

A Survey of Financial Challenges Facing Small Contractors in Western Kenya

By:

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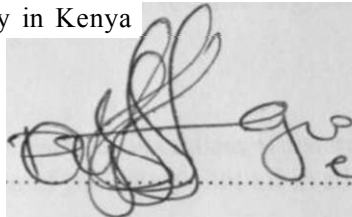
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A research project presented in partial fulfillment of the requirement of the degree of
Master of Business Administration of the school of Business, University of Nairobi

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DECLARATION

I declare that this is my original research proposal and the topic has not been presented in any University in Kenya



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Thank You

ABSTRACT

The study is a survey of financial challenges faced by small contractors in western region. The study is inspired by common business failures witnessed among this class of business in western region. The identified challenges are unique to small contractors in the western region. This study is vital to the Government's policy formulation and implementation in the SME sector and specifically small contractors. Financial institutions will gain from the study by appreciating the challenges related to them and put up measures to avoid them and support the small contractors. The small contractors themselves will mirror their situation through the report and put up corrective measures so as to ensure that their businesses continue to a going concern perpetually.

The main objective of the study was to determine such challenges that are experienced by the small contractors in western region.

The data used in the study was primary data collected directly from the contractors. The contractors were sampled out of a population of 247 small companies carrying out construction in western to come up with a sample of 87. Questionnaires and interviews were used to collect the data which was then summarized statistically.

From the findings, ten challenges were identified and ranked according to severity. Access to credit was ranked highest, coming out as the biggest challenge to the small contractors in western region. This implies that the small contractors suffer from lack of funds for running their business. Bribery on the other hand was ranked least among the challenges. This however showed that the respondents were uncomfortable to declare if they have participated in a bribe.

In conclusion, the study summarized the challenges and identified the parties that are supposed to help in mitigating the challenges. The Government was called upon to relax both the regulations and the taxes in the sector. Bank on the other hand was asked to reduce the cost of capital to reasonable levels and employ fair practices during loan appraisal processes.

ABBREVIATIONS

CIDB	Construction Industry Development Board
IFRS	International Financial Reporting Standards
DPW	Department of Public Works
KeRRA	Kenya Rural Roads authority
KES	Kenya Shillings
KURA	Kenya Urban Roads Authority
LPO	Local Purchase Order
MoR	Ministry of Roads
NDS	National Development Strategy
SME	Small and Medium Size Enterprises
VAT	Value Added Tax
SAGAs	Semi Autonomous Government Agencies

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CHAPTER ONE:

1.1 BACKGROUND

1.1.1 Introduction

The survival of a construction firm, just like any other firms' depends on a good understanding of the opportunities and threats associated with the construction industry and the economy as a whole. Shortage of financial resources and inflation and currency fluctuations are potential threats construction companies (Luger, 1997). According to Luger (1997) '•Delays with interim and final payments, as well as onerous contract conditions faced by construction firms, can also impose huge constraints on the industry and that construction firms have suffered financial ruin and bankruptcy because of delays in payment, which are common with government contracts.' This study is about financial problems that small and medium contractors face, especially in Western Kenya.

1.1.2 Small and Medium Size Enterprise Contractor (SME).

A contractor is a person or business which provides goods or services to another entity under terms specified in a contract. A small contractor has the characteristics of a small and medium size enterprise (SME). The European Commission (EC) categorizes SME's from other firms on the basis of their assets, number of staff and annual sales. The thresholds for these parameters differ according to countries but are generally smaller than those of larger organizations. The broad Kenyan definition of SMEs, which includes micro enterprises, was adopted. Therefore, Micro Small and Medium Enterprises (MSME) in Kenya, is any business in the private sector, which employs up to 50 employees, according to the National Baseline Survey of 1999. The definition is interchangeable with small business. Small enterprises are formal and non formalized undertakings which employ between 5 and 49 employees with capital higher than that of micro enterprises, definitions that provide enough flexibility to capture the MSEs (Trulsson, 2002) and are adopted for this study.

In several African countries micro and small enterprises employs between 17 percent and 27 percent of the working age population, this is almost twice the employment of large scale

enterprises and the public sector (Liedholm, 2001). In Kenya the consensus is that small enterprises are the mainstay of economic growth and prosperity (National Baseline Survey, 1999). Small contractors generate jobs; perform small projects at different and remote geographical locations that might be unattractive to big firms i.e. they get the job done. A large number of functional small and medium scale contractors can help reduce monopoly by large contractors. The relatively low skills and resources required at this scale can easily lower the entry point for the small and medium size owners to begin participating in the industry thus contribution to growth in the economy and redistribution of wealth. This is the importance of this subsector and therefore the importance of studying the small contractors in roads.

1.13 Financial Problems of Small and Medium Contractors

Delays with interim and final payments impose huge constraints on the industry. Many construction firms have suffered financial ruin and bankruptcy because of delays in payment, which are common with government contracts Donte and Migel (2006). Cash management is another challenge to the growth and development of Small and medium size contractors, for example contractors take up jobs without determining the cash flow of the operations (Navon. 1996 and Cook, 1991). Financial management is another challenge, especially in relation to working capital and over-trading, and proper choice of a source of finance (McMahon and Holmes, 1991; Dodge et al., 1994).

Difficulty when trying to access credit is another challenge, UNCTAD Mic 8 (2002). The banks have their own justification for not making it easy for these organizations to go through. For instance, there is limited branch network that these small contractors can Access and at the same time have limited range of financial instruments and lending conditions. Banks are risk-averse in behavior and instead prefer to invest in Treasury bills. There is also the issue of Non-performing assets, which make the banks too cautious to undertake further lending. In addition, such issues as lack of established information network such as a credit reference bureau for tracking defaulters, weak inter-bank collaboration and banks' inadequate capacity to appraise the creditworthiness of SME's are all factors that make banks refrain from lending to the SME's.

Management deficiency causes business failure for small and medium sized contractors. Partial record keeping is also a cause for startup business failure. In most cases, this is due lack of the

basic business management skills. Small businesses, therefore, end up losing track of their daily transactions and cannot account for their expenses and their profits at the end of the month (Rwelamila, 2002; Miles, 1980).

According to William (1986), causes of business failure are ranked in table 1 below.

Ranking of challenges

Rank	Reason	% of failed firms
1	Accounting - inadequate, inaccurate, non-existent books and records	55
2	Excessive private drawings	22
3	Undercapitalisation (particularly at start)	21
4	Overuse of credit (bad debts and slow collections)	21
5	Inventory problems	20
6	Accounting - inability to use/understand financial reports and statements	18
7	Lack of financial planning	17
8	Inability to borrow needed funds	8
9	Unproductive use of assets	7
10	Acting without adequate risk assessment;	6
11	Premature expansions	5

challenges

Table 1: Ranking of causes of Business failures

1.1.4 Financial theories

Among other financial theories discussed, Equity funds theory by Costand et al (1990) suggests that larger companies use a higher level of debt than smaller companies. This means that small companies such as the small contractors need more capital than large firms do. This insinuates that the debt option may not be easily available for the small firms therefore presenting a challenge to small contractors. On the other hand Access to capital theory outlines that number of challenges a small business companies are Small harder by taxes, higher costs for loans from

the investigation are generally less aware of funding sources and are less able to meet the needs of the loans. Signaling theory is now considered to be more insightful for some aspects of small enterprise financial management than others (Emery et al 1991). The ability of small businesses to report their value, potential investors, only the signal of the publication of a forecast income were found positive and significant value to the company maintained the connection between the proportion of equity by the owners and the net proceeds raised from a capital problem.

1.2 STATEMENT OF THE PROBLEM

In CIBD (2008) Statistics South Africa (2005) states that from 1995 to 2005, about 5907 construction companies were formally liquidated. Complexity, risks involved in the construction industry have led to enormous failures especially in small contractors and those small emerging contractors (Ngala, Adegoke and Otiena, 2005). In Kenya past statistics indicate that three out of five small businesses fail within the first few months of operation (Kenya National Bureau of Statistics, 2007). Such a failure rate coupled with stagnation in growth is alarming and must be addressed. Contractor's project and financial management ability is a critical success factor for small and medium (Young and Hall, 1991). In Malaysia contractor success lies in project and financial management capability, marketing and supply chain relationship (Jaafer and Abdul-Aziz, 2005). International Labour Organization -ILO- (2001) list of factors contributing to failure of small and medium contractors includes: inadequate finance and inability to get credit from suppliers; inability to employ competent workers; poor pricing, tendering, and contract documentation skills; poor mentoring; and fronting for established contractors; lack of entrepreneurial skills; lack of proper training; lack of resources for either large or complex construction work; lack of technical, financial, contractual, and managerial skills; and delayed payment for work done.

Previous studies in Kenya have concentrated on the challenges faced by small and medium size enterprises but have not specifically looked at the small contractors, despite the importance of small and medium contractors (Wanjohi and Mugure, 2008, Mage 2010 and Muteti, 2005). Further, no studies have looked at financial management problems of the Kenyan small contractors. Efforts to promote SMME access to finance might have more impact on development and growth. This presents a gap that calls for study in this area. This study seek an

answer to the question: What are the financial challenges faced by small and medium size contractors in roads and works subsector?

1.3 THE RESEARCH OBJECTIVES

Determine financial challenges that are faced by Small and Medium size Contractors.

1.4 VALUE OF THE STUDY

Small contractors will have an opportunity to mirror what they have been going through and then see the suggested solutions to their predicament. They will be able avoid the mistakes they have been making and emphasize on their existing strengths. Bad practices such as taking up more jobs than one can finance will be avoided.

The government will also be able to find appropriate measures to help nurture and develop this industry which is by and large the backbone of the economy. In the same breath, the government while trying to develop this sector can reconsider its tax policies and procedures that suit such business enterprises. The Kenyan economy will benefit from the boom resulting from the success of these institutions. Ensuring the going concern of these firms provides and secures employment to Kenyan citizen.

Financial institutions will get a better understanding of treating the SME's well because of their ultimate significance to the economy. Ultimately after all recommendations have been adhered to The Kenyan economy will benefit from the boom resulting from the success of these institutions.

1.5 RESEARCH LIMITATIONS:

The scope of this study only focused small and medium size contractors in the road environment.

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

The literature outlined below show is divided into two sections. The first being the theories that have been advanced that tackle aspects of Financials challenges to firms. The second part tackles literature review of the financial challenges facing the small firms and also other challenges that are relevant to this study.

2.2 THEORIES ON FINANCIAL CHALLENGES FACING SMALL FIRMS.

2.2.1 Resource based theory of the firm

In general, the theory suggests that organizational internal factors are responsible for generating firm sustainable competitive advantage and superior performance. The RBV theory is based on two assumptions (Barney, 1991: 1) firms are heterogeneous, because they are characterized by different resources; 2) resources are not perfectly mobile and that is why heterogeneity can be long lasting. The basic logic of the framework is relatively simple: the theory starts from the claim that the aim of the firm and desired outcome of managerial effort is sustainable competitive advantage as it allows firm to earn economic rents; further the theory deals with the problem, how the company can achieve and sustain those advantages and it locates the answer to this question with certain key resources the firm has developed

2.2.2 Peeking order theory or framework (POF)

This is another financial theory, which must be considered in relation to the financial management of SMEs. This is a finance theory suggests that management of retained earnings, then with debt, followed by Finance preferred hybrid forms of financing such as convertible bonds, and most recently, with the help of outside equity issued, play with the bankruptcy costs, agency costs, information asymmetries, and a little role in influencing policy on capital structure.

A study by Norton (1991b) found that 75% of small businesses used to order seemed to make capital structure decisions in a framework or hierarchical pecking order. Holmes et al. (1991) admitted that that is in accordance with POF Small Industries> that owns and manages not want to dilute their ownership. Owner-managed companies typically prefer to keep their profits operations because they want control of the business and assets.

2.2.3 Access to capital theory

Report of 1971 Small Business Bolton outlines the issues behind the concept of "financing gap" (these two components-knowledge-gap limit exists is because of the lack of awareness of appropriate sources, advantages and disadvantages of Finance, and gap not offer availability of funds or cost of debt for small firms exceeds the cost of debt service for large companies.) that number of challenges a small business companies are concerned. Small harder by taxes, higher costs for loans from the investigation are generally less aware of funding sources and are less able to meet the needs of the loans. Small businesses have money limited access to capital markets, capitalization, and therefore suffer from chronic under-funding. As a result, but probably the excessive use of expensive funds, which act as a brake on their economic have Development?

2.2.4 Equity Funds Theory

Costand et al (1990) suggests that "the financing of larger companies use a higher level of debt than smaller companies. This means that small companies need more capital than large firms do relatively more." According to the hierarchical framework small businesses have two problems when it comes to al-equity financing [McMahon et. (1993, pp 153)]; First, Small businesses usually have no possibility of release Tier II capital to the public and secondly owner-managers are clearly opposed to any dilution of their shares and control. In this way, unlike the managers of large companies that usually only a limited degree of control and restricted, where appropriate, the interests of the property, and therefore not prepared to recognize a broader range of financing options.

2.2.5 Trade-off Theory

Business organizations define optimum borrowing rate considering benefits and costs of borrowing. That bankruptcy costs overcome the benefits of tax advantage in the mentioned borrowing can make the value of tax advantage a matter of discussion (Myers, 1984; 577). The balance between tax advantages of borrowing and financial distress costs is achieved in maximizing the firm value valid at the time when the organization discovered that it had incurred excessive debt. It has been expressed that resulting benefit and cost balance will spoil along with the increase in borrowing level and thus that there will be a decline in firm value of the business in line with this. Another point which has been emphasized in the theory is that business organizations may have different borrowing structures due to the sector they serve in and for this reason, the said balance will differ from one business to another.

2.2.6 Signaling Theory-

Signaling theory rests on the transfer and interpretation of information at hand about a business enterprise to the capital market, and the impounding of the resulting perceptions into the terms on which finance is made available to the enterprise. In other words, flows of funds between an enterprise and the capital market are dependent on the flow of information between them. (Emery et al, 1991). For example management's decision to make an acquisition or divest; repurchase outstanding shares; as well as decisions by outsiders like for example an institutional investor deciding to withhold a certain amount of equity or debt finance. Until recently, there has been no substantial and reliable empirical evidence that signaling theory accurately represents particular situations in SME financial management, or that it adds insights that are not provided by modern theory (Emery et al. 1991 >. Keasey et al(1992) writes that of the ability of small enterprises to signal their value to potential investors, only the signal of the disclosure of an earnings forecast were found to be positively and significantly related to enterprise value amongst the following: percentage of equity retained by owners, the net proceeds raised by an equity issue, the choice of financial advisor to an issue (presuming that a more reputable

accountant, banker or auditor may cause greater faith to be placed in the prospectus for the float), and the level of under pricing of an issue.

2.3 FINANCIAL CHALLENGES

2.3.1 Challenges related to poor liquidity management

Some of the most common internal problems attributed to liquidity in small construction firms are poor cash flow prediction and multiple contracts undertaken simultaneously. These internal factors coupled with an ill-structured progress measurement system financially weaken small construction firms. Several researchers have highlighted the cash management problem. Navon (1996), Abudayyeh & Rasdorf (1993), Carr (1993), and Cook (1991) all have dealt with the problem of cash flow or expense flow from different perspectives. While some have attempted to predict the cash flow by integrating the cost and schedule, others have generated mathematical models for forecasting the cash flow for a project.

This seems to be the primary reason for business failure and it is considered to be the greatest problem facing small business owners. From a business viewpoint without adequate financing, the business will be unable to maintain and acquire facilities, attract and retain capable staff, produce and market a product, or do any of the other things necessary to run a successful operation (Megginson et al, 2003). Secondly, inadequate management is another commonly cited reason. Though new businesses, with their inherent risk and vulnerability, justify separate study, there is a need also not to ignore established businesses. In view of their greater economic significance in relative terms, the capital budgeting practices of small businesses in North America received considerable early attention from researchers like (Soldofsky, 1964; Luoma, 1967; Scott et al., 1982, Grablowsky and Bums, 1980). These results underscore the importance of the payback period, and informal criteria in the evaluation of capital expenditures by small businesses. It is also noteworthy that Soldofsky (1964) found there was considerable variation in the method of calculation and use of formal criteria among his survey respondents. There is little doubt that financial management systems continue to be of significance to business success. Research has pointed to the relative volatility of the small business when compared with larger

entities, due to volatile cash and profit positions, a reliance on short term debt funding and poorer liquidity (Walker and Petty, 1978). Financial management is critical, especially in relation to working capital and over-trading, due to the lack of medium and long-term finance available to small businesses and the reliance on short term debt funding (McMahon and Holmes, 1991; Dodge et al., 1994). In addition, a major survey by the Insolvency Practitioner Society, (CIMA, 1994) indicated that 20% of UK corporate failures (the vast majority of which are small firms) were due to bad debts or poor credit management.

2.3.2 Challenges related to Financial Management

This must be regarded as one of the most important aspects of business. Small firms have limited resources and cannot afford to make mistakes unlike their larger counterparts. Hall (1995) believes that the financial information available to the owner-manager must be detailed; must be separate from their personal accounts; whether their financial information was derived from a cashbook, bank statement, double entry bookkeeping, monthly or quarterly management accounts, and whether their financial system was computerized. Hall (1995) found amongst small business owners that the expectation was that the use of sophisticated information would be associated with a greater probability of survival. The financial information collected must also be of quality. The management of cash flow and surpluses, in particular, has a major impact on the survival of the firm. The greater the amount of surplus cash ploughed back into the business, rather than taken as remuneration by the owner, the better the chances of survival (Hall, 1995).

Efforts to promote SME access to finance might have more impact on development and growth but access is limited and cost of capital is high. While government has made some efforts to increase accessibility to finances, the targeted programmes have had limited success because awareness and usage of existing promotional programmes is very low. In addition to insufficient access, high interest rates also pose a constraint to micro enterprise growth. Moreover, (Gounden, 2000) reports that there are core difficulties seen in terms of discrimination by financial institutions against micro enterprises with little collateral, difficulties in accessing information and lack of market exposure. The inadequacy of external finance at the critical

growth/transformation stages of micro enterprises deters the enterprises with growth potential from expanding (Nissanke, 2001).

2.3.3 Loan Criteria unfair to small contractors

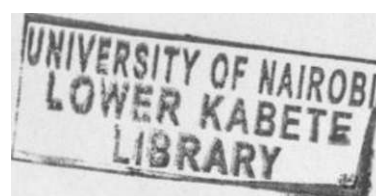
All commercial bankers in the world will definitely give loans to the profitable or potentially profitable businesses, since lending is the core activity of a banks and it is its duty to ensure that all monies lent out are collectible. As such, banks will need to assess the creditworthiness of its borrowers to ensure that loans will be repaid through the information provided to the banks (Mohd Harif and Md. Zali. 2006). In Malaysia, under normal circumstances, every customer who comes to the bank for a business loan need to go through several stages. SME contractors must carefully chronicle lessons learned. Such undertakings must be aimed at acquiring vital lessons that have immediate and future implications. The concept of a project closeout review which is aimed at acquiring vital lessons influencing current and subsequent project success is hardly new.

2.3.4 Government regulations

There was a time when small firms were exempt from a number of government regulations but things have changed to the extent that the same regulations faced by larger corporation are now applicable to small firms. The regulations are very often complex and contradictory which is why small firms find it so difficult to comply with (SACOB, 1999). The South African government has created new channels of bureaucracy which were regarded as major obstacles for small firms to do business in South Africa (Small Business Project, 2003).

2.3.5 Challenges relating to age and size of the firm

The Jovanovich model (Hall, 1995) explicitly proves the reduced probability of failure with increases in the firm's age and size. Those firms entering the product market realize after a short period of time that their product is not finding market acceptance, but they continue in the hope that things will improve or until their capital is exhausted (Hall, 1995). Over time the



management of a small firm will meet increasingly less novel problems and will thus be able to draw on its experience to deal with problems and threats (Hall, 1995).

Hall (1995) state that "human capital" is a broad term which includes all the capabilities of a single person. The age of the owner when they started the business is believed to be positively correlated to the probability of survival (Hall, 1995). Bates (in Hall, 1995) found the optimum age for a sample of American entrepreneurs to be 45-55 years of age

2.4 Review of Empirical Studies and conclusion

As outlined in the literature review above, the challenges faced by the small contractors are many. High cost of capital in form of high interest rates is among them. Poor Cash flow management has also been highlighted as a challenge. The contractors are seen to take up jobs without considering their ability to meet the cash obligations as they fall due. The banks do not also view the small contractors to be credit worth because of their few assets and cannot finance them. Poor book keeping also poses a big challenge to these contractors. Without proper books, they cannot access credit to finance their operations. Lack of financial **management** is also indicated as a challenge. Since these firms cannot hire competent finance staff, they continue to apply bad financial practices and are therefore unable to know if they are performing well or poorly. Other challenges that have come up that are not exactly financial are such as the size and age of the firm. For instance, very small firms may not be able to get credit. While Older firms will draw from their experience to ensure continuity and survival, new ones may succumb to the challenges mentions above.

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter consists of the research methods to be used in carrying out the study. It includes research design, location of study, target population, sampling procedures and sample size, research instruments, validity and reliability of research instruments, data collection procedures and data analysis techniques.

3.2 RESEARCH DESIGN

This study adopted a descriptive survey design. Descriptive Survey research is a research method involving the use of questionnaires and/or statistical surveys to gather data about people and their thoughts and behaviours. A survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. Yin (1984) argues in favour of the use of descriptive surveys in fact-finding because they provide a great deal of accurate information. The intention of survey research is to gather data at a particular point in time and to use it to describe existing conditions. The descriptive nature of research was used in order to gain information on how workforce diversity affects workplace performance.

3.3 TARGET POPULATION

The research was conducted Western province having three major regions: KeNHA, KERRA and KURA. KERRA has four sub regions namely Vihiga, Kakamega, Bungoma and Busia. These three regions have a workforce size of 427 small contractors that fall between class C,D,E,F and G, forming the population of the study.

3.4 SAMPLE SIZE AND SAMPLING PROCEDURE

This section discussed the sample size and sampling procedure.

3.4.1 Sample Size

In a target population of 427 Small Contractors, a sample size of 87 Small Contractors was used.

$$S = \frac{427 (0.21^2)}{0.21^2 + (427-1) 0.02^2} = 87.7888 = 87 \text{ Small Contractors}$$

More detailed derivation of the sample size is shown in the sample procedures below.

3.4.2 Sampling Procedures

To ensure appropriate representativeness of all geographical segments of the study area multi-stage sampling will be adopted. The first stage will involve cluster sampling aimed at allocation of specific numbers of Small Contractors to each of the regions. This will ensure coverage of all the six regions in the study (KURA = one region; KeNHA = one region and KERRA = four regions). The second stage will involve proportionate sampling aimed at allocation of specific number of Small Contractors to each region according to the total number of respondents in each of the six regions. This was followed by the selection of individual respondents using simple random sampling process. Simple random sampling procedure is selected because according to Kathuri and Pals (1993), it allows for generalization of research findings to a large population with a margin error that is statistically determinable and hence correctable.

The sampling procedure was guided by the general rule in most social science research which suggested that the use of the largest sample will facilitate generalization (Kline 1980). The simple random sampling or probability sampling was used so that each and every one in the target population has an equal chance of inclusion to select Small Contractors from a total population of 427. A census study was done in all the six regions. The sample size of respondents was obtained using coefficient of variation. Nassiuma, (2000) asserts that in most

surveys or experiments, a coefficient of variation in the range of 21% < C < 30% and a standard error in the range 2% < e < 5% is usually acceptable. We will therefore use a coefficient variation of 21% and a standard error of 2%. The lower limit for coefficient of variation and standard error was selected so as to ensure low variability in the sample and minimize the degree or error.

$$S = \frac{N (Cv^2)}{Cv^2 + (N-1) e^2}$$

Where S = the sample size

N = the population size (427)

Cv = the Coefficient of Variation

e = standard error

Therefore, the selected sample size was:

$$S = \frac{427 (0.21^2)}{0.21^2 + (427-1) 0.02^2} = 87.7888 = 87 \text{ Small Contractors}$$

3.5 DATA COLLECTION INSTRUMENTS

The tools that was used in conducting this research are questionnaire, interviews and documents reviews. The researcher chose this tool because it is familiar to most people (Berdie, Anderson, and Niebuhr, 1986). Nearly everyone has had some experience completing questionnaires and it generally does not make people apprehensive. When Small Contractors receive a questionnaire in the mail, they are free to complete it on their own time-table. The questionnaire is a convenient tool especially where there are large numbers of Small Contractors to be handled because it facilitates easy and quick derivation of information within a short time (Kerlinger,

2004). The structured (closed-ended) and unstructured (open-ended) was used so as to get the responses from respondents (contractors). The closed-ended questions provide a greater uniformity and more easily processed (China and Oteng'i, 2007). The structured questionnaires shall be accompanied by a list of all possible alternatives from which respondents select the suitable answer that describes their situation by simply ticking (Mugenda and Mugenda, 2003). The questionnaires were administered by the researcher or research assistants to avoid misinterpretation of questions by 'drop and pick' technique. Questionnaires are easy to analyze, and most statistical analysis software can easily process them. The responses are gathered in a standardised way, so questionnaires are more objective. Generally it is relatively quick to collect information using a questionnaire. Prior to taking part in the interviews, the researcher intends to give respondents an opportunity to adequately prepare themselves for the interview. It is anticipated that this will enable the interviewees to give accurate and relevant information.

3.5.1 Pilot Testing

Before the researcher goes out to collect the actual data, pilot testing will done in KURA in the former Rift Valley Province which will not be used in the final analysis. This will help the researcher to identify the problems that are bound to occur, especially when it comes to filling in the questionnaire. This will enable the researcher to make the necessary corrections on the final copies of the questionnaire before they are issued out.

3.5.2 Validity

Validity refers to the degree of accuracy and meaningfulness of inference based on research results. Content validity refers to the degree to which the content of the items reflects the content domain of interest. Is the content about what we say the test is about? (Miller, 2003). "Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests (AERA/APA/NCME, 2000). Best and Khan (2005) suggest that the validity of the instrument is asking the right questions framed from the least ambiguous way and based on study objectives. Validity of the data was done using content-related validity. This was done by presenting the instrument to the supervisor to evaluate the applicability and appropriateness of the content, clarity and adequacy of construction of the instrument and suggestions made and modified appropriately. This measures the degree to which data collected

using a particular instrument represents a specific domain of indicators or content of a particular concept Mugenda and Mugenda (2003). The indicators of variables were clearly defined and scrutinized and instruments developed to match them.

3.5.3 Reliability

Reliability of a research tool is realized if it yields consistent information or data after repeat measurements are taken under the same conditions. The tools were pre-tested (pilot testing) with the contractors and the data obtained will not be included in the final analysis. The sample for pre-testing (piloting) will include 10 contractors from the former Rift Valley Province. The main purpose of pre-testing the questionnaire is to identify any weaknesses and improve them. The pre-test is likely to give an indication of the time required to complete the questionnaire. In this case 15 Small Contractors were retested a second time two weeks later and their consistency between the two sets of the score were computed using Cronbach's alpha coefficient to ascertain if the α obtained is >0.7 (Nunally, 1998).

3.8 DATA ANALYSIS TECHNIQUES

Primary data collected from this study was analyzed using descriptive statistics including cross tabulation and frequency tables. Cross tabulation was used to understand two different survey items and how they relate. Cross tabulation was used to understand two different survey items and how they relate. For instance cross tabulation analysis was used to study relationships between inflation rates, location and site of roads, nature of procurement/contract, design changes and inappropriate contractors on road maintenance attributes like poor maintenance culture, potholes and cracks, lack of standard designs and poor drainage systems . Data was analyzed by feeding it in a statistical package for social science (SPSS and the outputs on frequency tables, cross tabulation and correlation analysis tables generated).

3.9 ETHICAL CONSIDERATIONS

The researcher will ensure that respondents were treated with utmost respect. Any data collected remained confidential. The researcher ensured there was no discrimination. The information

collected was at no time pegged to a particular individual or organisation instead it will treated with anonymity and privacy. Confidentiality was observed throughout the study for respondents who may give personal opinions.

4.0 DATA COLLECTION AND ANALYSIS

4.1 INTRODUCTION

This chapter presents the results obtained from the study analyzed according to the objectives of the study, which was to determine the financial challenges facing small and medium size contractors in western Kenya. The questionnaire return rate was 100% since all 87 questionnaires which given to the respondents were returned.

4.2 GENERAL INFORMATION

4.2.1 Number of years in practice as contractor

The information on the experience of the Small contractors helped to determine if lack of it would expose the contractor to more financial challenges. It helped to establish if Small contractors will continue being a going concern or will curtail operation. If the latter is true, is it as a result of the financial challenges faced by them?

	1 (0 to 5)	2 (6 to 10)	3 (11 to 15)	4 (16 and above)
Number of years in Practice as contractor	20(23%)	46(53%)	15(17%)	6(7%)

Table 2: Number of years in practice as contractor

As illustrated in the table 2 above, it was found that 23% of the contractors were less than 5 years old in practice as contractors. 46% of them were between 6 to 10 years while 17% of the

contractors are between 11 to 15 years old in service. Only 7% of the contractors were over 16 years in practice. Appendix 4 further shows that the mean for the Number of years that a contractor has been in business is 2.0805. Since the standard deviation is 0.8243 it means that the data set represents a high level of agreement.

4.2.2 Amount of Capital.

The study looked at the amount of capital that was injected into the businesses. The importance of this is to establish if this had a bearing on the contractors' financial performance. This is because less Capital implies that there would be less Asset financing and there heavily relying on debt. The details of the finding are as below.

1	1 (Below 1,000,000)	2 (1000,001 to 5,000,000)	3 (5,000,001 to 10,000,000)	4 (10,000,001 and above)
Amount of Capital	22(25%)	51(58%)	11(12%)	3(3%)

Table 3: Amount of Capital.

The survey showed in table 3 above that 25% of the contractors had capital below Kshs 1,000,000.00. In the bracket of capital of Kshs 1,000,001 to Kshs 5,000,000.00, 58% of contractors were realized. 12% of contractors had capital between Kshs 5,000,001.00 and Kshs 10,000,000.00. Only 3% of the contractors were found to have capital over Kshs 10.000,000.00. Appendix 4 of data analysis shows that the mean is 1.9425 which corroborates the fact that many small contractors in western have Capital between five million and one million. The standard deviation is 0.7211 meaning that there is a high level of agreement.

4.2.3 Annual Turnover.

Turnover is the revenue collected by the Firm. Revenue translates into profits after removing the expenses. If turnover is low then it means there would be less profits or losses. Losses can lead to winding up. The study sought to establish if the contractors suffer from low revenue. The study would also establish if the contracts issued by Government and other institutions on construction were sufficient to go around to all contractors. The details of the findings were as below.

	1 (Below 5,000,000)	2 (5,000,001 to 10,000,000)	3 (5,000,001 to 10,000,000)	4 (10,000,001 and above)
What is your Annual Turnover	42(48%)	28(32%)	15(17%)	2(2%)

Table 4: Annual Turnover.

What was evident in the findings as depicted in Table 4 above was that 48% of the contractors had a turnover of less than Kshs 5,000,000.00. 32% of the respondents had turnover ranging from Kshs 5,000,001.00 and Kshs 10,000,000.00. The rest had turnover above Kshs 5,000,001.00, 2 % of which were above Kshs 10,000,000.00. The data analysis in Appendix 4 shows that the mean for annual turnover that circulates in the business is 1.7356. The standard deviation is 0.8277

4.2.4 Current Ongoing Work

The study delved into ongoing works being carried out by the Small contractors. This would determine if the contractor had the capacity to run such works concurrently. The effect would be that there may not be sufficient working capital to support the excess works. The more works are undertaken by the contractor the higher the risk of insolvency. The findings of the study were as follows.

	1	2	3 and above
Do you have any Current ongoing work	29(33%)	43(49%)	15(17%)

Table 5: Current Ongoing Work

From the interviews conducted, and as summarized in table 5 above, it was found that 34% of the respondents had one job that was going on. 47% had had two while 18% had 3 or more.

From the additional information, it came out strongly that the contractors preferred having more jobs without due regard to their financial capabilities. Appendix 4 of the data analysis shows that the mean for current ongoing works is 1.8391 while the standard deviation is 0.0747 indicating a high level of agreement.

4.2.5 Sources of Capital

The study looked at sources of capital so as to determine the most common of them all. The importance of this is that it would pave way for further studies to establish why some of the sources are not favorite. In the study, Banks, Own Savings, Government and Family and friends were fielded as the general sources available in western region. The results of the study were found as follows.

	1 Banks	2 Own savings	3 Government	4 Family, friends and relatives.
What are the sources of your capital?	11(13%)	37(43%)	0(0%)	39(45%)

Table 6: Sources of Capital

The respondents intimated that Banks accounted for 13% of sources of capital for the small contractors. Own savings sources had 43% while family and friends had 45%. No respondent had received a funding from Government. The respondents intimated that banks had a low opinion of them regarding their ability to pay the loan supposedly because of the lack of entrepreneurial skills. It was clearly put by respondents that small Contractors from certain communities had easy time borrowing money. As shown in Appendix 4 of Data analysis, the mean was 2.770 while the standard deviation was 0.124 showing a high level of agreement in the data set.

4.2.6 Asset Financing

The study looked at the small contractors acquired their assets. This was important due the fact that machinery involved in the roads subsector was expensive and require huge cash outlays to purchase them.

	1 Freehold	2 Leasehold
How do you finance your plant and equipment to be used in the works?	13(15%)	74(85%)

Table 7: Asset Financing

The study, as shown in table 7 above found that most of the assets used were on leasehold; 74%. The freeheld assets were few. Most of the assets such as Graders, tippers, rollers, excavators, dozers and compactors were hired from the government. Other small contractors hired there assets from other large contractors in western region. Appendix 4 showed that the mean was 1.8506 showing the leasehold option is most preferred while the standard deviation was 0.0384 showing a high level of agreement.

4.3 FINANCIAL CHALLENGES

In this part of the study, respondents were to be interviewed on specific financial challenges that they face so as to establish their severity. It's divided into 5 sections Namely; Access to Credit,

Delays in Payment, Government Taxes and Regulations, Cash Management and Financial Management and Book Keeping.

4.3.1 Access to credit

The study sought to establish if there was easy access to credit for small contractors in western region. This is important because all firms must finance their businesses with credit in form of loans since Equity is more expensive than Debt. The Findings were as below.

	Very easy (4 Marks)	Easy (3Marks)	Difficult (2Marks)	Very Difficult (1 Marks)
Does your firm have easy access to credit?	0(0%)	2(2%)	65(75%)	20(23%)

Table 8: Access to Credit

As illustrated in table 8 above, none of the respondent admitted to find access to credit to be Very easy. 2% of the respondents said it was easy while 75% of them said it was difficult. 23% of the respondents admitted that access to credit is very difficult. Appendix 4 showed a mean of 3.2069 showing that it is largely difficult to get a loan. The standard deviation is 0.0494 which indicates the there is a high level of agreement. Appendix 11 shows a high correlation between Access to Credit and Collateral with a P-Value of 0.003 which below 0.10 which shows that it is statistically significant. It further shows that there is no Correlation between Access to credit and Bank networks Available. This shows that the number of bank networks available does make better the contractors access to Credit. The P-Value is greater than 0.10 thus not statistically significant.

Respondents intimated that it was easier for contractors from certain communities to access credit than small contractors from Western region. The respondents felt that the banks had a low

opinion of them with regard to their ability to pay due to their supposed lack of entrepreneurial skills. The respondents admitted that banks subjected them to rigorous qualification procedures which ended up into either no loan at all or with amounts so dismal. This they say is after producing the required Collateral.

4.3.2 Affordability of Cost of Capital

The cost of capital in the context of this study was the interest charged for loans. The sought to establish if the respondents felt that the interest rates were fair or punitive and if they can pay them and still make profits. The findings of the study were as follows.

	1 Not Costly	2 Costly	3 Very Costly
Is cost of capital affordable?	0(%)	21(24%)	66(76%)

Table 9: Affordability of Cost of Capital

In table 9 above it showed that none of the respondent admitted to the cost of capital being 'Not Costly'. 24% of them confirmed that the cost of capital was costly while 76% reiterated that the cost of capital was very costly. The Respondents complained of fluctuations in the rates always on the increasing trend. Appendix 4 of data analysis shows that the Mean for cost of capital is 2.7586 which implies that cost of capital is high at 3. The standard Deviation is 0.0461 which is considerably low indicating that there is high level of agreement. Appendix 11 shows that there

is positive correlation between Cost of capital and Access to credit. However since the P-Value is greater than .10 it means that it is not statistically significant.

4.3.3 Sufficiency of Collateral

Collateral is any asset that is set aside to guarantee a loan. In this study, respondents were asked to disclose if they have sufficient collateral to secure a loan, and if the lack of it has hindered them from accessing credit. The findings were as follows.

	1 More than Sufficient	2 Sufficient	3 Less than Sufficient
Do you have sufficient Collateral to take a loan?	3(3%)	15(17%)	69(79%)

Table 10: Sufficiency of Collateral

As shown in table 10 above, only 3% felt that there had more than enough collateral to take a loan. 17% had sufficient collateral while 79% had less than sufficient collateral to take a loan. Appendix 4 shows that the mean for collateral is 2.7586 while the Standard Deviation is 0.5050 which indicates a high level of agreement. Appendix 11 shows a positive correlation between Collateral and credit which has a P-Value of 0.003 which less than 0.10, therefore statistically significant. There is however no correlation between collateral and cost of capital. This means that availability of collateral highly determines whether a contractor will access credit. The other information that the respondents gave was that the little collateral they had had to be seriously

scrutinized and subjected to valuation which reduced it and thus the loan. Other assets were not considered as worthy collateral. These are such as cattle which to them is an important asset.

4.3.3 Bank Networks

Availability of bank networks implies that there enough options for a borrower to take when looking for credit. It also implies that there may be some competition among banks to offer better and cheaper services to the limited number of clients in the market. This study delved into the matter by inquiring from the respondents if, in western region, there are sufficient bank networks. The findings were as follows.

	1 More than Sufficient	2 Sufficient	3 Less than Sufficient
Are there sufficient bank networks to access financial services?	6(7%)	22(25%)	59(68%)

Table 11: Bank Networks

As illustrated in table 11 above, 7% of the respondents admitted that there are more than sufficient Bank networks at the contractors disposal for financial services.25% said that there were sufficient networks while 68% admitted that there were no sufficient bank networks that small contractors could access their banking services. Additional information from the questionnaires showed that some banks have opened up agencies for banking services that are spread to even remote areas but which do not offer loans but instead take deposits and accept withdrawals. Appendix 4 shows that the mean for bank networks is 2.6092, approximately 3 meaning that the contractors feel that the bank networks are less sufficient. The Standard Deviation is 0.6167 which is low enough to signify high level of agreement.

4.4 PAYMENT PROCESS

This part of the study delved into all aspects surrounding payments to small contractors. This is essential because delayed payments have adverse effects on contractors' growth. The findings were as follows.

4.4.1 Delays in payment

	1 2 Weeks	2 1 Month	3 2 Months	4 More than 3 months
After how long does the client pay?	0(0%)	3(3%)	64(74%)	20(23%)

Table 12: Delays in payment

In Table 12 above, it is shown that no respondents are paid in 2 weeks. 3% are paid in one month while 74% are paid in two months. 23% of them are paid after 3 months. The mean for the delay in payment is 3.1954 implying that most contract take an average of 3 months to be paid. The standard deviation 0.4783 which indicates a high level of agreement.

4.4.2 Bribe

The importance of looking at the corruption allegations is that though it is not formal it accounts for significant amount of cash outlay which cannot be assumed. The bribes go as high as 10% of the contract sum price there by affecting the small contractors cash management.

	1 Always	2 Sometimes	3 Never	Total
Are you asked to bribe to hasten the payment process	38(44%)	22(25%)	27(31%)	87(100%)

Table 13: Bribery to hasten payment process

In table 13 above, the study found that 44% of the respondents always give a bribe to hasten the process of payment. 25% admit that at times they do give a bribe while 31% say that they have never given a bribe for anything. From the interviews the respondents also disclosed that the bribes are required at all process levels including procurement level. Appendix 4 shows that the mean for taking a bribe is 1.8736 which indicates that it is agreeable that it is not always that contractors give a bribe. The Standard Deviation is 0.8600 showing a high level of agreement among the variables.

4.5. TAXES

There are various types of taxes common among them being Value Added Tax (VAT) at 16% and income tax of 30%. The study sought to establish if these taxes are soft or hard on the small contractors in western region.

	1 Not hard	2 Hard	3 Very hard
How hard are taxes	0(0%)	35(40%)	52(60%)

Table 14: Hardness of taxes

As shown in table 14 above, none of the respondents feel that tax is 'Not hard'. 40% of the respondents feel that taxes imposed by the government are hard while 60% feel that the taxes are very hard. Appendix 4 shows that the mean for taxes is 2.5977 which averages 3 meaning that the respondents feel that taxes are very hard. The standard Deviation is 0.4932 showing a high level of agreement.

4.6 CASH MANAGEMENT

Cash management in the context of this study means employing of good skills to ensure that the firm does not run out of cash. For example budgeting, delaying payments, speeding up collection of cash and so on.

4.7 SUFFICIENCY OF LIQUIDITY

	1 Always	2 Not Always	3 Never
Do you Always have sufficient liquidity to pay for your dues?	5(6%)	50(57%)	32(37%)

Table 15: Sufficiency of Liquidity

In table 15 above, it shows that 82% of the respondents either have never had sufficient liquidity or it is 'Not always' that they do, the latter of which is 50% . However, only 6% of the respondents admitted to have sufficient Liquidity always. Appendix 4 shows that the mean for sufficient liquidity to be 2.3103 , approximately 2 meaning that it is always not that the respondents have sufficient liquidity. The standard deviation is 0.5769 showing a high level of agreement among the variables.

4.8 FINANCIAL TRAINING

	1 Advanced Training	2 Basic Training	3 No training

Do you have any financial training?	1(1%)	29(33%)	57(66%)

Table 16: Financial Training

As illustrated in the table 16 above, only 1% of the respondents have undergone advanced financial training. 56% of the respondents possess basic financial training while 45% have no training at all. The respondents were not aware that financial training was vital to the growth of their business. Appendix 4 shows the mean for training to be 2.6437 which averages 3 meaning that most respondents have not undergone financial training. The standard deviation is 0.5053 meaning there is a high level of agreement.

4.9: PROPER BOOK KEEPING

	1 Always	2 Sometimes/When Required	3 Never
Do you keep Proper books of accounts	3(3%)	54(62%)	30(34%)

Table 17: Financial Planning

37% of the respondents do not maintain books of accounts. While 57% only prepare them occasionally. Only 6% prepare proper books of accounts always. Appendix 4 shows the mean for proper book keeping to be 2.3103 which averages 2 meaning that most only keep books when required. The standard deviation is 0.5351 meaning there is a high level of agreement.

4.10 Ranking of Challenges

CHALLENGE	MEAN	RANK
Access to Credit	3.2069	1
Delay	3.1945	2
Cost of Capital	2.7586	3
Collateral	2.7586	3
Basic Financial Training	2.6437	5
Bank Networks	2.6092	6
Taxes	2.5977	7
Liquidity	2.3103	8
Book keeping	2.3103	8
Bribery	1.8736	10

Table 18: Ranking of Challenges

The above ranking in Table 18 identifies Access to Credit as the greatest challenge to small contractors in western Kenya followed by cost of capital, Collateral and Training respectively. It deviates from William 1986 study that lists Book keeping and training as the main challenge (Causes of failure). Bribery is ranked last because the respondents were reluctant to state whether they have bribed or not.

5.0 SUMMARIES, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTION FOR FURTHER STUDY

5.1 INTRODUCTION

This chapter presents summary of study findings, conclusions drawn, recommendations based on the conclusions and suggestions for further research.

5.2 SUMMARY OF STUDY FINDINGS

The study found that 76% of the small contractors have experience below 10 years. This shows that companies do not leave long after inception. It gives a warning that there is a financial problem that is causing the early demise. On the other hand, 82% of the respondents were found to have capital of less than Kshs 5,000,000.00. Considering the fact that most contracts in the roads sub sector are above 5 Million, then it implies that such capital is dismal as compared to the business revenue. Like wisely, the study shows that 80% of the respondents have turnover below five million. This implies that most contractors scramble for the few contracts available so as to survive. It implies that it would not be surprising to find that contractors would go through the year without business.

The study also found that most contractors just have one or at most 2 jobs, signifying the fact they have not taken up a workload that they cannot support. It also shows that the jobs are scarce and are fought for through high competition. As per the study, own savings and relatives and friend seem to be the general source of capital with the bank accounting for only 11%. The government is seen to be ruled out as a source of capital since none of the respondents admitted to have been funded by the Government. The study further found out that 85% of the assets are

leased as opposed to owned. This shows that small contractors in western region do not have enough capital to finance their assets. Either that or that the assets need so much to purchase

The study was clear that accessing credit in western region for small contractors is an uphill task. A staggering 85% of the respondents feel that it either difficult or very difficult to access credit. Additional information in the questionnaires portrayed a picture that certain communities other than those from western region are favored by most banks when asking for a loan. The reason for this is given that most westerners do not have good entrepreneurial skills to ensure the going concern of a business. They are instead subjected to rigorous qualification procedures which end up without or with fewer yields. On the other hand, small contractors in western region feel that cost of capital is quite costly. They complain of the frequent fluctuations of the rates thereby making it difficult for them to carry out comprehensive financial planning. 96% of the respondents disclosed that they do not have sufficient collateral to take loans. This is also seen in the study on assets where most asset held are leasehold. That is one of the challenges leading to difficulty in access of credit.

The study also shows that there are no sufficient bank networks in western region to serve the small contractors satisfactorily. The respondents also showed that the payment process is long with 97% of the respondents admitting that it takes more than 2 months for the contractors to be paid. 70% of the small contractors sampled for the interview also confess to have been asked for a bribe to induce prompt payments. Additionally, all sampled contractors feel that taxes are either hard or very hard. None of the respondents felt that taxes are soft.

This study further found that small contractors in western preferred more than one job oblivious to the fact that it can lead to insolvency with limited liquidity. The research also showed that

82% of the respondents have a capital base of less than Kshs 5,000,000.00. This shows clearly that small contractors in western region do not invest sufficiently in their businesses. This could be the reason the reason for a high mortality rate of these firms. A look at the responses to Sufficiency of Liquidity showed that 82% of the respondents do not have sufficient liquidity. This is a risk because it will lead to insolvency of the firms where it would be impossible for the firm to meet if financial obligations when they fall due.

On training of the owners or employees of the firm, the study disclosed that only 1% of the respondents have received advanced financial training. Although it may be argued that business owner may not require advanced financial training, the lack of it is detrimental to the firm going concern prospects. This is because 66% of the small contractors in western region do not have any financial training. On the other hand 34% of them do not keep books of account while 62% are not consistent at it.

5.3 CONCLUSIONS

As depicted in the study, most small contractors in western region are below 10 years. This is an indicator that firms are not continuing in business for long 'Youthful' experience may affect some financial decisions made by the firms. Capital invested in the ventures is also found to be low as compared to the magnitude of the road works ventures. This case of undercapitalization especially at the start is leading cause of business failure (William 1986). Taxes are very high and regulations are stiff. The government does not have support the small contractors with loans.

The small contractors also suffer from low turnover since the contracts are perennial and may not be sufficient for all the contractors in the industry. Small contractors in Western region lack

collateral to secure the loans leading to inaccessibility to funds. They also do not train themselves or their staff in financial matter. The preparation of books of accounts is not regular.

Banks extend costly loans to small contractors in western region. They also do not offer equal loan evaluation criteria to all, instead seem to be biased in favor of some communities. The bank accessibility is not adequate because of limited bank networks.

The payment process was long and corrupt.

5.4 RECOMMENDATIONS

The government should provide credit to small contractors through banks and other financial institutions at an affordable rate. Consequently, it should formulate policies that regulate the bank lending rates. On the other hand, the Government should revise their taxes and regulations and impose easy taxes on small contractors and more flexible regulations so that the small contractors can be encouraged to do business. Since most employers in the contracts in roads subsectors are the Government and SAGAs, it is recommended that they speed up the payment process. The Government should therefore peg its performance on how fast the contractors are paid and discourage corrupt practices.

Small contractors in western region may need to consider diversifying in other sectors to avoid curtailing of business due to lack of revenue. They should also strive to invest more capital in the as this may ensure that the business does not lack funds. Small contractors and their staff must at least acquire basic financial training. They must also prepare books of accounts periodically

Banks should provide unsecured loans to contractors or allow them to use non conventional property to access credit. They should peg their lending rates on lower range global market rates and level of inflation as opposed to high rates that contractors cannot afford. The Banks should evaluate the loan applicants equitably, irrespective of where they come from.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

The following suggestions were made for further research:

- (i) A study should be conducted in other regions to ascertain if same results can be achieved.
- (ii) A study should be carried out on the influence of Government role on Financial challenges experienced by small contractors in Western Kenya.
- (iii) A study should be conducted to establish why small contractors in western region are not lasting in the business. To establish why there is high business failure in the region.

5.10 LIMITATIONS OF THE STUDY

The time allocated to carry out the study was quite short and this presented a challenge especially during data collection. The sample size on the other hand may not have been wholisitically representative of the entire population.

Confidentiality was also a limiting factor in that most respondents were reluctant to give all required information . The other limitation was the fact that there was no specific literature review for the study that have been carried out before complelling the researcher to use a wider range of literature review.

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APPENDIX 1 : QUESTIONNAIRE

A survey on the Financial Challenges faced by Small and Medium Contractors

(A) General Information

1. Details of Firm

Name

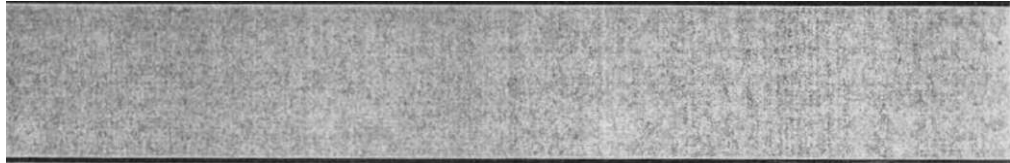
Address

Q1				
	1	2	3	4
	0 to 5	6 to 10	11 to 15	16 and above
Number of years in Practice as contractor				

Q2				
	1	2	3	4
	Below 1,000,000	1000,001 to 5,000,000	5,000,001 to 10,000,000	10,000,001 and above
Amount of Capital				

Q3

Below 1,000,000	1000,001 to 5,000,000	5,000,001 to 10,000,000	10,000,001 and above
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Q4

1	2	3 and above
----------	----------	--------------------



Q5

Banks	Own savings	Government	Family, friends and relatives.
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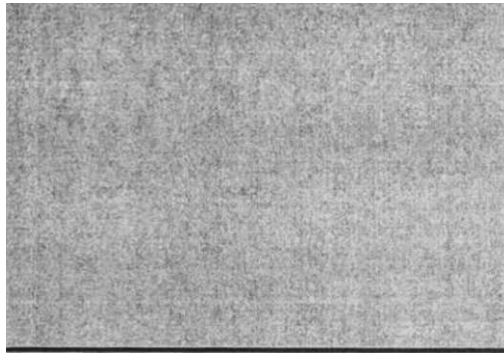
1

Freehold

2

Leasehold

**How do you
finance your
plant and
equipment to be
used in the
works?**



(B) Financial Information

Section 1: Access to credit

Q7

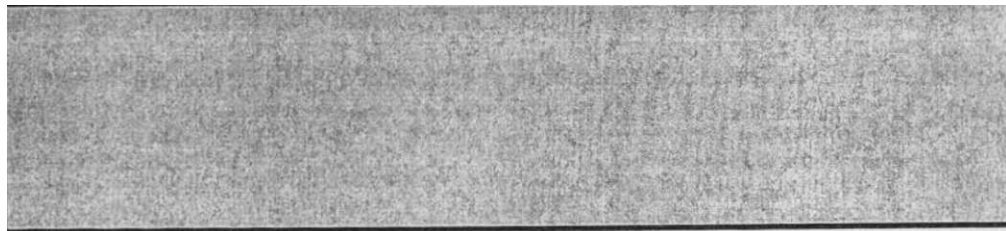
Very easy

Easy


Difficult

Very Difficult

**Does your firm
have easy access
to credit?**



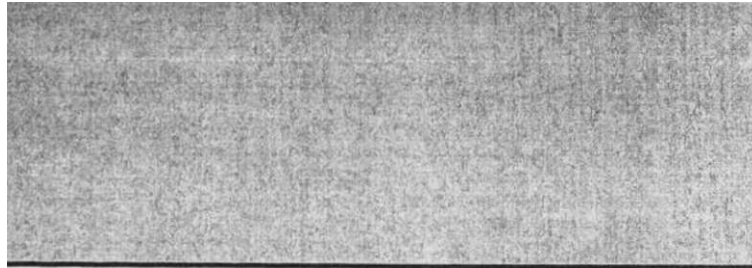
Q8

	1	2	
	Very Affordable	Affordable	Not Affordable
Is cost of capital affordable?			

Q9

1	2	3
More than Sufficient	Sufficient	Less than Sufficient

Do you have sufficient Collateral to take a loan?



Q10

	1	2	3
	More than Sufficient	Sufficient	Less than Sufficient
Are there sufficient bank networks to access financial services?			

Section 2: Delays in payment

Q11

	1	2	3	4
	2 Weeks	1 Month	2 Months	More than 3 months
After how long does the client				

pay?

Q12

	1	2	3
	Always	Sometimes	Never
Have you been asked for a bribe to hasten the payment process			

Q13

	1	2	3
	Not hard	Hard	Very hard

How hard are taxes

Q13

Section 4: Cash Management and financial management

Q14

1	2	3
Always	Not Always	Never

**Do you Always
have sufficient
liquidity to pay
for your dues?**

Section 5: Book keeping

Q15

1	2	3
Advanced Training	Basic Training	No training

**Do you have
any financial
training?**

Q16

Always **Sometimes** **When** **Never**
Required



Please list any other financial challenges

APPENDIX 2

LIST OF CONTRACTORS (POPULATION)

1	AFRICAN ENGINEERING CO. LTD
2	AFRO BUILDING CONTRACTORS LTD
3	AQUA RAODS CO LTD
4	ATLAS PLUMBERS & BUILDERS (K) LIMITED
5	BACKMART ROADS MERCHANTS
6	KENYA LIGHTING INDUSTRIES LTD
7	KIBONGE ELECTRICAL SALES
8	K.IMA & PARTNERS LTD
9	KIMAWIL ELECTRICAL SERVICES
10	AIRCON ELECTRA SERVICES (NAIROBI) LTD
11	ALLIED PLUMBERS LTD
12	ALWEX ELECTRICAL SERVICES (K) LTD
13	BARAKA ELECTRICAL & HARDWARES AGENCIES
14	BERKAI ENGINEERING & AGRICULTURAL SUPPLIES
15	BESTWAY PLUMBERS LTD
16	INDEPTH WATER SERVICES & MANAGEMENT LTD
17	INDO - AFRICAN CO LTD
18	INFINITY EAST AFRICA CO LTD
19	INTERCOOL VENTILATION SYSTEMS LTD
20	M J VEKARIA ELECTRIC LTD
21	MAHATHAS POWER KINGS
22	MAHOLA LOGISTICS E.A. LTD
23	MAMUNYA ELECTRICAL STORE
24	BHOJANI ENTERPRISES
25	BLACKTOP ENGINEERING LTD
26	BOMAC CONSTRUCTION SERVICES LTD
27	BOON CONTRACTORS INTERNATIONAL & EXTERNAL DESIGNS
28	BRIDGESTONE CONSTRUCTION COMPANY
29	BRUSH ENGINEERING CO LTD
30	BUDGET FURNITURE LTD
31	BUILDING & ROAD CONSTRUCTION
32	BUTAPRO GAS & PLUMBING WORKS
33	CANCELLED
34	CITROLAM CONSTRUCTION LTD
35	COASTAL (K) ENTERPRISES LTD
36	CONSTECH ENGINEERING ENTERPRISES LTD
37	DARINA CONTRACTORS LTD

38	DAVIS ELECTRO SYSTEMS
39	DEBONAIRS GENERAL C.LTD
40	DEWETO (KENYA) LTD
41	ELECTROCOM INTERNATIONAL LTD
42	ELIMAX ENTERPRISES
43	EMINANJO CONSTRUCTION COMPANY
44	EQUIPMENT TECHNOLOGIES LTD
45	ERUBI ENGINEERING SERVICES & SUPPLIES
46	ESESE ENGINEERING LTD
47	FOUNDATION ENGINEERING SERVICES LTD
48	FRALIMPA ELECTRICAL SERVICES
49	G ISSAIAS & CO (K) LTD
50	GALAXY POWER INSTALLATION CO LTD
51	GALLATEK EAST AFRICA LIMITED
52	GAMMA DELTA CO LTD
53	GATHENGE ENGINEERS & ELECTRICALS LTD
54	GENERGY ELECTRICAL LIMITED
55	GIGAT INVESTMENT
56	H YOUNG & CO (E A) LTD
57	HAYER BISHAN SINGH
58	HEER ENTERPRISES
59	HEER PLUMBING WORKS LTD
60	HIGH PRESSURE PLUMBING LTD
61	HYDRO SOLUTIONS LTD
62	HYDRO WATER WELL (K) LTD
63	INTOIL LTD
64	J B DRILLING (K) LTD
65	J B DRILLING LTD
66	JAFRA BEC LTD
67	JAISHAM PLUMBERS
68	JIMRO ENTERPRISES LTD
69	JOSEKENG ENTERPRISES & ELECTRICALS
70	JUMBA ENGINEERING SERVICE
71	JUPITER ELECTRICAL ENGINEERS AND GENERAL CONTRACTORS LTD
72	KABUITO CONTRACTORS LTD
73	KASMED ENGINEERING
74	KAYDEE CONSTRUCTION CO LTD
75	KENGELE LTD
76	KENISTAL ELECTRICALS
77	MON-CONS GENERAL CONTRACTORS

78	MOWLEM CONSTRUCTION CO (E A) LTD, THE
79	MURLUN ENGINEERING CO LTD
80	MWATON INVESTMENTS LTD
81	NEER CONSTRUCTION
82	KENJOS INVESTMENTS LTD
83	KENYA LIGHTING INDUSTRIES LTD
84	KIBONGE ELECTRICAL SALES
85	KIMA & PARTNERS LTD
86	KIMAWIL ELECTRICAL SERVICES
87	KINETICS CONTROLS LTD
88	KIRAN ENTERPRISES
89	KISIMA DRILLING (E.A) LTD
90	KISUMU GENERAL MERCHANTS
91	KITAYAMA CONSTRUCTION CO LTD
92	KITER ENGINEERING LTD
93	KLOBTECH INTERNATIONAL LTD
94	KOIPA CONSTRUCTION COMPANY
95	KYSA INTERNATIONAL LTD
96	KYSA INTERNATIONAL LTD
97	LAGUTROP (K) LTD
98	LAGUTROP (K) LTD
99	LANDIS LTD
100	LENACHA'S ELECTRICAL WORKS & SUPPLIERS
101	LEWAKAS LTD
102	LITELINE ENTERPRISES LTD
103	LOGITEC CONTRACTORS LTD
104	M E ENTERPRISES LTD
105	MAPALEC INTAKES
106	MARU PILING & GEOTECHNICAL CONTRACTORS LTD
107	^MASTER POWER LTD
108	MASTER POWER SYSTEMS LTD
109	MEHTA ELECTRICALS LTD
110	MERRIMACK POWER SYSTEMS LTD
111	MINEX MS LTD
112	MOLUX CONSULT LTD
113	MONAH BUILDING CONSTRUCTION
114	NOOR & CHOUHAN ELECTRICAL CONTRACTORS
115	NOOR ELECTRICAL CO
116	NYAMAKO WATERWAYS
117	NYANA HILLS ENGINEERING WORKS LTD

118	OHMETIC ELECTRICAL CONTRACTORS LTD
119	OMAE BUILDING SERVICES LTD
120	ORAIOS LTD
121	OUTSOURCE TECHNIQ LTD
122	PENELLY CONSTRUCTION & LTD
123	PENJA ELECTRICAL SERVICES
124	PEPOLLY ELECTRICAL SALES & SERVICES
125	PERAZIM ENGINEERING CONSTRUCTION & RENOVATIONS LTD
126	PHICTECH ELECTRICALS & FABRICATORS LTD
127	PHILAFE ENGINEERING LTD
128	PHOTOTRONIC LTD
129	PIONEER PLUMBERS LTD
130	PIULVA ENGINEERING & TECHNOLOGY
131	PLUMB ELECTRICAL LTD
132	PLUMBERS (AFRICA) LTD
133	PLUMBERS WITHOUT FRONTIERS
134	POLYPHASE SYSTEMS LTD
135	POWEL-ELSS ELECTRICALS
136	POWER ENGINEERING INTERNATIONAL LTD
137	POWER MEGGER LTD
138	POWERLINK LTD
139	POWERTECHNOLOGY SOLUTIONS LTD
140	PRD RIGS KENYA LTD
141	PRESION ELECTRICAL CONTRACTORS
142	PRIDE ENTERPRISES LTD
143	PRIME HYDRO DRILLERS LTD
144	PROFESSIONAL ELECTRICAL SERVICE
145	PROJECT ELECTRICALS LTD
146	RAICHA'S ELECTRO SERVICE LTD
147	RAKMAN ENGINEERING LTD
148	RAMJI RATNA & CO LTD
149	RAPOGI BUILDING CONTRACTORS
150	REACTIVE TECHNOLOGIES LTD
151	RELCON POWER SYSTEMS LTD
152	RELIANCE COMPANY
153	RELTECH SUPPLIERS LTD
154	RIVELCO - RIFT VALLEY ELECTRICAL CONTRACTORS LTD
155	S S MEHTA & SONS LTD
156	SAGOO & NYOTTA LTD
157	SAGOO ELECTRICALS

158	SAWARN SINGH & SONS LTD
159	SHALOM ELECTRONICS ENGINEERING
160	SILVOL ENTERPRISES LTD
161	SINOE CONSTRUCTION LTD
162	SIRA ELECTRIC (K) LTD
163	SIYANI ENTERPRISES
164	SOHANI ELECTRO SERVICES
165	SPARR DRILLING CO LTD
166	SPEEDWALL BUILDING TECHNOLOGIES LTD
167	SPENCON KENYA LTD
168	STANDARD ELECTRICAL CONTRACTORS LTD
169	STEWA SAFER TECHNICAL SERVICES
170	STRABAG INTERNATIONAL (K) BRANCH
171	SUMITOMO CONSTRUCTION CO LTD
172	SWISS GRADE CONSULT LTD
173	TAVEZ CONNECTION LTD
174	THRUST BORE TECHNICS LTD
175	TONICONLTD
176	TRIDENT PLUMBERS LTD
177	TURN-O-METAL ENGINEERS LTD
178	UASO NGIRO CONTRACTORS
179	ULTIMATE ENGINEERING LTD
180	UNA NDETO CONTRACTORS
181	UNEEK ELECTRIC CO LTD
182	VAJRA DRILL LTD
183	VAXTON INTERNATIONAL CO LTD
184	VELCO ELECTRICAL CONTRACTORS
185	VOLCANIC PLUMBING WORKS LTD
186	WAMBUGU & SONS ELECTRICAL ENTERPRISES (K) LTD
187	WATER BLUE LTD
188	WATERMAN DRILLING AFRICA LTD
189	WATERMAX DRILLING SYSTEMS LTD
190	WAWERU PLUMBING WORKS LTD
191	WEGCO ELECTRICAL CONTRACTORS
192	WELBRAH CONSTRUCTION LTD
193	WESTLANDS ELECTRICAL SERVICES
194	YUSUF ELECTRICAL SERVICES
195	ZAISCO CONSTRUCTION & ENGINEERING LTD
196	ZAKHEM CONSTRUCTION (KENYA) LTD
197	INTELLECT GENERAL CONTRACTORS LTD

198	MIDLAND CONSTRUCTION.
199	ALBYWOODS AGENCIES
200	ALVIT INVESTMENTS LTD
201	AMUGONGO CONSTRUCTION CO LTS
202	ANGOSE ENGINEERING
203	ANGURAI INVESTMENT LTD
204	APEX TOOLS & BULD CONST.
205	ARTECH CONSRUCTION LTD
206	AXPEX TOOLS AND BUILDING
207	BAROSS INVESTMENT
208	BASHASH CONST.CO.
209	BATILU CONTRACTORS LTD
210	BEKAM CONSTRUCTION CO. LTD
211	BELLION HARDWARE AND BUILDING CONSTRUCTION LTD
212	BERRY CONSTRUCTION LTD
213	BIN MASSOD CONTRACTORS
214	BOADA INVESTMENT
215	BOWSTON COMMUNICATION CO. LTD
216	BRADEV ENT. LTD
217	BULOMA GENERAL CONTRACTORS LTD
218	C&P INDUSTRIES LTD
219	CALMEX CONSTRUCTION LTD
220	CHEPTUIYA GENERAL CONTRACTORS
221	CHIROBANI CONTRACTORS LTD
222	COCY HOLDINGS INVESTMENT LTD
223	COMFIELDS INVESTMENT LTD
224	CONTRALINK SOLUTIONS LTD
225	CURTIS CONSTRUCTION LTD
226	CYAN CIVIL ENGINEERING
227	DAVON CONSTRUCTION CO. LTD
228	DEBONAIRS CONTR.
229	EVISA GENERAL SUPPLIES
230	DOMINIQUE CONSTRUCTION CO. LIMITED
231	DYNACOP LOGISTICS
232	DYNAMIC GEN. CONST
233	EMTECH ENTERPRISES LTD
234	ENDALINE CONSTR.LTD
235	ENEGILTD
236	EVISA GENERAL SUPPLIES LIMITED
237	FALCOM ROAD CONTRACTOR

238	FORTRESS CONSULTANTS ENTERPRISES
239	FOXSONE ENTERPRISES LTD
240	FROCH BUILDING AND CIVIL ENGINEERING
241	GOOD HOPE SERVICES LTD
242	HAMAKI GENARAL CONTRACTORS
243	HARMO ENGINEERING
244	IBEL CONSTRUCTION COMPANY LTD
245	IMALISON ENTERPRISES CO. LTD
246	ISAPAM ENTERPRISES LIMITED
247	IVORY EMPORIUM LTD
248	JAYBET ENT. LTD
249	JEBESS CONTRACTORS LTD
250	JEKINGA LTD.
251	JOJROSS CONSTRUCTION
252	JOSMO GENERAL COTRCATORS
253	JUBA CONCRETE& STEEL ENG.LTD
254	JUDOOL ENTERPRISES LTD
255	JULIKA AUTOMOBILE LTD
256	KAMATOLINDO CONSTRUCTION LTD
257	KAPTUMO AUTO AGENCIES LTD
258	KATSRAN LTD
259	KIRA WIRA CONSTRUCTION LTD
260	KONNEXION SYSTEMS LTD
261	KUNDAN SINGH
262	KWAMUSOGA INVESTMENT
263	LAKY VENTURER LTD
264	LANDMARK CONCEPTS
265	LESMA ENGINEERING LTD
266	LIKIFA (K) LTD
267	LINA GENERAL CONTRACTOR
268	LOG &PRODUCTIONS
269	LUCENT SYSTEMS SUPPLIES LTD
270	LUNGU BUILDING CONTR. LTD
271	LWAKHUPA GENERAL CONTRCTORS
272	LYDRO CONSTRUCTION
273	MAASTRICHT CONSTRUTION LIMITED
274	MACHAKA CONTRACTORS CO. LTD
275	MAPIA ENTERPRISE
276	MASERA CONSTRUCTION LTD
277	MATUNGU CONTRACTORS

JZ*J	MAZEMBE GEN. STORES LTD
279	MEEKLING LTD
280	MEGA COMP. LTD
281	MEROS STATIONERS & AGENCIES LIMITED
282	METS1 CONTRACTORS LTD
283	MIDLAND CONSTRUCTION CO. LTD
284	MINYALI LENGTH COAST COMPANY.
285	MIRRSIT SAWMILLS
286	MOSYLINE COMPANY LIMITED
287	MSINGI BORA CON. LTD
288	MUGAA-INI CIVIL CONTRACTORS LTD
289	MULTI CONSTRUCTION LTD
290	MUMIAS ROAD LTD
291	NABONWE ENGINEERING LTD
292	NDASI GENERAL MER. CO.LTD
293	NEVISCO INVESTMENT LTD
294	NGARWE BUILDING AND ENGINEERING
295	NORTH RIFT SUCCESS & TRANSPORTERS LTD
296	NYANGWARE BUILDING AND AND CONSTRUCTION LTD
297	NYATIMU CONSTRUCTION CO LTD
298	ODSO LTD
29<T	ODUMU CONSTRUCTION
300	OKONOS BUILDING CONTRACTORS LTD
301	OMENDA CONSTRUCTION LTD
302	OMONDA CONSTRUCTION CO. LTD
303	PERCOM ENTERPRISES
304	RAGOT LIMITED
305	RAMSOM CONTRATORS LTD
306	REEDS INVESTMENT
307	RIHO ENTERPRISES LTD
308	ROM CONSTRUCTION LTD
309	ROSINA CONSTRUCTION CO. LTD
310	RUKI AUTOMART
311	RURAL DISTRIBUTORS ENTERPRISES LIMITED
312	SAFARIPLIES LTD
313	SAK.IDOM LTD
314	SAMAO BUILDING AND CIVIL CONTRACTORS
315	SAMART CONSTRUCTION LTD
316	SAMKAI BUILD. CONSTR
317	SAMONGA BUILDING CONSTRUCTION

318	SARYDATRADERS LTD
319	SAVORY AGENCIES LTD
320	SEBOKA G. CONSTRUCTION CO. LTD
321	SERONIKE GLOBAL
322	SEVILLE ROADS AND BUILDING CONTRACTORS
323	SHIPWA INVESTMENT LTD
324	SHIRSAMO AGENCES LTD
325	SIDALO INVESTMENT
326	SKIPWA INVESTMENTS
327	SNOWBALL ENGINEERING SOLUTIONS LTD
328	SOW CONSTRUCTION ENG. LTD
329	SPANEX LTD
330	STANGEN CONSTRUCTION LTD
331	STOIC CONSTRUCTION LLTD
332	SYLWA AGENCIES LTD
333	SYNE TRADING LTD
334	TALENT GRAPHICS LTD
335	TATOO CONSTRUCTION COMPANY LIMITED
336	TELECOMS INFRASTRU. LTD
337	TENCONS BUILDERS LTD
338	THAMSIN ENT LTD.
339	THELMAX CONSTRUCTION CO LTD
340	THOMAJEM ENTERPRISES LTD
341	TRANSNILE ENTERPRISES
342	TRUDEA SERVICES LTD
343	TUFF CONTRACTORS
344	TUSCANY CO KENYA LTD
345	UNISPEC LTD
346	UTHOLE CIVIL CONSTRUCTION CO. LTD
347	VINBETH ENTERPRISE LTD
348	WAK CONSTRUCTION LIMITED
349	WEBMILL ENGINEERING CONTRACTORS
350	WILKORI BUILD.& CIV. ENG.
351	WILSAC
352	WILSON POWER AND TECHNOLOGIES LTD
353	WINTECH LTD
354	YEGUTS ENTERPRISES LTD
355	YOGA GENERAL CONSTRUCTION CO. LTD
356	ZEUEDA ZEE ENTERPRISES LTD
357	ACTRUISM MANAGEMENT CONSULTANCY

358 BUDGET FURNITURE LTD
359 BUDGET FURNITURE LTD
360 LUNAR ENGINEERS AND CONSTRUCTIONS
361 GARISSA STATIONERS
362 EAST AFRICAN PROPERTIES LTD
363 GANANA CONSTRUCTION CO. LTD
364 HIRAD CONSTRUCTION CO.
365 WARSAN CONSTRUCTION CO. LTD
366 SINAY CONSTRUCTION CO. LTD
367 GANUNI CONSTRUCTION CO. LTD
368 DIIS CONSTRUCTION CO. LTD
369 DUALE INVESTMENT LTD
370 HAGAR CONSTRUCTION CO. LTD
371 BODHAI INVESTMENT LTD
372 HORYAAL CONSTRUCTION CO.LTD
373 RIVA CONSTRUCTION COMPANY
374 HORSEED ENGINEERING & CONST CO.
375 SHUKRJ CONSTRUCTION CO. LTD
376 YASMOH CONSTRUCTION CO.
377 NORTHERN LIBERTY BRIDERS
378 BLACKROCK CONSTRUCTION CO.
379 HIRAD CONSTRUCTION CO.LTD
380 YASMOH CONSTRUCTION CO. LTD
381 HANAMAL CONSTRUCTION LTD
382 SEP & SONS LTD
383 MODOGASHE CONSTRUCTION CO.
384 RIVA CONSTRUCTION CO. LTD
385 BILKHEIR INVESTMENT LTD
386 NEW AGE CONSTRUCTION CO.
387 HIJAZ CONSTRUCTION CO. LTD
388 PIONEER ENGINEERING CONST CO.
389 HABASWEINI BUILDING CONSTR.
390 TOGWEINE CONST. CO.
391 NOMAD ENGINEERING & CONST CO.
392 ISSACK CONSTRUCTION CO.
393 FATUIN ENTERPRISES LTD
394 BASHASH CONSTRUCTION CO.
395 KAH INVESTMENT CO. LTD
396 LAMAHURAN INVESTMENT CO.
397 CONCORDIA BUILDING & CIVIL & ENG

398	WAMO CONSTRUCTION CO.
399	HAMSHI CONSTRUCTION CO. LTD
400	NAWAL GENERAL CONST & SUPPLIES
401	BARUT CONSTRUCTION CO. LTD
402	SHAMKA CONSTRUCTION CO. LTD
403	MINLE CONSTRUCTION & LAND SCAPPING
404	YASIR CONSTRUCTION CO. LTD
405	MUMAYAZ LTD
406	MORJAN INVESTMENT LTD
407	JIRE CONSTRUCTION LTD
408	ATOSH CONSTRUCTION
409	MAALIMS ROADS CONSTRUCTION
410	GANANA CONSTRUCTION COMPANY
411	COUNTY CONSTRUCTION CO.
412	FIRST ENERGY SERVICES CO. LTD
413	MICROSOFT CONSTRUCTION CO.
414	FAFI INVESTMENT CO. LTD
415	GEFA CONSTRU & SUPPLIES
416	JOGWEINE CONSTRUCTION CO.
417	BUNGOMA ENGINEERING LTD
418	KAKAMEGA CONSTRUCTION COMPANY
419	VIHIGA ENTERPRISES
420	SHINYALU BUILDING AND CONSTRUCTION
421	MUMIAS ROADS COMPANY
422	MAHIAKALO STATIONERS LTD
423	NANDAKAMBILWA ENGINEERING CO.LTD
424	MATORE ENTERPRISES
425	LESLEY GENERAL MERCHANTS
426	PEDAGOGUE INCORPORATED
427	BARROSS INVESTMENTS LTD

APPENDIX 3: LETTER OF INTRODUCTION

July, 2012.

Dear respondent:

I am a postgraduate student undertaking a Master of Business Administration in the School of business at the University of Nairobi. I am carrying out a study on **Financial challenges faced** by small **contractors in western region**. I am using the attached questionnaire to collect information for the study. It is my kind request that you fill the questionnaire, providing the relevant information to facilitate the study. Please use the space provided to fill in the information required as objectively and honestly as possible. The information provided will be treated with strict confidentiality for the purpose of this study only.

Thank you.

Yours faithfully,

Moses Simiyu

APPENDIX 3: LETTER OF INTRODUCTION

July, 2012.

Dear respondent:

I am a postgraduate student undertaking a Master of Business Administration in the School of business at the University of Nairobi. I am carrying out a study on **Financial challenges faced by small contractors in western region**. I am using the attached questionnaire to collect information for the study. It is my kind request that you fill the questionnaire, providing the relevant information to facilitate the study. Please use the space provided to fill in the information required as objectively and honestly as possible. The information provided will be treated with strict confidentiality for the purpose of this study only.

Thank you.

Yours faithfully,

Moses Simiyu

APPENDIX 4: DESCRIPTIVE DATA

Variable	N	Mean	Median	TrMean	StDev	SE Mean
Q1 years	87	2.0805	2.0000	2.0380	0.8243	0.0884
Q2CAPITA	87	1.9425	2.0000	1.8987	0.7211	0.0773
Q3TURN0V	87	1.7356	2.0000	1.6835	0.8277	0.0887
Q4JOBS	87	1.8391	2.0000	1.8228	0.6967	0.0747
Q5CAPIT	87	2.770	2.000	2.797	1.158	0.124
Q6EQUIP	87	1.8506	2.0000	1.8861	0.3586	0.0384
Q7CREDIT	87	3.2069	3.0000	3.2025	0.4610	0.0494
Q8COC	87	2.7586	3.0000	2.7848	0.4304	0.0461
Q9COLL	87	2.7586	3.0000	2.8228	0.5050	0.0541
Q10BANKS	87	2.6092	3.0000	2.6709	0.6167	0.0661
Q11DELAY	87	3.1954	3.0000	3.2025	0.4783	0.0513
Q12BRIBE	87	1.8736	2.0000	1.8608	0.8600	0.0922
Q13 TAXE	87	2.5977	3.0000	2.6076	0.4932	0.0529
Q14 LIQ	87	2.3103	2.0000	2.3418	0.5769	0.0618
Q15THAIN	87	2.6437	3.0000	2.6709	0.5053	0.0542
Q16BOOK	87	2.3103	2.0000	2.3291	0.5351	0.0574

Variable	Minimum	Maximum	Q1	Q3
Q1 years	1.0000	4.0000	2.0000	2.0000
Q2CAPITA	1.0000	4.0000	1.0000	2.0000
Q3TURN0V	1.0000	4.0000	1.0000	2.0000
Q4JOBS	1.0000	3.0000	1.0000	2.0000
Q5CAPIT	1.000	4.000	2.000	4.000
Q6EQUIP	1.0000	2.0000	2.0000	2.0000
Q7CREDIT	2.0000	4.0000	3.0000	3.0000
Q8COC	2.0000	3.0000	3.0000	3.0000
Q9COLL	1.0000	3.0000	3.0000	3.0000
Q10BANKS	1.0000	3.0000	2.0000	3.0000
Q11DELAY	2.0000	4.0000	3.0000	3.0000
Q12BSIBE	1.0000	3.0000	1.0000	3.0000
Q13 TAXE	2.0000	3.0000	2.0000	3.0000
Q14 LIQ	1.0000	3.0000	2.0000	3.0000
Q15TRAIN	1.0000	3.0000	2.0000	3.0000
Q16BOOK	1.0000	3.0000	2.0000	3.0000

APPENDIX 5: DESCRIPTIVE STATISTICS: Q7CREDIT, Q8COC,... BY Q1YEARS

Variable	Q1 years	N	Mean	Median	TrMean	StDev
C'CREDIT	1	20	3.250	3.000	3.278	0.550
	2	46	3.1522	3.0000	3.1190	0.3632
	3	15	3.333	3.000	3.308	0.488
	4	6	3.167	3.000	3.167	0.753
Q8COC	1	20	2.9000	3.0000	2.9444	0.3078
	2	46	2.7174	3.0000	2.7381	0.4552
	3	15	2.667	3.000	2.692	0.488
	4	6	2.833	3.000	2.833	0.408
Q9COLL	1	20	2.650	3.000	2.722	0.671
	2	46	2.6957	3.0000	2.7381	0.5108
	3	15	3.0000	3.0000	3.0000	0.0000
	4	6	3.0000	3.0000	3.0000	0.0000
Q1C3ANKS	1	20	2.500	3.000	2.556	0.688
	2	46	2.6522	3.0000	2.7143	0.6043
	3	15	2.733	3.000	2.769	0.458
	4	6	2.333	2.500	2.333	0.816
Q11DELAY	1	20	3.050	3.000	3.056	0.510
	2	46	3.2174	3.0000	3.1905	0.4170
	3	15	3.267	3.000	3.308	0.594
	4	6	3.333	3.000	3.333	0.516
Q12BRI3E	1	20	2.350	2.500	2.389	0.745
	2	46	1.761	1.000	1.738	0.874
	3	15	1.467	1.000	1.385	0.640
	4	6	2.167	2.500	2.167	0.983
Q13 TAXE	1	20	2.2500	2.0000	2.2222	0.4443
	2	46	2.7174	3.0000	2.7381	0.4552
	3	15	2.667	3.000	2.692	0.488
	4	6	2.667	3.000	2.667	0.516
Q14 LIQ	1	20	2.350	2.000	2.389	0.587
	2	46	2.2391	2.0000	2.2619	0.5651
	3	15	2.467	3.000	2.538	0.640
	4	6	2.333	2.000	2.333	0.516
Q15TRAIN	1	20	2.500	3.000	2.556	0.607
	2	46	2.7174	3.0000	2.7381	0.4552
	3	15	2.533	3.000	2.538	0.516
	4	6	2.833	3.000	2.833	0.408
•316300K	1	20	2.300	2.000	2.333	0.657
	2	46	2.1522	2.0000	2.1429	0.4199
	3	15	2.667	3.000	2.692	0.488
	4	6	2.667	3.000	2.667	0.516

Variable	Q1 years	SE Mean	Minimum	Maximum	Q1	Q3
CREDIT	1	0.123	2.000	4.000	3.000	4.000
	2	0.0535	3.0000	4.0000	3.0000	3.0000
	3	0.126	3.000	4.000	3.000	4.000
	4	0.307	2.000	4.000	2.750	4.000
28COC	1	0.0688	2.0000	3.0000	3.0000	3.0000
	2	0.0671	2.0000	3.0000	2.0000	3.0000
	3	0.126	2.000	3.000	2.000	3.000
	4	0.167	2.000	3.000	2.750	3.000
Q9COLL	1	0.150	1.000	3.000	2.250	3.000
	2	0.0753	1.0000	3.0000	2.0000	3.0000
	3	0.0000	3.0000	3.0000	3.0000	3.0000
	4	0.0000	3.0000	3.0000	3.0000	3.0000
Q10BANKS	1	0.154	1.000	3.000	2.000	3.000
	2	0.0891	1.0000	3.0000	2.0000	3.0000
	3	0.118	2.000	3.000	2.000	3.000
	4	0.333	1.000	3.000	1.750	3.000
QUDELAY	1	0.114	2.000	4.000	3.000	3.000
	2	0.0615	3.0000	4.0000	3.0000	3.0000
	3	0.153	2.000	4.000	3.000	4.000
	4	0.211	3.000	4.000	3.000	4.000
Q12BRIBE	1	0.167	1.000	3.000	2.000	3.000
	2	0.129	1.000	3.000	1.000	3.000
	3	0.165	1.000	3.000	1.000	2.000
	4	0.401	1.000	3.000	1.000	3.000
Q13 TAXE	1	0.0993	2.0000	3.0000	2.0000	2.7500
	2	0.0671	2.0000	3.0000	2.0000	3.0000
	3	0.126	2.000	3.000	2.000	3.000
	4	0.211	2.000	3.000	2.000	3.000
Q14 LIQ	1	0.131	1.000	3.000	2.000	3.000
	2	0.0833	1.0000	3.0000	2.0000	3.0000
	3	0.165	1.000	3.000	2.000	3.000
	4	0.211	2.000	3.000	2.000	3.000
Q1 STRAIN	1	0.136	1.000	3.000	2.000	3.000
	2	0.0671	2.0000	3.0000	2.0000	3.0000
	3	0.133	2.000	3.000	2.000	3.000
	4	0.167	2.000	3.000	2.750	3.000
Q16300K	1	0.147	1.000	3.000	2.000	3.000
	2	0.0619	1.0000	3.0000	2.0000	2.0000
	3	0.126	2.000	3.000	2.000	3.000
	L	4	0.211	2.000	3.000	2.000

APPENDIX 6 : DESCRIPTIVE STATISTICS: Q7CREDIT, Q8COC,... BY Q2CAPITAL

Variable	Q2CAPITA	N	Mean	Median	TrMean	StDev
Q7CREDIT	1	22	3.0909	3.0000	3.0500	0.2942
	2	51	3.2157	3.0000	3.2000	0.4610
	3	11	3.364	3.000	3.333	0.505
	4	3	3.333	4.000	3.333	1.155
Q8COC	1	22	2.682	3.000	2.700	0.477
	2	51	2.8235	3.0000	2.8667	0.3850
	3	11	2.727	3.000	2.778	0.467
	4	3	2.333	2.000	2.333	0.577
Q9C0LL	1	22	2.727	3.000	2.800	0.550
	2	51	2.8039	3.0000	2.8444	0.4010
	3	11	2.727	3.000	2.889	0.647
	4	3	2.333	3.000	2.333	1.155
Q10BANKS	1	22	2.591	3.000	2.650	0.590
	2	51	2.7647	3.0000	2.8000	0.4284
	3	11	2.182	2.000	2.222	0.874
	4	3	1.667	1.000	1.667	1.155
Q11IDE LAY	1	22	3.227	3.000	3.250	0.528
	2	51	3.1961	3.0000	3.1778	0.4481
	3	11	3.182	3.000	3.111	0.405
	4	3	3.000	3.000	3.000	1.000
Q12BRIBE	1	22	1.682	1.000	1.650	0.894
	2	51	1.804	2.000	1.778	0.825
	3	11	2.455	3.000	2.556	0.820
	4	3	2.333	2.000	2.333	0.577
Q13 TAXE	1	22	2.682	3.000	2.700	0.477
	2	51	2.5490	3.0000	2.5556	0.5025
	3	11	2.545	3.000	2.556	0.522
	4	3	3.0000	3.0000	3.0000	0.0003
; 214 LIQ	1	22	2.273	2.000	2.300	0.550
	2	51	2.3725	2.0000	2.3778	0.5277
	3	11	2.182	2.000	2.222	0.751
	4	3	2.000	2.000	2.000	1.000
Q15TRAIN	1	22	2.682	3.000	2.700	0.477
	2	51	2.6863	3.0000	2.7333	0.5095
	3	11	2.455	2.000	2.444	0.522
	4	3	2.333	2.000	2.333	0.577
Q16300K	1	22	2.182	2.000	2.200	0.501
	2	51	2.3137	2.0000	2.2889	0.4686
	3	11	2.545	3.000	2.667	0.688
	4	3	2.333	3.000	2.333	1.155
Variable	Q2CAPITA	SE Mean	Minimum	Maximum	Q1	Q3
Q7CREDIT	1	0.0627	3.0000	4.0000	3.0000	3.0000
	2	0.0646	2.0000	4.0000	3.0000	3.0000
	3	0.152	3.000	4.000	3.000	4.000
	4	0.667	2.000	4.000	2.000	4.000
Q8COC	1	0.102	2.000	3.000	2.000	3.000
	2	0.0539	2.0000	3.0000	3.0000	3.0000

	0.141	2.000	3.000	2.000	3.000
	0.333	2.000	3.000	2.000	3.000
I 39COLL	0.117	1.000	3.000	2.750	3.000
	0.0561	2.0000	3.0000	3.0000	3.0000
	0.195	1.000	3.000	3.000	3.000
	0.667	1.000	3.000	1.000	3.000
21DEANKS	0.126	1.000	3.000	2.000	3.000
	0.0600	2.0000	3.0000	3.0000	3.0000
	0.263	1.000	3.000	1.000	3.000
	0.667	1.000	3.000	1.000	3.000
;311DELAY	0.113	2.000	4.000	3.000	4.000
	0.0627	2.0000	4.0000	3.0000	3.0000
	0.122	3.000	4.000	3.000	3.000
	0.577	2.000	4.000	2.000	4.000
Q12BRIBE	0.191	1.000	3.000	1.000	3.000
	0.116	1.000	3.000	1.000	3.000
	0.247	1.000	3.000	2.000	3.000
	0.333	2.000	3.000	2.000	3.000
Q13 TAXE	0.102	2.000	3.000	2.000	3.000
	0.0704	2.0000	3.0000	2.0000	3.0000
	0.157	2.000	3.000	2.000	3.000
	0.0000	3.0000	3.0000	3.0000	3.0000
314 LIQ	0.117	1.000	3.000	2.000	3.000
	0.0739	1.0000	3.0000	2.0000	3.0000
	0.226	1.000	3.000	2.000	3.000
	0.577	1.000	3.000	1.000	3.000
Q1STRAIN	0.102	2.000	3.000	2.000	3.000
	0.0713	1.0000	3.0000	2.0000	3.0000
	0.157	2.000	3.000	2.000	3.000
	0.333	2.000	3.000	2.000	3.000
316BOOK	0.107	1.000	3.000	2.000	2.250
	0.0656	2.0000	3.0000	2.0000	3.0000
	0.207	1.000	3.000	2.000	3.000
	0.667	1.000	3.000	1.000	3.000

APPENDIX 7: DESCRIPTIVE STATISTICS: Q7CREDIT, Q8COC,... BY Q3TURNOV

Variable	Q3TUBNOV	N	Mean	Median	TrMean	StDev
Q7CREDIT	1	42	3.2857	3.0000	3.2895	0.5078
	2	28	3.1429	3.0000	3.1154	0.3563
	3	15	3.133	3.000	3.154	0.516
	4	2	3.0000	3.0000	3.0000	0.0000
Q8COC	1	42	2.8095	3.0000	2.8421	0.3974
	2	28	2.6786	3.0000	2.6923	0.4756
	3	15	2.733	3.000	2.769	0.458
	4	2	3.0000	3.0000	3.0000	0.0000
Q9COLL	1	42	2.7381	3.0000	2.8158	0.5437
	2	28	2.7857	3.0000	2.8077	0.4179
	3	15	2.733	3.000	2.846	0.594
	4	2	3.0000	3.0000	3.0000	0.0000
Q10BANKS	1	42	2.4762	3.0000	2.5263	0.6339
	2	28	2.679	3.000	2.731	0.612
	3	15	2.800	3.000	2.923	0.561
	4	2	3.0000	3.0000	3.0000	0.0000
Q11DELAY	1	42	3.1429	3.0000	3.1316	0.4174
	2	28	3.2500	3.0000	3.2692	0.5182
	3	15	3.267	3.000	3.308	0.594
	4	2	3.0000	3.0000	3.0000	0.0000
Q12BRXBE	1	42	1.929	2.000	1.921	0.808
	2	28	1.893	2.000	1.885	0.916
	3	15	1.800	1.000	1.769	0.941
	4	2	1.0000	1.0000	1.0000	0.0000
Q13 TAXE	1	42	2.5714	3.0000	2.5789	0.5009
	2	28	2.6429	3.0000	2.6538	0.4880
	3	15	2.667	3.000	2.692	0.488
	4	2	2.0000	2.0000	2.0000	0.0000
214 LIQ	1	42	2.2143	2.0000	2.2368	0.6063
	2	28	2.429	2.000	2.462	0.573
	3	15	2.333	2.000	2.308	0.488
	4	2	2.500	2.500	2.500	0.707
Q15TRAIN	1	42	2.5714	3.0000	2.6053	0.5474
	2	28	2.7143	3.0000	2.7308	0.4600
	3	15	2.733	3.000	2.769	0.458
	4	2	2.500	2.500	2.500	0.707
Q16BOOK	1	42	2.2857	2.0000	2.3158	0.5537
	2	28	2.4286	2.0000	2.4231	0.5040
	3	15	2.200	2.000	2.231	0.561
	4	2	2.0000	2.0000	2.0000	0.0000
Variable	Q3TURN0V	SE Mean	Minimum	Maximum	Q1	Q3
Q7CREDIT	1	0.0784	2.0000	4.0000	3.0000	4.0000
	2	0.0673	3.0000	4.0000	3.0000	3.0000
	3	0.133	2.000	4.000	3.000	3.000
	4	0.0000	3.0000	3.0000	.	.
Q8COC	1	0.0613	2.0000	3.0000	3.0000	3.0000
	2	0.0899	2.0000	3.0000	2.0000	3.0000
	3	0.118	2.000	3.000	2.000	3.000
	4	0.0000	3.0000	3.0000	.	.
Q9COLL	1	0.0839	1.0000	3.0000	3.0000	3.0000
	2	0.0790	2.0000	3.0000	3.0000	3.0000
	3	0.153	1.000	3.000	3.000	3.000
	4	0.0000	3.0000	3.0000	*	.
Q10BANKS	1	0.0978	1.0000	3.0000	2.0000	3.0000
	2	0.116	1.000	3.000	2.250	3.000
	3	0.145	1.000	3.000	3.000	3.000
	4	0.0000	3.0000	3.0000	.	.
Q11DELAY	1	0.0644	2.0000	4.0000	3.0000	3.0000

	2	0.0979				
	3	0.153	2.0000	4.0000	3.0000	4.0000
	4	0.0000	2.000	4.000	3.000	4.000
Q12BRIBE	1	0.0000	3.0000	3.0000	3.000	4.000
	2	0.125	1.000	3.000		
	3	0.173	1.000	3.000	1.000	3.000
	4	0.243	1.000	3.000	1.000	3.000
Q13 TAXE	1	0.0000	1.0000	1.0000	1.000	3.000
	2	0.0773	2.0000	3.0000		
	3	0.0922	2.0000	3.0000	2.0000	3.0000
	4	0.126	2.000	3.000	2.0000	3.0000
Q14 LIQ	1	0.0000	2.0000	2.0000	2.000	3.000
	2	0.0936	1.0000	3.0000		
	3	0.108	1.000	3.000	2.0000	3.0000
	4	0.126	2.000	3.000	2.000	3.000
Q15TRAIN	1	0.500	2.000	3.000		
	2	0.0845	1.0000	3.0000		
	3	0.0869	2.0000	3.0000	2.0000	3.0000
	4	0.118	2.000	3.000	2.0000	3.0000
Q16B00K	1	0.500	2.000	3.000	2.000	3.000
	2	0.0854	1.0000	3.0000		
	3	0.0952	2.0000	3.0000	2.0000	3.0000
	4	0.145	1.000	3.000	2.0000	3.0000
		0.0000	2.0000	2.0000	2.000	3.000

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STAT,ST,CS: Q7CREDJT, Q8COC,... B V

Variable	Q4JOBS	N	Mean	Median	TrMean	StDev
Q7CREDIT	1	29	3.345	3.000	3.370	0.614
	2	43	3.1163	3.0000	3.0769	0.3244
Q8C0C	1	15	3.200	3.000	3.154	0.414
	2	29	2.6552	3.0000	2.6667	0.4837
	3	43	2.8372	3.0000	2.8718	0.3735
Q9COLL	1	15	2.733	3.000	2.769	0.458
	2	29	2.8621	3.0000	2.9259	0.4411
		43	2.6744	3.0000	2.7436	0.5657

	3	15	2.800	3.000	2.846	0.414
iiOBANKS	1	29	2.310	2.000	2.333	0.660
	2	43	2.7442	3.0000	2.8205	0.5387
	3	15	2.800	3.000	2.923	0.561
QiDELAY	1	29	3.241	3.000	3.259	0.577
	2	43	3.1628	3.0000	3.1538	0.4326
	3	15	3.200	3.000	3.154	0.414
212BRIBE	1	29	2.172	2.000	2.185	0.805
	2	43	1.674	1.000	1.641	0.837
	3	15	1.867	2.000	1.846	0.915
313 TAXE	1	29	2.6897	3.0000	2.7037	0.4708
	2	43	2.4651	2.0000	2.4615	0.5047
	3	15	2.800	3.000	2.846	0.414
214 LIQ	1	29	2.345	2.000	2.370	0.614
	2	43	2.3721	2.0000	2.3846	0.5356
	3	15	2.067	2.000	2.077	0.594
STRAIN	1	29	2.3793	2.0000	2.3704	0.4938
	2	43	2.8372	3.0000	2.8974	0.4326
	3	15	2.600	3.000	2.615	0.507
Q16BOOK	1	29	2.586	3.000	2.630	0.568
	2	43	2.2093	2.0000	2.2051	0.4659
	3	15	2.067	2.000	2.077	0.458
Variable	Q4JOBS	SE Mean	Minimum	Maximum	Q1	Q3
27CREDIT	1	0.114	2.000	4.000	3.000	4.000
	2	0.0495	3.0000	4.0000	3.0000	3.0000
	3	0.107	3.000	4.000	3.000	3.000
Q3C0C	1	0.0898	2.0000	3.0000	2.0000	3.0000
	2	0.0570	2.0000	3.0000	3.0000	3.0000
	3	0.118	2.000	3.000	2.000	3.000
Q9C0LL	1	0.0819	1.0000	3.0000	3.0000	3.0000
	2	0.0863	1.0000	3.0000	2.0000	3.0000
	3	0.107	2.000	3.000	3.000	3.000
Q10BANKS	1	0.123	1.000	3.000	2.000	3.000
	2	0.0821	1.0000	3.0000	3.0000	3.0000
	3	0.145	1.000	3.000	3.000	3.000
QiDELAY	1	0.107	2.000	4.000	3.000	4.000
	2	0.0660	2.0000	4.0000	3.0000	3.0000
	3	0.107	3.000	4.000	3.000	3.000
:Q12BRIBE	1	0.149	1.000	3.000	1.500	3.000
	2	0.128	1.000	3.000	1.000	2.000
	3	0.236	1.000	3.000	1.000	3.000
Q13 TAXE	1	0.0874	2.0000	3.0000	2.0000	3.0000
	2	0.0770	2.0000	3.0000	2.0000	3.0000
	3	0.107	2.000	3.000	3.000	3.000
] Q14 LIQ	1	0.114	1.000	3.000	2.000	3.000
	2	0.0817	1.0000	3.0000	2.0000	3.0000
	3	0.153	1.000	3.000	2.000	2.000
Q15TRAIN	1	0.0917	2.0000	3.0000	2.0000	3.0000
	2	0.0660	1.0000	3.0000	3.0000	3.0000
	3	0.131	2.000	3.000	2.000	3.000
Q16BOOK	1	0.105	1.000	3.000	2.000	3.000
	2	0.0710	1.0000	3.0000	2.0000	2.0000
	3	0.118	1.000	3.000	2.000	2.000

APPENDIX 9 :DESCRIPTIVE STATISTICS: Q7CREDIT, Q8COC,... BY Q5CAPIT

Variable	Q5CAPIT	N	Mean	Median	TrMean	StDev
27CREDIT	1	11	3.455	3.000	3.444	0.522
	2	37	3.1622	3.0000	3.1212	0.3737
	4	39	3.1795	3.0000	3.2000	0.5064
28COC	1	11	2.727	3.000	2.778	0.467
	37	37	2.7027	3.0000	2.7273	0.4634
	4	39	2.8205	3.0000	2.8571	0.3888
29COLL	1	11	2.9091	3.0000	3.0000	0.3015
	37	37	2.8108	3.0000	2.8485	0.3971
	4	39	2.6667	3.0000	2.7429	0.6213
Q103ANKS	1	11	2.636	3.000	2.778	0.674
	37	37	2.7027	3.0000	2.7576	0.5199
	4	39	2.513	3.000	2.571	0.683
211 DELAY	1	11	3.182	3.000	3.222	0.603
	37	37	3.2973	3.0000	3.2727	0.4634
	4	39	3.1026	3.0000	3.1143	0.4469
Q12BRIBE	1	11	2.000	2.000	2.000	0.894
	37	37	1.730	1.000	1.697	0.902
	4	39	1.974	2.000	1.971	0.811
Q13 TAXE	1	11	2.545	3.000	2.556	0.522
	37	37	2.5946	3.0000	2.6061	0.4977
	4	39	2.6154	3.0000	2.6286	0.4929
Q14 LIQ	1	11	2.091	2.000	2.111	0.539
	37	37	2.4054	2.0000	2.4242	0.5507
	4	39	2.2821	2.0000	2.3143	0.6047
Q15TRAIN	1	11	2.455	2.000	2.444	0.522
	37	37	2.6757	3.0000	2.7273	0.5299
	4	39	2.6667	3.0000	2.6857	0.4776
Q16BOOK	1	11	2.455	2.000	2.444	0.522
	37	37	2.3514	2.0000	2.3333	0.4840
	4	39	2.2308	2.0000	2.2571	0.5832

Variable	Q5CAPIT	SE Mean	Minimum	Maximum	Q1	Q3
!27CREDIT	1	0.157	3.000	4.000	3.000	4.000
	4	0.0614	3.0000	4.0000	3.0000	3.0000
	4	0.0811	2.0000	4.0000	3.0000	3.0000
•28COC	1	0.141	2.000	3.000	2.000	3.000
	4	0.0762	2.0000	3.0000	2.0000	3.0000
	4	0.0623	2.0000	3.0000	3.0000	3.0000
Q9COLL	1	0.0909	2.0000	3.0000	3.0000	3.0000
	4	0.0653	2.0000	3.0000	3.0000	3.0000
	4	0.0995	1.0000	3.0000	2.0000	3.0000
Q10BANKS	1	0.203	1.000	3.000	2.000	3.000
	4	0.0855	1.0000	3.0000	2.0000	3.0000
	4	0.109	1.000	3.000	2.000	3.000
Q11 DELAY	1	0.182	2.000	4.000	3.000	4.000
	4	0.0762	3.0000	4.0000	3.0000	4.0000
	4	0.0716	2.0000	4.0000	3.0000	3.0000
212BRIBE	1	0.270	1.000	3.000	1.000	3.000
	4	0.148	1.000	3.000	1.000	3.000
	4	0.130	1.000	3.000	1.000	3.000
Q13 TAXE	1	0.157	2.000	3.000	2.000	3.000



APPENDIX 10: FACTOR ANALYSIS:

Principal Component Factor Analysis of the Correlation Matrix

Unrotated Factor Loadings and Communalities

Variable	Factor1	Factor2	Factor3	Factor4	Communality
Q7CREDIT	0.740	-0.097	0.057	0.096	0.570
Q8COC	0.037	0.207	0.787	0.289	0.748
Q9COLL	0.679	0.366	-0.057	-0.272	0.672
Q10BANKS	-0.189	0.716	-0.180	-0.140	0.600
Q11DELAY	0.188	0.250	-0.732	0.377	0.776
Q12BRIBE	0.343	-0.619	-0.113	0.439	0.707
Q13 TAXF.	0.237	-0.441	-0.062	-0.709	0.757
Q14 LIQ	-0.595	-0.370	-0.209	-0.037	0.536
Variance	1.6093	1.4765	1.2553	1.0248	5.3658
% Var	0.201	0.185	0.157	0.128	0.671

Factor Score Coefficients

Variable	Factor1	Factor2	Factor3	Factor4
Q7CREDIT	0.460	-0.065	0.046	0.094
Q8COC	0.023	0.140	0.627	0.282
Q9COLL	0.422	0.248	-0.046	-0.265
Q10BANKS	-0.118	0.485	-0.143	-0.137
Q11DELAY	0.117	0.169	-0.583	0.368
Q12BRIBE	0.213	-0.419	-0.090	0.428
Q13 TAXE	0.147	-0.299	-0.050	-0.692
Q14 LIQ	-0.370	-0.251	-0.166	-0.036

APPENDIX 11: CORRELATIONS

Q7CREDIT, Q8C0C, Q9COLL, Q10BANKS, Q11 DELAY, Q12BRIBE, Q13 TAXES

	Q7CREDIT	Q8C0C	Q9COLL	Q10BANKS	Q11DELAY	Q12BRIBE
Q8C0C	0.020 0.853					
Q9COLL	0.317 0.003	-0.004 0.973				
Q10BANKS	-0.121 0.263	0.035 0.749	0.104 0.336			
Q11DELAY	0.025 0.815	-0.220 0.041	0.101 0.351	0.144 0.184		
Q12BRIBE	0.213 0.047	-0.021 0.850	-0.044 0.684	-0.292 0.006	0.089 0.412	
Q13 TAXES	0.063 0.559	-0.134 0.216	0.072 0.505	-0.141 0.194	-0.107 0.326	0.125 0.247

Cell Contents: Pearson correlation
P-Value

APPENDIX 12 : TALLY FOR DISCRETE VARIABLES:

Q1 years	Count	CumCnt	Percent	CumPct					
1	20	20	22.99	22.99					
2	46	66	52.87	75.86					
3	15	81	17.24	93.10					
4	6	87	6.90	100.00					
N=	87								
Q2CAPITAL	Count	CumCnt	Percent	CumPct					
1	22	22	25.29	25.29					
2	51	73	58.62	83.91					
3	11	84	12.64	96.55					
4	3	87	3.45	100.00					
N=	87								
Q3TURN0V	Count	CumCnt	Percent	CumPct	Q4JOBS	Count	CumCnt-	Percent	CumPct
1	42	42	48.28	48.28	1	29	29	33.33	33.33
2	28	70	32.18	80.46	2	43	72	49.43	82.76
3	15	85	17.24	97.70	3	15	87	17.24	100.00
4	2	87	2.30	100.00	N=	87			
N=	87								
Q5CAPIT	Count	CumCnt	Percent	CumPct	Q6EQUIP	Count	CumCnt	Percent	CumPct
1	11	11	12.64	12.64	1	13	13	14.94	14.94
2	37	48	42.53	55.17	2	74	87	85.06	100.00
4	39	87	44.83	100.00	N=	87			
N=	87								
Q6EQUIP	Count	CumCnt	Percent	CumPct	Q7CREDIT	Count	CumCnt	Percent	CumPct
1	13	13	14.94	14.94	2	2	2	2.30	2.30
2	74	87	85.06	100.00	3	65	67	74.71	77.01
N=	87				4	20	87	22.99	100.00
					N=	87			
Q8COC	Count	CumCnt	Percent	CumPct	Q9COLL	Count	CumCnt	Percent	CumPct
2	21	21	24.14	24.14	1	3	3	3.45	3.45
3	66	87	75.86	100.00	2	15	18	17.24	20.69
N=	87				3	69	87	79.31	100.00
					N=	87			
Q10BANKS	Count	CumCnt	Percent	CumPct	QIIDELAY	Count	CumCnt	Percent	CumPct
1	6	6	6.90	6.90	2	3	3	3.45	3.45
2	22	28	25.29	32.18	3	64	67	73.56	77.01
3	59	87	67.82	100.00	4	20	87	22.99	100.00
N=	87				N=	87			

Q12BRIBE	Count	CumCnt	Percent	
1	38	38	43.68	43.68
2	22	60	25.29	68.97
3	27	87	31.03	
N=	87			

Q14 LIQ	Count	CumCnt	Percent*	
1	5	5	5.75	5.75
2	50	55	57.47	63.22
3	32	87	36.73	
N=	87			

Q1STRAIN	Count	CumCnt	Percent	CumPct
1	1	1	1.15	1.15
2	29	30	33.33	34.48
3	57	87	65.52	100.00
N=	87			

Q16B00K	Count	CumCnt	Percent	
1	3	3	3.45	3.45
2	54	57	62.07	65.52
3	30	87	34.48	
N=	87			

Q12BRIBE	Count	CumCnt	Percent	CumPct
1	38	38	43.68	43.68
2	22	60	25.29	68.97
3	27	87	31.03	100.00
N=	87			

LIQ	Count	CumCnt	Percent	CumPct	Q15TRAIN	Count	CumCnt	Percent	CumPct
1	5	5	5.75	5.75	1	1	1	1.15	1.15
2	50	55	57.47	63.22	2	29	30	33.33	34.48
3	32	87	36.78	100.00	3	57	87	65.52	100.00
N=	87				N=	87			

Q16BOOK	Count	CumCnt	Percent	CumPct
1	3	3	3.45	3.45
2	54	57	62.07	65.52
3	30	87	34.48	100.00
N=	87			