under which the principal cannot ascertain if the agent accurately represents his ability to do the work for which he is being paid. Moral hazard is the condition under which the principal cannot be sure if the agent has put forth maximal effort (Eisenhardt, 1989).

The problems of adverse selection and moral hazard mean that fixed wage contracts are not always the optimal way to organize relationships between principals and agents (Jensen and Meckling, 1976). A fixed wage might create an incentive for the agent to shirk since his compensation will be the same regardless of the quality of his work or his effort level (Eisenhardt, 1985). When agents have incentive to shirk, it is often more efficient to replace fixed wages with compensation based on residual claimancy on the profits of the firm (Alchian and Demsetz, 1972). The provision of ownership rights reduces the incentive for agents’ adverse selection and moral hazard since it makes their compensation dependent on their performance (Jensen, 1983).

A number of scholars have shown that the problems of adverse selection and moral hazard exist in the management of retail outlets (Rubin, 1978; Mathewson and Winter, 1985; Brickley and Dark, 1987). Outlet managers have an incentive to shirk and to misrepresent their abilities since the owner of the firm cannot easily differentiate the effect of manager behavior on outlet performance from the effect of exogenous factors (Carney and Gedajlovic, 1991). Franchising scholars have found that one way that performance of retail outlets can be enhanced is through the provision of residual claimancy that comes from franchising (LaFontaine and Kauffman, 1994).
However, the establishment of a hybrid organizational form does not eliminate all agency costs. Rather, the sale of residual claimancies on the profits of retail outlets creates a number of new agency costs, which come from the management of hybrid organizational arrangements. Agency cost theory expands on one aspect of TCT, as it deals with the different perspectives of risk that client and supplier have, and differentiates between outcome-based contracts, and behaviour-based contracts. If the client distrusts the supplier then the extent of monitoring required will be greater for the client, than it would be if the client could wholly trust the supplier to deliver. The client has two main choices: a contract which stipulates payment by results (an outcome-based contract), or a contract that states the supplier should do certain things at stipulated times, or spend a certain amount of time on certain functions. If one cannot trust a supplier to deliver a product some months down the line, then it might pay to ensure that it looks as if they are doing something. On the supplier side, a behaviour-based contract at least allows them to claim that they did spend x hours on this task, even if the outcome could not be achieved as originally intended. Agency cost theory helps to distinguish the most productive and fairest method of minimising risks for both client and supplier.

2.3 Concept of outsourcing

The term outsourcing refers to contracting out of non-core activities (Kremic, et al., 2006). The outsourcing Institute has defined outsourcing as the strategic use of outside resources to perform activities traditionally handled by internal staff and resources.; this is not an indication that the activities to be outsourced are less important. Outsourcing is therefore concerned with the external provision of functional activity and thus outsourcing decisions are strategic in nature. Consequently outsourcing
decision is not taken at the operational level or at the tactic level but at the top management level.

In today’s world public sector and private sector, organizations can hardly ignore the opportunities for cutting down costs. In fact to be more precise, as pressures mount on the heads of procurement and chief executives to contribute more to profitability, they tend to outsource non-core functions as a measure to cut down costs and increase profitability. This has led to an increase in discussion of the factors promoting the use of outsourcing as well as the advantages and disadvantages of outsourcing the non-core functions to the experts. The current attitude is that outsourcing is possible but care must be exercised not to outsource the core the soul of what an organization does best (Elimuti, 2003).

One of the most significant reasons for outsourcing is to enable organizations to focus on core activities. Increased flexibility to configure resources to meet changing market needs is also a very important reason. Explanations for these expected benefits were largely based on economies of scale and scope. Scale economies would come from using focused, larger-scale specialists for activities where the outsourcer lacked the necessary volume of requirement for current technology. Scope economies would be gained through access to a wider range of services, provided by niche specialists. Focusing on fewer, manageable core activities, organizations could lessen the costs and complexity of their own operations (McCarthy and Anagnostou, 2004).

Outsourcing allows organizations to remove separate departments and business units – and barriers between them. This provides better customer focus, flexing and
changing offerings and processes to meet changing markets. This is particularly beneficial to larger, more mature organizations whose strong, hierarchical structures make them less agile. For such organizations, re-engineering business processes to improve flow across functions is difficult: outsourcing enables “opting out” from complex internal organizational change. The objectivity of outsources relieves organizations of the constraints of cultures, established attitudes and taboos, providing fresh ideas and creativity for new opportunities. The most significant risks lie in the need to develop new management competencies, capabilities and decision-making processes. These include decisions on which activities should remain within the organization and which outsourced, whether all or part of the activity should be outsourced, and how to manage relationships rather than internal functions and processes (McCarthy 2004).

Mistakes in identifying core and non-core activities can lead organizations to outsource their competitive advantages. However, what is core one day may not be so the next. Moreover, once organizational competence is lost, it is difficult to rebuild. There is a difficult decision regarding how “close to core” outsourcing should be. Some organizations choose to retain some capability and capacity in-house and outsource part of the activity. Failure to manage outsourcing relationships properly, perhaps through service level agreements, may reduce customer service, levels of control and contact with customers. The assessment of costs of “make or outsource” should include the additional cost burden of managing the outsource relationships (Krause, et al., 1998).
The decision to outsource part of a company’s functions or activities is prompted by a variety of considerations (Lacity et al., 1996). These include potential cost savings (Earl, 1996), access to technological innovations and strategic considerations, (Quinn and Hilmer, 1994), concerned with scale and scope economies and possibly growth expectations.

Both small-sized and large-sized companies entered into outsourcing agreements. This is consistent with the Loh and Venkatraman (1992) observations in the USA. Theoretically, larger companies already enjoy economies of scale in their own right for most areas of their activities. Smaller companies, which have the highest scale disadvantage and are generally more flexible in absorbing changes and innovations, might therefore be expected to be enthusiastic users of outsourcing, since this should allow them to achieve the same efficiency as large companies in sub-competitive parts of their value chain. Nevertheless it appears that larger companies are the biggest users of outsourcing (at least as captured in outsourcing announcements). Testing the relation between outsourcing in terms of outsourcing payment to sales revenue and company size gives an important insight into factors in addition to economies of scale that might influence the outsourcing decision. Possibilities such as economies of scope, reinforcement of competitive advantage, and possibly advantageous outsourcing transaction cost may be relevant.

Clearly both large-sized companies and small-sized companies have an incentive to improve competitiveness. Accessing outsourcing opportunities, as with any other competitive innovation, is a necessary but not sufficient condition for increasing or maintaining companies’ profit or economic rent (Teece, 1980). To achieve
competitive advantage, companies need to understand their source of competitive advantage (Porter, 1980). In particular, a unique way in which core-business capabilities (Prahalad and Hamel, 1990) can be allied with technical and environmental factors provided by outsource partners may be instrumental in creating hard to imitate advantages. Activities that cannot deliver such advantage logically can be described as complementary services which could be acquired from an outside contractor, especially one that can provide competitive advantage and is willing to share this advantage (often through open-book or transparent pricing) with the outsourcing company.

Outsourcing may be motivated by a desire to secure direct benefits, indirect benefits or a combination of these. Direct benefits are obtained where outsource companies provide the same or better service for the same or less cost than could be achieved in internal process by the company. If this is not possible then services would be retained in-house unless significant indirect benefits are obtained. These indirect benefits would arise if opportunity benefits can be achieved by re-applying scarce resources liberated by outsourcing to more productive (competitive) functions retained by the firm.

An outsourcing decision motivated by direct benefits is then a trade off between relative production costs and relative transaction costs of in-house as opposed to external provision. Production costs include the prime costs: direct material, direct labour, and relevant conversion costs, in the form of overhead. In addition, outsourcing motivated by opportunity costs considers the opportunity cost of capital and other resources tied up by an activity in terms of their alternative use. The direct
and indirect evaluation arises not just with outsourcing but also with most make-or-buy transactions or sale-lease-back transactions, although the long term contract nature of an outsource contract make the nature of the relationship less arm’s length. In either a make-or-buy or outsourcing decisions the transaction costs involved in outsourcing internal activities to an external supplier will be influential in determining the boundaries of the firm and the overall benefits of outsourcing or subcontracting. Relevant transaction costs here include not just the cost of arranging the transfer of products or services outside the company (Coase, 1937; Williamson, 1975). Such costs include the costs of negotiation, co-ordination, monitoring, and controlling the realization of the outsourcing contracts between the parties but also the cost of in-house activities and co-ordination involved (Williamson, 1975).

Bettis et al. (1992) argue that a decrease in companies’ competitive advantage as reflected in declining profitability leads to outsourcing. Outsourcing is considered a strategy that allows companies to concentrate on core business (Prahalad and Hamel, 1990) in ways that reinforce competitive advantage (Porter, 1980). Therefore, it is expected that outsourcing improves profitability.

Through outsourcing, companies, generally terminate the continuing direct costs of the resources they have transferred such as employment costs, other benefits and profit sharing and may also reduce transaction costs associated with redundancy where the outsource contractor accepts liabilities for these resources. Additionally they may also avoid any investment expenditure (and often other employment) that may be involved in supporting the outsourced activities. For example, companies can avoid investment in recruitment and employee training (McFarlan and Nolan, 1995).
They may also be able to reduce the personnel support staff previously needed to support the outsourced staff and may dispose of physical assets or workspace. The empirical evidence suggests that transferring production to an external source leads to reductions in expenditure. There are a number of possibilities: substitution of capital for labour, more efficient work practices, economies of scale, innovation, labour shedding, and increases in work intensity are just a few.

Cost efficiency remains the primary explanation for outsourcing. Firms evaluate outsourcing to determine whether current operating costs can be reduced and if saved resources can be reinvested in more competitive processes. Some researchers contend that an important source of cost reductions is the outsourcing firm's access to economies of scale and the unique expertise that a large outsourcing vendor can deliver (Anderson and Weitz, 1986; Roodhooft and Warlop, 1999). Since these outsourcing contract receivers typically serve many clients, they often achieve lower unit costs than can any single company. Specialist outsourcing vendors can also afford to invest more in new technologies and innovative practices than can many outsourcing contract-granting firms (Alexander and Young, 1996). Specialists in payroll processing, for example, typically handle this task for a number of companies, thus spreading fixed costs and achieving economies of scale. Such specialists have the focus needed to identify areas that are candidates for improvement and the knowledge needed to act successfully on that awareness (economies of skill). On the other hand, outsourcing contract-granting firms generally engage in several different activities besides the core activity. By outsourcing some of these activities, they can concentrate their resources on the core business in which they have unique economies of skills or
knowledge. As a result, the outsourcing contract-granting firms can reduce their operations expense and overhead expense.

Cost efficiency metrics describe the ratio of outputs to inputs. Output is measured through the total revenue or sales of the firm. Inputs are measured through total costs and overhead costs incurred to generate outputs. The two measures of cost efficiency used in this study are overhead expense, i.e. selling, general and administrative expenses (SG&A) and operating expense, such as cost of goods sold (COGS) + SG&A, both expressed as a percentage of sales to enable us to compare firms of different sizes.

On the cost side, the ability of the airline to achieve many cost savings is fairly limited because of its fixed location in terms of area of operation and also because of the apparent lack of economies of scale beyond a certain size (Porter, 1980). More generally, the relevance of such a strategy to airlines has to be questioned given the relative price insensitivity of many of the markets and thus the lack of competitive pressures to produce a reduction in costs. Moreover the issue is complicated by the weak relationship between airline costs and prices at some airlines. For example when public sector owners subsidize airline operations to achieve some broader objective such as economic development or when an airline is operated as part of a group with uniform prices across the group which do not link very closely to the costs of the individual airlines (Meincke, 2002).

Several studies seek to explain the relationship between productivity growth and outsourcing. Abraham and Taylor (1996) find that firms “contract out” services with
the objectives of smoothing production cycles and benefiting from specialization. Ten Raa and Wolff (2001) find a positive association between the rate of outsourcing and productivity growth.

Efficient firms allocate their resources to activities for which they enjoy comparative advantage. Other activities are increasingly outsourced. Contracting out production of goods and services to a firm with competitive advantages in terms of reliability, quality and cost is emphasized by Perry (1997). The outsourcing contract-granting firms assess the productivity of their in-house service functions and only undertake outsource actions if outside producers can provide comparable services better. The cost reductions due to differences in labor costs lead to outsourcing and positive changes in labor input, and output produced is altered by profits and productivity growth. Outsourcing not only results in a shift of labor but also exacerbates the productivity differential between outsourcing contract granting firms and outsourcing contract receiving firms (Siegel and Griliches, 1992). Contracting out allows the firm to rely on management teams in other organizations to oversee tasks at which it is at a relative disadvantage, and to increase managerial attention and resource allocation to those tasks that it does best. Productivity metrics represent ratios of outputs and inputs. Output is measured through the total revenue or sales of the firm, inputs through the number of employees, total assets or inventory required to generate the output.

Traditionally, when business is booming, the temptation is to hire more staff, expand facilities, and bring more of the business “in-house,” where firms hope to better control costs. However, today's knowledge- and service-based economies offer
innumerable opportunities for well-run companies to increase profits through outsourcing (Quinn, 1999). When used properly, outsourcing can boost profitability in many ways, including: Staffing which is the use of independent contractors provides employers with the flexibility to hire help only when they need it, for only as long as they need it. Outsourcing of staffing also allows firms to avoid having to provide costly benefits, capabilities where outsourcing enables even the smallest firms to have a marketing expert, researcher, or other specialist on staff. While it may not pay for them to “own” that expertise, firms can “rent” it without adding to their payroll.

Outsourcing also bring in facilities to serve short-term needs, pouring cash into buildings may not match their long-term plans. When possible, firm should focus on reducing inventory, another cash drain, to minimize the need for additional facilities. When more space is needed, firms may lease and still avoid long-term investment obligations. Payment through the payroll also increases. Salaries are a large part of a business's costs, particularly in service industries. Independent contractors are a direct way to outsource – hire for the task. Thus, when sales are up, revenue is available to cover the higher salary expenses. When sales are down, firms are not tied to unrealistic salary costs.

Profitability is arguably the most important criterion for evaluating the performance of a firm. Profitability metrics measure the return that the firm's owners receive from their investments. We use return on assets (IBE/assets) and net profit margin (IBE/sales) to paint a firm's profit picture. IBE is the income before extraordinary expenses, which we use to better isolate the results from unusual situations and differences in accounting practices (Smith et al., 1998).
2.4 Financial Performance

Performance is a difficult concept, in terms of both definition and measurement. It has been defined as the result of activity, and the appropriate measure selected to assess corporate performance is considered to depend on the type of organization to be evaluated, and the objectives to be achieved through that evaluation (Hunger and Wheelan, 1997). Researchers in the strategic management field have offered a variety of models for analyzing corporate performance. However, little consensus has emerged on what constitutes a valid set of performance criteria (Lewin and Minton, 1986). For instance, researchers have suggested that studies on corporate performance should include multiple criteria analysis (Hitt, 1988). This multidimensional view of performance implies that different models or patterns of relationship between corporate performance and its determinants will emerge to demonstrate the various sets of relationships between the dependent and the independent variables in the estimated models (Ostroff and Schmidt, 1993).

Weiner and Mahoney (1981) indicated that numerous measures of corporate performance could be used as dependent variables. However, more important than a specific measure chosen is the use of multiple measures, because different criteria of performance are likely to be differentially affected by the various independent variables (Lieberson and O’Connor, 1972).

Different methods, however, have been employed in the literature to measure corporate performance (a summary of corporate performance model is offered in Diagram 1). Researchers in the U.S. focus on a balanced scorecard (Sim and Koh, 2001) and return on assets (ROA). Corbett et al., (2002) used ROA found that after
ISO 9000 certification, companies tended to report abnormal improvements in ROA and more importantly, these improvements were found to be lasting. Spinard and Sutter (1996) focused on the financial sector by examining the performance of 150 banks that had the best 5-year return on assets (ROA) in the industry. They found that the top-performers were able to achieve their status primarily with strong margins. UK researchers adopted instruments such cash flow, working capital and added value (Pat, 1995). Bhimani (1993) for instance investigated 21 companies to provide an overall picture of performance measurement in the UK manufacturing sector. Among the financial measures used were working capital, capital market, financial returns and lender security. The study highlighted the importance of working capital and lender security as a performance measure. In Europe, the focus was on return on assets, return on investment, economic value added and lender security (Heras et al., 2002). Similarly, research in New Zealand focuses on cash flow and economic value added (Perkins and Van Zyl, 1994). As for Return on Sales (ROS), Kay and Davis’s (1990) study of the top European company performers, found that Glaxo generates the highest return, followed by RTZ, LVMH, BT, Guinness, Kymmene and Philip Morris. Kearney (2001) also used ROS as a performance measure to assess the best performing manufacturing companies globally. Three measures of profitability are used in this study: Return on Investment (ROI) and ROE and ROS. Return on Investment is the most commonly used measure of the profitability of corporate performance (Hunger and Wheelen, 1997).

Besides profitability measures, performance measures were used in this study where, Stewart (2002) adopts Economic Value Added (EVA) measurement, as one of the latest and most widely used measures, to assess the financial well being of businesses.
Another additional performance measure, Tobin’s Q (TQ) is also being used by Corbett et al., (2002). Tobin’s Q is the market value of a firm’s equity plus its debt, divided by the book value of its total assets.

Research relating to the impact of ISO 9000 certification on financial performance is limited and slowly emerging. For instance, Corbett et al., (2002) undertook a valuable study by employing event study methodology to test whether ISO 9000 certification leads to productivity improvements, market benefits, and improved financial performance. The authors tracked the financial performance of all publicly traded ISO 9000 certified firms in several industrial sectors in the US. They highlight that those firms who sought their first ISO 9000 certification did indeed lead to significant abnormal improvements in financial performance, though the extent to which these are driven by productivity or market effects varied across sectors. In addition, Corbett et al., (2002) report that publicly traded firms in three U.S. sectors did experience improvements in Return on Assets, productivity and sales, depending on the industry. They conclude that careful design and implementation of consistent and documented quality management systems contribute significantly to superior financial performance.

2.5 Empirical Studies

Novak and Stern (2007) examined the impact of vertical integration on the dynamics of performance over the automobile product development lifecycle. Building on recent work in organizational economics and strategy, they evaluated the relationship between vertical integration and different performance margins. The tests were done using detailed data from the luxury automobile segment, establishing three key
results. First, initial performance was declining in the level of vertical integration. Second, the level of performance improvement was significantly increasing in the level of vertical integration. Finally, the impact of vertical integration on alternative performance margins was mediated by the level of pre-existing capabilities, by the salience of opportunities to access external technology leaders, and by the scope for learning over the product lifecycle. Together, the findings highlighted a strategic governance trade-off between short-term performance and the evolution of firm capabilities.

Jiang et al., (2006) empirically investigated the effect of outsourcing on firm level performance metrics, providing evidence about outsourcing influences on a firm's cost-efficiency, productivity and profitability. The study was concerned with empirically examining the impact of outsourcing on a firm's performance. The results were based on a sample of 51 publicly traded firms that outsourced parts of their operations between 1990 and 2002. Publicly available accounting data were used to test for changes in operating performances that resulted from outsourcing decisions. Operating performances were examined over a four-quarter period after the outsourcing announcement. This research provided evidence that outsourcing can improve a firm's cost-efficiency. While existing literature on outsourcing have also sought to draw anecdotal and conceptual evidence that highly visible companies have improved their productivity and profitability as well through outsourcing, the study reveals no evidence that outsourcing improves a firm's productivity and profitability.

A study by Juma’h and Wood (2000) investigated the business performance of a sample of companies announcing outsourcing contracts. Performance effects were
investigated by measures including operating profit, earnings margin, return on shareholders’ capital, reduction in employment cost and research and development expenditure prior to and subsequent to the outsourcing announcement. The conclusion was that outsourcing companies’ profitability and liquidity decrease in years in which outsourcing announcements occur, and tend to increase in the subsequent year. Also, it is possible that the short-term and long-term financial structure of outsourcing companies is altered.

Broedner et al., (2009) presented an empirical investigation of firm level productivity effects of outsourcing against the background of a review of recent theoretical considerations about the topic. The empirical research was based on a large representative data set from the German manufacturing industries containing detailed data about almost 500 establishments. It investigated productivity effects of outsourcing under control of other relevant factors influencing firm level productivity by means of a multivariate regression analysis. In sharp contrast to common belief and prevailing management practices, outsourcing had a strong negative impact on a firm's labour productivity. This result can be explained such that mere cost-efficiency comparisons are insufficient for appropriate decisions on vertical manufacturing range as the effects of opportunism, of disturbed competence formation, and of limited innovative value creation processes may be overcompensating cost benefits.

Gilley et al., (2004) confirmed that considerable anecdotal evidence suggest that an organization's use of outsourcing will have an influence on its performance. The study analyzed the relationship between the outsourcing of human resource (HR) activities, namely training and payroll, and firm performance. In addition, the study hypothesized that the outsourcing–performance relationship was not the same for all
firms. As a result, the study tested for the potential moderating effects of firm size. The sample consisted of 94 manufacturing firms representing 16 two-digit SIC code industries. Results indicated that both training and payroll outsourcing had implications for firm performance. However, findings regarding a moderating effect of firm size were inconclusive.

Gilley (2000) empirically examined the extent to which outsourcing of both peripheral and near-core tasks influences firms’ financial and non-financial performance. In addition, the potential moderating effects of firm strategy and the environment on the outsourcing-performance relationship were examined. Results indicated that, whereas there was no significant direct effect of outsourcing on firm performance, both firm strategy and environmental dynamism moderated the relationship between outsourcing and performance.

More recently, Kotabe and Mol (2009) studied how a firm's degree of outsourcing across all activities influences financial performance. The study argues that there is an optimal degree of outsourcing, where firms outsource some activities yet integrate others, and that deviations lower performance in a negatively curvilinear fashion. The study finds empirical support, using 1995 and 1998 data on a sample of manufacturing businesses in the Netherlands, and shows that the steepness of the curve increases under conditions of high uncertainty. The study further shows the magnitude of the uncertainty effect on performance outcomes through a post hoc scenario analysis. Thus the study provides a specific, theoretically and empirically grounded prediction of how outsourcing affects performance with implications for theory and practice.
2.6 Summary

The review has shown a mix of results on the effect that outsourcing has on financial performance of organisations. Given that not much has been done in Kenya on the same and especially on the banking industry, this constitutes a gap that the present study seeks to bridge.

An important feature of all the prior research studies documented in the preceding section is the exclusive focus on the Western developed economies. Thus, this study, with its primary focus on outsourcing practices in a developing country (Kenya) is an important extension of the outsourcing research and valuable addition to literature.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter presents the research methodology. It presents the research design, population and sample size, data collection instruments and procedure, how data was analyzed and how the results were interpreted.

3.2 Research Design
This was an explanatory research design. Explanatory research designs are used to describe and explain, through causal connection between two or several variables. An explanatory study is used when one wants deeper knowledge and comprehension, and when the purpose is to both explain and describe (Björklund & Paulsson, 2003). This is what the study intended to do hence the choice of the design.

3.3 Population of the Study
The target population was all the 43 licensed commercial banks in Kenya operating within Nairobi. A list of the 43 commercial banks is provided as appendix II. All the 43 commercial banks were used in the study.

3.4 Data Collection Instrument and Procedures
The study used primary data as well as secondary data. Primary data were collected using questionnaires. The questionnaires were constructed in order to establish the
extent of outsourcing among commercial banks in Kenya as well as the services outsourced in each of the commercial banks.

3.4.1 Instrument Validity

According to Straight (1993), validity refers to the extent to which an instrument measures what it intends to measure. In order to ensure the validity of these instruments, the questions on the questionnaires were constructed in a manner that the responses only provide answers to the research questions. The instrument validity was checked by the supervisor and the moderator. These are individuals that have much experience in the field of research as well as in the concept under study and were therefore very instrumental in checking instrument validity. After their comments on the instrument were worked on to their satisfaction, the questionnaire was considered valid for data collection.

3.4.2 Instrument Reliability

Reliability of measurements concerns the degree to which a particular measuring procedure gives similar results over a number of repeated trials. It also refers to the consistency of an instrument to yield the same results at different times. The researcher used test re-test type of method in order to establish the reliability of the instruments. The Cronbach’s alpha was used to test reliability of the data collection instrument. A correlation coefficient of 0.72 meant that the instrument was reliable. The SPSS package was helpful as concerns the calculation of the alpha value.

3.4.3 Secondary data

The secondary data was collected in order to help in the financial performance aspect of the study. As such, data was collected from the company financial statements
available on their websites, the Nairobi Stock Exchange market, the Capital Markets Authority and also from the Banking Survey 2010 booklet. The specific data collected was net income for each of the banks. Thus, the dependent variable was performance as measured by the Net Income while the independent variable was outsourcing as measured by the mean score on the extent of outsourcing by each of the banks. The net income values were used because one of the key motivations for outsourcing certain aspects of business activities is to save on costs. This also means that as costs reduce, the net income should rise. Further, control variables such as size of the bank (measured by assets) were used. The asset values were also found from the financial statements and the booklet. The study covered a period of 5 years 2005-2009.

3.5 Data Analysis and Presentation

After the data was collected, it was sorted and coded into the SPSS version 17. The data was then entered and analysed using two methods: descriptive and regression analysis. The descriptive analysis involved the use of mean scores and standard deviations. This was meant to elicit the outsourcing strategies used by the banks. Then, performance data was entered into the SPSS too. These formed the dependent variable. The data on size of the banks was also entered to act as control variable. These data were imported from the Microsoft Excel and are attached as appendix 3.

The regression analysis was used to test the relationship between outsourcing and performance. P-values, R, R square and the adjusted R square were used to interpret the correlation results. The tests were made at 95% confidence level. Thus, the relationship was considered significant if the p-value was 0.05 or less. Tables were
used in presentation. The following regression model was used to perform the analysis for objective 2:

\[ \text{Performance} = a + b_1 \text{(Outsourcing)} + b_2 \text{(Size)} + c \]

Where \(a\), \(b\) and \(c\) are constants

Performance is the dependent variable measured by natural logarithm of Net Income Values

Outsourcing is the independent variable measured by mean score on the responses to extent of outsourcing for each bank

Size is the control variable measured by the bank asset value
CHAPTER FOUR
RESULTS AND INTERPRETATION

4.1 Introduction

This chapter presents the results of data analysis collected via questionnaires and secondary sources. Questionnaires were distributed to all the 43 banks but only 36 banks responded positively. This suggests that the response rate was 71 percent. The chapter is organised as follows. First, a presentation on reasons for outsourcing is made. This is followed by levels of outsourcing and then the effects of outsourcing.

4.2 Reasons for Outsourcing

The respondents were asked to state the extent to which they agreed or disagreed with some statements regarding the reasons for outsourcing. The responses ranged from ‘strongly disagree (1) to strongly agree (5). The results are presented in terms of mean scores and standard deviations. Mean scores of 3 and above will show the significance of the reason for outsourcing. The mean scores and standard deviations are shown in Table 1.

Table 1: Reasons for Outsourcing

<table>
<thead>
<tr>
<th>Reason</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrate on core activity</td>
<td>4.6667</td>
<td>0.70711</td>
</tr>
<tr>
<td>Improved company focus</td>
<td>4.625</td>
<td>0.51755</td>
</tr>
<tr>
<td>To improve efficiency</td>
<td>4.5</td>
<td>0.53452</td>
</tr>
<tr>
<td>Increase productivity</td>
<td>4.375</td>
<td>0.74402</td>
</tr>
<tr>
<td>High administration costs</td>
<td>3.375</td>
<td>0.91613</td>
</tr>
<tr>
<td>Save time</td>
<td>3.375</td>
<td>0.91613</td>
</tr>
<tr>
<td>High operational costs</td>
<td>3.25</td>
<td>1.0351</td>
</tr>
<tr>
<td>Poor maintenance culture</td>
<td>2.875</td>
<td>1.24642</td>
</tr>
<tr>
<td>Lack of in-house expertise</td>
<td>2.7143</td>
<td>0.48795</td>
</tr>
</tbody>
</table>
As shown in Table 1, the study found that the most important reason for outsourcing was concentration on core activities (4.6667), improvement of company focus (4.625), efficiency improvement (4.5) and to increase productivity (4.375). Other reasons were high administrative costs (3.375) saving time (3.375), and high operational costs (3.25). These were therefore the major reasons why commercial banks outsourced goods and services. Poor maintenance culture (2.875) and lack of in-house expertise (2.71) were not important reasons for outsourcing.

### 4.3 Level of Outsourcing

The respondents were asked to state the level of outsourcing of services and goods in the organisation. The responses ranged from very low extent (1) to very large extent (5). The results are shown in Table 2 in terms of mean scores and standard deviations. A mean score of 3 or above is construed to mean that the good or service was outsourced by most banks.

<table>
<thead>
<tr>
<th>Service</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card processing</td>
<td>3.8889</td>
<td>1.16667</td>
</tr>
<tr>
<td>Automated Teller Machines</td>
<td>3.5556</td>
<td>1.5899</td>
</tr>
<tr>
<td>Information technology</td>
<td>3.4444</td>
<td>0.72648</td>
</tr>
<tr>
<td>Debt collection</td>
<td>3.3333</td>
<td>1.32288</td>
</tr>
<tr>
<td>Sales/marketing</td>
<td>2.7778</td>
<td>0.97183</td>
</tr>
<tr>
<td>Human resources</td>
<td>1.7778</td>
<td>1.09291</td>
</tr>
<tr>
<td>Account processing</td>
<td>1.3333</td>
<td>0.70711</td>
</tr>
<tr>
<td>Internal audit</td>
<td>1.1111</td>
<td>0.33333</td>
</tr>
</tbody>
</table>

The study found that the most outsourced activities were card processing (3.89), Automated Teller Machines (3.56), information technology (3.44) and debt collection
Other services outsourced were: cleaning, stationery, transport and taxation & external audit services. The least outsourced services were internal audit (1.111), account processing (1.33), human resources (1.78) and sales & marketing (2.78). This leads to the conclusion that there are many non-core services that banks are outsourcing especially the IT related services.

### 4.4 Effects of Outsourcing

The respondents were asked to rate the effects of outsourcing on cost. The statements were rated on a scale of 1 (strongly disagree) to 5 (strongly agree). The results are shown in Table 1 in terms of mean scores and standard deviations.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsourcing has resulted to increased costs</td>
<td>1.556</td>
<td>0.882</td>
</tr>
<tr>
<td>Operational costs have reduced as a result of outsourcing</td>
<td>3.25</td>
<td>1.389</td>
</tr>
<tr>
<td>Outsourcing has resulted in operational efficiency in the bank</td>
<td>3.778</td>
<td>0.833</td>
</tr>
</tbody>
</table>

Table 3 shows that outsourcing did not increase costs (1.556). In fact, the results show that the respondents agreed that the operational costs had reduced as a result of bank outsourcing of goods and services (3.25). The study also found that outsourcing had resulted in operational efficiency of commercial banks in Kenya (3.778). This leads to the conclusion that outsourcing of goods and services in commercial banks had led to reduced operational costs and had also resulted in operational efficiency.

The effect of outsourcing on profitability was also sought from the respondents as they were asked to rate the effect on some aspects profitability. The rating ranged
from 1 (strongly disagree) to 5 (strongly agree). The results are shown in terms of mean scores and standard deviations in Table 4.

Table 4: Effect of Outsourcing on Profitability

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our profits were very low when we did not outsource</td>
<td>2.375</td>
<td>0.744</td>
</tr>
<tr>
<td>Profits have increased since outsourcing</td>
<td>2.875</td>
<td>0.641</td>
</tr>
<tr>
<td>Profits have increased due to reduced costs of outsourcing</td>
<td>3.444</td>
<td>1.236</td>
</tr>
</tbody>
</table>

The study found that the respondents were in agreement that profits had increased due to reduced cost of outsourcing (3.44). It was also noted that the respondents denied the fact that profits were low when the banks did not outsource (2.375) and that profits had increased since outsourcing (2.875). These results reveal that the reduction in costs due to outsourcing had led to increased profits.

4.5 Relationship between Outsourcing and Financial Performance

This section presents the results of regression analysis. As was shown in chapter 3, financial performance was measured by the natural logarithm of net income values. These were the dependent variables. The independent variables were the mean scores on levels of outsourcing on goods and services. The results are shown in Table 5.

Table 5: Outsourcing and Financial Performance

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>.983</td>
<td>.967</td>
<td>.956</td>
<td>.14183</td>
</tr>
</tbody>
</table>

The study found that Pearson correlation coefficient, R, was 0.983. This means that there was a high correlation between outsourcing and financial performance. The $R^2$
was 0.967 meaning that outsourcing influenced up to 96.7% of the variance in financial performance. The adjusted $R^2$ was 0.956 which suggests that the least influence of outsourcing on performance was 95.6%. The standard error was low at 0.14183. The relationship was however not statistically significant ($p>0.05$).

Table 6 shows the results on the coefficients of each of the variables used in the model. The constants alpha, beta and error terms are shown as well as the $p$ values.

**Table 6: Variable Coefficients**

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.878</td>
<td>.785</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>-.007</td>
<td>.109</td>
</tr>
<tr>
<td>Size</td>
<td>1.286</td>
<td>.122</td>
</tr>
</tbody>
</table>

The study found that outsourcing was negatively related with net income (Unstandardized beta = -0.007). This relationship was not statistically significant ($p>0.05$). The study also revealed that size of the bank was positively related to net income (Unstandardized beta = 1.286) and the relationship was statistically significant ($p<0.05$). These results suggest that the study failed to establish any significant relationship between level of outsourcing and financial performance but that the influence of size on financial performance was significant. The regression equation becomes:

$$\text{Performance} = -3.878 - 0.007 \text{ (Outsourcing)} + 1.286 \text{ (Size)} + 0.785$$
CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The study found that the most important reasons for outsourcing was concentration on core activities, improvement of company focus, efficiency improvement and to increase productivity. Others were high administrative costs, saving time, and high operational costs. The study revealed that the most outsourced activities were card processing, Automated Teller Machines, information technology and debt collection. Other services outsourced were: cleaning, stationery, transport and taxation & external audit services.

The study noted that outsourcing did not increase costs. In fact, the results showed that the respondents agreed that the operational costs had reduced as a result of bank outsourcing of goods and services. The study revealed that outsourcing had resulted in operational efficiency of commercial banks in Kenya. The study found that profitability of commercial banks had increased and this had been attributed to reduced cost of outsourcing. It was also noted that the respondents denied the fact that profits were low when the banks did not outsource and that profits had increased since outsourcing.

From the Pearson correlation coefficient, there was a high correlation between outsourcing and financial performance. The $R^2$ revealed that outsourcing influenced up to 96.7% of the variance in financial performance. The adjusted $R^2$ suggested that
the least influence of outsourcing on performance was 95.6%. The relationship was however not statistically significant. The study found that outsourcing was negatively related with net income and that size of the bank was positively related to net income.

5.2 Conclusion

The study sought to establish the relationship between outsourcing and financial performance of commercial banks in Kenya. The study concludes that there are many non-core services that banks are outsourcing especially the IT related services. It is also concluded that outsourcing of goods and services in commercial banks had led to reduced operational costs and had also resulted in operational efficiency. These results reveal that the reduction in costs due to outsourcing had led to increased profits. The study failed to establish any significant relationship between level of outsourcing and financial performance though was negative and that the influence of size on financial performance was positive and significant.

5.3 Recommendations

One interesting and disturbing finding is the large number of financial institutions (nearly 50%) involved in outsourcing of certain banking functions, in an environment without a regulatory framework. This therefore calls for urgent measures to institute a regulatory framework in place in the form of an outsourcing guideline to the banking sector.

While this study may not have covered this aspect, it is of interest to the regulatory authorities to examine how banks achieve a balance in risks and benefits associated with outsourcing taking into consideration interests of other stakeholders such as depositors.
5.4 Limitations of the Study

There were a number of limitations that affected the outcome of the study. For instance, data was collected from only 36 banks out of the total number of 43 banks. This is because most of the banks were not willing to give out the information regarding their outsourcing activities. The other limitation was time factor as it was not possible to cover all the 43 commercial banks within the time given to carry out the research. These issues may limit the applicability of the research findings to the wider industry.

5.5 Suggestions for Further Research

An important extension of this study is to replicate this research to other countries, and more importantly conduct comparative country studies. In additions, given the changes that are taking place globally and enactment of rules and laws, on corporate governance, it would be necessary to carry out research on the role of board members in outsourcing. As it has been the tradition, the board is the key internal governance mechanism, and it would of interest to understand the board-room dynamics in making decisions to outsource of certain banking services. Interviewing board members on this vital and emerging practice will provide a rich textual and thematic understanding of boards’ evaluation of risks and benefits as well as prioritisation of services to be outsourced. The findings are useful to further refine the already existing Corporate Guidelines with respect to the role of the board in considering outsourcing of certain banking services from a third party.
REFERENCES


APPENDICES

Appendix 1: Questionnaire

**THIS QUESTIONNAIRE SEeks to establish the Extent to which the Bank has outsourced various goods and services and it’s impact on the Bank’s financial performance.**

**Kindly fill in the questionnaire as accurately as you can.**

To what extent do you agree or disagree with each of the following statements, being the reasons for outsourcing? 1 represents ‘strongly disagree’ and 5 representing ‘strongly agree’.

<table>
<thead>
<tr>
<th>Reason</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of in-house expertise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High administration costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved company focus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High operational costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor maintenance culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To improve efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentrate on core activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Save time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

State the level of outsourcing of the following services and goods in the organisation.

Tick appropriately in the spaces provided.

[1] Very low extent

[2] Low extent

[3] Average
[4] Large extent

[5] Very large extent

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Card processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal audit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales/marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt collection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What other services or goods are outsourced by the organisation?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

Please in a scale of 1-5, rate the following as being the effects of outsourcing on cost. 1 represents ‘strongly disagree’ and 5 represents ‘strongly agree’.

<table>
<thead>
<tr>
<th>Effect</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>We are experiencing increased costs as a result of outsourcing services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational costs have reduced as a result of outsourcing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To what extent do you agree with the following statement: Outsourcing of has resulted in operational efficiency in our company

Strongly agree [ ]

Agree [ ]
In a scale of 1-5, please rate the following aspects of profitability as being the effects of outsourcing. 1 denotes ‘strongly disagree’ and 5 represents, ‘strongly agree’.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our profits were very low when we did not outsource</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We have been experiencing increasing profits since we started outsourcing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We have experienced increase in profits due to the reduced costs of outsourcing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of Questionnaire
Appendix 2: List of Banks

African Banking Corporation Ltd.
Bank of Africa Kenya Ltd.
Bank of Baroda (K) Ltd.
Bank of India
Barclays Bank of Kenya Ltd.
CFC Stanbic Bank Ltd.
Charterhouse Bank Ltd
Chase Bank (K) Ltd.
Citibank N.A Kenya
City Finance Bank Ltd.
Commercial Bank of Africa Ltd.
Consolidated Bank of Kenya Ltd.
Co-operative Bank of Kenya Ltd.
Credit Bank Ltd.
Development Bank of Kenya Ltd.
Diamond Trust Bank (K) Ltd.
Dubai Bank Kenya Ltd.
Ecobank Kenya Ltd
Equatorial Commercial Bank Ltd.
Equity Bank Ltd.
Family Bank Ltd.
Fidelity Commercial Bank Ltd
Fina Bank Ltd
First community Bank Limited
Giro Commercial Bank Ltd.
Guardian Bank Ltd
Gulf African Bank Limited
Habib Bank A.G Zurich
Habib Bank Ltd.
Housing Finance Ltd
Investment & Mortgages Bank Ltd
Kenya Commercial Bank Ltd
K-Rep Bank Ltd
Middle East Bank (K) Ltd
National Bank of Kenya Ltd
Oriental Commercial Bank Ltd
Paramount Universal Bank Ltd
Prime Bank Ltd
Savings and Loan (K) Ltd
Southern Credit Banking Corporation Ltd.
Standard Chartered Bank (K) Ltd
Trans-National Bank Ltd
Victoria Commercial Bank Ltd
## Appendix 3: Research Data on Outsourcing and Performance

<table>
<thead>
<tr>
<th>Outsourcing (Mean score)</th>
<th>Std. Deviation</th>
<th>Net Income</th>
<th>Log Net Income</th>
<th>Assets</th>
<th>Log Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.88</td>
<td>0.834523</td>
<td>80938</td>
<td>4.908152</td>
<td>6898919</td>
<td>6.838781</td>
</tr>
<tr>
<td>2</td>
<td>0.755929</td>
<td>293058</td>
<td>5.466954</td>
<td>25522986</td>
<td>7.406931</td>
</tr>
<tr>
<td>2.75</td>
<td>1.669046</td>
<td>4552679</td>
<td>6.658267</td>
<td>172384128</td>
<td>8.236497</td>
</tr>
<tr>
<td>3</td>
<td>1.603567</td>
<td>521505</td>
<td>5.717257</td>
<td>27575327</td>
<td>7.440521</td>
</tr>
<tr>
<td>2.75</td>
<td>1.752549</td>
<td>192439</td>
<td>5.284293</td>
<td>16912962</td>
<td>7.228222</td>
</tr>
<tr>
<td>2</td>
<td>1.195229</td>
<td>1462955</td>
<td>6.165231</td>
<td>51404408</td>
<td>7.711</td>
</tr>
<tr>
<td>2.75</td>
<td>1.581139</td>
<td>220895</td>
<td>5.912424</td>
<td>4598919</td>
<td>6.662656</td>
</tr>
<tr>
<td>3.25</td>
<td>1.581139</td>
<td>4732754</td>
<td>6.675114</td>
<td>123778972</td>
<td>8.092647</td>
</tr>
<tr>
<td>3.5</td>
<td>1.309307</td>
<td>4083871</td>
<td>6.611072</td>
<td>195011548</td>
<td>8.29006</td>
</tr>
<tr>
<td>2.82</td>
<td>0.834523</td>
<td>81738</td>
<td>5.25753</td>
<td>6898919</td>
<td>6.838781</td>
</tr>
<tr>
<td>2.14</td>
<td>0.755929</td>
<td>293658</td>
<td>5.466842</td>
<td>25222986</td>
<td>7.401796</td>
</tr>
<tr>
<td>2.75</td>
<td>0.669046</td>
<td>4525679</td>
<td>6.65684</td>
<td>252384128</td>
<td>8.402062</td>
</tr>
<tr>
<td>2.36</td>
<td>1.603567</td>
<td>521505</td>
<td>5.719414</td>
<td>21975327</td>
<td>7.341935</td>
</tr>
<tr>
<td>2.15</td>
<td>0.752549</td>
<td>292439</td>
<td>5.466635</td>
<td>26912962</td>
<td>7.429961</td>
</tr>
<tr>
<td>2.03</td>
<td>0.195229</td>
<td>1254955</td>
<td>6.098628</td>
<td>51454408</td>
<td>8.290038</td>
</tr>
<tr>
<td>2.65</td>
<td>0.581139</td>
<td>220849</td>
<td>5.3344095</td>
<td>13309692</td>
<td>7.120479</td>
</tr>
<tr>
<td>3.44</td>
<td>0.581139</td>
<td>4732554</td>
<td>6.675096</td>
<td>123779372</td>
<td>8.092648</td>
</tr>
<tr>
<td>4.21</td>
<td>0.309307</td>
<td>4084071</td>
<td>6.611093</td>
<td>195010548</td>
<td>8.290038</td>
</tr>
<tr>
<td>2.28</td>
<td>0.834523</td>
<td>180938</td>
<td>5.25753</td>
<td>6800919</td>
<td>6.832568</td>
</tr>
<tr>
<td>2.87</td>
<td>0.755929</td>
<td>290058</td>
<td>5.462485</td>
<td>25513986</td>
<td>7.406778</td>
</tr>
<tr>
<td>2.75</td>
<td>1.669046</td>
<td>4513679</td>
<td>6.654531</td>
<td>72384128</td>
<td>7.859643</td>
</tr>
<tr>
<td>3.04</td>
<td>1.603567</td>
<td>521555</td>
<td>5.7173</td>
<td>7575327</td>
<td>6.879401</td>
</tr>
<tr>
<td>2.75</td>
<td>1.752549</td>
<td>192475</td>
<td>5.284574</td>
<td>10019262</td>
<td>7.005636</td>
</tr>
<tr>
<td>2.44</td>
<td>1.195229</td>
<td>7462955</td>
<td>6.872911</td>
<td>55404408</td>
<td>7.743544</td>
</tr>
<tr>
<td>3.98</td>
<td>1.581139</td>
<td>2201895</td>
<td>6.342979</td>
<td>16307569</td>
<td>7.212341</td>
</tr>
<tr>
<td>3.98</td>
<td>1.581139</td>
<td>4713754</td>
<td>6.673367</td>
<td>223778972</td>
<td>8.349819</td>
</tr>
<tr>
<td>3.45</td>
<td>1.309307</td>
<td>4783871</td>
<td>6.679779</td>
<td>95011548</td>
<td>7.977776</td>
</tr>
<tr>
<td>2.82</td>
<td>0.834523</td>
<td>181738</td>
<td>5.259446</td>
<td>4598909</td>
<td>6.662655</td>
</tr>
<tr>
<td>2.04</td>
<td>0.755929</td>
<td>1293658</td>
<td>6.111819</td>
<td>25552986</td>
<td>7.407442</td>
</tr>
<tr>
<td>2.75</td>
<td>0.669046</td>
<td>452567</td>
<td>5.655683</td>
<td>25204412</td>
<td>7.401477</td>
</tr>
<tr>
<td>3.33</td>
<td>1.603567</td>
<td>52410</td>
<td>4.719414</td>
<td>21975327</td>
<td>7.341935</td>
</tr>
<tr>
<td>2.38</td>
<td>0.752549</td>
<td>29243</td>
<td>4.466022</td>
<td>269012962</td>
<td>8.429773</td>
</tr>
<tr>
<td>3.89</td>
<td>0.195229</td>
<td>254955</td>
<td>5.406464</td>
<td>53454401</td>
<td>7.727983</td>
</tr>
<tr>
<td>2.65</td>
<td>0.581139</td>
<td>200849</td>
<td>5.30287</td>
<td>12406969</td>
<td>7.093666</td>
</tr>
<tr>
<td>4.11</td>
<td>0.581139</td>
<td>732554</td>
<td>5.86484</td>
<td>22379742</td>
<td>8.34982</td>
</tr>
<tr>
<td>2.17</td>
<td>0.309307</td>
<td>408401</td>
<td>5.611087</td>
<td>19406548</td>
<td>7.287948</td>
</tr>
</tbody>
</table>