SECURE PROPERTY RIGHTS AND ACCESS TO SMALL ENTERPRISES' (SEs) CREDIT: A COMPARATIVE STUDY OF GHANA AND ENGLAND

DANIEL DOMEHER

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FIGURE 2 P43

FIGURE 3 P52

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DECLARATION

This is to certify that no material contained in this thesis has been used in any other submission for an academic award. The author is solely responsible for the work submitted in this thesis and the works of others have been appropriately acknowledged.

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Daniel Domeher

ABSTRACT

Small enterprises are a major source of livelihood for most people in the developing world. Their ability to grow is however, undermined by credit constraints. This has often been attributed to the lack of registered property ownership which is argued to make property insecure and unacceptable to lenders. Though several studies have been conducted on the relationship between property registration and credit access, the focus is usually on the demand side mainly involving households and the agricultural sector. Furthermore, no studies have compared the developed and developing countries. Finally, the exact nature of the credit constraint amongst businesses in countries such as Ghana for instance is not known. This research therefore, set out to conduct a demand-side study into the nature of the credit constraint amongst small businesses in Ghana and a supply-side investigation of the influence of registration on small businesses access to credit.

The multi methodology was deemed most suitable approach for the investigation of the objectives of the study. The quantitative approach was first used to investigate the objectives. Part of the initial findings was validated through the quantitative approach whilst the other part was validated through the qualitative approach. The results show amongst other things that the existing credit constraint is almost entirely a supply side problem. The supply side study showed that in Ghana, unregistered property is not eligible for use as collateral but this is applicable only to the universal banks (UBs) and not the microfinance institutions (MFIs). That said, the possession of registered property title was not found to influence the loan terms that businesses are offered neither was there evidence that it guarantees access to credit. Even though in England the eligibility of property was not dependent on whether it is registered or not, lenders also did agree that the possession of registered property does not guarantee credit access neither does it influence the credit terms businesses are offered. It was concluded that since majority of small businesses in Ghana seek credit from MFIs, the lack of registered property titles does not constitute a major barrier to credit access. The main barriers to credit access identified are the poor repayment ability and high risk of default amongst others.

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Credit plays a major role in the economic development of the world's economies. Such a role is even more important in the developing countries where poverty exist in pandemic proportions. Credit makes investment capital available to the poor and with the consequent improvement in their income levels such poor households can accumulate their own capital to engage in employment creating economic activities (Hossain, 1988). Improved access to credit is pivotal in channelling resources to more productive use and is an important mechanism for enhancing household incomes and livelihoods (Atieno, 2001). Increasing credit access helps economic units to take greater advantage of growth opportunities. Doubling the credit flow to the private sector could also cause a 2% increase in the GDP growth rate (Caprio and Honohan, 2001) and as aptly argued by Melzer (2007) any disruption to the level of credit supply is capable of affecting the level of economic activities significantly.

Two schools of taught appear to exist with regards to the role of credit in economic development. At one end of the spectrum, the variation in economic growth rates between countries is attributed to the differences in the role of finance in capital accumulation. At the other end of the spectrum is the argument that there are other more important factors responsible for the variation in the economic growth rates observed between countries and that finance only responds passively to these factors (King, and Levine, 1993). Credit speeds up the growth by eliminating the impediments to small businesses, allowing firms to expand operations and setting an equal platform for all economic agents to operate (Klapper et al., 2004). Some empirical studies have also shown that a significant number of Small and Medium Enterprises (SMEs) are failing as a result of reasons other than the lack of funding (Abor and Quartey, 2010). With the latter argument, the role of credit can only become material in an economy where the enabling environment for investment already exists. This means that without the right property rights enforcing systems, adequate socioeconomic and legal infrastructure and macroeconomic policy framework, credit alone may fail to induce the productive investments required to promote growth and poverty reduction (Domeher and Abdulai, 2012a). Since credit alone may not be sufficient to stimulate growth, the focus probably needs to be broadened to include all those factors that influence the investment decision of small businesses. Nonetheless, the role of credit in SME development continues to take centre stage in the literature.

The SMEs sector has often been described as the engine of growth in Africa. In the developing countries, the sector has been a major source of livelihood to most of the poor households, about 70% of whom are said to reside in the rural areas (Atieno, 2001). This makes the sector key to rural development efforts. These small businesses usually are more labour intensive and highly linked to the local industries; they contribute to skill development in entrepreneurship and the spread of technology and as a result are very important in ensuring broad based economic growth on equitable basis (Bahar, 2001). Their ability to stabilise incomes and reduce the rate of rural urban migration deserves mentioning; apart from being suppliers, SMEs play an equally important role as consumers of industrial output to further stimulate growth of other sectors (Abor and Quartey, 2010). In addition to their role as prolific creators of jobs, they are seen as the beginning of larger businesses as well as the fuel for the overall economic engine (Abor and Biepke, 2006). SMEs account for over 60% of GDP and over 70% of total employment in low-income countries, while they contribute over 95% of total employment and about 70% of GDP in middle-income countries (Ayyagari et al., 2003). In Ghana, 85% of manufacturing related employment comes from the SMEs; they contribute 70% to GDP, constitute 92% of all businesses and make up 80% of the private sector (Abor and Quartey, 2010). About 90% of businesses registered at the registrar generals department are SMEs and 90% of the private sector consists of small businesses (Mensah, 2004).

Having said that, there is no denying the fact that, small enterprises (SEs) are continually besieged by several challenges which constrain their overall development. As a result, the sector could only be described as one performing below its potential. The important constraint factors include the following: (a) the unfriendly nature of the business environment - unnecessary bureaucracy, complexity and high cost of business licensing, lack of effective and fair enforcement of business laws and socio-political uncertainty; (b) the Complex tariff and non-tariff barriers impeding access to important export markets; and (c) the lack of management and marketing skill as well as the capacity to compete (Gockel and Akoena, 2002; Salisu, 2006). The World Bank (2006) notes that, 60% of the most difficult countries for starting a business are in Africa. For instance, regarding the cost and complexity of business registration or licensing in Ghana, business owners go through about 16 different procedures lasting a total of four months and one week. Such frustrations and the associated cost do not auger well for efforts to integrate SEs into the formal system. The challenges encountered by SEs are by no means limited to the ones stated above. Indeed, the most prominent of the problems not yet mentioned is the difficulty SEs have in accessing credit.

The problem of access to credit is reflected by the following: (a) about 66% of all microenterprise loan applications are most likely to be turned down (Aryeetey, 1998); (b) about 90% of SMEs consider access to credit as the main barrier to new investments; (c) most African businesses fail in their first year due to lack of financial support (Abor and Biekpe, 2006); (d) the limited access to credit required to finance working capital and long term investment is the major constraint to promoting SME-sector led economic growth in developing countries (Kakuru, 2008); and (e) the success rate for firms applying for bank loans is almost 70% for large firms as against 45% for small-scale enterprises and 34% for microenterprises; in Ghana, it is estimated that 79% and 83% of micro and small scale enterprises respectively face credit constraints compared to 62% and 68% in Malawi and also, 90% and 72% of SEs are credit constrained in Senegal and Mali respectively (Aryeetey, 1998). Six out of the 10 countries where credit is most difficult to get are in Africa (The World Bank 2006). This is evidence of the existence of regional variation in the intensity of the credit constraint problem. Given the above statistics, it must be pointed out that the real problem is the extent of the credit constraint and not just the existence of the constraint itself. Even though there may be some more fundamental reasons for a business failing to start or progress, the lack of funds is often the most immediate reason (Abor and Quartey, 2010). This is the case because, if SEs had adequate funding they would be able to cater for most of the other fundamental problems that could potentially cause their collapse. As a result of the credit constraint, the growth rate of small businesses is reduced by 10% and that of large businesses by 6% (Beck et al., 2006c). In line with the above, improved access to credit for SEs is pivotal in the fight against poverty. As aptly observed by Claessens (2006), credit provides the ladder on which the poor can climb out of poverty.

Attempts to support SE development in Ghana have often led to various policy interventions which amongst other things aim at: reducing collateral requirements; providing safeguards for the credit delivery system; and promoting access to funds through various direct funding schemes (Mensah, 2004). State intervention programs such as direct lending schemes are often criticised as vehicles for channelling funds to political party or government loyalists. Although in theory the direct lending schemes are meant to provide capital to the small scale businesses, it only improves access to credit for the large scale businesses and influential individuals to the detriment of the small scale businesses (Sonne, 2010). The sustainability of such state programs has always been threatened by poor repayment by beneficiaries (Mensah, 2004). The repayment incentive for such loans is reduced by the borrowers' perception that no serious attempts will be made to collect loans and this is worsened by state leniency towards defaulting borrowers (Yaron, 1992). There is therefore substantial amount of moral hazard associated with such government lending schemes. It appears the aim of liberalising

the financial sector across the developing world was to deal at least partly with the effects of repressive policies (which characterised various direct lending schemes) which stifled the development of vibrant and efficient private sector financial institutions. The involvement of the private sector commercial banks does not appear to have solved the problem of credit access for many small businesses. As observed in Ghana by Abor and Biepke (2006), access to credit by small businesses remains a big challenge despite the introduction of several intervention schemes. So what is the cause of the credit constraint amongst SEs?

The causes of credit constraint among small businesses in the developing world are wide ranging. Whilst bankers attribute the problem to the lack of viable or profitable projects, business owners attribute it to the lack of collateral (Aryeetey, 1998). In Africa, Aryeetey et al. (1997) and Atieno (2001) put the blame on the high fragmentation of the credit markets into informal and formal segments - where each segment of the market focuses on meeting the credit requirements of specific groups of potential borrowers. The consequence is that there are some potential borrowers from one segment of the market (informal sector) who need specific kinds of credit not provided by the sector and at the same time are considered unqualified for formal sector credit. Information asymmetries, lack of collateral and high transaction cost have also been identified as the factors responsible for the credit constraint (Beck, 2007; Beck et al., 2007; Bester, 1985; Hoff and Stiglitz, 1990; Pearce et al., 2004; Stiglitz and Weiss, 1981). The weak legal framework for contract enforcement in the developing countries make banks shy away from taking the risk of lending to small businesses (Claessens, 2006; Sacerdoti, 2005; Yaron, 1992). The legal framework does not only limit the kind of assets that can be used as collateral but may also make foreclosure very difficult. It is argued that though banks can function without a good legal system and property ownership system, their operations are largely constrained by it (Honohan and Beck, 2007).

An estimated 51% of all firms refused credit in Africa is as a result of insufficient collateral; in East Asia, Eastern Europe and Central Asia, Latin America and the Caribbean as well as South Asia, the estimates stand at 70%, 72%, 39% and 72% respectively (Fleisig, 2006). The author adds that 19% of people who do not apply for credit in Africa do so because of the high collateral requirements. It thus appears that collateral forms an integral part of the requirements for credit across the developing world. There is the easy tendency to attribute the collateral problem at least in part to the high poverty levels which make it impossible for most people to acquire valuable assets that can be used as security for credit. However, the lack of property per se is not seen as the main cause of the collateral problem by some authors. As noted by de Soto (2000) the collateral problem is not one of lack of property per se because even the poor in the developing countries possess some form of landed property

but rather, it is the lack of registered and secure property titles which renders the otherwise valuable property unacceptable for collateral purposes. This is echoed by Deininger (2003) who estimates that over 50% of the total housing stock in Sub-Saharan Africa has no formal registered titles compared to 45% in Asia and 25% in Latin America. Indeed, Besley (1994) argues that the collateral problem is due to the absence of secure property rights on land which remains the most valuable asset of most households and small businesses in the developing world. Whilst Llanto (2007) argues that secure property rights are a basic requirement for a collateral based banking system, Deininger (2003) observes that the possession of registered property titles is a precondition for access to formal credit. In fact, landed property constitute the main source of livelihood of most people in the developing world and as Bell (2006) notes, it accounts for 50% to 75% of the national wealth in many developing countries. A large percentage of the average household's asset portfolio especially in the developing countries is said to be made up of land (Davies and Shorrocks, 2005). In the advanced economies, about 33% to 50% of the average household assets are said to be made up of land (MacGee, 2006).

De Soto (2000) thus argues that the lack of registered property titles in the developing world is the cause of the credit constraint problem. According to him, though many of the poor people possess valuable landed property that could enhance their access to credit, such properties are made defective by the absence of formally registered property titles over them. De Soto argues that these properties are therefore not a secure form of collateral for lenders to accept. To buttress this point he argues that property ownership in developing countries cannot be traced or validated and that no legal protection or enforcement of property rights exists and as a result, such properties cannot be easily converted into money (either through sale or mortgage). Describing property in the developing world as dead capital, de Soto observes that landed property performs simple functions such as farming and shelter in the developing world where as in the developed world this role is extended to the creation of capital for the enhancement of productivity through its use as collateral. For instance, in the United States, mortgage is said to be the most important source of funding for start-up businesses (de Soto, 2000). The implications of the above arguments are threefold: (a) that collateral is a necessary requirement that must be met in order to obtain credit; (b) that the possession of a registered property title is necessary to make landed property an acceptable collateral asset; and (c) since landed property is not the only form of collateral that could be used to secure credit, the arguments above also presume that lenders prefer landed property to other forms of collateral.

Given the significant contribution of landed property to the overall wealth status of people, promoting secure property rights in the developing world could have a wide-spread positive

effect on the well-being of many by solving the collateral problem and subsequently enhancing access to credit for most businesses and households. It is probably in this light that insecure property rights are believed to be a major hindrance to economic development in the third world (World Bank, 1975).

De Soto posits that the western world is highly capitalised and developed because of the existence of comprehensive land registration; he attributes the existence of high levels of poverty and underdevelopment in the developing countries to the fact that a very small proportion of landed property ownership is registered. In reference to the failed attempt to raise the level of development in the third world, de Soto notes that the "...third world...nations have balanced their budgets, cut subsidies, welcomed foreign investment and dropped tariff barriers. Their efforts have been repaid with bitter disappointment". In de Soto's own words, "...in the West, every parcel of land, every building...is represented in a property document that connects all these assets to the rest of the economy. Thanks to this representational process...they can be used as collateral for credit. Third world nations do not have this representational process. As a result, most of them are undercapitalised" and hence underdeveloped. Commenting on the history of development in the advanced world the author notes that "the pioneers who opened the American west were undercapitalised because they seldom possessed title to the lands they settled". Furthermore, comparing the developed and developing nations in terms of the developmental impacts of property registration, de Soto notes that "assets in the developing ...nations primarily serve immediate physical purposes. In the west however, the same assets also lead a parallel life as capital outside the physical world. They can be used to put into motion more production by securing the interest of other parties as collateral for a mortgage, or by assuring the supply of other forms of credit".

The argument of de Soto and his followers thus presume that the possession of collateral or registered property titles is the panacea to the problem of credit constraint in the developing world as it guarantee access to credit and enhance growth and poverty reduction. According to de Soto, it takes the implementation of landed property registration to (a) make property rights secure and (b) fix their capital potential because such a formal property rights system: lays down the code of best practice regarding the use and transfer of property; makes room for recording and storing the economic features of assets into a system which is then embodied in a title; this, allows for a validation of the existence of assets as well as the their associated transactions required to discover the hidden capital in them (de Soto, 2000). Indeed, it is believed that property registration does not only influence lenders to make credit available to borrowers but also influences the terms of the credit offered. For instance, De Laiglesia (2004) argues that property registration through its ability to raise land values and

increase its liquidity influences credit terms by increasing the amount of credit that is made available to borrowers as well as reducing the interest rate charged and other loan terms. Whilst Field and Torrero (2004) for instance, found that loan applicants with registered property faced lower interest rates than untitled applicants, Place and Migot-Adholla (1998) found no evidence that land titles significantly alter the terms of formal sector loans.

The argument linking property registration to credit access is premised on its ability to amongst other things, make property ownership secure and reduce the associated transaction cost (Adams et al., 1999; Deininger and Chamorrow, 2002; Kakuru, 2008). The World Bank in its 1975 Land Reform Policy Paper thus recommended among other things, property registration as a critical precondition for investment and modern economic development particularly in Africa (Bromley, 2008). It is therefore not surprising that many developing countries backed by the international donor community, particularly, the World Bank, have been religiously pursuing land registration policies and programmes for many years. In 2001 alone, the World Bank funded land policy and administration projects in the third world up to the tune of US$195 million, 92% of which was for land registration and administration projects (World Bank, 2007). Available data on the expenditure on land registration as at 2004 range from US$ 20.51m in Ghana, US$ 27m in Malawi, US$ 106m in Bolivia, US$ 140m in the Dominican republic to US$ 195m in Ukraine (Griffith-Charles, 2004). The above arguments have led to a number of studies into the relationship between landed property registration and secure land rights on one hand and access to credit on the other hand. Whilst registration is seen by some authors as the panacea to the problem of landed property ownership insecurity (Feder and Nishio, 1998; MacGee, 2006; Sims, 2002; World Development Report, 2006; World Bank, 2007) there is another school of thought which argues that registration per se cannot guarantee property ownership security (Abdulai and Domeher, 2012; Deininger, 2003; Durand-Lasserve and Payne, 2006; Fitzpatrick, 2005). Despite many years of implementing land registration programmes in the third world countries, they remain poor and underdeveloped. Indeed, poverty levels have been escalating. For example, during the past two decades, the number of poor people in Africa has doubled representing more than 40% of the region's population (World Bank, 2007) and access to credit appears to remain a distant dream to most businesses.

Furthermore, irrespective of the strong argument often put up in support of the credit effects of landed property registration, Deininger and Goyal (2009) report that related empirical studies are few, outdated or non-existent in some instances. The available empirical studies carried out across countries often emerge with mixed findings or conclusions. While some studies have established a significant positive relation between land registration and credit access (Boucher et al., 2005; Feder et al., 1988), several other studies across the developing

world found that either no relation at all exist between the two or the established impact on credit access was found to be insignificant (Broegaard et al., 2002; Brown et al., 2006; Carter and Olinto, 2003; Galeana, 2004; Gilbert, 2000; Mighot-Adholla et al., 1991; Pender and Kerr, 1999; Petracco and Pender, 2009; Place and Migot-Adholla, 1998). Byamugisha (1999 aptly observes that studies on property registration and credit access often tend to focus on one sector – agriculture and though other sectors are affected they are often not accounted for. The other problem with the existing empirical research is that, they all often tend to be demand side studies (involving borrowers) to the unfortunate neglect of the supply side (lenders). The existing demand side studies are often focused on whether or not the possession of registered titles encourages people to participate in the credit market by applying for funds and whether one is more likely to obtain credit with/without registered title. Such studies also tend to concentrate on studying households and not businesses. There is a problem with focusing on only the demand side because access to credit is affected by both demand and supply side factors. Whilst the demand side includes factors such as the desire or need to borrow, the supply side involve the decision of whether to lend or not and how much to lend (Chen and Chivakul, 2008). Atieno (2001) also argues that credit constraint is mainly a function of the supply side and not the demand side.

Therefore, there is the need to examine the supply side in order to obtain a complete picture of the landed property rights and credit access nexus. Though people may be encouraged to apply for credit on receiving a registered titles, whether or not they actually get the required funds will depend on the action of the lenders. There is thus the need to study how the possession of title also influences the lender. It appears that the only study that considered the supply side is the pilot study by Abdulai and Hammond (2010) in Ghana. Previous studies have also focused only on the developing countries of Africa, Asia and Latin America. This highlights the need for a similar study in the developed countries. Studies that have systematically investigated the link between landed property registration and access to formal credit on a comparative basis between the developing and developed countries are also notably non-existent. In addition, though businesses in the developing countries are almost always associated with credit constraints, Berg (2010) argues that very little robust evidence of this exists. Also, though studies (cited earlier) have revealed that most SEs are credit constrained, it is worth mentioning that there are various dimensions of the credit access problem and in Ghana, the exact nature of this constraint (whether it is a demand or supply side problem) is not known. In order to tackle the problem of credit constraint, its nature must be well understood. There is thus the need to for a demand side study into the nature of the credit constraint amongst SEs in Ghana. Finally, no previous study has looked at both the demand and supply sides of the credit market.

1.2 Research Questions

In the light of the preceding discourse, there are a number research questions that arise; these include the following:

- What is the nature of the SE credit constraint problem in Ghana?
- Is collateral always necessary when dealing with SEs?
- Do lenders prefer landed property to other forms of collateral?
- Must landed property be registered to make it eligible for collateral purposes?
- Does the provision of registered landed property guarantee access to credit?
- Are there differences in the credit terms offered to registered and unregistered landed property owners?
- Is there a significant difference between the developed and developing countries regarding the credit effects of landed property registration?
- Is property registration the solution to poverty in the developing world?
- Do all advanced countries have comprehensive land registration systems?
- Are the advanced countries developed because of land registration?

1.3 Aim and Objectives

Following the research questions identified above, this research aims at investigating the influence of registered landed property titles on access to SEs credit on a comparative basis between Ghana and England. To achieve this aim the following individual objectives were pursued:

- To investigate the nature of the credit constraint amongst SEs in Ghana.
- To examine what influence landed property registration has on SEs access to credit.
- To assess the underlying factors responsible for turning down SE credit demand and the importance of landed property registration relative to other factors.
- To examine if a significant difference exist between the two countries with regards to the credit effects of property registration.

Though this is a comparative study between Ghana and England the first objective above focuses on only Ghana since the credit constraint problem is more pronounced in the Ghana. Also, though the credit constraint in the developing nations is attributed to the lack of registered titles, the exact nature of this constraint in the developing world such as Ghana is not known. Finally, the main focus of this study was the supply side of the mortgage market, there was thus no need to do a comparative study on the demand side.

1.4 Methodology

There are three main research paradigms/approaches that could be adopted in conducting any social research. These are the quantitative (positivist), qualitative (interpretive) and the multi- methodology (pragmatic) approaches. The positivist approach assumes that knowledge is real, and can be objectively measured in a manner which does not allow the researcher's values to influence the process or the outcome; it therefore, emphasises on numerical measurement of verifiable facts (Newman, 2007). Research under the positivist paradigm is generally based on causal principle using a logical deductive approach with the help of quantitative variables and statistical procedures (Bryman, 2008; Creswell, 2009). On the other hand, the qualitative approach regards reality as a social construct that can be understood by studying people's beliefs, perceptions and reactions to various phenomena (Bryman, 2008; Newman, 2007). The focus is usually not to test theories but rather to develop them. The third approach (multi-methodology) involves the use of the above two approaches in a single study which helps to off-set the weaknesses of using any single approach in isolation (Creswell, 2009).

The multi-methodology was considered most appropriate for this research. The quantitative approach was first used to investigate all of the stated objectives. Surveys involving officials from various financial institutions were conducted in both Ghana and England. A separate form of survey was also conducted amongst proprietors of SEs in Ghana to help determine the nature of the credit constraint. Subsequently, the study employed both the quantitative and qualitative approaches to validate the initial quantitative findings. In this case, the quantitative approach was used to validate the findings on the nature of the credit constraint in Ghana whilst the qualitative approach was used to validate all the other findings. The qualitative approach involved the conduct of semi-structured interviews amongst loans managers and business managers. The quantitative and qualitative data collected were analysed with the help of SPSS and Nvivo respectively. Further details on the methodology are provided in chapter five.

1.5 Significance of the Study

Even though there are studies on SE financing in the developing countries and particularly Ghana, such studies fall short of revealing the true nature of the problem of access to finance. The significance of this study therefore lies in the fact that, firstly, it fills in this knowledge gap and provides clear evidence for the design of more appropriate policies that will target the right sections of the credit market to produce better effects regarding the reduction of the severity of the credit constraint problem. It also provides evidence on the relative importance of property registration in causing the credit constraint problem. The findings thus provide

Policy makers with a guide on the set of actions that could generate greater impacts on credit access. It would also allow policy makers to promote landed property registration based on its ability to facilitate ownership verification and related transaction but not on the basis of the wrong assumption that it guarantees access to credit. The benefit of this study to academia is not only derived from the fact that it adds to the existing literature on property registration and credit access but also provides direction for future research. Finally the financial institutions could benefit from the recommendations of this study.

1.6 Research Scope

The aim was to conduct a comparative study between a developed and developing country on the second and third objectives stated in section 1.3 above. For the sake of convenience, Ghana and England were selected to represent the developing and developed countries respectively. The author's nationality as a Ghanaian and previous experience as an employee in one of the Ghanaian financial intuitions influenced the choice of Ghana as his previous contacts in industry were influential in recruiting respondents for all stages of the study. Secondly, Ghana is one of the developing countries that started implementing land registration programs since the pre-colonial era. However, several decades after the introduction of such programs access to small business credit continues to be a problem which makes it a fertile ground for this study. The selection of England was for the convenience since the research was carried out in a university in England.

In Ghana there are ten administrative regions. Currently land title registration covers only two of the ten administrative regions in Ghana (these are the Greater Accra and the Ashanti regions). Even though other parts of the country are covered by deed registration, Zevenbergen (2002) laments that its operations are over centralised in Accra (capital city of Ghana) with only six deed registries in the whole country. Hence, the choice was between only two regions - Greater Accra and Ashanti regions. The Ashanti region was eventually selected by simple random sampling and the study was limited to the capital – Kumasi. The choice of Kumasi was based on the author's familiarity with the area. Kumasi is widely regarded as the second largest commercial city (after Accra) in the country and also the second most populated. In England the study was limited to the North West which consists of five counties: Cumbria, Greater Manchester, Merseyside, Lancashire and Cheshire. The final sample was taken from only three of these counties - Merseyside, Lancashire and Cheshire. The study covered all the research questions raised in section 1.2 except the last three. It is also worth stating that though this study is about access to credit, the focus is on access to formal credit and not informal credit. Finally, credit extended to SEs for investment was the other focus of the study and the interest was not on personal or large corporate credit.

There is no universal definition for SEs. Different criteria (such as number of employees, turnover, and value of fixed assets) have been used by researchers and this may vary across countries. In the developing countries for instance, UNIDO classifies businesses with 5-19 employees as SEs and below 5 employees as micro enterprises –MEs (Abor and Quartey, 2010). According to Abor and Quartey (2010) the Ghana Statistical Service classifies all businesses with less than 10 employees as SEs; the Regional Project on Enterprise Development Ghana manufacturing survey paper also classifies businesses with 5-29 employees as SEs whilst the National Board for Small Scale Industries – NBSSI, defines SEs as businesses with nine or less employees as well as those with plant and machinery valuing up to 10 million Ghana cedis. The number of employees appears to be the widely used criteria in Ghana for defining SEs. Given that majority of the respondents in this survey were traders (who typically do not employ large numbers of people) the definition by the Ghana Statically Service was more suitable and was adopted in this study.

In the developed countries however, UNIDO defines SEs as businesses with up to 99 employees (Abor and Quartey, 2010). According to McQuaid (2003) the European Commission defines them as businesses with employees ranging from 10-49 and businesses with less than 10 employees as MEs whilst medium enterprises are defined as those with 50-249 employees. In the UK, Urwin et al (2008) define SMEs as those generally having less than 250 employees; and within this SME category, firms with 1 to 49 employees are 'Small', whilst 'Micro' enterprises are those that employ less than 10 employees. The contrast is thus clear that what is considered a small enterprise in the UK based on the criteria above will be a medium or large enterprise in Ghana.

1.7 Limitations of the Study

The findings from the study cannot be said to be totally representative of the practices in the developed and developing countries. As noted earlier, the data was obtained from only three counties in England and one administrative region in Ghana. Having said that, the general principles of lending tend to be the same within any given bank irrespective of which branch one submits a credit application and this may permit the results to be generalised within each case study area. However generalisation outside the case study countries must be done with caution since specific practices of funding institutions may differ across countries. Furthermore, there were some data inadequacies when it came to conducting the factor analysis. Given the number of variables involved a higher sample size was required. As a result some of the initial variables (about four of them) were dropped in an effort to improve on the sampling adequacy for the factor analysis. The consequence is that the eventual factor analysis did not include all the important variables. However, given the level of secrecy

amongst funding institutions and the fact that supply side studies of this nature are virtually non-existent, any data obtained irrespective of how small it may be, should be considered very valuable.

The results also show that most of the businesses in this study generate very small amounts of cash per month. Using cash amounts generated per month as a proxy for the size of the business, the business in this study could be classified as micro-enterprises. The focus should not have been limited to these businesses only as relatively larger businesses do appear significantly different on the issues of credit worthiness and access to credit. Furthermore, other business owners (such as building contractors, transport and hotel service providers) that are quiet visible in the Kumasi metropolis were not considered. These other lines of business tend to be larger in terms of the income they generate and should have been given some consideration.

1.8 Organisation of the Thesis

The thesis has been structured into eight chapters. Apart from the introduction in chapter one, chapters two to four cover literature review on various topics. Chapter two focuses on the economics of property rights. The concept of property registration, its significance and limitations are discussed in chapter three. Chapter four presents the theoretical framework for this study whilst the methodology is discussed in chapter five. The results of the quantitative and qualitative data collected are presented and discussed in chapter six and seven respectively. Finally, the summary, conclusion and recommendations for policy and further research are outlined in chapter eight. Below is a schematic representation of the whole thesis

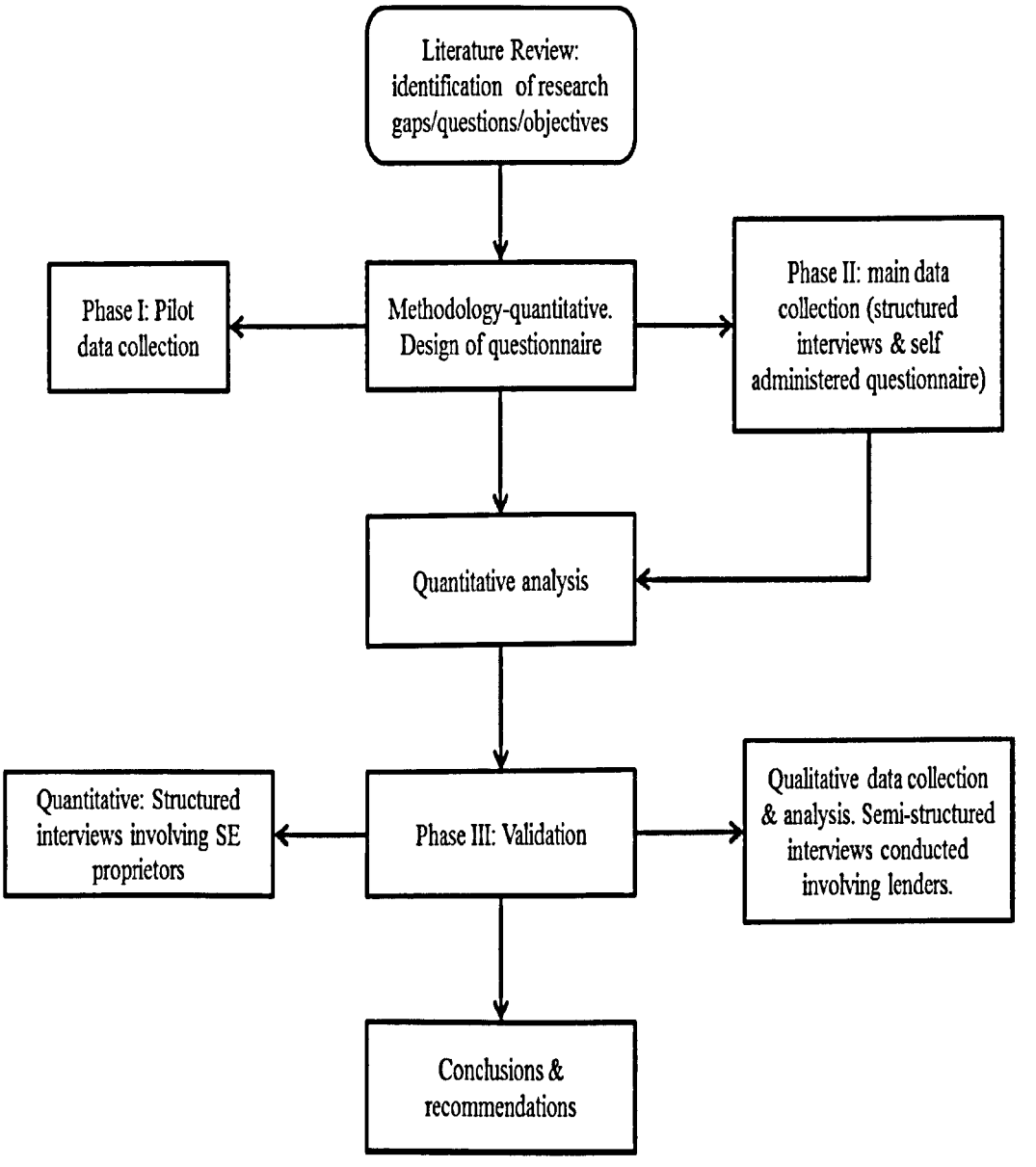

Figure 1: Schematic Representation of Thesis

CHAPTER 2

ECONOMICS OF PROPERTY RIGHTS

The assertion that landed property has always remained an important productive resource and great symbol of wealth in the history of mankind is common knowledge. As a result, how much land one owns, the manner in which it is owned and the enforceability of ownership rights are key factors that could influence productive investment, household incomes and poverty reduction. It is therefore imperative to explore the systems of property rights that exist to provide an understanding of the extent to which they may or may not be a disincentive to investment. The next section therefore looks at the definition of property rights; section 2.2 discusses land tenure security and its various dimensions; the economic implications of property rights systems are examined in section 2.3 and the summary of the chapter is provided in section 2.4.

2.1 Defining Property Rights

Property is often thought of as a thing; according to Anderson and Huggins (2009) it involves more than just tangible things like real estate and includes intangibles like intellectual property. A right on the other hand is an entitlement to perform or not to perform certain actions (Leif, 2011) and as Abdulai (2010) aptly observes, it reflects a sense of duty, coercion and also restitution whenever violations occur. Therefore, pulling the two together, one could say that whilst property refers to a tangible or intangible thing, a right establishes the relationship between people and things in terms of who has an entitlement to the 'thing'. The definition of property rights may not be entirely straight forward as one may expect. Cole and Grossman (2002) lament the diverse and often inconsistent definitions of the concept in economic literature and the fact that the concept appears to have contradictory meanings when looked at from the economic and legal perspectives. The legal conception of property rights as explained by the Hohfeldian theory of correlative property rights and duties, is summarised by Cole and Grossman (2002, p. 318) as follows

> ...if one person holds a "right" to some-thing, at least one other person must have a corresponding duty not to interfere with her possession and use, if she claims a "right," but cannot point to a corresponding" duty" that is enforceable against at least one other person, then what she possesses may not be a "right" at all but some lesser entitlement such as a privilege, liberty, or mere use.

> ...to claim that an industrial facility has a right to emit noxious substances into the air would necessarily be to claim that others have an enforceable duty not to interfere with their polluting activity.

From the perspective of this theory the term right has often been used very loosely in economic literature to include lesser interests such as mere privileges, powers or immunity; therefore to establish a true right, there is the need to identify another person with a corresponding duty. Hence for every enforceable right, there must be a corresponding and legally enforceable duty. The difference between rights on one hand and privileges or liberties on the other hand is that having a liberty or privilege to something does not imply that someone has the duty not to interfere since others may have the same privileges. According to Cole and Grossman (2002) property rights economists try to distinguish between economic rights and legal rights. For instance, as argued by one property rights economist Barzel (1997), though a thief may not have legal rights to a property he nonetheless has economic rights as evidenced in his ability to enjoy the stolen property, prevent others from enjoying it, transfer it to others through sale or earn income from it (which are all essential characteristics of property rights). Having the right to do something is essentially different from being merely able to do it. Whilst these economists think of property rights as arising from individual choices and claims, from the legal perspective, property rights arise from legal and social recognition. In the words of Cole and Grossman (2002, p. 325) "a claim only becomes a right when it is socially and legally recognised as such"; and the mere use or control of something should not be seen as a right to it. The economic and legal definitions are complementary to each other. This is because legal recognition and enforcement gives rights a better economic value and without the ability to use or control resources legal recognition may not be enough.

Therefore, Bromley (2005) defines property rights as a formal or informal institutional arrangement that governs access to property and other resources as well as the claims on the resources and their related benefits. Hence, the role of institutions (formal or informal) cannot be ignored if a functional property right regime is to be established. Such institutions will be needed for the purpose of setting the standards and enforcing them. When property rights are properly assigned and enforced the rights holders have the consent of others that permit them to act in certain ways in relation to the property. At the same time, other individuals or members of the community are expected to prevent anybody from interfering with the exercise of any one's rights given that the manner in which such rights are exercised is not prohibited (Demsetz, 1967). The above definitions draw a very close connection between property rights and the legal system. In fact the legal system in part defines and enforces property rights. Anderson and Huggins (2009, p. 2) sums up this argument by

defining property rights as "the rules of the game that determine who gets to do what and who must compensate whom if damages occur". It has also been argued that property rights may exist without the law as physical force and strong traditions could be used to control ownership of resources (Foss, and Foss, 2005). Even though Barzel (1997) agrees with this notion, he rightly points out that the value of property rights is largely enhanced when they are sanctioned and enforced by the law. Property ownership is about a set of 12 different rights that can be exercised over a property which according to Honore (1961) include these.

- The right to possess or exclude
- The right to manage – ability to decide how the property should be used and by whom.
- The right to income –benefits of forgoing personal use in favour of other people.
- The right to capital – the ability to transfer, consume, waste, modify or destroy.
- The right to security – ability to enjoy protection against expropriation.
- The right to transmissibility – ability to bequeath.
- The right to divisibility – ability to divide in any way desirable.
- The right to prohibit harmful use – responsibility to use in a manner not detrimental to others.
- The right to absence of terms or duration – indeterminate length of ownership rights.
- The right of Liability to execution – liability to have ones land taken away for the repayment of a debt or to satisfy a lawful action.
- The right to residual character – the right to reversion of lapsed ownership and
- Usufruct rights – right to use and personal enjoyment without interference

Each individual right above describes a different aspect of property ownership. The general explanation of property rights above can be applied to any property. Applying them to landed property, one can talk of property rights to land, land tenure or land ownership. Therefore, land tenure or ownership is nothing but property rights in relation to land. This includes the principles and underlying guidelines for land holding, usage and transactions (Mzumara, 2003). Whenever the term land tenure or ownership is used one thing should be noted, that, the thing that is actually owned is the set of rights to the land not the land itself;

consequently what is owned is a social recognition of the right to undertake certain actions (Alchian and Demsetz, 1973) and of course a legal recognition as explained earlier to relate to the land in a certain manner.

2.2 Property Ownership Security

The International Fund for Agricultural Development (IFAD) in its 2008 policy document defines property right security as the enforceable claims on land where enforcement emanates from national laws or local rules and where such local rules are supported by the national laws - it refers to people's recognized ability to control and manage land. In other words security refers to the certainty that a person's land rights will be recognized by law and, especially, by members of the society and protected when there are disputes or challenges to such rights (FAO, 2005; Abdulai, 2010). Security of land tenure therefore involves two forms of validation or recognitions - state validation by legal recognition and validation at the local level through recognition of one's rights by one's neighbours and others based on a given set of values (Toulmin, 2008). These two forms of validation must be both present to make property rights function most effectively. Without recognition at the local level for instance, legal recognition alone may only succeed in making otherwise legitimate rights illegal whilst local recognition alone may be weakened without the backing of the national legal framework. In the absence of legal recognition many legitimate property owners may be cut off from the formal economy. Integrating local values on property ownership into the national legal framework will be the way to achieve both forms of recognition.

Security has also been used to refer to a protected land ownership which cannot be challenged or disputed (Petracco and Pender, 2009). Any set of actions geared towards protecting ones ownership rights could be said to be promoting security. Hence where ownership is secure, related rights are protected against counter claims from other individuals, institutions and even government. Once this kind of protection is attained then, the possibility of losing one's rights should be non-existent. Security also appears to be more about people's perceptions or expectation about possible changes in their ownership status. As Roth and Haase (1998) aptly observe security is a kind of perception held by individuals regarding their ability to exercise their rights both now and in the future in a manner that is devoid of interferences from others and at the same time allows them to benefit from any investment made on the land. De Souza (1999) describes it as the perception regarding the likelihood of eviction or expropriation. Individual views on the likelihood of losing their land rights vary across persons, time and space; such perceptions are not static neither are the factors that influence them. Perception is a subjective and qualitative variable; it is not like temperature that can be measured by a thermometer. Different individuals with the same

kind of land related characteristics are likely to exhibit different security sentiments. However, how secure people feel their rights are, could arguably be observed indirectly as it tends to be reflected in their actions and or inactions regarding investment.

Bloch (2003) however argues that security is objective and quantifiable. Those who believe security can be measured often use various proxies of security such as the incidence of land disputes and the possession of legal documentary evidence of ownership inter alia. The possession of documentary evidence is strongly linked to the legal perspective of security as articulated by Bruce (1998) and Roth and Haase (1998). The lawyers are more interested in how to defend/argue cases in the law courts. A lot of the arguments are based on facts and the ability to provide hard evidence to proof one's case beyond all reasonable doubts. To such a group of people, the attainment of security is synonymous to the ability of property owners to provide proof of their rights in the form of accepted documents issued by the state agencies and with the backing of the law. Based on this legal perspective of security, an attempt has been made by Wannasai and Shrestha (2007) to classify security of land tenure into three levels as follows: (a) secure; (b) temporary secure; and (c) insecure. By the above classification rights are described as secure if the owner has a formal land certificate as proof of ownership usually issued by the appropriate land sector agency in this case the department of lands. This category or level of security appears to be the ultimate (security is 100%) as it is argued that it gives the landowner an unrestricted right to sell, transfer and bequeath the property. The second level of security (temporary secure) is described as inferior to the first and is attained when the land owner has other documents inferior to the ones stated in (a) above as proof of ownership and these are documents which only grant the right to use and inherit. Finally, rights are classified as insecure where there are no documents that are recognised as a proof of one's ownership of a property.

By this classification it is only the possession of formally registered property titles that qualifies one's rights to be classified as secure. Clearly, the basis of this classification is flawed as documentary proof of ownership should not be equated to security at all. This is because despite holding a certificate of ownership, different people are likely to exhibit differences in their perceptions of how secure their rights are. This is particularly true in parts of the developing world such as Ghana, where people have lost their land rights despite possessing documentary proof of ownership. Secondly, in places where land disputes exist or once existed, the history of the dispute and how it was resolved in the past may in itself trigger a sense of insecurity even though people may possess documentary proof of ownership. Furthermore, security is about both legal and societal recognition hence even where the possession of documentary evidence provides land owners with the legal recognition, it is unable to provide the social recognition and as such cannot be equated to

security. Documentation per se should not be pursued with the aim of making property ownership secure but to provide evidence of secure ownership. Apart from the legal perspective of security, Bruce (1998) and Roth and Haase (1998) also explain the economists perspective as follows: Unlike the lawyers, economists have a much broader conception of land tenure security. To the economists, security involves three things: (a) the legal aspect; (b) duration of the tenure – depth of rights; and (c) the scope or breadth of rights. Duration is about how long one can exercise one's rights to a property to allow for the reaping of any investments made - security is thus considered to be the degree of confidence with which right holders expect to reap the fruits of their investments. Duration is important for investors because it may take some time before their investments begin to generate enough returns to at least cover initial cost and subsequently make reasonable profits. Therefore, from the perspective of the economist, if property holders can exercise their rights for a considerable period of time that will allow them to enjoy the fruits of their labour then the ownership could be said to be secure. Thus any set of rights to property that can only be exercised over a short duration which does not allow the benefits of investments to be reaped are regarded insecure.

Though an individual may possess a legal documentary proof of right(s) to land, his/her ownership may still be regarded insecure from the economist perspective if the duration of the right(s) is short relative to the kind of investments the individual wants to undertake on the land. Having said that, it should then be recognised that what is regarded as short or long duration of tenure is dependent on the kind of investments the individual wishes to pursue. This aspect of ownership security is often linked to the debate on the relationship between security and investment; the kind of investment activity undertaken is seen to depend on the duration of rights. The scope of land rights on the other hand, refers to the bundle or combination of various individual rights that one possesses. Ownership is about the exercise of a series of rights; one may only possess the right to use and or occupy a property but cannot transfer or mortgage this land to another person or institution. If an individual does not possess certain rights which are considered key to undertake certain economic decisions, then his/her tenure is said to be insecure because he/she can only use the land in a limited way. In terms of stimulating long term investments, the possession of certain strands of right such as the right to bequeath is seen as very essential and as such, individuals who have only use rights may nurture some sense of insecurity due to the restrictiveness in scope of their land rights.

From earlier explanations of security, the economists perspectives on the duration or scope of rights do not seem to matter in determining whether one's rights are secure or not. Irrespective of how short the tenure may be or the limited scope of the rights, all that matters

is for people to be assured that whatever rights they possess will be protected and enforced in the time period within which they are valid. In the words of Bruce (1998, p. 2) "...the tenure itself may be short, for instance, a lease for one month, but if the leaseholders can be certain that they will be able to keep the land for the one month, then the tenure is secure". The duration and scope of rights could influence investor attitudes but the fact that one has a longer duration and broader scope of rights does not make such rights secure if they are not legally and socially recognised. However once an individual's rights are recognised both legally and socially, he will choose the appropriate investment to match the scope and duration of his rights.

Putting together both the legal and economist perspectives Place (2009) describes secure property rights as a collection of rights in land along various dimensions including: type of rights, breadth and duration of rights and the certainty with which these rights could be exercised. It appears, however, that the emphasis on securing land rights has been skewed towards the legal conception of security. Hence the legal definition of secure property rights is what dominates the literature. A number of themes have emerged from the above explanations of property rights security which include: legal and societal recognition; protection and enforcement as well as perception of certainty regarding the above. Land rights thus become insecure when: (a) they are not recognised by both the legal machinery and local values; (b) they are not protected and enforced formally and informally and (c) when there is a feeling of uncertainty regarding the recognition, protection and enforcement of rights. Drawing from the arguments in the literature above, property ownership security in this study will be used to refer to the perception of the likelihood that an individual's right to a property will be protected and enforced both legally and socially irrespective of the scope and duration of such rights. The element of enforceability in property ownership security is very important. Thus, where rights are unenforceable, land owners are faced with a clear case of insecurity (Kvitashvili, 2004). The answer to securing property rights partly lies in this adopted definition and partly in the causes of insecurity or disputes.

One of the key elements required to strengthen property ownership security is the formal and informal recognition of an individual's rights. Any set of policies that provide only formal recognition whilst neglecting the informal recognition as argued earlier will fail to guarantee security. In the absence of informal recognition (which is based on what the society perceives as acceptable per their values) formal recognition alone is a recipe for greater insecurity. The way forward could be to provide formal recognition to traditional property rights systems by incorporating them into the law and any land formalisation programs instead of trying to completely replace them. The second essential element of security identified earlier is the element of enforceability of rights. Any given property rights system

requires good level of enforcement of rights to make it effective (Anderson and Huggins, 2009). It goes without saying that the law or traditional values will be useless if they are not well enforced. Commitment to consistent enforcement of rights will boost people's confidence – an important component of security. One cannot be absolutely certain that disputes will not occur but when rights are well enforced then even during disputes such rights will be protected. Establishing well-equipped institutions for resolving disputes could go a long way to help enhance security. This gives individuals the assurance that they will not lose their rights and even when they do lose such rights, they are assured of some reasonable form of compensation. This is what gives investors the confidence to commit resources to productive use in the medium to long term.

Land disputes (an indicator of insecurity) could emanate from issues related to property boundary demarcations; for instance a study in Kenya by Yamano and Deininger (2005) found that though there were conflicts relating to property inheritance and sales, about half of the land conflicts were made up of conflicts over boundaries that occur mainly with neighbours. If clear property boundaries cannot be established then how can the associated rights be enforced? To make enforcement easier, property rights must be well defined and in this case, proper demarcation of property boundaries is a requirement for enhancing security. It is in this light that Abdulai and Domeher (2012a) advocate for the replacement of traditional methods of boundary demarcation based on temporary features such as footpaths, rivers, trees etc. with more permanent boundaries properly surveyed with accompanying maps and plans. Alternatively, Abdulai (2010) advocates for title insurance as practiced in the United States and Canada as a way of promoting security. However, title insurance carries with it similar cost implications often blamed for the failure of related programs in the developing world. Its impact may therefore be insignificant in the developing world for lack of wide-spread patronage.

2.3 The Economic Implications of Property Right Systems

Property rights as already observed play or have a major role to play in the economic development process of a country through its provision of the necessary incentives required for productive investment. This is however, believed to vary depending on the property rights system that exist in an area as some property rights regimes are considered to be a disincentive to investments. The World Bank (1997) points out that sustainable development as well as efficient and equitable use of resources depends very much on the manner in which property rights are defined and distributed. As far as landed property is concerned, Feder and Feeny (1991) identify four kinds of property rights regimes and these are as follows: open access, communal property, state and private property right systems.

2.3.1 Open access and communal property rights

Under an open access property rights regime, no rights are assigned to any parcel of land but rather as the name suggest, it is open to all to use in any manner as and when required. No individual or group of individuals can exclude another from using the property. Feder and Feeny, (1991) argue that such a system is a disincentive for conservation, the consequence of which is degradation. This argument appears to make economic sense. Economic literature shows that people tend to pursue their self-interest in their use and allocation of resources to maximise their economic benefits and are thus likely to care less about what happens to other parties. In a system of open access benefits arising from resource use accrue only to the individual but part of the cost or effects may be borne by other individuals and the community as a whole. The presence of such negative externalities implies that the individual does not pay for or face the full cost of their actions and is thus more likely to engage in unsustainable practices or use of the resource. The outcome is usually overexploitation of the resource, quick degradation, and poor resource conservation. This kind of system may only exist in areas where land is in abundant supply (Feder and Feeny, 1991). Therefore, Platteau (1996) argues that with abundant availability of land the absence of property rights does not pose any damaging consequences for resource use. This is probably because abundance of the resource gives it a low economic value and hence no 'rush' to exploit it.

In a communal property rights system, rights are assigned to a whole group other than an individual and according to Feder and Feeny (1991) where such a group is so large it becomes similar to an open access system. No one individual within the assigned group has the right of exclusion and the resource use is based on first-come first-serve basis; others can only be excluded through prior and continuous use of the resource (Alchian and Demsetz, 1973). This implies that once the resource is abandoned or not in use anymore, the previous user cannot prevent anybody within that community or group from using it.

Communal rights are also exposed to the same issue of negative externalities explained under the open access system; but one can think of the problem to be less pronounced under a communal system than in an open access system since rights are limited to certain group of people only. One way to tackle this problem of externalities according to Alchian and Demsetz (1973) is to allow a communal right to the benefits arising from individual resource use. If other individuals will suffer the consequences of one person's use of a common resource, then it makes sense for such victims to also partake in the enjoyment of the associated benefits generated. If no individual possesses the exclusive right to the benefits derived from their resource use there will be no incentive for over-exploitation and this is expected to effectively reduce the external cost of individual actions. As appealing as this

argument may look, it is possible that such a move may also lead to under-utilisation of the resource which in itself may not auger well for the economic wellbeing of the whole society as it could lead to a situation whereby people are starving in a resource rich environment. This is because the right to exclude other individuals from the benefit of one's resource use appears to provide a strong incentive for people to work harder and to be more productive. The economic being is self-centred and the absence of exclusive rights may thus discourage sufficient individual effort required to maximise economic returns from available resources. Another important question to ask is how the benefits will be shared between those generating the benefits and those who contributed nothing to the generation of these benefits. The argument even appears very unsustainable the larger the community becomes.

As a way of tackling the externality problem in a communal rights system, Alchian and Demsetz (1973) alternatively call for individual resource use to be strongly regulated by the state or influenced by strong adherence to culture. In small communities the cost of regulating land use tends to be minimal as the community members know themselves and intruders are easily recognised and it is easier to restrict individual land use to reduce potential negative externalities (Feder and Feeny, 1991). Though the community is able to reduce the external cost by agreeing on common rules for resource use, Demsetz (1967) notes that, in large communities the cost of negotiations, implementation and monitoring could be very high making regulation extremely difficult if not impossible. Informal regulation as a solution to the externalities problem is more applicable to very remote and sparsely populated rural areas where land remains sufficiently abundant and where there is still a strong adherence to traditions. Given the difficulties that may be associated with regulating resource use, Coase (1960) proposes that instead of relying on state intervention in tackling the externality problem, all parties should be allowed to engage in negotiations or voluntary exchange of resource rights assuming that transactions cost is zero. Depending on the cost and benefits balance between the parties, the victims may be prepared to pay others to stop producing the externality or the producer may pay the victims to waive their right to stop the production of the externality. There are however, important question to ask on coase's proposition. For instance, even if the victims are prepared to pay, is it fair to do so? What about the vulnerable groups who cannot afford? Reliance on this kind of approach may provide the powerful elites in society the license to undertake undesirable activities. Given the problems associated with the open or communal right systems and the difficulty in dealing with them the introduction of private property rights is seen as the best remedy.

2.3.2 Private property rights system

A private property rights system unlike the communal and open access systems assigns the exclusive rights to individuals. The individual is able at least in principle to prevent others from using or benefiting from the property concerned. With private rights people try to maximise the present value of their properties by taking into consideration the future stream of returns and cost in their use of the property; by so doing, Demsetz (1967) believes that private rights induce people to consider the social cost of their actions. Individualisation of property rights to a large extent internalises the externalities associated with resource use because unlike the communal system where individuals enjoyed the benefits of resource use alone but pass on the cost to the rest of the society, when rights are privately assigned, the owner bears both the cost and benefits associated with resource depletion. For instance mismanagement of the resource will be most costly to the individual as that may affect income levels now or in the future hence people are more likely to make judicious use of such resources to minimise the cost.

Demsetz (1967) does concede however that some external cost may still exist even under private property rights. This is because each individual only has control over his own parcel and cannot interfere with the way another person exercises his private right. Therefore each individual may act without considering how his actions may affect other rights owners. Oestereich (2000) argues that private property rights do not always provide for resource conservation and sustainability as thought; in fact the degradation of the Mediterranean during the era of the Romans was the result of the activities of profit-seeking private mine, forest and land owners. In further support of this point Oestereich states that, applying the concept of unrestricted control over property to land tends to be insensitive towards the environment and could subsequently destroy the available natural resources base. This appears to contradict the general perception that externalities are internalised by assigning property rights to private individuals. These externalities are however much smaller than that in the open access and communal system. The private property rights and sustainable resource use argument is usually made possibly with the assumption that all individuals are 'rational' and will allocate their resources in a way that will take into consideration the future. However, in economic sense, a 'rational' individual could be seen as one who seeks to maximise returns from resource use and such profit motives (especially in the short term) may be inconsistent with conservation and sustainability. Individual rights undoubtedly will make people more long term minded hence more sustainable in resource use.

Apart from its ability to at least minimise the externalities problem and enhance sustainability in resource use, private property rights also work to lower resource transaction

cost and makes such transactions both easier and faster. The extract below taken from the work of Abdulai (2010) explains how this works:

> *If A, an owner of private land right, in the process of tilling a parcel of land to grow rice observes B, another owner of private land right constructing a dam across a stream on another parcel of land contiguous to his, he (A) might prefer the stream as it is and will ask B to stop the construction of the dam. B might agree to stop the construction of the dam on condition that A pays him. If A accepts and pays B, B will stop. Another alternative is for A to buy off B completely. In either case, it will be a simple negotiation between two parties and the transaction costs here will be low. however, if A and B were owners of communal rights in land, B might stop the construction of the dam if A pays him but since it is a communal property B cannot guarantee that another engineer C will not take up the task; A and B have no right to exclude C. This will involve a complex negotiation between A and invariably everyone else and the transaction costs will be very high*

2.3.3 Property ownership in Africa

Torhonen (2004) classifies property ownership in Africa into statutory and customary: a statutory system exist where there are well written or documented rules which set the guidelines for land ownership or define the exact relation between land and people; on the other hand, customary tenure exist where these rules are based on custom and recognised by the society even though they are not formally documented (informal). Based on this explanation, property ownership in Africa could be described as predominantly customary. For instance, about 80% of the land in Ghana is classified under customary tenure (Toulmin, 2008). In sub-Saharan Africa, customary landownership comprises lands vested in communities or groups of people represented by their chiefs and families as well as individual ownership; it is thus a dual system involving both communal and private ownership (Abdulai, 2010). Having said that, it appears the former is more prominent than the latter.

Landed property ownership in Africa has often been associated with certain characteristics some which are worth mentioning. It is regarded as communal and as such, though the individual may have the right to occupy and use land, the exclusive right and right to transfer remains with the whole family or community (Payne, 2001; Torhonen, 2004). Platteau (1996) as a result, describes the property ownership in Africa as a system in which individual rights are still maturing. It may be rather too extreme to argue that the tenure systems in Africa do not allow for individual ownership in that some amount of individual ownership exist especially in the urban centres whilst the rural communities appear to remain mostly under

communal ownership. Secondly, it is argued that in Africa land is regarded as a god and as such cannot be traded. Payne (2001) observes that land is largely regarded as sacred with man only playing the role of stewards to protect the interest of future generations. However, there is empirical evidence of land sales growing bigger and bigger in Africa (Platteau, 1996) and various forms of land transactions have existed in most parts of Africa for a long time (Toulmin, 2008). Finally, the culmination of the above in addition to the fact that land ownership in Africa is mostly not formally registered has led to the notion that customary land ownership in Africa is insecure (De Soto, 2000 and MacGee, 2006). Quan (1997) disagrees with this perception by noting that customary tenure generally provides secure inheritable rights of occupation and use to individuals and groups alike. Furthermore, as argued earlier insecurity of land ownership is a function of several factors other than the absence of registered property titles.

Based on this argument that land ownership is communal and insecure, the customary system in Africa is regarded as a disincentive for investment in especially agriculture and thus responsible for the high incidence of poverty leading to the calls for individualisation of land rights as a solution to the problem. The argument in favour of individualisation often ends with reforms centred around various land registration programs in the developing world. Instead of attempting to revolutionise the land ownership systems in the developing world by replacing communal ownership with individual ownership through land registration, it should be noted that from history, changes in land ownership systems tend to be gradual – an evolution rather than a revolution. The various systems of property rights discussed above are not static but evolve over time as society develops. Rising population pressure increases the scarcity of land, raises land values as well as the benefits of clearly defining property rights to land (Feder and Feeny, 1991). Different forms of Property rights emerge as a response to the need to adjust to changing cost-benefit situations as the gains and benefits of internalisation rise above the associated cost (Demsetz, 1967). Well defined and enforceable property rights emerge whenever the associated benefits exceed the cost as land becomes scarce.

Demsetz (1967) traces the emergence of private property rights among the Native Americans to the development of the fur trade. It is said that the communal land rights before commercialisation of the fur trade provided no incentive for any individual to try to conserve the resource creating huge externalities leading to 'over hunting'. As the commercial trade in furs increased, the value of furs did increase and each individual stepped up his hunting activities to try to maximise his return from his right to hunt. This increased pressure on the resource (scarcity) leading to overexploitation and creating huge external cost. This is said to be the point at which the property right system began to change towards private rights

system which begun with the allotment of hunting territories to smaller groups such as families with each family having the exclusive right to its allotment. Similar experiences are reported in Thailand during the rice export boom and in England during the period of rising land values in the 12 century by (Feder and Feeny, 1991; Alchian and Demsetz, 1973).

In his evolutionary theory of land rights, Platteau (1996) explains that as land becomes scarce, its value rises and in a communal rights regime, land rights become uncertain leading to rising level of disputes and litigations which consequently lead to increased demand for individual rights. Communal rights only become unstable creating mismanagement and overexploitation as the population grows and resource demand begins to increase (Platteau, 1996) and this is the point where the state needs to intervene to facilitate the process of change by introducing reform programs such as land registration. Note that registration on its own is not what will convert communal ownership into private ownership. If this process is forced then conferring private rights to property communally owned may spark off conflicts. Platteau (1996) observes that this process of change is being experienced in Africa; the growing population pressure on land and rising agricultural commercialisation with introduction of cash crops such as cocoa, coffee, cotton and oil palm since colonial era have worked together to change gradually the existing communal tenure towards individualisation as the incidence of land sales has grown bigger and bigger. A systematic individualisation of land rights has been taking place over the years in Burkina Faso, Guinea and other parts of Africa (Toulmin and Longbottom, (2001).

2.4 Summary

This chapter has looked at the various issues on property rights with regards to land; apart from defining the concept of property rights it has also looked at property rights security and its various dimensions, the forms of property rights and their economic implications as well as the nature of property ownership in Africa. The available literature has often classified landownership in Africa as communal and insecure and as such a disincentive to investment and development. The communal ownership of property creates externalities and increases transactions cost. Studies show that land ownership systems evolve from usually an open access system through communal ownership to private ownership regimes where exclusive rights are vested in individuals. In Africa there are already signs of a gradual change in land ownership towards individualisation. The several land disputes in the continent is an indication of the rising demand for the resource and the need for more clearly defined property rights system. The next chapter will look at the concept of property registration and how it is linked to security and economic development.

CHAPTER 3

PROPERTY REGISTRATION

Land registration has assumed popularity globally and especially in the developing countries. This is evident by the enthusiasm with which donor agencies such as the World Bank have promoted the concept which has subsequently led to the roll out of several land registration related programs around the developing world. It is considered as a critical precondition for investment and modern economic development particularly in Africa. This chapter therefore explores the concept of land registration, its economic importance and limitations. The chapter is structured as follows. The next section explores the concept of land registration – the meaning, principles and approaches to implementation. Section 3.2 looks at the systems of land registration. Since this is a comparative study of Ghana and England, the subsequent sections provide a brief history of land registration in England and Ghana, followed by the link between registration and security, the economic significance of land registration and its limitations respectively. The final section devoted to the summary of the chapter.

3.1 The Concept of Property Registration

The terms land registration and land titling are often used in the literature interchangeably. In the words Atwood (1990, p. 659) "Land titling or registration... refers to legally sanctioning primary land claims which are already recognized informally by the local community (although they may have been previously ignored or denied in formal law). It involves: taking these claims out of the realm of informal lineage or community land ownership and making them fully legal, formal and individual; measuring precisely the boundaries of each claim and recording claims in a formal, state-administered land records system..." MacGee (2006) also uses the term land titling to encompass all processes needed to legally recognise, protect and record trades of property as well as the legal and administrative processes required to support their efficient operations. There is however the need to point out that the use of the term land titling to mean land registration in the literature is inappropriate in that, the two do not mean the same thing. The word title means ownership or a right to something (Abdulai and Domeher, 2012b) whilst registration is about recording property ownership into a public database.

Land registration is described as a public system of records on legal land rights (Hanstad, 1998) or a process of recording legally valid land rights (Griffith-Charles, 2004). According to Hogg (1920) land registration is a system of recording ownership of interest in land and or land transaction from time to time in a public register. It has also been described as the

unambiguous recording of the physical boundaries of land and ownership rights to land in a public register as well as establishing and maintaining each individual interest to land (Fiadzigbey, 2000). All the definitions of land registration appear to point to the same things appropriately summarised by Domeher and Abdulai (2012a) as the process of recording all land ownership data into a national or central database that can easily be accessed by the general public, as well as the continuous update of such data to render the database a mirror image of the actual land ownership. The registration process thus captures the particulars of land owners and the land they own. For land registration to yield positive outcomes it should be seen as a means to providing formal legal recognition to existing land rights that are already recognised socially or informally in other words land registration should be considered a process of recording land rights already recognised informally to integrate such rights into the formal legal system.

Under any system of land registration, registered rights are given priority over unregistered rights (Simpson, 1976). However, in instances where several registered rights to a land exist or where a land is involved in a case of double transfer, priority may be established based on the principles race and notice; in the race principle, the winner of the race to the registry as evidenced by the order in which the instruments appear on the register is given priority over everyone else, however, under the notice principle more attention appear to be directed towards the provision of notice of an interest in a parcel (Zevenbergen, 2002). What this means is that for instance, if Mr A registers his interest in a land first before Mr B, under the race principle, Mr A has the prior claims over B. However, under the notice principle if the fact of A's registration is not regarded to have provided sufficient notice, then B may have the prior claim if his registration is considered sufficient notice to the public even though he registered his interest at a much later date than Mr A. The notice principle thus emphasises on providing sufficient public notice of various interests in land rather than merely recording them. The first to provide sufficient notice of a particular interest obtains the priority over all others.

There are different approaches to implementing land registration programs. The approach to implementation may be compulsory or voluntary (Larson, 1991). Compulsory means people have no choice but to register their properties whilst a voluntary approach gives people the choice to register their properties or not. Compulsory registration is triggered only when certain events (such as transfer of land) occur. In England for instance, a buyer's rights to a land according to the Land Registration Act (LRA) 2002 are not recognised legally if the transfer is not registered whilst in Ireland, the transaction cannot even take place if the land is not already registered by the seller. Alternatively, Zevenbergen (2002) classifies the implementation approaches into two - systematic and sporadic approaches. Janczyk (1979)

explains the difference between the systematic and sporadic approaches as follows. In the sporadic registration, usually, there is first an official declaration of an area as a registration area. Once this is done, the public is expected to formally apply for registration of their lands. Each land that is to be registered is surveyed individually. Apart from this initial action, the State really does not do much. The assumption here is that the public understands the value of registration and will patronise it; however, this does not happen often in reality especially where people are reasonably happy with any previous systems (Larson, 1991). The sporadic registration method thus appears similar to the voluntary registration. There are no index maps in the sporadic registration and this could lead to a situation where various parcels of land overlap as they are surveyed individually (Zevenbergen, 2002). Under systematic registration, Janczyk (1979) observes that once an area is declared a registration zone, the declaration is followed by preparation of a cadastral map of the whole registration zone. Owners of land must indicate their land boundaries in this process as well as indicate the exact rights they wish to claim with the relevant supporting written evidence or oral evidence backed by sworn statements. In the systematic system, registration starts only in one part of the country and gradually extends to other parts as previously declared registration zones get covered.

Larson (1991) explains that in a compulsory systematic registration system, individual land owners are not required to submit applications for their land to be registered; the State simply registers all lands though the owners may be asked to pay the necessary fees. This is said to be prevalent in areas where land reforms are aimed at transferring public lands to private individuals or vice versa. This system involves a smaller per unit cost of registration and the huge initial cost is mostly born by the State (Larson, 1991). Each approach has its own challenges. A combination of these may be more helpful and effective than any of them taken in isolation. For instance, both systematic and sporadic approaches could be adopted; implementation of systematic registration could start from high economic potential zones while sporadic registration is maintained at low to average economic potential areas (Zevenbergen, 2002). Prioritisation of the registration process will depend on the expected outcomes; if the aim is to help reduce litigations then priority should be given to areas with high incidence of land disputes (Larson, 1991).

3.2 Systems of Property Registration

Basically there are two forms of land registration – deed and title registration systems. A distinction between these two systems can be found the explanations that follow.

3.2.1 Deed registration

Under the deed registration system, one is said to attain legally recognized rights to land upon the conclusion of a transaction agreement or contract (Deininger, 2003). The registration of a deed does not affect its legal status but merely stores it (Torhonen, 2004). It is further observed that in deed registration, transactions may be offered for registration without any enquiry regarding its contents and effect, and the fact of registration carries with it no implication of title prior to registration (Larson, 1991). Deed registration thus merely records instruments or land transactions as they occur without specific reference to the land they affect; the deed itself is a legal document of the transaction as such its registration is only to provide notice to the public.

Asiama (2000) reiterated this by observing that the deed registration system does not permit sufficient effective investigation of title before registration. It is hence possible for transactions to be recorded even though none of the parties involved is the rightful owner of the land involved in the transaction. In other words, registration of a deed does not guarantee that the registered owner is the rightful owner of the property involved. This is probably the reason why the deed registration system according to Larson (1991) most often does not provide any guarantees apart from providing evidence in times of double transfers. The drawbacks of this system of registration need no mentioning. Having said that, the process involved in deed registration is relatively easy and fast (Zevenbergen, 2002) and a good deed registration system could be more useful than an improperly organised title registration system (McLaughlin and Williamson, 1985). Very often, the deed registration system forms the basis for the introduction of title registration; hence a pre-existing deed registration system could facilitate the title registration process.

3.2.2 Title registration

Unlike deed registration, however, in title registration, it is the recording of land rights into the register that makes such rights legally valid and qualifies the proprietors for state compensation where it is available (Deininger, 2003). According to Hogg (1920), title registration has the following four basic features:

- The land is initially recorded in the register as a unit of property;

- Transactions are registered with reference to the land itself and not merely as instruments executed by the owner; it is the title to the land and not merely the instrument between the parties that is registered;
- Registration of transactions is essential for their legal validity and
- Registration acts to some degree as a warranty of title provided by the State to the person registered as owner.

Though Hogg (1920) argues that the state warranty of title in the title registration system is the single most important feature that distinguishes it from the deed system, Zevenbergen (2002) explains that the title registration systems in countries like Germany, Sweden and Denmark involve no title warranties as protection for registrants is only derived from 'public faith'. The provision of State guarantee is said not to be relevant in all instances. Zevenbergen (2002) argues that in order to maintain public confidence such guarantees become necessary in a system where things are always likely to go wrong. Presumably, if the registration system is well structured and proper mechanisms put in place to minimise the occurrence of errors and fraud, then there will be no need for providing title warranties. Abdulai and Domeher (2011) hence point out that the other critical difference between the two systems stems from the source of legal validity; whilst the fact of registration is the source of legal validity in the title registration system, in the deed system legal validity is derived from the contract between the land grantor and grantee but not from registration.

As a result of the above the title registration system is sometimes considered superior to deed registration. Zevenbergen (2002) however debunks that notion by arguing that title registration will not be effective if introduced in an area without any meaningful pre-existing form of registration such as a deed registration system. This gives the impression that title registration only builds upon or modifies existing systems. Therefore title registration may be more effective where they are introduced to streamline existing deed registration. In light of this, Simpson (1976) argues that title registration is usually introduced to solve the problems experienced in a deed registration system in order to simplify and secure land transfer as well as eliminate repetitions and inefficiencies. The title registration system has its own down sides. Apart from being more complex, Zevenbergen (2000) argues that it is expensive especially where up-to-date cadastral surveys are not available and also may involve a lot of delays due to the nature of the verification process involved.

The title registration system is often based on certain principles – the mirror, curtain and guarantee or insurance principles. The lands register acts literally as a mirror reflecting

accurately, the reality regarding ownership of land; anybody looking through the register should easily obtain information regarding the identity of the land owner, nature of the ownership and any limitations on such ownership (Lawrance, 1980; Zevenbergen, 2002). The mirror principle must therefore rely heavily on the ability of the authorities concerned to continuously update the register and where this works properly, it could be expected to increase public confidence in the register by making it more reliable. The curtain principle according to Henssen (1995) takes away the need to go beyond the register in search for historical information on land ownership to a parcel of land. The register at least in theory provides the public with a snap shot of land ownership data and once this data is guaranteed to be accurate there will be no need to try to trace the historical roots of title to any land. Under the guarantee principle, any registered land right is guaranteed by the state to be accurate (McLaughlin and Williamson, 1985; Zevenbergen, 2002). The payment of compensation to registered proprietors for losses arising from the operation of the register appears to be a key feature of this principle. It is therefore imperative to take steps to minimise errors and related loses in order to minimise the cost of compensation in the registration process.

Conclusiveness of the title register

Once a land is registered under title registration system, it provides the registered owner with a prima facie or conclusive evidence of ownership. The register is supreme and the rights so registered indefeasible; registration provides protection for an individual's rights against all other claims by 'the rest of the world' (Larson, 1991). It must be stated here however, that the register drives its strength from the warranty provided by the State. The State basically guarantees the accuracy of the data in the register and is committed to pay out compensation to any one losing his registered right for one reason or the other as may be specified by the law. However as previously argued there is no such provision under the title registration in some countries. In reality, there are limitations on the extent to which the register can be described as indefeasible. One of such limitations is the possibility of losing one's registered land rights through adverse possession. In Ghana, the Limitation Decree of 1972 (NRCD 54), permits the dispossession of a person's land (whether it is registered or not) if a squatter occupies it for a minimum of 12 years and the owner fails to assert his ownership within that period. In England a person in adverse possession of a registered land for a minimum period of 10 years can apply to be registered as the new owner whilst adverse possession of unregistered property requires a minimum of 12 years to qualify the occupier to be registered as legal owner (Harpum and Bignell, 2002). This provision is thus a disadvantage to registered property owners as they have fewer number of years within which a squatter can take over legal ownership of their properties.

It may be impossible to record every single interest in land into the register. Some unregistered interests are not invalidated by the fact of non-registration and may remain enforceable; these are referred to as overriding interests and in Ghana include things like: the rights of compulsory acquisition, rights of way, customary rights that existed at the time of registration, rights acquired under the Limitations Decree (LTRL, 1986). In Ghana, the State Lands Act 1962 and the 1992 Constitution empowers the State to compulsorily acquire the absolute interest in any private land for purposes that are deemed to be in the interest of the wider society while making provision for the payment of appropriate compensation. The extent to which the register is indefeasible is thus subject to the extent to which the state honours its obligation to compensate land owners. However, there are several cases of unpaid compensation in Ghana (Abdulai et al., 2007; Toulmin and longbottom, 2001).

Mistakes made in the registration process and fraud or forgery could also make the register inconclusive. If the 'owner' of a property is considered to have been registered by mistake, or through fraud or forgery, the register may be subject to rectification in favour of the 'real owner' (Coveney, 2003). In that case the register would have failed to protect the original registered owner. Where rectification is not thought to be the best option, the registered owner may be liable to pay compensation to the 'real owner' by paying for the value of the land (Coveney, 2003). The exception is that if the registered owner (who acquired the title through fraud or a mistake) goes on to sell this land to another person, the register may be conclusive for the purchaser who could plead bona fide purchaser for value without notice; but the 'real owner' may then qualify for compensation (Clarke, 2002; Coveney, 2003; Larson, 1991). This implies that the purchaser's rights are protected provided they can plead bona fide purchaser for value without notice. However, if the registered owner transfers the land to another person without valuable consideration, the rights of all such transferees without valuable consideration cannot be said to be indefeasible. Title registration is thus said to be essentially a purchasers' system with the aim of facilitating land transfer through the elimination of the risk of financial loss to purchasers (Clarke, 2002). Any efforts at minimising the extent of error, fraud or forgery in the registration process will be essential in enhancing its indefeasibility and this may require adequately trained personnel equipped with the right tools to operate. In addition, governments' commitment to enforce the law as well as pay compensation where it is due will both be crucial; since one cannot always guard against the above events from occurring one way forward will be to honour the promise of compensation as defined in the law. This will stimulate confidence in the system, make the register truly conclusive and provide the kind of protection required to guarantee security of

land rights. That said, the limited budgets of the developing countries could make this a heinous task to achieve.

3.3 Landed Property Registration in England

Various authors have given a systematic account of the history of land registration in England and their accounts have been summarised below. The earliest record of land ownership was introduced in England by the Romans in 397 which culminated into the doomsday book of 1086 - a comprehensive compilation of land ownership information (Mayer and Pemberton, 2000). To a large extent land registration in England has always been an attempt to improve on the conveyancing system but before 1535, land transfers took place in the presence of public witnesses (Mayer and Pemberton, 2000). The essence of public conveyancing was probably due to the need to give such transactions the societal recognition required to enhance security of land rights and eliminate potential fraudulent deals. However, the inconveniences involved in carrying out transactions in the public are obvious as it denies the parties involved the benefits of confidentiality. In 1535 an Act was passed to permit private land transfer. Private conveyancing thus replaced public conveyancing after 1535; but to avoid secret conveyancing the Statute of Enrolment passed in 1535 made it compulsory for all deeds to be enrolled with the keeper of rolls or one of the courts –this was a prelude the land registration acts that followed (Mayer and Pemberton, 2000).

Private conveyancing was not without its own problems. For instance to carry out a given transaction, the purchaser by necessity had to research into the history of title to that land for the previous 30 years making conveyancing complex for the ordinary individual who relied heavily on lawyers (at an extra cost) in the transfer of land rights (Larson, 1991). It was in an attempt to make land transfers simpler that various initiatives were taken to improve land registration. The deed registration system preceded title registration in England (Hanstad, 1998), the first deed registries were established in Bedford, Middlesex and Yorkshire in 1663, 1708 and 1703 respectively (Mayer and Pemberton, 2000). The deed registers according to Zevenbergen (2002) were closed to the public (did not permit inspection by the public) for the purpose of protecting the privacy of parties involved, the only exception was where the consent of the owner was given; this inevitably defeated the very purpose of registration but this closed register principle continued even under title registration until 1990.

A system of land registration based on the ship registration system (title registration) which was introduced in 1858 in Southern Australia by Sir Robert Torrens was subsequently replicated in England through the enactment of the Land Registry Act 1862 followed by the

enactment of the Land Transfer Act in 1875 (Hanstad, 1998; Larson, 1991). Registration at this time was still voluntary. It was not until the passage of the Land Transfer Act of 1897 that compulsory registration was introduced; this was however a selective compulsory registration system as it was only introduced in an area upon the request of the County Council (Larson, 1991). The Lands Registration Act (LRA) of 1925, however, designated some areas as compulsory registration areas and this was slowly extended to other areas until 1990 when compulsory registration was extended to cover the whole of England (Larson, 1991). Presently all lands that have not yet gone through the initial registration process may be registered by their owners voluntarily; however, compulsory registration is triggered by the occurrence of seven events amongst which are the sale or purchase of an unregistered land. The 1925 Act was criticised for the obscurity and confusion of its principles and was said to be difficult to understand even for professionals; these according to Harpum and Bignell (2002) were among some of the arguments that led to various amendments culminating into the Land Registration Act (LRA) 2002. Before 2002, however, the 1925 law was amended severally by the Land Registration Acts of 1936, 1986, 1988 and 1997 (Harpum and Bignell, 2002). The LRA 2002 replaced all existing laws on land registration and introduced electronic conveyancing; its aim is to simplify and modernise land registration laws, make the register a more accurate reflection of land ownership and speed up the rate of registration (Harpum and Bignell, 2002). Currently an average of about 75% of land in England and Wales is registered; there are however variations from one county to the other from as high as 98.14% in Brighton and Hove to a lowest of 46.33% in Torbay (HM Land Registry, 2012).

3.4 Landed Property Registration in Ghana

Records show that facilities for deed registration have always been in existence during the 18th century. Land registration in Ghana was first introduced by the British and as such is very similar to the system that exists in England. This began by the passing of the Land Registration Ordinance of 1883 which first introduced a deed registration system in Ghana - this was later repealed by the Land Registry Ordinance of 1895 to further strengthen the deed registration system (Sittie, 2006). The Land Registry Act (Act 122) was enacted in 1962 and According to Sittie (2006), Act 122 was only to serve the purpose of providing evidence of which instruments were registered and did not provide or confer title on the registrants; it attempted to solve the problem of multiple sales by giving priority to registered instruments according to when they were registered. Deed registration in Ghana, was beset with such problems as the lack of land plans and maps for accurate identification which led to multiple registrations for the same land (Sittie, 2006). As part of the attempts to enhance land transfers under the deed registration the system, the Conveyancing Decree of 1973 was

passed; it required amongst other things that all customary transaction be written since almost all such transaction were not documented but this was never implemented and was subsequently repealed (Blocher, 2006). Under the current conveyancing decree, customary transactions do not need to be documented for legal validity. Indeed the constitution does recognise customary ownership as evidenced by current occupation and use.

Land title registration was introduced by the enactment of the Title Registration Law (PNDCL 152) in 1986; this law required that cadastral maps be produced to reduce fraud and conflicts. The main purpose of this law was to facilitate proof of title and make land transactions simple, safe and inexpensive (Karikari, 2000). PNDCL 152 introduced systematic title registration which currently covers only two regions (Greater Accra and Ashanti) out of the ten regions in the country. Currently 20 districts in the greater Accra Region and one in the Ashanti region (Kumasi) are declared as compulsory registration districts (Larbi et al., 2010). In the other eight regions where title registration has not yet been introduced, deed registration remains the system of land registration in operation.

There are about seven different steps involved in title registration in Ghana and according to Sittie (2006) these include: (a) formally submitting an application to the title registry together with fees and required documents; (b) the Registry issues a receipt to the applicant as well as a letter to be submitted to the Survey Department to request site plans to be prepared; (c) thirdly, applicant picks up the completed plans upon paying required fees and submits the plan to the Title Registry; (d) the title registry again issues the applicant with a photocopy of the plan and a search report form which has to be submitted to the Lands Commission; (e) if the search reports indicates no objection to the applicants claim, the Title Registry publishes the application in the newspapers; (f) if no objections are raised after two weeks the registry proceeds with the registration and finally (g) the title certificate is issued and the particulars recorded on sectional plans. As part of the process, the applicant is also required to provide a tax clearance certificate.

The challenges in this process are glaring; the problem is just not the number of steps involved but also, the inconvenience of shuffling from one agency to the other as well as the cost implications. The documentary requirement such as the need to provide a tax clearance certificate in itself could be a big disincentive for people to patronise the system. On the other hand, the deed registration process is quiet short. All that is required is for the land owner to present the deed to the deed registry; upon payment of the required fee the deed is registered by placing an official stamp at the back page. Therefore, the absence of the stamp on any deed is an indication that it is not registered. Though title registration was introduced

to solve the problems of deed registration in Ghana, the system is still be beset with several problems not very different from those experienced under the deed registration; for instance, registration is still undertaken without the help of planning schemes and layouts or area maps - the results have been the registration of open spaces, public access areas and public lands to individuals (Fiadzigbey, 2000). Another problem is the unnecessary bureaucracy one has to go through to get land registered. According to Zevenbergen (2002) several organisations are still involved in the registration process with a very poor level of cooperation amongst them, and operations are said to be over-centralised in Accra.

Blocher (2006) reports that about 50% of registered land owners spent up to 10 years to get their lands registered at a cost that most Ghanaians cannot afford. It is therefore not surprising that as at 2001 (15 years after the enactment of the title registration law), less than 5% of the country was registered (Blocher, 2006). From the time this law was enacted up to the year 2000, a little less than half of the total applications received have been processed and its impact has been described as negligible (Toulmin, 2006). Only six deed registry offices and four title registry offices were established in the country by 2002; in addition, only one title registry actually issued certificates as at that time), some of these registries lacked registrars and, the official process involved is too lengthy and expensive (Zevenbergen, 2002). In 1997, attention was directed towards improving land registration with specific emphasis on the introduction of aerial photographs and computerisation of title plans, which was followed in 1998 by a study commissioned by the government on how to improve the land registration system within the short, medium and long terms (Zevenbergen, 2002). This study recommended the elimination of the requirement for tax clearance for registration as well as clearly defining and recording boundaries among others (Kuntu-Mensah, 2006).

The current estimate of the proportion of the country registered stands at only 8% (World Bank, 2010). The introduction of the Ghana Land Administration Project (LAP) since 2004 has brought about some reported improvements to land registration in Ghana. The deed registration has now been decentralised to all the regional capitals and is said to have brought the registration of deeds closer to the people, resulting in a reduction in the time it takes to register a deed from 36 months to two months; since 2006 the time it takes to register deeds of sale with the Lands Commission has been reduced from 135 days to 34 days (World Bank, 2010). Registration of titles in declared registration districts has been reduced to about 6 months from 36 months as at 2011; as at this same time the number of land litigation is said to have reduced by 70% and customary boundary demarcation in most pilot areas have been completed (World Bank, 2010). The lands Commission Act passed in 2008 paved the way

for the merging of four land sector agencies into one body (the Lands Commission); other successes include the completion of the first phase of the Geodetic Reference Network (GRN) covering the golden triangle of Accra, Kumasi and also the first phase of the Land Information System (LIS), development and piloting of the three tier land use planning models in six (6) pilot districts (World Bank, 2011). The implementation of the LAP thus appears to have provided solutions to some of the teething problems that beset land registration in Ghana. Though a lot remains to be done, the future looks bright with continues commitment from all stakeholders.

3.5 Landed Property Registration and Security

Property registration is most often wrongly perceived as the panacea to the problem of insecure property rights in the developing countries. The legal perspective of property rights and security (discussed in chapter 2) appears to be the driving force behind the advocacy for mass land registration programs especially in developing countries. According to Griffith-Charles (2004) this has already led to huge expenditures on providing landholders with ownership certificates which serve as proof of ownership in the law courts. Even though secure property rights as previously explained involves both formal and informal recognition and enforcement of property rights, programs designed to create secure rights based on the legal perspective especially in developing countries do appear to ignore the informal recognition aspect. Indeed, land registration programs often are introduced to replace indigenous systems instead of integrating the two into a more formidable security enhancing tool.

The provision of documentary proof of ownership through registration does not solve the problem of land disputes especially in the continent of Africa. As noted by Payne et al (2009) in several areas including India, Mexico, Peru, South Africa, Tanzania, Senegal and Egypt, de facto security already existed before the introduction of land registration programs; indeed in Afghanistan and India for instance, it is reported that registration actually led to a reduction in tenure security. It is probably in this regard that Atwood (1990) argues that land registration could actually reduce security and lead to more conflicts. In fact, Abdulai (2010) observes that out of the I2, 380 cases of land disputes filed at the law courts of Ghana within the 8 year period from 1999 to 2006, 17% of such lands were registered; out of this number, about 195 of such cases were resolved in court but 53% of these cases were decided against the registered owners. Elsewhere in Honduras and the Philippines the World Bank (2005b) further estimates that about 10% and 15% of registered lands respectively remain under ownership disputes.

Also, in Kenya where extensive land registration programs have been embarked on for quite some time now, a new legislation was passed which referred land disputes first to elders of the community and the law now recognises certificates only as one piece of evidence of ownership (Migot-Adholla et al., 1991). What this means is that the possession of a land title certificate alone does not protect the holder from disputes and the holder could actually lose his or her rights. The failure of land registration programs geared towards enhancing security of tenure to a very large extent is a reflection of how narrowly security has been conceptualised in the design of such programs. Indeed any program designed to enhance property rights security that focuses on formal legal recognitions alone to the neglect of societal recognition based on the values of the people will only succeed in creating more disputes and making such right more insecure. There is thus the need to expand the scope to bring other aspects of security of tenure to the fore. Abdulai and Domeher (2012b) observe that the argument which portrays land registration as if it guarantees ownership security is often based on a number of things such as: the state provision of title warranty under the title registration system; the publicity function of the lands register and the provision of legal recognition of land ownership. However, an understanding of what constitutes real security as discussed in the previous chapter clearly shows the flaws in such arguments. Under the title registration system already discussed, the state guarantees the accuracy of land ownership information stored in the register and promises to compensate registered land owners if they incur any loses relating to their ownership rights; this provides certainty to land owners. However, this argument is limited only to the title registration and cannot be extended to the deed system. Furthermore, as mentioned before, in some countries such warranties of title are non-existent and in other jurisdictions though the warranties exist on paper in practice several cases of unpaid compensation exist.

Land registration is also one way of formalising customary ownership and through that process provides legal recognition to land ownership. Since formal legal recognition and enforcement of land rights is a key component of security, land registration is capable of contributing to the enhancement of land ownership security; that said, registration alone does not cater for societal recognition which is also an essential aspect of security. Using Zimbabwe as an example Toulmin (2008) observes that paper title is not sufficient condition for land tenure security. Instead of increasing the level of ownership security Atwood (1990) argues that land registration could actually reduce security and lead to more conflicts in instances where overlapping customary and residual right of women, uneducated, nomadic and other marginalised groups are not recognised and recorded in the process. As a result, it must be pointed out that registration of property per se is not what makes land rights secure. Hence efforts should be appropriately directed towards securing ownership before pursuing

registration and not the other way round. The parameters of property ownership security have been discussed in chapter two.

3.6 The Economics of Property Registration

Land registration is being promoted in the developing world as a tool for providing tenure security for land owners, lenders and traders; securing investments; unifying land markets; improving access to formal credit; reducing poverty and promoting economic development (Payne et al., 2009; UNECE, 2005). The earliest attempts at establishing land records in Europe were fuelled by the need to use such data to tax land owners (Hanstad, 1998). Its significance has since been highly linked to economic growth and poverty reduction as explained by Feder et al. (1988) and Brasselle et al. (2001) in the paragraphs below.

The economic impact of registration is derived from the assurance effect – certainty that landowners will be able to reap the fruits of their investment and the collateralisation effect – the ability of land owners to use their lands as collateral for credit (Brasselle et al., 2001; de Soto, 2000). Both the assurance and collateralisation effects and their ultimate impact on economic growth and poverty reduction are dependent on the argument that land registration guarantees security. By enhancing security, land registration triggers the assurance effect, provides the incentive to invest and increases investment demand. From Figure 2 below, it can be seen that as investment demand increases, the demand for other complementary variable inputs such as labour, equipment, fertilizers and improved seeds also increase. The higher demand eventually leads to greater use of inputs, more investment and greater output levels. The end product is higher land values, higher income levels and growth. For instance, Brown et al (2006) observe that land values could appreciate by about 25% or higher upon registration. Durand-Lasserve and Payne (2006) also estimate that the market value of land appreciates by at least 20 to 60% upon registration. The introduction of land registration in Holland in 1529 resulted in higher land values and made arrangement of mortgages quicker (Mayer and Pemberton, 2000). Such appreciation in land values makes theoretical sense. If registration enhances security, then people should be willing to pay a premium for the enhanced security.

Given two properties (A and B) with the same characteristics, people are expected generally to be willing to offer a higher price for the property that has ownership rights security. An implicit assumption from the assurance effect explained above is that the land owners already have the funds to invest but this may not always be the case and in reality the desired effects may not be realised. Byamugisha (1999) however, argues that land registration reduces information asymmetry and uncertainty regarding property ownership and as a

result, lowers transaction cost and speeds up land transaction. This is said to facilitate land market operations which permits land to be transferred from less efficient to more efficient users. Therefore even where land owners do not have their own funds to invest, the vibrant land markets should ensure that such lands are transferred to others who are not only willing but also financially capable to invest.

Figure 2: Security of land ownership and farm productivity: A conceptual framework. Source: Feder et al. (1988).

Alternatively, land owners who do not have funds to invest could obtain credit to undertake desired investment activities through the collateralisation effect of land registration. Land registration through its security enhancing ability, is said to improve on the collateral properties of land - making it a better, more secure and acceptable form of collateral that can used to secure investment credit (de Soto, 2000). The readily available credit coupled with the higher investment demand could then work together to increase output and household incomes as shown in Figure 2 above. Registration therefore by implication reduces the problem of lack of collateral which is perceived to be the main factor responsible for the limited access to credit (Berger, 1989; de Soto, 2000; Kakuru, 2008; Pearce et al., 2004). Land registration in effect is argued to make borrowers more credit worthy to attract funding from private financial institutions for investment that will improve output and revenues. On the contrary Domeher and Abdulai (2012b) argue that in rural Africa providing registered titles will on its own not make them that credit worthy.

Arguing in support of the credit effect of land registration, Domeher and Abdulai (2012a) observe that if registration is capable of reducing land conflicts, it will provide a boost to lenders taking land as collateral since such conflicts could be very costly to them. Not only can such conflicts prevent lenders from repossessing the land or delay the process of doing so but also it could make foreclosure difficult. Buyers may be less willing to purchase lands known to be involved in ownership disputes as those who purchase such lands may be exposed to reprisal actions from disputing parties. Without land disputes however, it should be relatively easier for lenders to sell any land based collateral that they hold. Since the only interest lenders may have in the collateral they hold is to sell it to recover loans on default, the ease with which an asset can be liquidated must be a highly desirable feature considered in accepting an asset as collateral for credit. Registration provides lenders with the assurance that the borrower has at least the legal right to mortgage a given property and that there will be no disputes whenever foreclosure becomes necessary.

Foreclosure is further made easy by the earlier argument that registration facilitates the operation of land markets and this is particularly important because banks may not grant investment credit where active land markets are absent (Barrows and Roth, 1990). The earlier argument that land registration raises land values is another medium through which the credit effect may be realised. According to Domeher and Abdulai (2012a) the amount of credit granted often constitutes a fraction of the property's value (eg 80% LTV) hence any rise in land value as a consequence of land registration will increase the amount of credit that one could potentially borrow. The average household land size in Africa is small ranging from one hectare per household in Ethiopia, two hectares in Tanzania and two and half hectares in Uganda and Kenya (Salami et al., 2010). Therefore appreciation in property values will be good news for landowners because the widespread land fragmentation leaves many people with small land holdings and land values that may not be substantially high to secure the credit needed (Domeher and Abdulai, 2012a).

More importantly, land registration could also be used as a tool to help lenders manage their risk. This is achieved by providing lenders the opportunity to check for the existence of encumbrances (such as mortgages) on the property presented for use as collateral (Domeher and Abdulai, 2012a). In the absence of land and collateral registries, a borrower who in the past may have presented his landed property to a lender (A) for credit could decide afterwards to present the same property to a different lender (B) even though they have not finished paying the loan owed to lender (A). With land registration the assignment of land as collateral for a loan will be recorded as charge on the land and where the second lender (B)

decides to use the same property to secure a loan for the borrower, that would be done with knowledge of the fact that prior claim to the property belongs to Lender A.

This allows Lender B to take any necessary measures required to protect itself from the risk of not having prior claim to the property. Furthermore, land registration makes it easier and less costly to verify land ownership therefore in credit markets where lenders tend to push all or a greater proportion of cost to the borrowers in the form of interest rates and other charges such as commissions (which cover processing or administrative expenses), the potential of land registration to reduce the cost of verifying land ownership could lower the cost of credit for borrowers and make credit more affordable (Domeher and Abdulai, 2012a; MacGee, 2006). Even though arguments on the effects of land registration illustrated in Figure 2 above tend to focus on the agricultural sector, Byamugisha (1999) points out that the investment incentive generated by land registration is not limited to agriculture but cuts across all sectors of the whole economy; most economic activities such as those in agriculture, fishing, manufacturing, mining, construction and services sector involve the use of land either directly or indirectly. Therefore, land registration can generate investment incentives across all these sectors through the assurance and collateralisation effects. To explain why land registration affects all sectors in the economy and not just agriculture, Byamugisha (1999) pointed to the following reasons: (a) the fact that non-agricultural land tend to be more secure, transferable and valuable making it a more attractive collateral asset; (b) non-agricultural sectors of the economy are also more profitable with less risk and (c) the combination of the first two makes the non-agricultural sectors attract more bank credit.

The role of property registration in economic development is given even much emphasis by de Soto (2000) who attributes the existence of high levels of poverty and underdevelopment in the developing countries to the fact that a very small proportion of land ownership is registered. De Soto posits that the western world is highly capitalised and developed because of the existence of comprehensive land registration systems. The modern economic development of Britain was kick-started by the industrial revolution from 1750 to 1850 (Allen, 2006). The industrial revolution which later spread to other parts of the western world led to a structural change as manifested by the shift of resources away from agriculture to industry and the fast economic growth which translated into considerable and progressive increase in real income levels (Crafts, and Mills, 1994). There was a change in social values as people moved away from traditionalism to risk taking and profit making attitudes (Hartwell, 1965).

The revolution is attributed to factors such as: technological advancement/innovations; availability of resources; as well as economic and geographic factors; capital accumulation; laissez fair; market expansion and miscellaneous factors such as the wars which favoured England; the growth in knowledge and the decline in plague and good harvest (Adams, 2010; Hartwell, 1965). A wide range of unprecedented micro-inventions (such as the spinning jenny, the steam engine and coke smelting) occurred at the time in Britain. The invention of new machinery and sources of power made large scale production possible (Allen, 2006; Hartwell, 1965). Britain's achievements in international also trade opened up a whole range of profitable and unique opportunities which generated the economic incentive required to invent (Allen, 2006). Trade was also boosted by domestic demand created by the massive rise in population; urbanisation and rising income levels as well as the slave trade the triangular trade involving Britain, West Africa and the West Indies (Allen, 2006). Much recent works have attributed the industrial revolution to such factors as: the political structure; the security of property rights and the flexibility of the legal system which together created a favourable investment climate that made the industrial revolution possible (Allen, 2006). Securing property rights at the time was based on the use of patents as a tool to incentivise the introduction of new technology by ensuring the whole stream of returns from an invention could be reaped by the inventor (Allen, 2006). However, most of the innovations were better protected as trade secrets and as such were never patented; indeed, property rights in France and even China at the time were equally as secure as in England but France and China were not experiencing the revolution as England (Pomeranz, 2000).

The second face of the industrial revolution which started around 1850 covered the chemical and electric industries, petroleum refining and distribution and automotive industries. The new wave of technology during this era was led by the United States and Germany as the importance of coal declined with increasing availability of petroleum products (Allen, 2002). A survey of the literature on economic development of the Western World does not show that property registration played any significant role. Therefore the argument attributing the economic development in the Western world to property registration appears to be an exaggeration. Taking the case of Britain for example, there is no need stressing that no comprehensive system of registration exists albeit it is a developed economy. Despite the long history of land registration in England and wales for example, as high as about 40% of land is still not registered in some counties. Furthermore, around the time of the industrial revolution in Britain, property registration was not that developed. Indeed, the first deed registries were established in Bedford, Middlesex and Yorkshire in 1663, 1708 and 1703 respectively (Mayer and Pemberton, 2000) and title registration was introduced around the end of the revolution in 1862. The events which culminated into the modern economic

development in Britain and other developed nations are well documented in the literature and landed property registration does not appear to have played a role.

3.7 Limitations of the Effects of Property Registration

The economic impacts of land registration discussed in the previous section have a number of limitations. It is thus not surprising that most studies (cited in chapter one) in the developing world especially Africa have not been able to identify the existence of both the security and credit effects. The linkage between land registration, credit, investment and poverty reduction is based strongly on the argument that land registration is the panacea to land ownership insecurity. As argue in section 3.5, the arguments linking land registration to property ownership security are fundamentally flawed as they do not give due recognition to the real parameters of security as discussed in chapter two. Therefore, property registration cannot guarantee security and as a result any time land registration fails to solve the problem of insecurity, its relation with credit, investment and poverty reduction is bound to be weakened.

However, assuming that land registration succeeds in enhancing security and provides the incentive to invest, the strength of this incentive (in terms of leading to actual investment demand) will depend on other factors such as the overall friendliness of the investment climate; the availability of appropriate infrastructure; and availability of profitability investment opportunities amongst others. Not only will these affect the decision to actually invest but also it will affect the decision of lenders to make credit available to investors (Domeher and Abdulai, 2012b). Consequently, Adams et al. (1999) argue that improving security within an environment full of various constraint factors will not bring about the desired effects. Given the wave of discussion so far, it must clearly be pointed out that registration per se will not make land the perfect collateral that will trigger credit supply because apart from its inability to guarantee security, there are also many other factors which are more important in influencing the decision to advance credit. These factors include: the ability to repay advanced credit, the nature and location of the property amongst others. Land registration does not change the nature and location of the properties (which influence the ease of foreclosure) that people hold; therefore foreclosure of registered property could still be difficult. If such properties are in deprived rural location lenders may be deterred from accepting them even if they are registered. In Bogotá for instance, Gilbert (2002) notes that the challenge for lenders is the nature of the assets often offered as collateral and not the absence of registered property titles.

Adding to the debate on the collateralisation effect of land registration, Wannasai and Shrestha (2007) explain that it is not applicable to all investors as some limiting factors may undermine profitability and make it difficult for some investors to access formal credit. Atwood (1990) therefore, argues that providing registered titles for as many people as possible will not in many situations especially in Africa increase the number of potential borrowers. Even though land registration may be able to enhance access to credit for investment, Carter and Olinto (2003) on the basis of evidence in Paraguay, argue that in the agricultural sector for example, biases usually exist in the credit market in favour of the more affluent large scale farmers to the disadvantage of the poor majority small scale farmers. Land registration will not change the cash flows and profitability of investments. Formal lenders are not NGOs and every penny advanced is based on the conviction that it can be recovered with no significant problems. The main reason why people may be denied credit according to Brown et al (2006) is the low borrower repayment capacity. Gilbert (2002) also establishes that the formal lending decision making process is based on the ability of borrowers to demonstrate that they have a regular income source. Formal lenders thus seek the assurance that a loan will be repaid. It may be difficult to find such an assurance from Africa's majority poor households and small business owners. Formal lenders usually do not have confidence in the repayment capacity of such borrowers as lending to them often turns out to be unprofitable (Gilbert, 2002).

Furthermore, land registration does not change people's attitudes. Place and Migot-Adholla (1998) establish in Kenya that there exists a very limited use of land titles as collateral for credit purposes. The unwillingness to use land titles as collateral will limit its impact. The ability of land registration to promote greater access to credit is dependent on the policies, traditions and culture in different countries; for instance, where the customs, traditions, culture or policies prohibit the use of land as collateral, there is no way registration will promote credit access (Feder and Nishio, 1999). Also, since registered landowners sometimes have very little or no interest in taking formal credit (Durand-Lasserve and Payne, 2006), the preference for informal credit could limit the potential credit effect associated with land registration. As a result, Deininger (2003) points out that certain preconditions must exist to realise the credit effects of land registration; these conditions include the existence of: (a) an informal credit market; and (b) a latent demand for formal credit that is not met because of lack of registered title. The implication is that for land registration to influence credit access, not only must people have a higher preference for formal credit but also they must be willing to use their registered property titles as collateral and the possession of registered land titles should be a necessary requirement for obtaining formal credit. Hence in areas where these conditions are not met, obtaining a registered title

may not enhance an individual's chance of getting formal credit. For instance in Indonesia, Dower and Potamites (2005) find that unregistered land is acceptable as collateral as people are able to use informal documents to demonstrate property ownership and this reduces the potential impact that land registration could have.

Land registration does not also eradicate all the significant cost elements involved in collateralising a loan. Such cost could still be high enough to deter lenders from granting credit even when the borrower possesses registered title to land. Collateral cost incurred by the lender may include cost of evaluation and monitoring, filling fees for collateral registration, cost of liquidation and asset utilisation and other administrative expenses (Menkhoff et al., 2003). In the developing countries, apart from the collateralisation process being complex, the liquidation process is also time consuming and costly (Menkhoff et al., 2003). Whenever the legal framework complicates or delays the process of creating, repossessing or sale of collateral and enforcing collateral agreements, the economic value of the collateral asset is affected and this makes such assets less acceptable by lenders (Fleisig et al., 2006).

Fleisig et al. (2006) identify three main stages in the collateral enforcement process which may be a big hindrance to lenders. Firstly, on default of a loan, the lender files a court complaint. Secondly the court must give a ruling on the case. If judgement favours the lender, an order is issued for the seizure and sale of the property. Kibodya (2006) observes for instance that amendments to the Lands Act of Tanzania in 2004 required all banks to seek approval of the courts for any intended repossession of residential property or agricultural lands. Finally the appraisal and sale of the assets involved is usually administered by the courts. There is no need stressing that the outcome of such court proceedings could be very uncertain. The likelihood of losing the legal battle to recover outstanding loans through the sale of collateral presents a big challenge to lenders. Therefore, the mere fact that a loan is collateralised does not mean that the property will certainly be foreclosed in times of default. Uncertainties of this nature could make even registered property unacceptable to banks. Apart from the fact that the law may prohibit the sale of certain assets, another legal barrier arises when the law prohibits the sale of the property below a certain value with the aim of protecting the borrower (Fleisig et al., 2006). It is thus apparent that even the best forms and programs of land registration may not in any way take away these very important legal and other elements of cost associated with collateral use.

3.8 Summary

In this chapter the author explains the concept of land registration, its principles, systems and approaches to implementation. On the economic significance of land registration, available literature often underscores its ability to increase investment, enhance economic growth and reduce poverty through the assurance and collateralisation effects. Such arguments are however based on the assumption that registration guarantees security of property ownership. As already discussed this argument is flawed because registration per se does not cater for all the dimension of security and hence weakens its economic impacts. It is thus not surprising that in the developing world especially Africa, several studies have found no significant relationship between land registration and security or access to credit. Other limitations emanate from the overall investment climate, availability of appropriate infrastructure and profitable investment opportunities amongst others. The next chapter will focus on the theoretical framework for this study.

CHAPTER 4

THEORETICAL FRAMEWORK

The absence of registered property titles is often regarded as the factor responsible for the credit constraint faced by many businesses and households in the developing countries. To gain a better understanding of this argument, there is the need to provide a conceptual explanation of credit constraint and how it is linked to registered property titles. The concepts of market equilibrium and information asymmetry are central to the credit constraint theory and require an equal level of attention. The next section thus explains what market equilibrium is and how it works. Section 4.2 examines the concept of information asymmetry. Whilst section 4.3 looks at the credit constraint theory; the need for collateral in credit contracts is discussed in section 4.4. In section 4.5 the link between credit constraint, collateral and land registration is outlined and the chapter is summarised in section 4.6.

4.1 Market Equilibrium

A market is the medium that allows interaction between buyers and sellers of a good; demand is the amount of the good that consumers are willing and able to buy at various prices whilst supply refers to the amount of the good that sellers are willing and able to offer for sale at these prices (Sloman, 2008). In a free and competitive market (where there is no government intervention), the interaction between demand and supply determines the prices of goods in the market; these prices provide signals to the market regarding the decisions of buyers and sellers (Sloman, 2008). Prices are therefore sensitive to any surpluses or shortages in the market. When supply exceeds demand, it results in a surplus whilst a shortage is the result of demand exceeding supply. A shortage is an incentive for sellers to increase prices. As prices go up, demand falls whilst supply increases until the whole shortage is completely eliminated. On the contrary, a surplus will put downward pressure on prices, as prices fall, demand will rise whilst supply declines until the surplus is eliminated. Prices keep rising and falling in response to shortages and surpluses respectively until such a point where neither a shortage nor a surplus exist in the market (i.e demand and supply are equal). When the market is stabilised and there is no tendency for change, the market is said to be in equilibrium; the price at which demand equal supply is the equilibrium price and the quantity is the equilibrium quantity (Sloman, 2008). At the point of equilibrium all traders are able to buy or sell as much as they want and everyone is satisfied (Perloff, 1999). The market thus has a self-adjusting mechanism that automatically responds to changing behaviours of buyers and sellers; this is only possible if prices are allowed to freely move in

response to demand and supply (Browning and Zupan, 2002). This self-adjusting system is illustrated in Figure 3 below.

Figure 3: Demand and Supply Equilibrium: Adopted from Pindyck and Rubinfeld (1995)

In the market represented in Figure 3 above, equilibrium is established only at P^* Q^* and it is only at this price and quantity that both consumers and suppliers are satisfied. Any change in the price will cause an imbalance in demand and supply. At P_1, the supply (Q_2) exceeds demand (less than Q_0) and the resulting surplus pushes the price downward to P^* where equilibrium is re-established. If the price were to reduce to P_0, demand (Q_1) would exceed supply (Q_0), the shortage would tend to push the price upwards and back to P^* where the whole shortage is eliminated and market returns to equilibrium. The above illustration shows how the market equilibrium may be distorted by changes in price. However, these distortions could also be the result of changes in either demand or supply. Given the supply curve S_0 and the current ruling market price of P^* and assuming that there is an increase in demand, this will cause a shift in the demand curve from D_0 to D_1 as shown in Figure 4 below. The increase in demand creates a shortage in the market equal to Q_2-Q^* which puts the market into disequilibrium. The shortage drives prices upwards (P^* towards P_1) and demand gradually declines from Q_2 and supply increases from Q^*. The movement continues until a new equilibrium is established at E_1. The new equilibrium price and quantity are P_1 and Q_1 respectively. A decrease in demand will create a directly opposite effect. Any changes in supply at the ruling market price will also distort the equilibrium and the same mechanism will work to re-establish a new equilibrium.

Figure 4: Effects of an Increase in Demand on Market Equilibrium. Pindyck and Rubinfeld (1995)

The explanations so far imply that any distortion in the market is temporary because demand and supply through the price mechanism will always interact to return the market to a state of equilibrium. That notwithstanding, when government intervenes in the operations of the market through the imposition of price controls, the market is supplanted and results in a persistent shortage or surplus (Salvatore, 2008). In other words, government's intervention either prevents or delays the process of re-establishing equilibrium and keeps the market in a permanent state of disequilibrium. The introduction of repressive financial policies such as interest rate and other price controls prevent prices from changing freely in response to demand and supply and consequently distorts the working of the free market discussed above. The concept of market equilibrium is applicable to different markets but its application in the credit market is of particular interest in this research. The supply side of the credit market involves lenders (banks) whilst the demand side involves individuals, households and business who require credit facilities.

4.2 Information Asymmetry

The concept of information asymmetry which was first discussed by George Akerlof (1970) constitutes a common feature in financial markets and is often used to describe a situation where by one party to a transaction does not have relatively sufficient information about the other to enable him make the right decisions in dealing with the other party (Mishkin and Eakins, 2006). According to Hubbard (2002) when there is information asymmetry, one party possesses information about his opportunities and activities that he fails to disclose to the other and can thus take advantage of this undisclosed information. Alternatively, information asymmetry occurs where one party to a transaction has information that the other party either ignores or does not have access to with the effect that this information is

used to profit at the other's expense (Bebczuk, 2003). Access to information is a key component that facilitates the operation of all markets, especially, financial markets. The amount and kind of information that people possess is an essential factor influencing their behaviour and decisions in the market; for instance a seller may adjust the price of his goods based on his knowledge of the prices of other similar goods and the price a buyer may be prepared to pay may also vary given his knowledge of the price charged by other sellers (Auronen, 2003). Hence Information asymmetry affects both the internal organization of firms and its external relations with labour, capital, and product markets (Greenwald and Stiglitz, 1990). The presence of imperfect information in the market gives rise to problems adverse selection and moral hazard.

4.2.1 Adverse selection

Adverse selection occurs whenever the party likely to produce an undesirable outcome with regard to a transaction is the one most likely to be picked for the transaction; for instance in a loan transaction the bad credit risk borrowers are the ones who actively seek credit and hence are more likely to be selected for a loan (Mishkin and Eakins, 2006). When lenders are unable to differentiate between projects of different credit risk, they are exposed to adverse selection (Bebezuk (2003). A lender will usually prefer safer projects in advancing credit; however, risky borrowers may conceal the risky nature of their projects and exploit the lender's lack of information to their advantage. The problem of adverse selection is illustrated by Hubbard (2002) and slightly modified in the following example. Suppose that Mr. D wants to sell his 2000 model of Toyota Corolla. For all 2000 Toyota Corolla adverts there will be good cars and "lemons" (cars always at the repair shop). Mr D and all other individual sellers are more informed about the quality of their cars than all potential buyers. Since buyers cannot differentiate between good cars and lemons, they tend to offer a price for an average quality 2000 Toyota Corolla to all sellers. Mr D (whose car is a good car) believes the price is too low and his car is undervalued. However, another seller Mr. S whose car is a lemon is happy with that price because his lemon has been overvalued. Because of the pricing process involved, sellers of good cars like Mr D may decide not to sell their cars at all. The pool of used 2000 Toyota Corollas available in the market will thus consist mainly of lemons. The implication is that a potential buyer in this market is likely to select or buy a below average car (a lemon) and this is the adverse selection problem. Akerlof (1970) thus argues that the presence of information asymmetry eventually leads to a situation where bad cars derive out good cars from the market because they are priced the same as the good cars.

The effect of adverse selection on credit markets can be inferred from the above illustration. Since lenders are unable to distinguish between good and bad borrowers they may not be able to reward good borrowers with lower rates and bad borrowers with higher rates.

Information asymmetry causes lenders to require higher rates of return due to an over exaggeration of borrower risk. As a result of this, the average interest rate that will be charged may be higher than what a low risk borrower would expect or deserves. Good borrower (low risk) may feel they are being over charged given their lower likelihood to default and as a result may decide not to apply for credit at all. However, bad borrowers (high risk) will be happy to borrow at that rate of interest because they may even count themselves lucky to be able to borrow at that rate. As a result, the demand side of the credit market will consist of mainly high risk borrowers and increase the lenders' chances of advancing credit to a bad borrower. The high risk borrowers are the most active seekers of credit because they have so much to gain if their risky adventures become successful and little to lose if they fail.

On the contrary, risk-averse borrowers are more conservative and will most likely go for safer projects with low risk. Such borrowers therefore, may only go for credit only when they have a safe project to invest in. Given the high possibility of granting loans to high risk borrowers, lenders may decide to advance no loans at all despite the fact that some low risk borrowers are also out there seeking for loans (Mishkin and Eakins, 2006). Good and honest borrowers are thus made to suffer for the threat posed by the presence of bad borrowers through information asymmetry. If there were no information asymmetries each borrower would be charged the right price and the above effects would not happen. Adverse selection thus affects the allocation of funds, business growth and the economy as a whole (Hubbard, 2002). Asymmetrically distributed information between buyers and sellers of financial instruments is capable of causing the operations of such financial markets to break down or be severely limited (Greenwald and Stiglitz, 1990).

4.2.2 Moral hazard

If the parties in a transaction manage to go round the adverse selection problem to undertake a financial transaction, they remain exposed to the risk of moral hazard after the transaction has been undertaken. Moral hazard, basically, is the risk that one party and in this case the borrower may resort to undesirably risky activities at least from the point of view of the lender after the credit is disbursed (Mishkin and Eakins, 2006). Moral hazard occurs because the borrower has more information regarding how the loan will actually be used than the lender. Alternatively, the moral hazard problem is seen as one of a problem of conflict of interest where one party to a transaction is motivated to act in its own interest without regards to the interest of the other party. In the credit market such a change in borrower attitude reduces the chance of the loan being repaid (Hubbard, 2002).

A sudden change in borrower attitude may be very attractive in that, as explained earlier, risky investments have a high return if they are successful. That incentive of a very high return may cause borrowers to divert the funds away from the original purpose for which it was secured. After all, what the borrower may lose on default is his reputation. Depending therefore on how valuable this reputation is to the borrower, the risk of moral hazard may be high or low. This issue of moral hazard arises because it may be practically impossible for the lender to know what the borrower is actually going to do with the funds, otherwise the lender could take steps to prevent any diversion of the funds. Since the lender is not well informed with all certainty what actions the borrower will undertake after obtaining the loan, Mishkin and Eakins (2006) argue that a decision might be taken not to advance the loan at all even though the probability of repayment may be high. Asymmetric information thus increases the cost for savers and borrowers in financial markets. Though the cost of moral hazard and adverse selection could actually be high enough to cause lenders to stop lending or to lend to only governments and well-known borrowers, Hubbard (2002) concedes that in practice, lenders find ways to lower these costs so as to expand their lending opportunities. The way a debt contract is designed could lower or increase the moral hazard problem. Furthermore, asking borrowers to invest a certain amount of their own funds into projects will also put them at risk in case of failure and this may reduce their likelihood of undertaking risky activities (Hubbard, 2002).

4.3 Credit Constraint

The focus of this section is to look at the theory of credit constraint. The World Bank (2008) describes access to finance as the absence of both price and non-price barriers to the actual use of financial services - credit. The phrase 'access to credit' may also be used to refer to a situation where credit is made available to potential borrowers at a reasonable quantity and cost (Claessens, 2006). Credit access is thus multifaceted and could be defined in terms of not only the availability of credit but also in terms of the amount of credit made available, the cost of the available credit, the type of credit made available. According to Claessens (2006), these dimensions could alternatively be described in terms of the degree of access reliability– whether credit can be obtained when needed; the convenience of access - ease of access and continuity in terms of ability to repeatedly access funds; and flexibility - whether or not credit products are tailor made. Access to credit is affected by both demand and supply side factors. The demand side includes factors such as the desire or need to borrow. Demand for credit is determined by the desire to expand operations, profitability of investment relative to the cost of capital, availability and cost of other sources of funding (Bigsten et al., 2003). The supply side involves the decision of whether to lend or not and how much to lend (Chen and Chivakul, 2008).

Under what circumstance can one be said to have credit access problems or face a credit constraint? From the above discourse, a credit constraint exist if one cannot obtain the needed credit due to following; the fact that it is unaffordable, unreliable or inflexible as well as other barriers that do permit the amount of credit desired to be met by the suppliers. Thus a credit constraint exists wherever the desired level of credit is higher than the amount offered by the market (Ruiz-Tagle, 2005). When a firm is unable to borrow as much as it would like to at the going market rate, then the firm is credit constrained (Banerjee and Duflo, 2004). The terms credit constraint and credit rationing are used interchangeably in the literature as reflected in the quotation below:

> In the economic literature credit constraints or credit rationing are defined as a situation in which interest rates do not fully adjust to equalize the demand and supply of loans. Some borrowers are denied credit even though they are willing to pay market interest rates (or more), whereas apparently similar borrowers are able to obtain credit; the borrowers who are denied credit (either fully or partially) are referred to as credit constrained (Jaffee and Stiglitz, 1981 cited in Love and Sánche, 2009; p. 2).

However, other authors argue that the two are slightly different; credit rationing exists where there is a gap between the amount the lender is willing to offer and what they are able to offer; this only leads to credit constraint for borrowers if they are unable to borrow the optimal amount they wanted (Diagne et al., 2000). In this study the term credit constraint is used to describe a situation where excess demand for credit is not met because of a decision by suppliers not to advance more credit or because they are constrained from doing so as well as a situation where people do not obtain the needed credit because of a decision not to apply. The concepts of imperfect information and market equilibrium discussed above are fundamental to the theory of credit constraint. Stiglitz and Weiss (1981) combine the two concepts to provide the following explanation of the theory of credit constraint. Starting from a state of equilibrium in the credit market, any increase in demand will create disequilibrium as the credit demand curve shifts to the right (where demand exceeds supply). As a result, interest rate (price of credit) will be expected to rise to trigger a fall in demand or an increase in supply or both so as to re-establish equilibrium at a higher interest rate. The interest rate is thus assumed to be flexible both upwards and downwards. The flexibility of interest rate is expected to eliminate the excess demand for credit anytime there is a temporary distortion, re-establish equilibrium and remove any existing credit constraints.

In reality, there are limits to the extent to which lenders could raise the rate of interest which means the market could settle in disequilibrium. Information asymmetry distorts the credit

market operations. Though lenders would like to raise interest rates to return the credit market to equilibrium whenever there is excess demand, doing so under information asymmetry would lead to adverse selection where only risky borrowers are attracted to apply for credit. The interest that borrowers are willing to pay is an indicator of their riskiness. The higher the rate they are willing to pay the more risky they are likely to be. Unfortunately, therefore, credit market interest rates cannot increase beyond a certain optimum point. There is an optimum rate of interest beyond which lenders will not supply credit. At this optimum interest rate, if demand exceeds supply, borrowers will be prepared to pay higher rates to obtain credit but raising the interest rate will reduce the expected returns of the lender. Secondly, the interest rates charged have an effect on the incentive to repay the loan. Higher interest may wipe out the expected returns accruing to the borrower. This motivates borrowers to undertake high risk projects with high pay-offs but low probability of success (moral hazard problem). Higher interest rates also lead to debt overhang where a highly indebted borrower has very little incentive to work hard (Ghosh et al., 2000) and at the same time induces borrowers to undertake high risk projects and other actions that are not promoting the interest of the lender. Therefore, lenders cannot freely increase interest rates as a response to the rise in demand. The market may as a result settle in disequilibrium where demand outweighs supply even though some borrowers would have been willing to pay a higher interest rate to increase the supply of credit and remove any existing credit constraints. This is illustrated in the figure below.

Figure 5: Interest Rate and Expected Returns to Banks. Source: Stiglitz and Weiss (1981).

Figure 5 above shows that the maximum return that can accrue to the bank is achieved at the optimum interest rate of r^*; any attempt to increase interest rate above this optimum will actually cause a decline in expected returns. Hence, at the optimal rate of interest shown above any increase in demand for credit will not be met creating a credit constraint. Apart from the limitations imposed on the credit market by the presence of information asymmetry as explained by Stiglitz and Weiss (1981), repressive financial policies such as interest rate

controls as pointed out earlier could also limit the ability of lenders to respond to rising demand for credit through increasing interest rates. Interest rate controls do not only lead to a credit constraint but also perpetuates the constraint. To overcome the credit constraint in the credit market, a remedy to the problem of information asymmetry must be found. It is essential to device a blend of strategies capable of minimising its impacts. Auronen (2003) recommends the use of mechanisms such as guarantees for goods and services, brand names and franchising to reduce information asymmetry. Such mechanisms carry product quality information relevant to the buyer and as such help sellers of high quality goods to get the full value for their goods when sold. Guarantees for instance, give buyers sufficient time to be well informed about product quality as the seller before assuming full risk of the good being a 'lemon'. Government regulations could be used to require information disclosure by dealers in the market and to set some kind of minimum quality requirements for goods and services (Auronen, 2003; Hubbard, 2002). Leaving markets unregulated in the presence of information asymmetry affects their efficiency (Auronen, 2003).

Lenders can rely on credit records, accounts transactions, cash flow statements and other records to screen borrowers (Pearce et al., 2004). Unfortunately, however, in the developing world obtaining such data may be an insurmountable challenge in itself because, apart from the fact that functional credit reference bureaus are mostly absent, most small business operators are not well educated and cannot keep basic records and several others do not have access to bank accounts (Sacerdoti, 2005). Unfortunately, interest rates cannot also be used as a screening device due to previous explanations given. Hence, the need for an alternative device for tackling the information asymmetry problem and this is where collateral comes in. The problem is solved by incorporating collateral into the design of credit contracts (Stiglitz and Weiss, 1981).

4.4 The Need for Collateral in Credit Contracts

Collateral is generally perceived as any asset that is pledged to a lender to guarantee a loan should the borrower fail to repay. This gives the lender the right to sell the asset to recover any outstanding debts. Several properties could be used as collateral but are generally classified into movable assets including: goods, machinery, account receivables, warehouse receipts, shares, life policy and immovable assets such as landed property (Fleisig et. al., 2006). The preference for one form of collateral or the other may thus be a result of the associated legal restrictions as well as specific attributes of the asset. A good and hence an acceptable collateral asset is usually identified by the following key attributes: firstly, it must have an adequate and stable value that is expected to rise over time (Rouse, 2002). The certainty with which an assets value is expected to appreciate is relevant in the decision to accept an asset as collateral (Benjamin, 1978). A more stable asset value represents lower

risk of losses to the lender and makes related assets more acceptable; hence banks prefer assets that are not likely to depreciate significantly in value over the term of the facility (Foss, 2012). Secondly, a good security should be easy to measure (Rouse, 2002), some assets are easy to value relative to others; the easier it is to value an asset the lesser the possibility of errors. Thirdly a good security should be easy to charge (Rouse, 2002); fourthly, collateral is more valuable the more immobile and immune to damage it is (Feder and Feeny, 199). Fifthly, a good security should also be easy to realise (Rouse, 2002). The availability of secondary markets and their depth determines how easily the lender can dispose collateral in case of default. Assets that have well developed markets are better collateral (Foss, 2012; Kibodya, 2006)

Furthermore, apart from being highly marketable Balkenhol and Schütte (2001) note that the transactions cost involved in verifying ownership, valuing and enforcing security interest affects the quality of the collateral and must be considered when taking the asset. Since most of such cost is passed on to the borrower, it may not be too much of a problem for the lenders provided borrowers are willing to pay. finally, a good collateral must also be easily identifiable; lenders want to be able to identify pledged assets even in the midst of other similar assets and identification is made easier if the asset has unique features such as serial numbers, make, model or marks that cannot be erased – such assets are preferred to others with no distinguishing features (Foss, 2012). The question now is whether or not lenders can do without collateral. According to Nirmala (2008) and Rouse (2002) there are four specific circumstances when collateral may be required to secure a loan and these are as follows: the first involves a situation where the realisation of an asset represents the source of repayment. The lender in this case will require control over the source of repayment which is the asset. The second is where the purpose of the loan is to acquire an asset. Mortgage is a typical example. The lender retains ownership right of the assets until the borrower has fully repaid the loan. Thirdly the lender may seek collateral where the amount involved is substantial. Lenders should be 'amount conscious' when seeking security for a lending facility. It might not be cost effective to take security for small amounts given the transactions cost associated with the taking and enforcement of collateral contracts. Finally, collateral is required where the risk and consequences of the repayment plan failing are substantial.

The economic significance of collateral could be better understood by considering the consequences of unsecured loan transactions. In the event of a default involving an unsecured loan agreement, the only resort for the lender may be to go to court to make a legal claim on the borrower's property (if he has any) and as Fleisig et al. (2006) notes, the nature of the judicial process may make this very costly even though the outcome cannot be certain; the problem is worsened where the borrower has no valuable assets at all or where

such assets were lost in the events leading to the default in which case the lender completely loses the total amount outstanding. Quiet apart from that, the risk of unsecured loans for any particular lender (X) is that another lender (Y) may have similar claims against the same borrower and it is possible that lender Y may be the first to secure a court ruling to get the assets to defray its outstanding loans; alternatively, the proceeds from the sale of the borrower's property may be divided evenly among all lenders. (Fleisig et al., 2006). The amount received by each unsecured lender may not be sufficient to cover the outstanding amounts owed by the borrower. The advantage that the secured lender has is that he has the prior claim on the borrower's property over all other claimants including the unsecure lenders (Balkenhol and Schütte, 2001). In countries with security archiving systems, establishing priority among several secure lenders is done on the basis of the order in which such lenders filed a notice of the existence of their security interest in the property (Fleisig et al., 2006). The first to file is given the priority.

4.4.1 Borrower-based Collateral Theory

The borrower-based collateral theory regards the use of collateral as a function of information asymmetry and the borrowers' characteristics. It is the assumption of this theory that all lenders in the credit market face the same information asymmetry where no one particular lender has an information advantage over other lenders regarding the borrowers (Bester, 1985; Boot et al., 1991; Jimenez et al., 2008). Proponents of the theory argue that there will be no need for collateral in loan contracts if there exists a competitive credit market with risk neutral borrowers and lenders where both lender and borrower possess the same information regarding creditworthiness of the borrower (Chan and kanatas, 1985). Using collateral in loan contracts under perfect information will be inefficient given the cost involved (Bester, 1985). How then does collateral solve the problems of information asymmetry? Under information asymmetry, the use of interest rates as screening device is ineffective; collateral thus acts as a screening or signalling device by inducing the borrower to reveal any inherent risk of default and thus providing the lender with relevant signals to help tackle adverse selection (Balkenhol and Schütte, 2001; Jimenez and Saurina, 2004; Menkhoff et al., 2003). This theory postulates that, low risk borrowers will always use collateral to signal their credit quality to enable them obtain lower interest rates (Bester, 1985; Hainz et al., 2008). Hence, if a lender offers a menu of loan contracts comprising: a secured loan with low interest rate and an unsecured loan with a high interest rate, low risk borrowers are expected to go for the former while the high risk borrower is expected to go for the latter (Menkhoff et al., 2003).

The prospect of losing assets pledged as collateral is what deters risky borrowers from accepting credit contracts involving the provision of collateral. Therefore by allowing

borrowers to choose from a menu of credit contracts with different collateral requirement, lenders are able to put them into their respective risk classes (something that lenders are unable to do under information asymmetry). In this regard, the willingness to provide collateral acts as a substitute for information on the borrower's creditworthiness where there is information asymmetry (Fleisig et al., 2006). Collateralising loans allows the design of loan contracts to ensure that high risk borrowers are not provided the incentive to demand credit. Apart from being a signalling device, collateral is also a tool for motivating credit repayment, aligning the interest of the borrower to that of the lender and encouraging good borrower behaviour (Jimenez and Saurina, 2004). After credit is disbursed, collateral is the tool used by lenders for controlling the risk of asset substitution on the part of the borrower (Scott, 1986). The moral hazard model maintains that the use of collateral compels the borrowers to work harder to avoid default or reduce the risk of default. The reason is that the lenders have the right to seize the underlying asset on default thus passing the cost of default back to the borrower. Having said that, the borrower only has a stronger incentive to fulfil his obligation in a collateralised contract if he has a greater equity stake in the asset than the lender (Scott, 1986).

Therefore, moral hazard according to Boot et al. (1991) can only be eliminated completely if borrowers pledge "sufficient" collateral to make the loan riskless. Since lenders may not be able to control the actual behaviour or actions of borrowers after a loan has been advanced, the loan contracts should be designed in a way to attract low risk borrowers and also compel the borrower to take those actions which are in the interest of the lender through collateralisation (Stiglitz and Weiss, 1981). The main implication of the borrower-based theory is that a reduction in the extent of information asymmetry in the market will lower the demand for collateral (Berger et al., 2011).

A potential borrower with valuable assets has two options to raise funds to finance an impending project. The asset could be used as security for a loan to finance the project; alternatively, it could be sold and the proceeds used to finance the project (Benjamin, 1978); this will do away with the need to borrow. The borrower will prefer to use his asset as collateral if only its sale is more costly than the value of the forgone rights to the asset attenuated by the collateral contract (Benjamin, 1978). A borrower will however, prefer to pledge an asset as collateral where the cost of selling it is higher than the cost of pledging it as security and vice versa. Benjamin (1978) provides the following illustration to explain the above argument. If an asset to be used as collateral has an existing market. Assume the net market value of the asset is P_n. P_m is the gross market price and S is the fixed cost of selling the asset, then, $P_n = P_m - S$. This means that selling the asset will fetch the owner P_n. Assuming also that all lenders consider the used value of the asset to be below P_n, if a lender

thus offers a loan amount (L) greater than P_n (i.e. $L>P_n$) then all borrowers who would otherwise have sold the asset for P_n will find it more profitable to pledge it to the lender in return of L. This will however be unprofitable to the lender. The reverse is true if $L< P_n$. Thus whenever $L< P_n$, repaying the debt is valuable to the borrower and the default rate on such a debt should be zero; except for circumstances beyond control of the borrower. Advancing amounts less than the net market value of the collateral reduces moral hazard and defaults are more likely to be caused by factors that are external to the borrower. This is why in reality lenders tend to lend only a fraction of the assets value.

Focusing on the borrower specific characteristics that influence the use of collateral in credit contracts, reference is often made to the risk of default as the overarching determinant of the collateral demand by lenders. Collateral offsets the weaknesses in the borrower's cash flows, character and other important borrower attributes; it is only used as the last resort to recouping outstanding loan amounts should the borrower default in repayment (Balkenhol and Schütte, 2001). Hence any uncertainty about repayment will lead to a demand for collateral to provide cushion for the lender against the possibility of default. Under the assumption of information asymmetry, a negative correlation exists between the willingness to offer collateral and the perceived riskiness of the borrower. However, when information is not asymmetric and the risk of a borrower is observable, the actual or observed risk of the borrower is positively correlated with collateral use and the lower the observed risk of a borrower, the lesser the likelihood of collateral use and vice versa (Boot et al., 1991). When the risk of default is deemed unacceptably high, the need to reduce it leads to the demand for collateral by lenders (Scott, 1986). This presupposes that a certain class of borrowers (with unacceptable risk of default) will fail to obtain credit if they do not provide collateral. As a result of the significant role of collateral in the credit markets, Balkenhol and Schütte (2001) argue that the lack of collateral is to blame for the demand and supply mismatch in the market for small scale enterprises. Even though information asymmetry is the underlying of cause of credit constraints, the absence of collateral is what exacerbates the situation because the provision of collateral would have solved the problem and helped many people obtain credit all other things being equal.

4.5 Credit Constraint, Collateral and Property Registration

A clear linkage between land registration and credit constraint can be deduced from the concepts discussed above. Information asymmetry is central to the theory of credit constraint. The lack of information creates uncertainties in the credit market and negatively affects the lending decision making process. Though there are several ways of mitigating the information imbalance between lenders and borrowers, collateral is often regarded as the most effective tool for fighting the twin problems associated with information asymmetry.

Collateral acts as a substitute for information on the borrower's creditworthiness where there is information asymmetry (Fleisig et al., 2006). That notwithstanding, the taking of collateral in itself is also constrained by information asymmetry. In the developing world, property ownership cannot be traced or validated; one cannot identify who owns what and addresses are difficult to verify (de Soto, 2000). For every asset that is to be used as collateral, lenders require essential information not only on its value or quality but most importantly its ownership and any third party interest in it.

This ownership information is crucial to determine whether or not the potential borrower has the legal right to present that asset as security for a loan. De Soto (2000) argues that in developing countries a lot of effort is required to tackle simple issues such as whether or not a seller really owns the asset being put up for sale and whether he has the right to transfer or pledge it. The difficulty or inability to ascertain the right owner due to the lack of public information as in all cases of information asymmetry will create uncertainty and eventually, lenders will decline to accept such properties as collateral. The reason is that if banks cannot accurately ascertain and provide proof of the borrower's rights to the assigned property, the bank stands to lose its rights to foreclose the property for the purpose of recovering any outstanding debt.

Until the information asymmetry involving property ownership is appropriately addressed property will not be accepted as collateral because they (the collateral assets) will be unable to solve the teething problems of adverse selection and moral hazard. When property ownership information is not publicly available for easy verification, emphasis on collateral will rather create adverse selection and moral hazard where potential borrowers are most likely to present to the banks, properties that are under ownership disputes or some forms of encumbrances. In such a scenario, since the potential borrower's claims to the property may be fraudulent or in dispute, incorporating the property into a loan contract will not provide the repayment incentive required to avoid moral hazard. In a nutshell information asymmetry on property ownership weakens the ability of collateral to reduce the credit constraint problem. As far as landed property is concerned, land registration: solves the problem of information asymmetry on property ownership and allows lenders to accept land as collateral and all other things being equal eases the credit constraint problem. Furthermore, as argued in previous sections, information asymmetry often justifies the intervention of government to encourage information disclosure to make otherwise private information publically available. As far as landed property is concerned, land registration is the medium through which government could intervene to make land ownership information public.

Registered property titles are important because they generate useful signals about the borrower's credit worthiness not only by merely serving as collateral but by providing information on unobservable borrower characteristics (Dower and Potamites, 2005). The cost and inconveniences of the land registration process (in terms of time and resources spent) in the developing world is commonly known to be high (Toulmin, 2008). Given the high levels of poverty in the developing world, the incidence of registered titles is likely to be higher amongst the economically affluent and socially connected individuals. Therefore, under conditions of information asymmetry, the possession of a registered title other things being equal may provide signals of the likely economic status of the property's owner. Such information will be of interest to the lender by reducing the information deficiency to some extent and improving the chances of the property owner obtaining credit.

Another way to solve the problem of information asymmetry as pointed out earlier is the provision of guarantee for goods and services sold in the market. The title registration system discussed in chapter three provides this kind of guarantee; all land ownership information under this system (apart from some exceptions identified in chapter 3) are guaranteed to be accurate and this guarantee is sometimes backed by a promise of compensation. The provision of such guarantees through the title registration system gives lenders confidence in the information provided by borrowers and acts as a direct remedy to the information deficiency in the credit market. As Field and Torero, (2004) rightly note, the lack of formal registration creates mistrust among lenders with regard to the validity of ownership rights and increases the cost of verification to prohibitive levels.

An asset is more acceptable as collateral the easier it is to sell and title registration could make that possible. Given the guarantee provided by the title registration system it will be much easier to sell registered property than unregistered property all other things being equal, making registered property more acceptable to lenders. Once the property is accepted and incorporated into the loan contract, it helps to solve the problems of adverse selection and moral hazard which paves the way for credit to be made available to potential borrowers. Not only may credit be made available but the terms of the credit may also be influenced. De Laiglesia (2004) argues that property registration through its ability to raise land values and increase its liquidity could influence credit terms by increasing the amount of credit that is made available to borrowers as well as reducing the interest rate charged. The linkage between land registration (specific emphasis on title registration) and credit access is summarised in the diagram below.

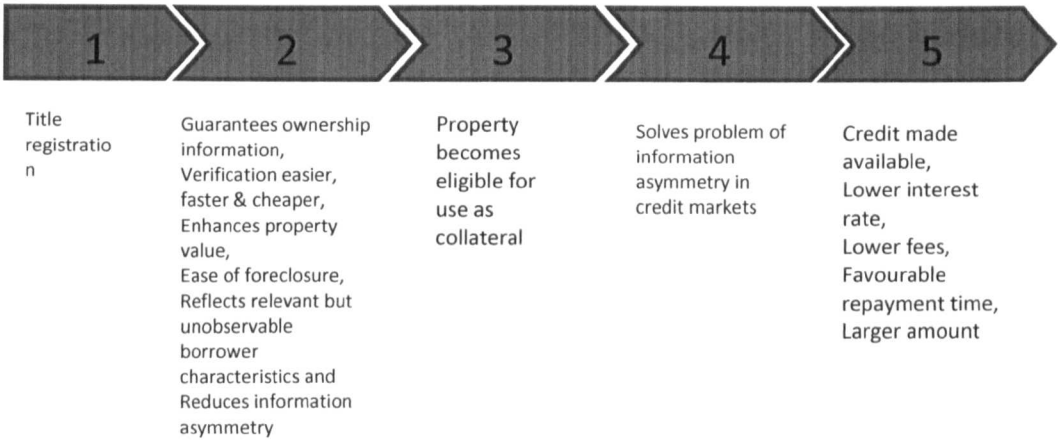

Figure 6: Link between Land Registration and Access to Credit

4.6 Summary

The credit constraint amongst businesses and households has often been linked to several factors but at the centre of the theory are the concepts of information asymmetry and market equilibrium. The most viable option to overcoming the information asymmetry and hence the credit constraint is to incorporate collateral into credit contracts. However, when the ownership of property is shrouded by information asymmetry they become less acceptable forms of collateral to lenders. Property registration thus provides publically available data on property ownership which makes it easier for lenders to verify the ownership of any property presented for collateral purposes at a faster rate and lower cost. The next chapter will now consider the methodological underpinning of this study.

CHAPTER 5

RESEARCH METHODOLOGY

The previous chapters have outlined the background, the objectives as well as the theoretical underpinnings of this study. This chapter provides an insight into the pproach/methodologies available and the ones adopted to investigate the stated objectives. The next section looks at the research paradigms. The strategies of enquiry are discussed in section 5.2. In section 5.3, the available techniques for sampling and data collection in both qualitative and quantitative research are outlined. The penultimate section outlines the specific methodology adopted and finally, section 5.6 gives a summary of the chapter

5.1 Research Paradigms

A research paradigm refers to the set of assumptions and beliefs that constitute a good way of conducting research and this includes data collection and analysis techniques (Newman, 2007). Paradigm defines the philosophical world views that guide the conduct of research (Saunders et al., 2009). These worldviews constitute the researcher's orientation about the nature of research (Creswell, 2009). There are three main research paradigms in conducting social science research. They are: positivism – quantitative; constructivism – qualitative; and pragmatism - multi-methodology. These philosophical standpoints are helpful in understanding social phenomenon in terms of their nature and the way they operate. The distinction between these paradigms is often based on epistemological and ontological considerations as well as the approach of the whole research process - deductive or inductive (Newman, 2007). Epistemology, according to Bryman (2008) is about what constitutes warranted or acceptable knowledge. It also bothers on the following questions: what is the relationship between the researcher and the subject being researched? and how do we know what we know? (Krauss, 2005); Ontological considerations however, focus on the nature of reality (Creswell, 1994).

5.1.1 Quantitative approach

The positivist paradigm assumes that the social world can be objectively measured in a manner that does not allow the researcher's values to influence the process or the outcome; it emphasises on numerical measurement of facts (Newman, 2007). Social phenomenon is thus regarded as an ontologically objective and verifiable fact; there is only one truth and it is objective (Creswell, 1994). On the assumptions of epistemology, the positivists try to maintain an independent stance to avoid biases in the research process (Creswell, 2008). In

the positivist research, therefore, the researcher does not interact with the subject of the research; this clearly, is not applicable when dealing with social research and is more suitable for laboratory based research. Research under the positivist paradigm is generally based on causal principle using a logical deductive approach; as a way of studying social reality, it involves the testing of known theories against hard empirical evidence with the help of quantitative variables and statistical procedures (Bryman, 2008l; Creswell, 1994). Causality, generalisation and replication are most often the preoccupation of research under this paradigm (Bryman, 2008). The positivist researcher is thus predominantly quantitative minded.

5.1.2 Qualitative approach

The proponents of the constructivist/qualitative approach often regard the positivist approach to research as applicable in the natural sciences and therefore do not agree with the wholesale adoption of the positivist approach in the conduct of social science research. It is argued that people and institutions which are the main subjects of social research are uniquely distinct from natural science phenomena and related studies should involve different set of logic or procedures that reflect that uniqueness (Bryman, 2008; Newman, 2007). Researchers in favour of this paradigm are of the view that people interact and respond to situations based on their beliefs about reality other than what is objectively real (Newman, 2007). Therefore, reality is nothing more than a social construct. The social world can thus be well understood by studying the way people perceive it. Kraus (2005) aptly observes that the best way to gain a good understanding of any social phenomenon is to look at it within its own context. The ontological assumption of this paradigm is one of subjectivity of social phenomenon based on changing perceptions. Reality or truthfulness is not singular; rather, multiple realities exist in the social world. Since each individual has different sets of experiences and perception, reality could be said to vary for different people (Kraus, 2005). In qualitative research truthfulness could therefore be said to emanate from peoples experiences and perceptions of the phenomenon being studied; in short reality is what people say it is.

Unlike the positivist, in this approach, the researcher interacts with the subject being studied with the view to obtain an in-depth understanding of reality from the point of view of those living it (Creswell, 2008). It is in this regard that this approach is seen as value laden as the researcher's own values may influence the research process and outcomes through the interaction with the subjects of the study. The interpretations or meanings derived from this interaction are influenced by the researcher's own background. The overall process of conducting research under the qualitative paradigm is inductive; the focus is not to test

theories but rather to develop them. The inductive approach begins with observation or information gathering, interviews, categorising data, identifying patterns and comparing patterns with other theories; hypothesis and theories are the products that emerge from this whole process of data collection and analysis (Creswell, 2008). Furthermore, this approach involves explaining social reality by giving a detailed or holistic picture or description of the setting, process or relationships; qualitative data involve mostly written/spoken words, symbols and visual images even though sometimes the researcher may also use numbers (Newman, 2007). The debate over qualitative and quantitative approaches to research is still on-going with followers of each approach pointing a finger at the weaknesses of the other. These weaknesses are summarised by Bryman (2008) and Morse et al. (2002) as follows. Qualitative research has often been criticised for been too subjective, difficult to generalise and replicate and lacking transparency and rigor. Quantitative research on the other hand has its own criticisms: firstly it is said not to recognise the inherent difference that exists between nature and the social world; secondly the process of measuring variables provides a false sense of precision and accuracy and finally, in the process of analysing the relationship existing between variables the social world is presented as static.

5.1.3 Multi-methodology

Given the weaknesses of both quantitative and qualitative methodologies, a third methodology - pragmatic or multi-methodology has emerged which emphasises the need to focus on the research problem and using all the available approaches to produce a better understanding of the problem at stake (Creswell, 2009). The multi-methodology approach to research therefore is a combination of both qualitative and quantitative approaches already discussed to conduct a given study. The methodology therefore allows the use of different worldviews, and different forms of data collection and analysis (Creswell, 2009); this is a methodological triangulation. Triangulation is possible because no research question fits perfectly into any one paradigm. Nevertheless, one approach may be more suitable for a particular question than the other (Saunders et al., 2009). In doing this kind of research one approach (either the quantitative or qualitative) may dominate the other. The two approaches could be considered to be compatible and complementary to each other. Triangulation allows the biases and weaknesses associated with specific methodologies to be offset by using other approaches simultaneously (Jick, 1979). It also allows the research questions at stake to be thoroughly addressed compared to using any single approach in isolation (Creswell, 2009). Adopting the multi- methodology adds to the scope and breadth of the study and allows contradictions or new perspectives to emerge and may also permit convergence of results (Swanson, 1992). In this regard, the results obtained from one approach could be cross-

checked by using the other approach. This does not only promote confidence in the research findings but also improves reliability and validity (Bryman, 2008). Despite the advantages of methodological triangulation, there is also a problem with its use in any research. Apart from the fact that triangulation could be expensive and time consuming Creswell (2009) notes that the researcher may not also have the requisite skills to use both qualitative and quantitative approaches. Selecting an appropriate methodology for any given research is a big challenge for all researchers. Creswell (2009) identifies the key factors that should inform a researcher's choice as follows: the researcher's own worldview, training and experience; the research audience; and above all nature of the research problem or research objectives.

5.2 Strategies of Enquiry

Research strategy provides the basis for data collection and analysis in any research project (David and Sutton, 2004). The research paradigm adopted determines which strategies the researcher will employ and all will depend on the nature of the research questions or objectives. That apart the amount of time and resources available to the researcher also influence the choice of research strategy (Saunders et al., 2009). Since the choice of a strategy depends on the research philosophy, some strategies are associated with the quantitative research paradigm whilst others are related with qualitative paradigm. However, no one strategy can be said to be superior and they all tend to be mutually inclusive (Saunders et al., 2009). One strategy may only be more appropriate than the other depending on the research question or objective involved.

5.2.1 Quantitative research strategies

There are mainly two kinds of strategies in quantitative research namely: experiments and surveys. Experiments are built on the positivist principles discussed earlier; though they are predominant in the natural sciences, they are sometimes also used in social science research (Newman, 2007). The focus of experiments is to determine if there is a causal link between two variables and whether the introduction of a particular treatment affects the outcomes (Creswell, 2009; Saunders et al., 2009). Usually, subjects under study are assigned to groups randomly whilst one or more of the independent variables are manipulated to determine if they influence the outcome given that all other factors or variables that could influence the come are controlled (Creswell, 2009). These same principles are applied in social science experiments as explained by Newman (2009) below. The observed participants are often put into two groups; both groups are given the same treatment. However, the researcher introduces a particular condition of interest to only one of the groups and measures the responses of the two groups. The researcher is then able to attribute variations in the responses of the two groups to the condition or treatment introduced to the other group.

Experiments are thus useful in making comparison between any entities of interest to the researcher. Surveys on the other hand provide a quantitative description of the opinions, trends and or attitudes of a given population based on generalisations from the findings of a sample of that population (Creswell, 2009). Contrary to Creswell's description, survey is a system of collecting data and could also provide qualitative description with the aim of making generalisation. Though surveys are common in quantitative studies they can also be used in qualitative studies and can be combined with other qualitative strategies. A survey could either be cross sectional - collects data on different cases at a point in time or longitudinal - collects data on a particular case over two or more points in time to allow for comparison and determination of change over the period (David and Sutton, 2004).

5.2.2 Qualitative research strategies

The main qualitative strategies identified by Creswell (2009), Newman, (2007). Saunders et al. (2009), Strauss and Corbin, (1990) and Willig (2008) include: case studies; phenomenology; ethnography; grounded theory and narrative. Detailed descriptions of each of these strategies are provided by the above authors and have been summarised below. Case studies provide detailed investigation of a particular phenomenon within its context and using a combination of methods to collect the needed data. The study of two or more cases at the same time allows the researcher to make comparisons. Phenomenology is used where one intends to do a detailed description of the experiences of a group of people and involves an attempt to understand reality from the perspective of those living it. Phenomenology is interested in the world as it is experienced by human beings within particular contexts and at particular times, rather than in abstract statements about the nature of the world in general. In other words, it is concerned with the phenomena that appear in our consciousness as we engage with the world around us. Attempting to understand social phenomena from the perspective of the entities living it reduces researcher biases by removing any preconceived ideas. When using the grounded theory, the target is to develop theories through a multi layered data collection process, refinement and categorisation of data to establish relationships through comparisons of data with the emerging categories. With this strategy, theories emerge and are rooted in the data from which they emerged rather than from analytical construct or pre-existing theories. Ethnography refers to the act of describing a particular culture and understanding the way of life from the native point of view. In studying different cultural groups ethnographic studies involve the collection of observational data over a considerable time period. Ethnography is sometimes also referred to as participant observations; the researcher basically plants himself into the group being studied while observing their behaviour and asking questions over a period of time. Finally,

the narrative strategy involves the researcher studying the lives of some individuals through stories about the individual's life being told by the individuals themselves and then retold by the researcher in narrative chronology (Creswell, 2009).

5.2.3 Multi-methodology research strategies

The multi-methodology has three fundamental strategies explained by Creswell (2009) as follows: first is the sequential strategy where the findings of one methodology are expanded on using another approach; secondly the researcher could adopt concurrent strategy where both quantitative and qualitative data are collected at the same time; and finally, the transformative strategy where a theoretical lens provides the overall perspective in a study with both qualitative and quantitative data. It is important to note that though the above strategies are often classified under the qualitative and quantitative research paradigms, they are not mutually exclusive. For instance, the survey strategy could be used in qualitative research just as the case study strategy could also be used in quantitative research.

5.3 Sampling and Methods of data Collection

5.3.1 Sampling techniques

Sampling involves the selection of a small group of participants from a larger target group. The aim of sampling in quantitative research is to obtain a representative sample of the population, reduce biases and to permit accurate generalisation (Baker, 1999; Bryman, 2008). There are two broad sampling techniques – probability sampling (simple random sampling, systematic sampling, stratified sampling and cluster sampling) and nonprobability sampling techniques (haphazard, quota, purposive and snowball sampling techniques). According to Newman (2007) quantitative researchers focus more on the representativeness of a sample and tend to lean towards probability/random sampling techniques; On the other hand, sampling in qualitative research is not so much bothered about how representative the selected sample is but rather emphasis is on whether or not the chosen sample helps in explaining the issues at stake. The result is that qualitative researchers mostly use non-probability sampling techniques. The main difference is that unlike non-probability sampling, probability sampling seeks to give each participant an equal chance of being selected to avoid biases. Hence probability sampling relies a lot on sampling frames which define the elements in the target population from which a representative sample could be chosen (Newman, 2007). In practice however, it appears quantitative researchers may be faced with situations where such a sampling frame does not exist or cannot be closely estimated and may have to rely on non-probability sampling techniques.

Probability Sampling Techniques

In a simple random sampling technique, a sampling frame is developed and a random process is used to select elements from the frame. An example is the lottery system where names are put in a container and the winner drawn out randomly (Malhotra and Birks, 2009). Systematic sampling as explained by Newman (2007) starts with allocating numbers to each element in the sampling frame; a sampling interval is then used as the random way of selecting elements from the sampling frame. For instance, a simple random sampling method is used to select the first element after which every nth element (eg. every 5^{th} person) is selected for inclusion into the sample. Stratified sampling technique involves subdividing the population into several layers or sub-groups after which the simple random sampling or systematic sampling could then be used to select elements from each of the subgroups (Newman, 2007). It is thus more suitable where various sub-categories exist within the target population. By so doing the researcher is able to ensure that each sub group is well represented in the final sample. Finally, the cluster sampling technique is used where the population is dispersed; the population is first put into various clusters. A number of the clusters are randomly selected and elements within each cluster are further selected randomly to the final sample to be studied (Malhotra and Birks, 2009).

Non-probability Sampling Techniques

The non-probability sampling techniques have been well explained by Newman (2007) and a summary is provided below. Haphazard sampling involves selecting cases in any convenient manner. The participants are selected because they are in the right place at the right time. This technique is cheap, easy and convenient. Under quota sampling, the target population is divided in various categories of interest (eg. Male and female) and a predetermined number of people under each category is selected to reflect the composition of the population. It thus has some resemblance with the stratified sampling technique. Purposive sampling is often used to select unique informative individuals or institutions. Purposive sampling is appropriate if members of the population are difficult to reach or specific individuals are considered key informants in a study. Snowball sampling technique is also a convenience sampling which often starts with a few respondents. These initial respondents then provide the researcher with contacts to other respondents. One respondent links the researcher to another and the process goes on and on. Just like all other non-probability sampling, this technique is mostly used where no sampling frame is available or easily accessible for use.

Sample Size

The size of the final sample is one area of interest to all researchers. The question of how large or small the sample should be has no simple or straight forward answer. It depends on factors such as the analysis techniques to be adopted, how accurate the sample needs to be for the given purpose and also the peculiar characteristics of the population (Newman, 2007). For high accuracy and more diverse population, a large sample size is usually recommended but where the population is more homogenous a smaller size may also be acceptable (Newman, 2007). However, a good sample is not necessarily one that is large because, a large sample does not necessarily guarantee precision (Byrman, 2008). Therefore, a representative sample may not be strictly about the size of the sample.

5.3.2 Methods of data collection

All researchers require data to investigate their research objectives. One purpose of sampling is to select a group of individuals from whom the relevant information will be obtained to investigate the research objectives. It is therefore imperative to design instruments that can accurately capture the required information. Just like the research strategies discussed already, there are data collection methods peculiar to quantitative research and others peculiar to qualitative research. However, these methods are also not mutually exclusive to any one research paradigm. The various methods for data collection are compatible with both quantitative and qualitative studies and the one to choose ultimately depends on the research objectives, the available resources and time.

Quantitative data collection

In quantitative research, experiments and surveys in addition to being strategies of enquiries also act as methods of data collection (Creswell, 2009). Structured observations are also a quantitative data collection tool (Saunders et al., 2009). The experiments conducted provide the researcher with data which is then analysed. In surveys, the researcher has at his disposal various techniques to use. Quantitative survey techniques typically are based on structured questionnaires which ask different questions relating to the behaviour, intentions, attitudes, awareness, motivation and demographic characteristics of respondents (Malhotra and Birks, 2009). Questionnaires in quantitative research often involve the use of closed ended questions where each question has a predetermined set of responses from which the respondents choose an appropriate answer (Saunders et al., 2009). Questionnaire design differs according to how it is administered or the amount of contact one has with the respondents; the questionnaires could be self-administered or interviewer administered questionnaires (Saunders et al., 2009). The differences between them as provided by

Saunders et al. (2009) are outlined below. Self-administered questionnaires are often completed by the respondents and are administered electronically – internet based, sent through the post – mail/postal questionnaire or delivery and collection questionnaire where the questionnaire is delivered by hand to the respondents and collected at later date. In the case of interviewer administered questionnaires, the responses to questions are recorded by the interviewer and this could be done via telephone and face-to-face interviews. Indeed, quantitative researchers use these structured interviews which are based on standardised questions usually with pre-coded responses; the interviewer reads out the exact questions and records the answers given

As observed by Malhotra and Birks (2009) each of these techniques has its own strengths and weaknesses which are as follows. Telephone interviews allow contact to be made with respondents spread over a wide geographical area; however such interviews are shorter and questions should often have fewer responses to choose from so as not to confuse the respondent. Mail and electronic techniques can also reach wide spread respondents and could be relatively cheaper. In the case of face-to-face interviews, the researcher has the opportunity to provide explanations to clarify anything not understood to ensure that the right answers are given. This opportunity is not present when the other techniques are being used. However, face-to-face interviews could be expensive and time consuming. Self-administered questionnaires such as mail and electronic based questionnaires as well as telephone interviews usually have a lower response rate than face-to-face interviews (Saunders et al., 2009). Due to the various limitations encountered in capturing data through any of the above data collection mechanisms, Saunders et al. (2009) argue that a researcher's choice will be influenced amongst other things by the type and number of questions to be asked, the sample size, the amount of time and financial resources available. Finally, the focus of structured observations conducted in quantitative studies is to determine how often something is occurring and not why it is happening (Saunders et al., 2009). Observations could take a long time to conduct.

Qualitative data collection

In qualitative research, the main tools or techniques for data collection are: observations, interviews as well as the use of documents and audio-visual materials (Creswell, 2008). Qualitative interviews could be in different forms. It could be a one off interview or cumulative where the researcher returns to interview the same person a number of times; it could also be a one on one or group based interview as in the case of focus group discussions (David and Sutton, 2004). The quest for detail responses in qualitative research requires such interviews to be of an unstructured or semi-structured nature and involving the use of open

ended questions. In semi-structured interviews, there is always a list of themes on which questions will be asked during the interview; the exact question asked and the order in which they are asked may vary from one interview to the other (Saunders et al., 2009). Unstructured interviews (in-depth interviews) are non-standardised and are informal, the researcher uses it to explore in detail a general area of interest and even though there is no predetermined list of questions the interviewer is clear on the general issues of interest; the interviewee essential determines the direction of the questioning based on what they say (Saunders et al., 2009). Unstructured and semi-structured interviews could also be conducted via telephone or face-to-face. Observations could also be used to collect qualitative data. After all, the best way to know how people do something is to watch as they do it; It involves systematically observing, recording, describing analysing and interpreting people's behaviour (Saunders et al., 2009). Observation as a data collection method in qualitative research takes the form of participant observation which is explained by Saunders et al. (2009) as follows. In participant observation the researcher plants himself into the group of people or institution being studied and part-take in their daily lives and activities. The researcher thus understands the issues better because he does not just observe the activities but also gets a first-hand feeling of the experiences of the people. The data is collected by keeping a diary of whatever the researcher sees at various times and his perceptions or feelings about the issue being observed. There are no formal interviews but all information may be obtained through informal discussions. Under the multi-methodology, the researcher may combine a number of the above data collection methods.

5.4. Data Analysis

There are a variety ways to analyse data in both quantitative and qualitative studies. Both quantitative and qualitative data analysis are often facilitated by the use of computer software such as SPSS and Nvivo respectively.

5.4.1 Quantitative data analysis

The techniques of data analysis adopted in quantitative research inevitably depend on the nature of the data or the level of measurement (nominal, ordinal, and interval and ratio data). Nominal or categorical data cannot be ranked in any order and are not capable of mathematical manipulations - addition, subtraction, division or multiplication (David and Sutton, 2004). Questionnaire responses to YES or NO questions or questions which allow respondents to choose a category or option from a set of multiple choice responses involve nominal level measurements (McQueen and Knusses, 2006). Though respondents in each group are different from others, such differences are not quantifiable and one group cannot be said to be better than another (McQueen and Knusses, 2006). Ordinal level measurement

involves ranking of data. Unlike nominal data, it is possible to say that one category is more preferred, better or worse than another; even though ordinal variables can also be seen as nominal they have quantitative elements (McQueen and Knusses, 2006). Though it is possible to determine if one category is better than the other, one cannot determine the size of the difference between categories. An example is the Likert scales used to provide measures of people's attitudes (Newman, 2007). Finally, interval and ratio variables are made up of continuous data which can be ranked in order of importance where the difference or distance between variables or categories can also be measured; the only difference between interval and ration level measurement is that ratio measurement has a true zero whilst interval measurement does not have a true zero (David and Sutton, 2004). It has thus been argued that in practice distinguishing between ratio and interval levels of measurement makes little difference (Newman, 2007).

Any quantitative data collected could be analysed statistically and the analysis could be based on parametric or non-parametric techniques. Field (2009) explains the conditions under which these techniques can be used as follows. To use parametric techniques, the data must meet the assumptions of parametric data which are that the data must be measured at least at interval level; nominal and ordinal data therefore do not qualify to be analysed based on parametric techniques. Secondly the data must be independent – that is to say, data from various participants must be independent of each other. The data must also be normally distributed and there should be homogeneity of variance. In reality not all data meet these conditions; whenever these conditions are not met, non-parametric test is recommended because they work based on fewer assumptions about the nature of the data. Non-parametric tests are applicable on ranked data where each score is given a rank (higher scores represent higher ranks and vice versa); the analysis is based on the ranks and not the actual data. It is important to point out that for each parametric test conducted there is an equivalent non-parametric test that could be carried out. The parametric statistics include the Pearson's correlation (r); t-test; ANOVA etc. There are also a number of non-parametric statistical test namely: the Spearman's rho, Mann-Whitney test, Wilcoxon rank sum test, Wilcoxon signed-rank test; kruskal-Wallis test and the Friedman's ANOVA. Field (2009) provides a good explanation of these tests which have been summarised below. The t-test and ANOVA are both statistical techniques used to test for differences between groups of people or respondents or variables that allow causal inferences to be made. The t-test looks for differences between the means of any two groups in a study. In a situation where different participants or groups are assigned to two different experimental conditions, the independent sample t-test is used. However when the same participants are put through the two

experimental conditions, the paired sample t-test is more appropriate. The formula for the t-test is given below:

$$t = \frac{D - Ud}{Sd\sqrt{N}}$$

Where D is the observed difference between the means of the two samples; *Ud* is the expected difference between the population means given that the null hypothesis is true (*Ud* = 0) and the denominator represents the estimated standard error of the difference between the two sample means. If the two samples are from the same population, their means are expected to be similar. As the difference between the samples means gets bigger the more likely it is that the null hypothesis will be rejected which is an indication that a genuine difference exist between the samples. SPSS estimates the probability that the value of t was obtained by chance; if the probability is less than 5% (0.05) that means there is a very small likelihood that the difference observed occurred by chance. One can then conclude that the observed difference between the two samples is significant and did not occur by chance. The reverse is true if the probability is greater than 5%.

ANOVA works in a similar way like the t-test, the difference is that it compares the means of three or more groups. The outcome is the F-statistic or ratio which compares the systematic variance in the data to the unsystematic variance. One limitation of the F-statistic is that it doesn't indicate exactly where a difference may come from amongst the groups. This problem is solved by doing a post hoc test where a t-test is performed for all possible pairs of the groups to find where the differences are. One popular post hoc test is the Bonferroni correction where the 5% probability is divided by the number of paired test conducted; so for instance, if 10 tests were conducted, the critical value becomes 0.005 and not 0.05. Mention needs to be made of the two forms of ANOVA: the one way independent ANOVA where the participants or groups are independent of each other and the dependent ANOVA where the same participants are put through three or more experimental conditions.Apart from testing for difference between groups, the data can also be tested for existing relationships between variables using correlation or regression analysis. The correlation between two variables could take one of three forms: positive correlation – variables change or move in the same direction; negative correlation – variables move in opposite directions and no correlation – a change in one variable leaves the other remaining the same. The correlation coefficient therefore assumes a value ranging from – 1 to + 1. For data that meet the assumptions of parametric test, the Pearson's correlation coefficient is applied; otherwise the spearman's rho or the Kendall's tau (used with a small data set) is more appropriate. Correlation values of 0 to .2 are considered weak, .3 to .6 moderate and .7

to 1 strong. Regression also help establish relationships between variables however unlike correlation, regression analysis help determine the existence of causal relationships.

The non-parametric equivalents of these tests are explained as follows. In the case of the independent t-test, the non-parametric equivalents are the Mann-Whitney test and Wilcoxon rank sum test which also test for differences between two independent samples. These two tests work on the same principles. The Mann-Whitney test (U) looks for differences in the ranked positions of the scores in the two groups. The scores are ranked from lowest to highest. Hence the group with the lowest mean rank has the highest number of low scores and vice versa. A comparison between the mean ranks determines if they are significantly different or not. On the other hand the Wilcoxon signed-rank test - a non-parametric equivalent of the dependent t-test (Z) is used to compare two sets of scores where the scores are obtained from the same participants. Finally, the Kruskal-Wallis test is used to find the difference between several independent groups just like the independent ANOVA whilst the Friedman's ANOVA is the equivalent of the one-way related ANOVA used to test for differences between several related groups.

The test statistic for the Kruskal-Wallis test (H) is labelled by SPSS as chi-square ($X^{2)}$ because it has a chi-square distribution. Similarly, the test statistic for the Friedman's ANOVA is not labelled as F_r but rather as chi-square. The output of these tests are reported as X^2(degrees of freedom) = chi-square value, significance value (p); an example is provided as follows; $X^2(3) = 8.5, p < 0.05$.Parametric statistical analysis can only be applied to ratio and interval level data whilst non-parametric test can be applied to ordinal, interval and ratio level data. How then can one deal with categorical data? They are often analysed descriptively based on frequencies. Having said that, it is possible to test for relationships between categorical variables using the Pearson' chi-squared test (X^2); this test simply compares the observed frequencies of the categories under investigation to the frequencies one would expect to get by chance. The only condition of the test is that the expected frequency in each cell must be greater than 5. Alternatively, with larger contingency tables (more than 2x2 tables) the rule is that expected counts should be greater than 1 and the expected counts less than 1 must not exceed 20%. Where this condition is not met, the fisher's exact test is rather recommended. How strong the relationship between two categorical variables is, can be measured by the Cramer's' V.

Statistical analysis also provides mechanisms for data reduction; a typical example is factor analysis. The explanation of this analytical tool is provided in detail by Field (2009) and Malhotra and Birks (2007) and below is a summary. Factor analysis is a data reduction

technique; any time there is a large number of variables most of which are correlated, factor analysis is used to reduce them to manageable size. Essentially factor analysis examines the relationships among groups of interrelated variables and represents them with fewer underlying factors or components. The technique is thus used amongst other things to identify the underlying factors that explain the correlation of a set of variables and to identify a smaller set of important variables for use in subsequent regression or discriminant analysis. Since each factor is expressed as a linear combination of observed variables, this technique is similar to multiple regression. The conduct of factor analysis begins by: identifying its purpose and the variables to be factor analysed; an appropriate sample size required; a correlation matrix for the variables is constructed and a method of factor analysis selected and a decision is made on how many factors should be extracted and which rotation method to use.

The KMO test of sampling adequacy is often used to determine if the sample is appropriate for factor analysis. It assumes a value between 0 and 1; values closer to one indicate that factor analysis will produce distinct and reliable factors and vice versa. Generally factor analysis is considered appropriate when KMO value is 0.5 or greater. Secondly factor analysis works based on the correlation between variables; cluster of variables that measure similar things must be significantly correlated. Hence if there is no significant correlation between the variables under consideration, factor analysis will not be reliable. This is checked using the Bartlett's test of sphericity; if the test is significant, it means the correlation is significantly different from zero and factor analysis will be reliable. Even though the variables need to be correlated to permit factor analysis to be conducted when they are too highly correlated there could be a problem of multicollinearity; though mild multicollinearity is not a problem, extreme ones should be avoided. Multicollinearity makes it impossible to determine the unique contribution of highly correlated variables to a factor (component). In factor analysis, multicollinearity is detected by looking at the determinant of the R-matrix which should be greater than 0.00001. The value of the determinant is between 0 (perfectly correlated) and 1 (perfectly uncorrelated) the closer it is to zero the more severe the multicollinearity.

Furthermore the rotation method allows the maximisation of the loading of each variable on one of the extracted factors whilst at the same time minimising the loading on all other factors. The process of rotation thus makes it easier to determine which variables relate to which factors. If the factors are expected to correlate a priori, an oblique rotation is recommended otherwise the orthogonal rotation (especially, Varimax rotation) is recommendable. Another essential element is the selection of a method of factor analysis.

There are several methods of extracting factors from any data set but an individual's choice is often based on what the analysis will be used for; that is, whether the analysis will be generalised beyond the sample or whether the aim is to explore the data and test specific hypothesis. Originally, factor analysis was developed to explore data and generate hypothesis for future analysis; some of the methods (principal component analysis, principal axis factoring) assume that the sample used in the factor analysis is the population and as such the results are not to be extended beyond the sample. However, confirmatory factor analysis is used if the aim is to test for specific hypothesis.

The number of factors to extract could be decided a priori; other ways of selecting factors are the use of the scree plot and the Kaiser's criteria. The scree plot is a graph of the factors and their Eigenvalues; all factors to the left of the inflexion point are selected. Alternatively, the Kaiser's criteria advocates for the selection of only factors with Eigenvalues greater than 1. The result of the two methods could be compared and a decision taken on which is appropriate. The reliability of extracted factors could be tested using the split-half reliability test or the Cronbach's alpha; the two work in similar ways. The more popular of the two - Cronbach's alpha, is used in this study. This approach splits up the data into two in every possible way and computes the correlation coefficient for each split; the average of these values is equivalent to Cronbach's alpha (Field, 2009). Generally a value of 0.7 or above is considered acceptable and values substantially below 0.7 indicate unreliability.

5.4.2 Qualitative data analysis

The focus so far has been on the analysis of quantitative data; the approaches to analysing qualitative data are quite different. Audio and textual material for instance, could be analysed through conversation analysis (CA), discourse analysis (DA) and content analysis. Conversation analysis attempts to describe people's methods for producing an orderly social interaction: its assumption is that the talk shows stable and organised patterns. A speaker's action is shaped in context, contributions to an on-going sequence of actions is not clear unless reference is made to its context (Silverman, 2001). CA is often used to analyse naturally occurring talk. It is a formal analysis of everyday situations and is the focus of ethnomethodology; there is less emphasis on the content of the conversation but focus is on the formal process through which the content is communicated (Flick, 2009). Hence, CA focuses on how the content of a conversation is communicated and so the choice of words, pauses, and body language are all very essential (Flick, 2009). The problem here is that notes written by an interviewer during the course of a semi-structured interview cannot be used to do conversation analysis (Willig, 2008). Willig (2008) explains what DA entails. Discourse analysis shows the manner in which in a conversation, the participant's conversational

version of events are constructed to do communicative interactive work. Unlike conversation analysis however, it focuses on the content of the talk and its social order and not the linguistic organisation. This analysis does not only involve everyday conversations but others like interviews. Analysis is focused on the context, variability and constructions in the text.

Though the ideal thing is to use discourse analysis to analyse naturally occurring talk or text, the practical difficulties involved has led to the use of semi structured interview data. The disadvantage is that interviewees reorient themselves to suit the interview settings and do not react as in their everyday setting. Since the way in which something is said could affect its meaning, transcripts meant for discourse analysis should contain some amount of non-linguistic aspect of the conversation which together make discourse analysis very labour-intensive. Discourse analysis is similar to conversation analysis; some DA researchers are thus against the use of non-naturally occurring data such as interviews for the conduct of DA (Silverman, 2001). Finally, researchers may also use content analysis to analyse qualitative data. As explained by Flick (2009), content analysis is a procedure for analysing textual data irrespective of its source; it is based on the use of categories often derived from theory or identified from the empirical data. The categories identified from theory are repeatedly examined against empirical data and modified where necessary. The goal of content analysis unlike the other approaches is to reduce the material being analysed. Content analysis could be conceptual where the focus is on establishing the existence of concepts and their frequencies or relational where attempts are made to examine relationships amongst the concepts. Content analysis essentially attempts to introduce some form of quantification into qualitative data. The adoption of content analysis techniques in any given research is due the fact that compared to other techniques for analysing qualitative data, it is clearer, relatively unambiguous and easier to do than other analysis techniques. It yields a uniform scheme of categories and facilitates comparison; in a text

5.5 Reliability, Validity and Ethical Issues

The reliability and validity of a study are often the bases for evaluating any study. Reliability refers to how consistent or dependable something is; if something is reliable it implies that it can be replicated under similar conditions (Bryman, 2008; Newman, 2007). According to Malhotra and Birks (2007) Reliability can be tested using the test-retest method where the same instrument is administered to the same respondents at different times or to different sets of respondents; other methods include the split-half method and the Cronbach's alpha. The split-half method is where a test is only conducted once on a sample which is then split into two and the results compared (McQueen and Knusses, 2006). Since qualitative research

involves processes that are unstable over time, replication may not be possible; hence reliability is achieved by being consistent through the techniques adopted to collect and analyse data (Newman 2007). Newman also argues that the use of pilot studies to streamline the final study is another way to enhance reliability in conducting social research.

Validity refers to the integrity of the research findings or conclusions - that is whether the instruments measure what they were intending to measure (Newman, 2007). It has several dimensions described by Bryman (2008) as follows: face validity – based on the judgement of the scientific community as to whether or not an indicator actually measures what it intends to measure, content validity – based on whether or not a measure captures the full content of what it intends to measure and criterion validity – based on comparing the indicator with other accepted indicators of the same construct. Where it agrees with an accepted pre-existing measure then concurrent validity is achieved but where it predict correctly the associated future behaviour of a construct then we have predictive validity (Newman, 2007). External validity however, refers to the generalisability of the findings of a research (Newman, 2007). The credibility of findings is an issue of internal validity (Bryman, 2008). Newman (2007) observes that content validity can be improved by using different indicators that measure the same thing or different aspects of the same thing. To improve reliability and validity in a study, Creswell (2008) recommends among other things, the triangulation of data sources and analysis procedures. As important as reliability and validity may be, Newman (2007) notes that one cannot achieve perfect reliability or validity. Apart from the issues of research reliability and validity, ethical issues in research are becoming increasingly important as a result of rising public concerns and changing legislation on human rights and data protection (Iphofen, 2003). Researchers are thus expected to act responsibly when dealing with people in the research process. Ethical issues also bother on what constitutes a legitimate or moral way of conducting research; this includes issues of plagiarism and falsifying data (Newman, 2007).

5.6 Adopted Methodology

The focus of this section is to explain the actual approach adopted in an attempt to investigate the research objectives in this study. The nature of the research question/objectives under investigation indicate that the first objective could only be appropriately investigated through the quantitative approach. Therefore, this approach was employed to investigate the first objective at both phases two and three of the study (see Figure 1). The fourth objective which sort to examine if a statistically significant difference existed between the two case study countries was purely quantitative in nature and was appropriately investigated based on the quantitative approach. Finally, the second and third

objectives were such that they could be investigated using both quantitative and qualitative approaches. However, the quantitative approach was deemed more suitable and was employed as the primary approach to investigate these objectives. The qualitative approach was subsequently used to validate the quantitative findings.

Therefore, overall, the multi-methodology was adopted for the study. The nature of the research objectives in this study coupled with the potential benefits of methodological triangulation (stated earlier) were the main factors that informed the adoption of this approach in the conduct of the research. The adopted approach was also more pragmatic as it allowed the researcher to choose from a wide range of research strategies and sampling techniques which was critical in overcoming various barriers especially during data collection. Three different strategies of enquiry were employed in the study. Apart from the survey strategy, the researcher also adopted the case study strategy where Ghana and England were chosen as the case study countries to permit a comparison between the developing and developed countries. Also, the sequential strategy was employed; the qualitative approach was used only after the completion of the quantitative investigation of the objectives with the aim of validating the quantitative findings.

5.6.1 Sampling

The target population for this study was the proprietors of small enterprises in Ghana as well as the officials involved in handling lending requests within the lending institutions in both Ghana and England.

Sampling - Ghana

The small business owners in this study were all sampled from Kumasi. According to the Kumasi Metropolitan Assembly –KMA (2011), the local economy of the Metropolis is dominated by the services sector consisting mainly of traders who make 71% of the economy. This is followed by manufacturing (which includes carpenters and auto-mechanics) who also make up 24% of the economy. Though there are other quiet visible businesses such as building contractors, transport and hotel service providers within the metropolis, the focus was on businesses identified by the KMA as key players in the local economy. The above KMA classification was thus adopted in selecting the sample for this study. The number of respondents from each line of business was made to roughly reflect their relative importance to the local economy. For instance, the respondents from the service sector involved traders and caterers who respectively constituted 66.4% and 13% of the whole sample whilst those from the manufacturing sector involved carpenters and auto-mechanics who also constituted 20.6% of the sample. The inclusion of caterers (providing

restaurant services) in this sample was due to the fact that they were easily accessible; they were often found around the areas where the traders were located.

The traders in the city are mainly located in various markets such as the Adum central business district, the Kumasi Central Market (single largest market in West Africa) with linkages to the satellite markets at Asafo, Bantama, Asawase, Ayigya, Ahinsan, Oforikrom, Tafo, Atonsu-Agogo, Santasi, Suame, Amakom, Bomso and Tarkwa (KMA, 2011). The traders in this study were selected from the two main markets – the Kumasi Central Market and the Adum central business district not only because they are the major markets but also because they are quiet easily accessible. The caterers were selected from the central business district. The mechanics were also sampled from the famous Suame Magazine where small engineering based industries are sited specialised in vehicular parts production and servicing. Finally, the main sites for the woodworking industries specialised in the production of furniture are Anloga and Sokoban. Anloga was sample using the simple random sampling technique. Since there was no list of the businesses in each market or site visited, the researcher adopted a convenience sampling technique. On the day the researcher visited any site, SE owners who were both willing and available to participate in the research were selected accordingly. A combined total of 131 proprietors of SEs were involved in the survey but this was made up predominantly of traders since majority of the businesses are related to commerce. Indeed, the study could have focused on only the traders but a decision was made to add a few of the other businesses to permit the researcher to explore any differences that may exist in credit access.

With regards to the lending officials who participated in the survey, below is an explanation of how they were sampled. In Ghana, the lending institutions were grouped into Universal Banks (UBs) Rural banks (RBs) and savings and Loans Companies (SLCs). The RBs and SLCs were classified as Microfinance Institutions (MFIs) since they are often preoccupied with the business of providing micro loans to individuals, groups of individuals and small enterprises. The participating officials within the lending institutions included the credit officers, loans managers and branch managers all of whom are involved in loan processing at one stage or the other. The credit officers are usually the first point of contact for potential borrowers; they do the initial assessment of the client and advise on the borrowing options that may be suitable for the client or which option the client qualifies for. The initial assessment is passed on to the loans manager in the form of a report; the loans manager in turn will assess the application and when satisfied approves the application. Depending on the structure within the institution, the branch manager who has overall responsibility for the

branch may also be required to take an independent look at the approved application. This process may however vary from one institution to the other.

The participating bank officials were recruited from Kumasi (the capital of the Ashanti region). According to the Bank of Ghana (2011), there are a total of 29 UBs, 136 fully operational RBs and 19 SLCs in Ghana. These institutions have several branches spread across the country. In Kumasi, there were eight SLCs with a combined total of 30 branches; there were also 25 RBs with 29 branches and 23 UBs with 69 branches (GHIPSS, 2011). This gives a total of 128 branches of all the lending institutions considered in this study. To increase the response rate so as to obtain a sample size suitable for some of the analysis intended to be carried out (factor analysis) the researcher did not only visit all 128 branches but also in some instances (involving 73 of the branches) where more than one official was willing to participate two questionnaires were given to any two of the officials. In the other 55 branches however, only one questionnaire was issued. Hence a total of 201 questionnaires were distributed. An overall response rate of 53.7% (108 respondents) was achieved; 57 of these respondents were from UBs and 51 from MFIs (27 from SLCs and 24 from RBs).

Different sets of samples were chosen later on to validate the findings of the first surveys conducted. To validate the findings on the nature of the SE credit constraint in Ghana, another set of small business owners were interviewed face-to-face using the same questionnaire. This time the focus was only on traders since an overwhelming majority of the small businesses in Kumasi are into commerce. Secondly, the first round of analysis did not reveal any differences between the various businesses regarding their access to credit. Twenty-seven traders (a quarter of the sample in the first survey) were haphazardly sampled from a different market (Bantama market). The Bantama market was selected based on a simple random sampling technique from the available markets listed earlier. To validate the findings on the survey involving officials of the lending institutions, semi-structured interviews were conducted. Loans managers were considered as key informants because mostly the final decision on whether to lend or not rest with them and were thus better placed to validate the findings of the earlier survey. The snowball sampling technique was used here in that the researcher first made contact with friends in management positions in some banks who then provided the link to other managers from other institutions willing to participate. Ten loans managers (six from UBs and four from MFIs) eventually took part in this validation survey.

Sampling - England

In England the lending institutions involved were the main high street banks. The participating bank officials were the loans advisors, business managers and branch managers. The loan advisors are often the first point of contact for clients seeking credit and tend to be sales officers. The business managers are relationship managers assigned a portfolio of business clients with the aim of helping to meet the credit needs of such businesses whilst the branch managers are in charge of running the whole branch. Participants were sampled from institutions within three counties in the North West - Merseyside, Lancashire and Cheshire. In each of these counties, the major cities or towns were selected for the study. These included Liverpool, St Helens and South Port in Merseyside; Manchester in Lancashire and Chester in Cheshire. The choice of these cities and towns was influenced by their proximity to where the researcher resided at the time (Liverpool). A total of nine different high street banks were identified within the selected cities and towns with several branches; the total number of bank branches in Liverpool was 119; 14 in St. Helens; 21 in Southport; 162 in Manchester and 90 in Chester (the investing site, 2011). There were thus a total of 406 bank branches in the selected areas. A decision was made to distribute a total of 200 questionnaires in England but the exact number distributed in each town was influenced by the proportion of the total bank branches located in the town. The bank branches were selected in each city or town using simple random sampling technique. Ninety five of the questionnaires were successfully completed and returned representing a response rate of 48%. A breakdown of the number of questionnaires distributed in each area as well as the number completed and returned can be found in Appendix A. Just as in Ghana, there was also the need to validate the findings of the survey conducted amongst the bank officials in England. Seven business managers were haphazardly sampled in Liverpool for this part of the study.

5.6.2 Data Collection

Phase I - Pilot

The pilot questionnaires were a combination of both closed and open ended questions. The aim of the pilot survey (which involved five relevant bank officials in England and five SE proprietors in Ghana) was to find out if the questions were clearly worded for easy understanding and whether respondents will be willing to provide the required information. The SE questionnaire was piloted in Ghana whilst the bank officials' questionnaire was piloted in England. The pilot was done from January to February 2011. A number of issues were highlighted. The SE questionnaire was originally made up of 21 questions. During the pilot, it was found that two of the questions had been repeated (a question on why one had

not applied for any credit in the past, and a question on the main reason why one's application was unsuccessful). Also two question which asked respondents to report their maximum cash amount generated per month and their minimum amounts per month respectively were merged into one question - the average cash generated per month. The final SE questionnaire was thus made up of 17 questions (see Appendix A). The issue that emerged with regards to the bank officials' questionnaire was that respondents generally avoided open ended questions or gave very short responses which did not fully explain issues. For instance, respondents were asked to explain the circumstances under which they will not take collateral and the conditions under which landed property will not be acceptable to them. As a result, a decision was made to remove all the open ended questions. The final bank official's questionnaire was made up of only closed ended questions and was used in both countries. All such open ended questions which were eliminated were covered in the semi-structured interviews conducted later (in stage three of the data collection) for validation purposes. Having made the necessary amendments to the questionnaires, the way was cleared for phase two of data collection which lasted from February 2011 to June 2011.

Phase II – Full scale data collection

In England only one set of questionnaire (the bank officials' questionnaire) was used. In Ghana however, given the nature of the objectives under investigation, two sets of questionnaires were administered (one set for bank officials and another for proprietors of SE). The bank officials' questionnaire sought for information on various issues including: their attitudes towards the use of collateral in credit contracts; preferences for various forms of collateral; whether or not registered and unregistered property are eligible for use as collateral; attributes that make landed property eligible for use as collateral; the influence of registered property titles on SE loan terms and finally the factors responsible for turning down SE loan applications. Respondents attitudes/perceptions were measured using the likert scale (see Appendix A for questionnaire). In Ghana, the bank officials' questionnaire was delivered by hand to respondents on a first visit and an appointment was booked to return on a later date to collect the completed questionnaires. Three assistants were recruited to help with questionnaire administration; two of them administered the SE questionnaire whilst the other joined the researcher for the purpose of distributing and returning to collect the bank officials' questionnaire. However, in England, the researcher personally visited the selected bank branches located within the North West. The questionnaires were handed over to the selected respondents together with prepaid envelopes to return the completed questionnaires. This method was chosen because it was convenient for both the researcher and respondents.

On the other hand, the focus of the SE questionnaire was to seek information on their credit market activities or experiences: whether or not they participate in the market; their experiences in terms of the success or failure in loan applications; and for respondents who did not report credit market activity, to find out why they did not participate. Structured interviews were conducted with the SE owners as most of them could not administer the questionnaires themselves. The data obtained was coded and entered into SPSS (version 17) as and when each completed questionnaire was returned. After analysing the data obtained there was the need to validate the findings which led to stage three of the data collection process.

Phase III – Data collection for validation

The third phase of data collection span from October to November 2011. In Ghana, only one research assistant was used to conduct structured interviews amongst the 27 selected traders from the Bantama market. It essentially involved a replication of the earlier survey but this time with a different set of participants. The findings from the bank officials' survey were validated through semi-structured interviews (see Appendix A for interview guide) conducted with loans managers via the telephone. For England, the semi-structured interviews were conducted amongst 7 selected business managers of the main high street banks. Four of these managers were interviewed via telephone whilst the other 3 were interviewed face-to-face.

5.6.3 Data Analysis

Phase I

Just like the data collection process, the analysis was divided into two phases. The first phase involved statistical analysis of quantitative data (using SPSS) collected through the surveys conducted during stage two of data collection whilst the second phase dealt with analysis of qualitative data collected at stage three of the data collection process with the help of Nvivo. Prior to the start of actual analysis, the quantitative data was coded into SPSS and screened for possible errors. The screening revealed a few missing data which were dealt with using EM algorithm method for missing data analysis in SPSS. This method uses a complex and very rigorous approach to replace missing values based on trends identified in the data; it uses maximum likelihood estimators to produce estimates of the missing data and is more robust than replacing missing values with the mean (Borman, 2009). The objectives of the study formed the broad themes for the statistical analysis; as such each objective was analysed using techniques considered most appropriate in achieving them. It is hence important to re-state each objective and explain how it was analysed.

- *Objective 1:* To determine the nature of the small enterprise's credit constraint in Ghana.

Diagne et al. (2000) identify two approaches to detecting household credit constraint which could easily be adopted in measuring constraints amongst SEs. They are the direct and indirect approaches. Whilst the first solicits household perceptions on whether or not they are credit constrained the second seeks to test for possible violations of the assumptions of the permanent income hypothesis that consumption expenditure should not be affected by temporary shocks in income if there are no credit constraints. Based on the indirect approach a credit constraint exists if consumption is significantly dependant on short term incomes. The indirect method involves the estimation of disequilibrium models of demand and supply of loans whilst the direct approach involves surveys that provide data on loan applications and the outcome of such applications (Love and Sánchez, 2009). In the developing countries SEs are owned by sole proprietors where its quiet difficult to separate the owner from the business itself - the business is personalised. As a result, the above methods could be applied to SE studies of this nature.

The credit constraint amongst SEs could be estimated by looking at the influence of temporary shock in investible funds on SE investment activity. However such information is difficult to get especially in the developing world where such businesses rarely keep records. Therefore, the direct method was rather adopted in this study where the reported credit market experiences of the SEs within the past 2 years was used to determine if they are constrained and the nature of the constraint. This period was chosen because it's short enough to allow participants to recall their credit market activities. The participants were classified into those who have applied for credit and those who have not. Respondents who had applied for credit were considered not to face a credit constraint if they were able to obtain the full credit amount needed. However, those who applied for credit but were refused (either partially or completely) were considered to be constrained. These constraints were classified as supply side constraints in that, they did not get the needed credit due to a decision by lenders not to grant their request. The supply side became the barrier to accessing the required credit.

The other participants who had not applied for credit were further divided into two groups - the unconstrained and the constrained groups. According to Atieno (2001) and Banerjee and Duflo (2004), people who do not apply for credit because they have no need for it should be considered unconstrained whilst those citing any other reason should be considered as constrained. The constrained group were further classified into supply-side and demand-side constraints base on the exact reason why they did not apply even though they needed credit.

Those that did not apply due to other reasons such lack of information were classified as demand side constrained and finally respondents who did not apply for credit because of reasons such as: high cost of credit, process inconveniences, lack of required documents and the lack of tailor made facilities were classified under supply-side constraint. In this study businesses were considered to face a supply-side constraint if (a) they applied for credit but did not get the full amount required or (b) did not apply for credit because of barriers emanating from the supply side. The demand-side constraint involved those that did not apply for credit because of barriers emanating from the demand side. The data was descriptively analysed; in addition, the chi-square test and spearman's rho were also used to explore relationships. For instances, the test explored the existence of relationships between demographic characteristics of the respondents and the participation in the credit market, their selection of a lending institution and constraint status (see next chapter for details).

> ***Objective 2:*** to examine what influence (if any) property registration has on SEs access to credit.

Most existing studies stated in chapter one such as Petracco and Pender (2009) attempt to evaluate the impact of property registration on access to credit in an experiment type before and after study where households which are similar in every respect but differ only in terms of their possession of registered titles are compared. Usually a longitudinal study is conducted involving households who at the start of the study had no registered titles to land; some of them are later issued with registered titles. They then try to investigate whether the issued titles have enhanced credit access. Boucher et al (2005) examine the issue by looking at the relationship between the possession of a registered title and the possibility of being credit constrained based on longitudinal studies of households. To measure the effect of receiving a property title on credit access, Field and Torero (2004) used household surveys to collect detailed information on household and individual characteristics. Their survey involved an extensive array of self-reported data on all loan applications requested by the household between 1997 and 1999 including bank requirements and the terms of loans provided. Using such micro level data, they estimated the impact of land registration on credit access by modelling the outcome of individual credit application to determine the probability that a loan application will be approved with or without registered title.

The approaches described above are only suitable in conducting demand side studies. Since the focus of this objective is to study the issue from the supply side the above approaches could not be adopted. The approach used in this study is thus explained below. The possession of registered property title may only guarantee or at least influence access to SEs credit under the following conditions: (a) Collateral must be a necessary requirement for

granting such loans and the provision of registered property titles on its own should be a sufficient criteria for approving credit application. This is premised on the argument that registration guarantees access to credit through the use of property as collateral; (b) landed property must be preferred to other forms of collateral in that, if other forms of collateral are preferred then the possession of registered titles may not enhance credit access; and finally (c) landed property must be registered to make it eligible for use as collateral. Indeed where registered property titles are not required by lenders, their possession will be of no consequence on credit access.

The possession of registered property titles will enhance one's chance of obtaining credit from lenders who meet the above criteria. This is because these lenders would not even consider SE loan applicants if they (SEs) fail to provide registered property titles for use as collateral. This was used as the first evidence of the possible impact of property titles on credit access. This study therefore investigated the extent to which these conditions are met through the following: (a) A four point Likert scale was used to determine how necessary collateral is considered to be in lending to SEs. a five point was also used to determine the extent to which respondents agree that the provision of collateral per se is not sufficient to trigger credit supply; (b) participants were asked to indicate on a four point scale, their level of preference for various forms of collateral including landed property and; (c) respondents were asked to indicate the kind of property documents accepted as proof of ownership amongst other things to determine whether unregistered property is eligible for use as collateral or not. They were also asked to rank in order of importance the various features of landed property (including property registration) they look for when accepting such property as collateral. To determine the exact form of this impact, respondents were given a scenario involving two SEs similar in every relevant aspect except that one possesses a registered title and the other an unregistered title. Respondents were asked whether they will treat the two borrowers differently in terms of the interest rates and fees charged, the repayment time allowed and the loan amount each is allowed to borrow.

The Mann-Whitney test and Wilcoxon signed rank test were both used amongst other things to determine if there were differences between different lenders and their attitudes towards the use of landed property as collateral whilst the chi-square test and spearman's correlation were used to test for relationships between the illegibility of unregistered property and the preference for landed property, the ease of verifying property ownership and the likelihood of repossession problems occurring during default amongst other things.

Objective 3: to identify the underlying factors responsible for turning down SE credit demand and the importance of property registration relative to the other factors.

The attainment of this objective will permit the land registration and access to credit argument to be looked at in a much broader context by giving a clear idea of its relative importance. About 14 different reasons for turning down loan applications were identified from literature and respondents were asked to rank these factors in order of importance on a 14-point scale. The data was analysed descriptively using the median ranks of these factors. The test for differences was conducted for the level of importance of the individual reasons as rated by respondents using the Friedman's ANOVA, Man-Whitney test, and the Wilcoxon test. As in other cases the chi-square test and spearman's rho were also used to explore relationships. After looking at the individual reasons, the study also used exploratory factor analysis (EFA) to explore any interrelationship that may exist amongst the 14 variables so as to reduce to them to a smaller number of underlying components/factors. The relative importance of each component was determined by the proportion of the total variance explained by each component.

Objective 4: To examine if a significant difference exist between the two countries with regards to the credit effects of property registration.

The Mann-Whitney test was used to test for differences in responses from the two countries on the various issues under investigation. For instance, the test was used to explore differences in: lenders' perceptions on how necessary collateral is; preferences for various forms of collateral; perceptions on the eligibility of unregistered property for use as collateral; perceptions on the influence of landed property registration on loan terms; and the important reasons responsible for turning down SE credit applications amongst others.

Overall, the choice of the specific statistical tools adopted in investigating the various objectives was informed by the nature of the data obtained. Since this study collected only categorical and ordinal level data, parametric test (such as t-test and ANOVA) which require at least interval level data could not be conducted. Therefore, the non-parametric statistical tools were adopted because they were more suitable for the kind of data obtained in this study. The nonparametric tools adopted are the Man-Whitney and Wilcoxon's signed rank tests, Friedman's ANOVA test, Spearman's rho and Chi square test. Though the Man-Whitney and Wilcoxon's signed rank tests both test for differences between any two samples, the Man-Whitney test was used were the two samples of interest were considered to be independent of each other. The Wilcoxon's signed rank test was however used where the two samples were not independent of each other. The Friedman's ANOVA test was similarly used to test for differences amongst three or more dependent samples of interest. To test for

correlation between variables, the spearman's rho (non-parametric equivalent of Pearson's correlation – r) was used were the two variables involved were both measured at ordinal level. However, in cases where: the two variables were both categorical or where one was categorical and the other ordinal, the chi square test was used to test for associations.

Phase II

The second phase of the analysis involved analysis of data collected for the purpose of validating the findings from phase one of the analyses. This included qualitative data collected through semi-structured interviews and quantitative data from structured interviews. The semi-structured interview was sub-divided into different topic areas depending on the questions asked. Under each topic area, the responses to each question were examined to identify main themes whilst reading through the transcripts. All categories identified were later re-examined leading to the merger of some categories and others became subcategories of the main ones. These categories were created in Nvivo as nodes and sub-nodes using a tree node structure. The transcripts were then imported into Nvivo for coding (see Appendix A for the coding summary report). During the coding process, new categories were identified and coded appropriately. The coding was done systematically according to responses to questions in each topic area. The data was then analysed using conceptual content analysis.

5.6.4 Reliability, Validity and Ethical Issues

In this study, the use of pilot studies helped to restructure the final questionnaire to ensure that reliable responses were obtained. In addition, the use of the different data collection and analysis methods permitted the quantitative findings to be validated by qualitative findings. The findings on the nature of the SE credit constraint were validated through a replication of the survey amongst a much smaller group of participants. The design of the questionnaire also permitted the researcher to check for consistency in responses as the same question was sometimes asked in different forms. For instance respondents were asked to indicate how much they agree that unregistered property is eligible for use as collateral. Subsequently they were again asked to identify the kind of property documents which they accept as proof of property ownership. Furthermore, the coding of the interview transcripts was done several times and in a very consistent manner. Another person was asked to independently cross check the initial coding to ensure it was reliable. Regarding ethical issues, Liverpool John Moores University as an institution has stringent requirements that must be met to obtain ethical approval for the conduct of research. This study met the requirements and received full ethical approval before the research data collection even began. Each participant was

given adequate information on what the research is about and an assurance was given to each respondent regarding their confidentiality. As such, no personal details such as name, institution name addresses etc. were required. During the conduct of the semi structured interviews participants consents were sought to record the interviews (see Appendix A for consent form and participant information sheet)

5.6 Summary

This chapter has provided a detailed insight into the methodologies, sampling, data collection and analysis techniques adopted in the study to investigate the stipulated objectives set out in chapter one. This was preceded by a broad analysis of the available methodologies. This chapter has thus provided the answer to the question of how the researcher went about investigating the objectives of the study. This chapter has set the stage for the results obtained to be presented and discussed in the next chapter.

CHAPTER 6

Quantitative Data Analysis And Discussion

This chapter presents and discusses the results from the questionnaire surveys conducted amongst proprietors of small enterprises (SEs) and officials of various lending institutions. The top three objectives of the study outlined in chapter one form the main themes around which the analysis and discussions are conducted. There is therefore the need to restate these objectives which are as follows:

- To investigate the nature of the credit constraint amongst SEs in Ghana.
- To examine what influence landed property registration has on SEs access to credit.
- To assess the underlying factors responsible for turning down SE credit demand and the importance of property registration relative to the other factors.

The organisation of the chapter is as follows. Section 6.1 looks at the nature of the small enterprise's credit constraint in Ghana. Section 6.2 examines the influence of property registration on small enterprise's access to credit and finally, section 6.3 examines the underlying factors which explain why lenders turn down small enterprise's credit applications.

6.1 Nature of the SE Credit Constraint in Ghana

The focus is on only Ghana because the provision of registered property titles is perceived as the panacea to the problem of credit access in the developing world and thus calls for the need to study the nature of the constraint in these countries if the right solution is to be found. To determine the nature of the credit constraint amongst SEs, selected proprietors of small businesses were asked various questions about their credit market experiences. The results are presented below.

6.1.1 Respondent characteristics

A summary of the respondents' characteristics can be found in Table 1 below. A total of 131 SE owners were involved in this survey; the sample consisted of 74 females (56.5%) and 57 males (43.5%). About 46.6% of respondents were between 30-45 years old. On the level of education, the results show that 23.7% have no formal education at all. Whilst 36.6% have only basic education, only 7.6% have tertiary education. The median number of dependants per respondent is 5-10 (64.1%). Respondents were engaged in various businesses in the areas

of trading, mechanics, carpentry and catering. Majority of participants (66%) were into trading. Approximately 62% of respondents employ less than five people. Most of the businesses in this sample could thus be classified as small enterprises. These businesses reported a median monthly cash of GHC 500-1000 (35%) and a median monthly expenditure of GHC 300-500 (36%).

Table 1: A Summary of Respondents' Characteristics – Small Business Owners

	Categories	N=131	Valid %
Gender	Female	74	56.5
	Male	57	43.5
Age	<30yrs	21	16
	30-45yrs	61	46.6
	46-60yrs	36	27.5
	>60yrs	13	9.9
Level of education	No formal education	31	23.7
	Basic education	48	36.6
	Secondary/technical/vocational	42	32.1
	Tertiary	10	7.6
Number of dependants	<5	33	25.2
	5-10	84	64.1
	>10	14	10.7
Business Type	Trader	87	66.4
	Mechanic	17	13.0
	Carpenter	14	10.7
	Catering	13	9.9
Number of Employees	<5	81	61.8
	5-10	37	28.2
	>10	13	9.9
Cash generated per month	<500 GHC	25	19.1
	500-1000 GHC	46	35.1
	1001-1500 GHC	38	29.0
	>1500 GHC	22	16.8
Monthly expenditure	<300 GHC	33	25.2
	300-500 GHC	47	35.9
	501-700 GHC	28	21.4
	>700 GHC	23	17.6

About 28% of the females have no formal education at all, compared to 17.5% of their male counterparts but the chi square test did not identify any significant association between level of education and gender. There was also no correlation with age (see Tables 1 & 2 of appendix B). The number of dependants was found to rise with age [*rho = .573, p < .001]*; it was negatively correlated with educational level [*rho =.-192, p < .05].* However, it did not vary with gender (see appendix B). The number of employees reported was associated with the business type [x^2 *(6) =54.7, p < .001*]. For instance, 81% of traders employed less than five people whilst about 62% of mechanics employ above ten people. It was established that those reporting higher numbers of employees included their apprentices (this is particularly true for respondents in carpentry and mechanics related businesses). Gender was significantly associated with the reported business type [x^2 *(6) =54.7, p < .001*]. Some of the businesses (carpentry and mechanics) are male dominated whilst others - trading are

dominated by females (see Appendix B). Finally, the reported average amount of cash the business is able to generate per month was not found to vary depending on the business type [$x^2(9) = 6.2, p > .05$].

6.1.2 Credit market experiences

To determine the constraint status of participants, their opinions were sought with regards to what they considered to be the most important problem facing the growth of their businesses. Though several (seven) factors were identified as shown in Table 2 below, one problem (the lack of funds) stood out distinctively from the rest (see Table 2 below). A little less than half of the respondents (45.8%) identified funding as their most critical problem. The remaining 54.2% of the respondents reported other problems. Comparing the individual problems reported, the lack of funds emerged as the single most important problem. The seriousness of this problem is reflected in the fact that the other individual problems identified were less widely spread or reported.

Table 2: Most Important Business Problem Encountered by Respondents

most important business problem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	lack of funds	60	45.8	45.8	45.8
	frequent price increament by suppliers	17	13.0	13.0	58.8
	lack of business space & poor location	12	9.2	9.2	67.9
	high import duty & bureaucracy	14	10.7	10.7	78.6
	competition	12	9.2	9.2	87.8
	lack of raw material	10	7.6	7.6	95.4
	others	6	4.6	4.6	100.0
	Total	131	100.0	100.0	

The lack of funds also emerged as the only problem that cuts across all business types whilst each of the other six problems tend to be associated more with particular business types (see Appendix B, Table 9). Respondents were asked to report whether they had applied for credit in past two years. The results show that about 72% of all 131 respondents had participated in the credit market through the submission of credit applications at some point. There was however, no credit market activity reported by the remaining 28%. This demonstrates a high need and demand for formal credit amongst small businesses in the country contrary to findings elsewhere by Love and Sánchez (2009) that microenterprises have a very limited demand for formal credit. Elsewhere in rural Romania, Chaves et al. (2001) also found a very low participation rate (20%) of enterprises in the loans market. Given that this study was conducted in the urban centre, it was not surprising to find very high participation rates amongst small businesses.

As shown in Appendix B, about 78% of females had applied for credit compared to 63% of their male counterparts. There was however, no significant association between gender and the reported participation in the credit market [χ^2 *(1) = 3.68, p >.05].* This contradicts the findings that in rural Ghana, the demand for credit is lower for female headed households as they are often poorer than their male counterparts (Bendig et al., 2009). The likelihood that a respondent had made a loan application in the past two years also had no significant association with the respondent's age [χ^2 *(3) =6.77, p > .05];* level of education [χ^2 *(3) = 2.78, p > .05];* number of employees [χ^2 *(2) = 2.36, p > .05];* monthly cash generated [χ^2 *(3) = 1.95, p > .05];* and the most important business problem *[*χ^2 *(6) = 2.04, p > .05];* (see Appendix B). These results reiterate the argument that the key determinants of credit demand is the availability of profitable venture and the need to expand or finance working capital (Bigsten et al., 2003). Irrespective of the age, gender, education, the amount of cash generated and number of employees, a business will not borrow if they do not have difficulties in financing working capital or if they do not have a need to expand or invest in new profitable projects. Contrary to the above findings, Bendig et al. (2009) argue that a lower level of education is associated with lower credit demand because, the less educated often have less productive jobs, lower incomes and may often not understand the need for such financial services or how to access them.

For ease of analysis, the most important business problems reported by respondents in Table 2 above were re-categorised into two: the lack of funds and other factors (involving the other six problems reported in Table 2). Almost 72% of respondents in each category had made a loan application (see Appendix B, Table 15). Therefore, even though in general 54% of the respondents cited various problems other than the lack of funds (see Table 2 above), most of them had an active demand for credit nonetheless. About 28% of respondents cited the lack of funds as their main problem but did not apply for credit. These are the respondents whose potential demand for credit according Aryeetey (1996b) could not be transformed into revealed demand due to a number of barriers from either the demand or supply side; these barriers are examined later.

The 94 participants who had applied for loans (loan applicants) were asked to report where they submitted their applications. Most of them (41.5%) applied for the credit from Savings and Loans Companies. About 34% from Rural Banks, 21.3% from the main Universal Banks and only 3.2% from other institutions (credit unions). For ease of analysis, the lending institutions were reclassified into universal banks and MFIs (rural banks, Savings and loans companies and credit unions) The institutions from which credit is being sought could influence success rate of the application as they tend to have different requirements.

Compared to the Universal banks, the other institutions do have relatively less stringent requirements and they tend to take financial services to the door steps of these businesses making them the more convenient choice when credit is needed. Indeed, Atieno (2001) observes that non-bank financial institutions are the main sources of formal credit for small enterprises as their loan application procedures are shorter and loans tend to have longer maturities. The universal banks place much emphasis on collateral based lending when dealing with small businesses. Therefore given the fact that women make up a greater proportion of landless population (Karanja, 1991), one would have expected that female borrowers will be attracted more to the other institutions but there was no significant association between gender and the selected lending institution [χ^2 *(1) = 1.5, p > .05]*. Furthermore, one would expect that given the high level of formal procedures involved in dealing with universal banks, the people with lower levels of education would shy away from them. However, this study did not establish a significant association between educational level and the selected lending institution [χ^2 *(3) = 3.6, p > .05]* (see Appendix B, Tables 16&17).

6.1.3 Constraint status of loan applicants

The loan applicants were thus asked to indicate how much they applied for and the proportion of this amount they actually received. Only 7% of the applicants wanted to borrow amounts less than GHC 500 and about 27% wanted above GHC 2,000. 33% of the loan applicants each wanted loan amounts of GHC500-1000 and GHC 1001-2000. The loan amount applied for had a significant association with the selected lending institution [χ^2 *(3) = 13.61, p < .01. Cramer's V = .380, p < .01]*. For instance, 52% of the universal banks received applications for loan amounts in excess of GHC 2,000 compared to 18% of MFIs (Appendix B, Table 19). Hence, business owners who required larger loan amounts went to the universal banks. The other lenders (MFIs) tend to provide micro loans which may only increase gradually overtime as each loan amount is successfully repaid. Businesses that cannot wait to go through this process are most likely to approach a universal bank for credit.

The loan amount that the respondents wanted to borrow was also found to have a significant association with the average amount of cash the business generates per month [χ^2 *(12) = 70.39, p < .001. Cramer's V = .421 p < .001]*. This is confirmed by the correlation test which shows that as the amount of cash generated increased so did the loan amount applied for and vice versa [*rho = .342, p < .001]*. This is an indication that these small businesses are only borrowing as much as they can afford and this is good for the lenders and the economy as a whole. Another explanation is that those businesses generating higher cash per

month are relatively bigger and thus have bigger financing needs, hence, their decision to approach universal banks for credit.

Table 3 below shows the proportion of the loan amounts that applicants actually received. About 28% of the 94 loan applicants obtained the full amount of the loans they wanted and were therefore not facing a credit constraint (unconstrained applicants). At the other extreme, almost 11% had their loan applications completely rejected and were classified as fully constrained and about 62% were classified as partially constrained since they only received fractions of the amounts they applied for. A total of about 72% of the loan applicants in this survey were thus credit constrained.

Table 3: Proportion of Loan Amount Actually Received and Constraint Status of Loan Applicants

Proportion of loan amount received	N=94	Valid %	Constraint Status
zero	10	10.6	Fully constrained applicants
< 50% > zero	16	17	Partially constrained applicants
50-75%	31	33	
>76% but <100%	11	11.7	
100%	26	27.7	Unconstrained applicants

The Wilcoxon's test shows that a significant difference exist between the amount applied for and the amount received, $[Z = -4.03, p < .001]$. The amount received was significantly lower than what was applied for and according to Atieno (2001) this is an indication of the existence of loan quantity rationing in the credit market. The results reiterate that participation in the credit market does not guarantee access to credit. Indeed, elsewhere in Bangladesh and Malawi, 31% and 40% of households respectively did not receive any formal loan even though they reported some credit market activity (Diagne et al., 2000). The extent of the constraint is much higher in this study relative to that reported in other developing countries like Mexico where Love and Sánchez (2009) report a relatively lower percentage (7%) of completely rejected loan applications; they also reported a lower percentage (42%) of constrained businesses. In Romania however, Chaves et al. (2001) established that the proportion of application completely rejected is 29% much higher than the 10.6% reported in Table 3 above.

The chi square test conducted shows that the possibility of being a constrained or unconstrained applicant did vary significantly based on the average monthly cash generated $[\chi^2(3) = 13.04, p < .01]$ and the loan amount applied for $[\chi^2(3) = 18.87, p < .001]$. Small business with the ability to generate larger cash amounts are more likely to receive the full loan amount desired and vice versa. For instance, about 73% of all unconstrained loan

applicants were generating above GHC 1,000 a month whilst only 26.9% were generating monthly cash amounts of GHC 1,000 or less. Furthermore, about 81% of the unconstrained borrowers wanted loan amounts above GHC 1,000 (see Appendix B, Tables 23 & 24). There are two implications here. Firstly, applicants desiring to borrow relatively smaller amounts are more likely to be constrained and secondly, the degree of the constraint is likely to be higher for such borrowers than those desiring larger amounts. This is quite surprising in that, lenders should be more capable to meet borrowing requirements involving smaller amounts than those involving larger amounts and the smaller the amount the lesser the consequences of default will be for the lender. However, earlier results revealed that respondents who desired to borrow smaller amounts are mostly those that generate relatively small amounts of cash per month from their businesses. Therefore, applicants seeking smaller amounts are relatively smaller and less credit worthy. This could be the reason why most of those desiring to borrow small amounts did not receive the entire amounts they applied for.

In addition, the constraint status of the borrower had a significant association with the selected lending institution [x^2 *(4) = 9.8, p < .05*]. The degree of the credit constraint is higher for applicants seeking credit from universal banks than their counterparts seeking credit from MFIs. For instance, about 22% of all applicants who sought for credit from universal banks were completely turned down compared to only 7% of those who approached MFIs. Also, only 13% of universal bank loan applicants got the full amount applied for relative to the 32% of MFI loan applicants. The strict lending policies of the universal banks possibly are the underlying factors responsible for this difference (see appendix B Table 30). However, as displayed in Appendix B (Tables 25-29 – Appendix B), there was no association between the possibility of being a constrained or unconstrained borrower and the respondents' age [x^2 *(3) = 5.81, p > .05];* gender [x^2 *(1) = .01, p > .05];* education [x^2 *(3) = 3.45, p > .05];* number of dependants, [x^2 *(3) = 5.34, p > .05];* monthly expenditure [x^2 *(3) = 2.24, p > .05].* As far as gender is concerned, a world bank study reported by the B&FT (2012) shows that women are particularly disadvantaged when it comes to accessing financial services but this study did not establish any difference between male and female in terms of their constraint status.

To find out how reliable credit access is, participants were asked whether or not they are able to obtain credit anytime it is needed. Of the 94 loan applicants, about 46% indicated that they do not have reliable supply of credit compared to 30% with reliable supply. As much as an estimated 39% of respondent who received the full loan amount applied for, do not have reliable supply vis-à-vis 48.6% of respondents who received less than the full amount (see Appendix B, Tables 31 & 32). The most worrying issue is that, a large proportion of the

most credit worthy loan applicants in this study (those obtaining the full amount) still faces problems of supply reliability. This may be due to factors external to the borrowers such as the macroeconomic environment.

6.1.4 Reported causes of the constraint faced by loan applicants

Sixty-eight of the loan applicants were credit constrained in one way or the other (see Table 3 above) and were asked to report on the main reason for which their applications were unsuccessful. Table 4 below gives a breakdown of the reported factors responsible for the constraint. The single most important reason responsible for unsuccessful loan applications as reported by the loan applicants themselves was the lack of landed property (31%) followed by difficulties encountered in repaying past loans (25%). Cash flow problems accounted for about 16% of the unsuccessful applications. The results reveal that the lack of collateral alone (including: lack of landed property, insufficient funds for use as lien and lack of guarantor) account for about 52% of the credit constraint amongst small businesses who applied for credit. This confirms the argument by Fleisig et al (2006) that in Africa, insufficient collateral accounts for 51% of all firms refused credit whilst 19% of people who don't apply for credit do so because of the high collateral requirements.

Table 4: Perceived Causes of the Credit Constraint amongst Constrained Loan Applicants

Reasons	N=68	Valid %
Lack of landed property	21	30.9
Past repayment difficulties	17	25.0
Cash flow problems	11	16.2
Insufficient funds in A/c for lien purposes	8	11.8
Inability to provide guarantor	6	8.8
Lack registered property documents	3	4.4
Don't know	2	2.9

The lack of formal registered property documents only accounted for 4% of the reported constraints. This appears contradictory to the assertion that the absence of registered landed property titles but not the lack property per se is to blame for the credit constraints in the developing countries (de Soto, 2000). All business owners who perceive the lack of registered property titles as the main cause of their constraint also reported to have sought for credit from the Universal Banks and none applied for credit from the MFIs. The lack of landed property was the most frequently reported reason for the credit constraints amongst businesses seeking credit from commercial banks (31%). For those seeking credit from the MFIs, difficulties encountered in repaying past loans was the most frequently (27%) reported cause of their credit constraint (see Appendix B, Table 33)

6.1.5 Constraint status of non-loan applicants

Apart from the 94 participants who had applied for loans, there were 37 participants in this survey who did not apply for credit within the two year period leading to the time of the survey. Their credit status could only be determined by examining the reasons why they did not apply for credit. Participants who stated that they did not need credit are considered unconstrained whilst those stating any other reason are constrained (Banerjee and Duflo, 2004; Diagne et al., 2000; Love and Sánche, 2009). Table 5 below shows that 27% (10) of the non-loan applicants (non-applicants) did not apply for credit because they had no need for it and were appropriately classified as unconstrained non-applicants since they had no demand for credit. These are probably people who had their own funds to invest or did not have any profitable venture that would necessitate a demand for credit. The remaining 73% (27) were constrained because though they needed credit (had a demand for credit), there were some factors (identified in Table 5 below) that prevented them from making a credit application.

Table 5: Reason for not applying for a Loan and Constraint Status

	Frequency	Valid percentage	Constraint status
Don't need it	10	27.0	Unconstrained Non-applicants
Can't afford cost	11	29.7	Constrained Non-applicants
Could not find one that suits my needs	8	21.6	
Think I don't qualify	3	8.1	
Don't know where and how to get it	2	5.4	
Procedure time consuming	2	5.4	
Don't have required documents	1	2.7	
Total	37	100	

Of the 27 constrained non-applicants, the most important reported reason why they did not apply for credit is because they could not afford the cost involved (40.7%) followed by the fact that: they could not find one that met their specific requirements (29.6%) and they think they are unqualified (11%). The rest are displayed in Table 6 below. These reasons indicate that these respondents have sometime in the past applied for credit, made enquiries from friends or lenders and as such have an idea of what the requirements for credit are. This confirms findings in Kenya that most non-applicants are credit constrained; indeed only 15% of non-applicants is this Kenyan study were unconstrained (Atieno, 2001). In a similar study amongst micro enterprises in Brazil, 39% of respondent did not apply for credit due to lack of need for it whilst 61% reported other reasons (Kumar and Francisco, 2005). The incidence of credit constraint amongst non-applicants in this current study is lower than that reported in the Kenyan study but higher than that in Brazil. In Kenya, Atieno (2001) reports that the most important reason for not applying for credit is the lack of information. This is expected

as the study was conducted in rural Kenya. This current study was conducted in a major city (Kumasi) and one would rightly expect that information on where to get credit would not be much of a problem.

Table 6: Constrained Non-applicants and the Perceived Causes of the Constraint

	Frequency	Valid percentage
Can't afford cost	11	40.7
Could not find one with terms that suits my needs	8	29.6
Think I don't qualify	3	11.1
Don't know where and how to get it	2	7.4
Procedure time consuming	2	7.4
Don't have required documents	1	3.7
Total	27	100

Given the high interest rates of 25% and above in Ghana (Kpodo and Valdmanis, 2010), it is not difficult to understand why it is the most reported barrier to participation in the credit market. This confirms findings of Love and Sánchez (2009) that higher interest rates and transaction cost are the main barriers to participation in the credit market for small enterprises. In Brazil, Kumar and Francisco (2005) also report cost as the main reason why some microenterprises do not apply for credit. Apart from cost been a major barrier to credit access, the above result also appears to suggest that lenders provide standardised products. Almost 30% of constrained non-applicants did not apply for credit because they could not find facilities with the right amounts, maturities and repayment schedules that suit their needs. These people would rather not seek credit than to go for credit that does not meet their needs. The lack of tailor-made products could actually create repayment problems for borrowers. In the Mexican study reported earlier, only 9% of non-applicants were hindered from participating in the market by the lack of tailor-made facilities (Love and Sánchez, 2009). The problem of documentary requirements was not a major cause of the constraint reported by constrained non-applicants (3.7%).

6.1.6 Demand and supply constraints

A detailed breakdown of the above results into the supply and demand side components is provided in the Figure 7 below. From the results discussed so far in this study, 72.5% (95) of all the 131 small businesses surveyed are credit constrained (involves 68 loan applicants and 27 non-applicants). This is relatively higher than the 48% reported in Brazil (Kumar and Francisco, 2005). Of the 95 constrained respondents, 93 of them (97.9%) faced a supply-side constraint. These included the partially and fully constrained applicants as well as non – applicants who did not apply for credit because of: high cost, lack of tailor made facilities; fear of rejection (those who think they don't qualify); process inconveniences and lack of

required documents). Only 2 respondents (2.1%) reported a demand side constraint (those who cited lack of knowledge of where and how to get credit). On the other hand, 36 participants (27.5%) made up of 26 loan applicants and 10 non-applicants were unconstrained. Hence, the small businesses surveyed face predominantly a supply-side constraint. Demand-side constraints are almost non-existent amongst the sample surveyed. This also confirms the argument in the literature that credit constraint is mainly caused by supply-side factors (Atieno, 2001). Contrary to the results of this study Chaves et al. (2001) found that demand side factors were responsible for the limited participation of the small enterprises in the Romanian credit market. This survey has established that the SEs in Ghana are mostly faced with a supply side credit constraint and that the lack of registered property titles is not recognised by borrowers as a prominent cause of their credit constraints,

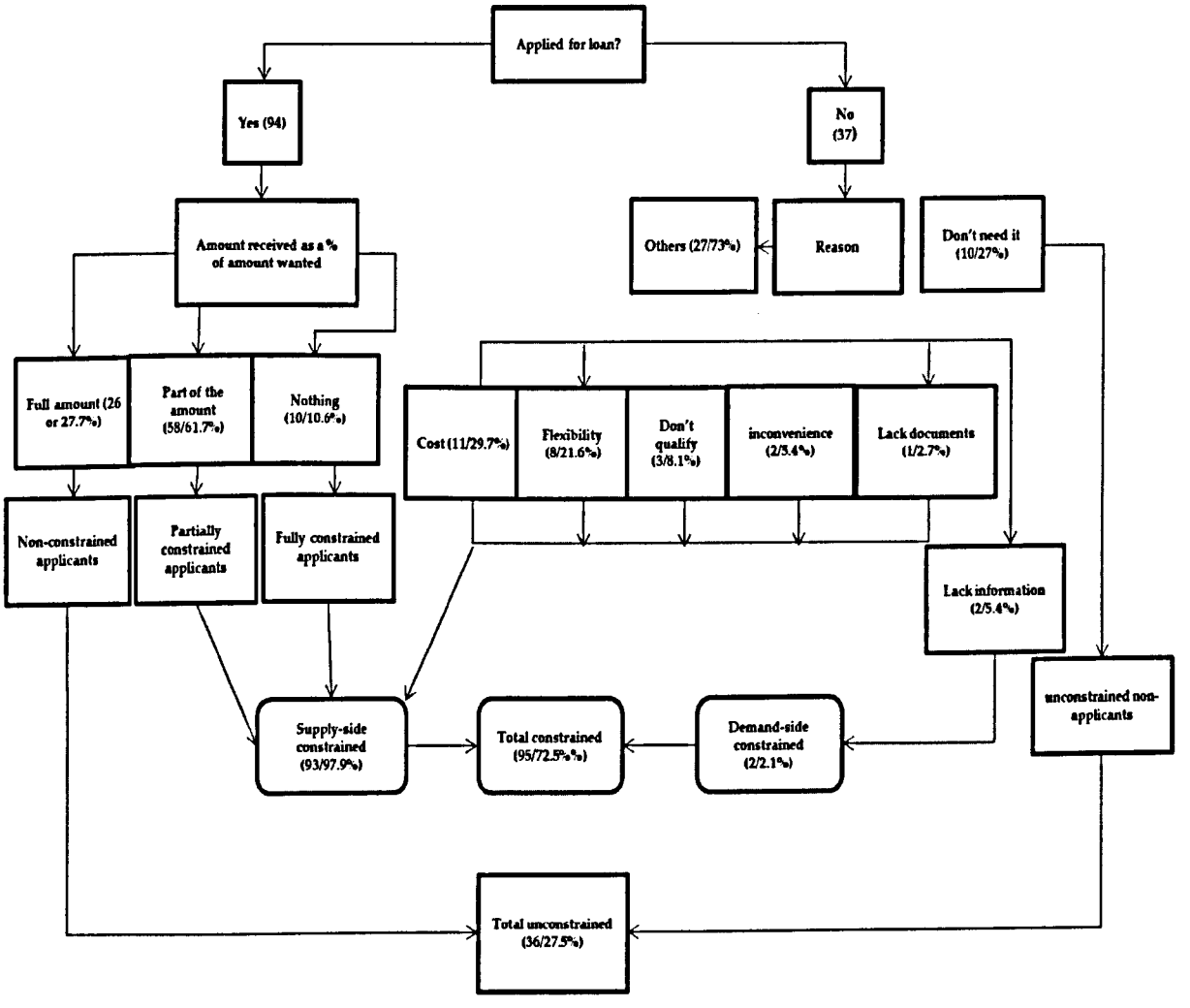

Figure 7: A Summary of the Credit Constraint amongst SEs. Source: Field Data

6.1.7 Nature of the SE Credit Constraint - Validation

This sample consisted of 27 traders, 70% of whom were females. Though this sample is not large enough to permit any meaningful statistics to be conducted, the descriptive analysis is meant to determine whether there are similar trends compared to that of the main survey. The median age was 30-45years (55.6%). About 48% had basic education, 30% had no formal education whilst 22% had vocation or technical education. A majority of about 44% of these businesses were generating between GHC 1001-1500 per month and 74% employed less than 5 workers. The participants identified a number of challenges in the conduct of their businesses but the one that featured most prominently was the lack of funds (55.6%) which is a confirmation of the findings of the main survey. The original SPSS tables containing the results discussed here are attached to Appendix B, Tables 35-51.

Credit market experiences constraint status

Once again there was evidence of small businesses active participation in the formal credit market. About 81% of the sample submitted a credit application in the two year period to the time of the survey; only 18.5% never applied for credit within the period. Of the 22 loan applicants, an estimated 68% sought for credit form MFIs compared to 32% who approached UBs. A majority of respondents wanted loan amounts above GHC2000; only 9% wanted to borrow amounts less than GHC500 whilst 27% each wanted to borrow between GHC500-1000 and GHC1001-2000. Unfortunately however for all loan applicants only 13.6% actually received the full amount they wanted the rest were constrained as they received less than the desired amount. Appendix B provides a breakdown of the loan proportion obtained.

Though these results are not exactly the same as that obtained from the main survey, the general trend appears very similar. For instance only a small percentage of loan applicants is unconstrained vis-à-vis 86% (19 respondents) that faces different degrees of constraint. The seriousness of the constraint can also be seen in the fact that, of the 19 constrained applicants about 53% obtain less than 50% of the amount they desired whilst 47% obtained amounts greater than 50% but fell short of 100%. This indicates that a sizeable proportion is seriously constrained. In the main survey however majority of the constrained applicants (62%) obtained above 50% of the amount wanted. On the participants' perception of the causes of the constraint they experienced, approximately 26% did not know why their applications were unsuccessful, 31.6% related it to the fact they had repayment difficulties in the past but a majority 42% identified their inability to provide collateral as the reason why they couldn't obtain their needed credit. This was also the case in the main survey as 56% of respondents also attributed the credit constraints to the lack of collateral. From the perspective of the loan applicants, the lack of collateral is the main cause of the credit constraint.

For the five participants who reported no credit market activity, 80% indicated that their non-participation in the market was due to the high cost involved whilst only 20% expressed no need for credit and as such was unconstrained. The other 80% were however constrained since they had an unrevealed demand for credit. Overall, four participants – three loan applicants and one non-applicant (representing a total of 14.8%) were unconstrained. The constrained businesses constituted 85% of the sample and involved 19 loan applicants and four non-applicants. There was no reported case of a demand side constraint which confirms the main survey finding that the constraint problem is almost entirely a supply-side problem. Hence, whilst the main cause of the constraint for loan applicants is the lack of collateral, affordability is the main barrier for non-applicants. About 70% of all the participants did not have a reliable access to credit which is to say they are not able to obtain credit anytime they are in need. Only 11% reported a reliable access to credit. All the three unconstrained loan applicants did not have a reliable access to credit. The above results thus highlights that not only should authorities be worried about the extent of the constraint but also the reliability and affordability issues.

6.2 Property Registration and Credit Access

This section presents results on the second objective of the study which is to investigate the influence of registered property titles (if any) on access to credit. As explained in chapter five, the achievement of this objective involved an investigation into lenders' attitudes to collateral as a requirement for small business credit (this includes how necessary they regard collateral in credit contracts and their preferred forms of collateral), perceptions on the important attributes of landed property based collateral as well as the influence of registered property titles on the loan terms that lenders offer. The results are presented below.

6.2.1 Respondent characteristics

Ghana

Table 7 below displays the demographic information of the 108 lending officials who participated in this study. An overwhelming majority of these respondents (64.8%) were males. the median age of respondents was 30-45years (48%). A little more than half of the sample (about 53%) was made up of respondents from universal banks (UBs), 22% were from rural banks (RBs) and the rest from savings and loans companies (SLCs). For the purpose of the analysis here, the respondents from RUs and SLCs were classified as microfinance institutions (MFIs). The number of years a participant had spent with the current employer was used as a proxy for the level of familiarity with the institution's policies on the subject matter whilst the number of years the reported position has been held

was used as a measure of the level of experience. Only 31.5% of these respondents have been with their current institutions for less than five years compared to 68.5% who have been at their current institution for at least five years.

This could be an indication of a good staff retention rate within the lending institutions. The majority of these participants thus had ample knowledge of the policies and practices of their institutions as far as lending to small businesses is concerned. About 50% gave their job designation as credit officers. The other 50% were either loans managers or branch managers. The results also show that apart from 36% of the respondents who had held their current reported positions for less than five years, 64% have been in their position for five or more years. The median number of years in the reported position was 5-10 years. This indicates that the sampled respondents have good amount of experience in dealing with credit issues and were as such well placed to respond to the question posed. The responses given could thus be considered as very reliable.

Table 7: Demographic Characteristics of Lending Officials - Ghana

Demographics of officials from lending institutions	categories	N=108	Valid %
Gender	Male	70	64.8
	Female	38	35.2
Age	<30yrs	23	21.3
	30-45yrs	52	48.1
	Above 45yrs	33	30.6
Institution type	UB	57	52.8
	Rural bank	24	22.2
	Savings & Loans	27	25.0
Years at current institution	<5yrs	34	31.5
	5-10yrs	42	38.9
	Above 10yrs	32	29.6
position	Credit officer	54	50
	Loans manager	41	38
	Branch manager	13	12
Years at current position	<5yrs	39	36.1
	5-10yrs	46	42.6
	Above 10yrs	23	21.3

The analysis revealed a significant association between the level of experience of the officials (number of years spent at current position) and the lending institution they work for [χ^2 (2) = 7.1, $p < .05$]. For instance, about 64% of all participants with less than five years' experience work for MFIs. The UB respondents in this study therefore have a higher level of experience than their MFI counterparts. There was however no significant association between the number of years respondents spent at their current institutions and whether they

work for a UB or MFI [χ^2 (2) = 4.2, p > .05]. About 70% of all participants under the age of 30 were credit officers whilst 56% of loans managers and 85% of branch managers were between 30-45years old and above 45 years respectively; a significant relationship existed between the respondents' age and the position held [χ^2 (4) = 23.9, p >.001] (see Appendix C, Tables 1-3). The position of managers requires experience amongst other things and experience is gained with time, hence the older respondents are more likely to be more experienced.

England

A total of 95 officials from the high street banks participated in the survey conducted in England and Table 8 below presents their demographic characteristics. Majority of the participants were males demonstrating the dominance of men in the banking profession. About 45% were aged above 45 years and about 43% have been with their current institutions for less than five years. Also, 43% have held their reported positions for between five to ten years. About 48% of the respondents were business managers, 40% were loans advisors; branch managers constituted only 11% of the sample

Table 8: Demographics of lending officials - England

	categories	N=95	Valid %
Gender	Male	68	71.6
	Female	27	28.4
Age	<30yrs	17	17.9
	30-45yrs	35	36.8
	Above 45yrs	43	45.3
Years at current institution	<5yrs	41	43.2
	5-10yrs	36	37.9
	Above 10yrs	18	18.9
position	Loans advisors	38	40
	Business managers	46	48.4
	Branch manager	11	11.6
Years at current position	<5yrs	26	27.4
	5-10yrs	41	43.2
	Above 10yrs	28	29.5

There was no significant association between respondents experience and position held [χ^2 (4) = 8.8, p > .05] and experience and gender [χ^2 (2) = 3.1, p > .05]. Respondents' experience was however, significantly associated with age [χ^2 (4) = 89.0, p < .001], (see Appendix, C, Tables 4-6). Comparing respondents from Ghana and England, it appears that males dominate their female counterparts in the lending business. Both sets of respondents are also highly experienced in handling credit issues.

6.2.2 Attitudes to collateral as a requirement for SEs credit

A four point Likert scale (where 1 = not necessary, 2 = seldom necessary, 3 = mostly necessary and 4 = always necessary) was used to establish the extent to which participants considered collateral as a necessary requirement in granting small businesses credit. A five point scale (where 1 = strongly disagree and 5 = strongly agree) was also used to determine

whether or not, respondents perceived the provision of collateral as a sufficient requirement to trigger approval of a credit request. Below are the findings for the two countries.

Ghana

Out of the 108 respondents, about 51% indicated that collateral is always necessary and as such will not approve a SE loan request unless collateral is provided. About 34% perceived collateral to be mostly necessary and may only ignore collateral in exceptional situations, probably, depending on their relationship with the client. Whilst 12% perceived collateral as seldom necessary only 2.8% think it not necessary at all (Appendix C, Table 7). The results thus indicate that most lenders (85%) in most instances make the provision of collateral a necessary requirement when dealing with small businesses. This confirms the earlier findings on SE owners that the lack of collateral accounted for about 52% of the credit constraint reported by small business owners (see Table 4). It also confirms arguments in the literature that about 70% to 80% of firms applying for loans in the low and middle income economies are required to provide collateral (Inderst and Mueller, 2007). In Ghana, there appears to be acute level of information asymmetry in the credit markets. This is evidenced amongst other things, by the fact that about 70% of Ghanaians adults still do not have a bank account (B&FT, 2012). Since information asymmetry is often blamed for the existence of credit constraints (see chapter 4), in the developing countries where information asymmetry is more pronounced, it will be difficult if not impossible for small businesses to obtain credit without providing collateral.

Even though majority of the participants in this study considered collateral as always necessary in designing credit contracts for small businesses, there appears to be variations from one institution type to the other. For instance, 70.2% of UB-based respondents believe that collateral is always necessary vis-à-vis 29.4% for MFIs. A majority of the MFI respondents (43%) rather believe it is mostly necessary but not always. The chi square test shows a significant association between institution type and perception on how necessary collateral is, [χ^2 (3) = 21.7 p < .001]. This was confirmed by the Mann-Whitney test [U = 775, Z = - 4.6, p < .001]. One thing needs reemphasising. UBs appear to be more reliant on Collateral when dealing with small businesses than MFIs. Indeed Cull et al. (2006) argue that MFI's are more flexible with collateral requirements than traditional banks. Reed (2012) also observed that MFIs operate on a model different from the traditional collateral-based lending used by commercial banks. The MFIs model according to Reed focuses on what the businesses readily have such as the viability of the business and the seriousness and credibility of the managers. Having said that, most MFI respondents in this study as already stated did indicate that collateral is mostly necessary.

This appears contradictory to the argument that microfinance emerged to provide a solution to the lack of collateral problem, responsible for the inability of many low income households and businesses to obtain credit (Sonne, 2010). Explaining why MFIs still demand collateral sometimes Reed (2012) admits that though the MFIs model is not reliant on collateral, very often they tend to take collateral because, "...if you came and said you would like to borrow some money from us and you had collateral to pledge and you weren't prepared to pledge it, the first question I'd ask is, do you believe in your business?". That said, there was no association between respondents' perception on how necessary collateral is considered to be and gender [χ^2 *(3) = 1.8, p >.05]*; age [*rho = .01 p >.05*]; number of years at institution [*rho = .03, p >.05*] and; level of experience [*rho = .06, p >.05],* (see Appendix C, Tables 10-13). On the other hand, 72% of the lending officials do generally agree that the provision of collateral per se is not sufficient to guarantee access to credit. About 21% neither agreed nor disagreed but only 7% disagreed. Given the small proportion of respondents who disagree that collateral alone is insufficient, granting credit to small business on the sole basis of the availability of collateral is an extreme exception rather a norm in the credit market. The use of collateral per se does not solve all the problems that lenders are more concerned about and according to Scott (1986) no lender will grant a loan against a basket of gold bricks if the lender is certain that the collateral will be foreclosed. This result thus points to one thing, that, though most lenders will require collateral from small businesses, to actually succeed in obtaining the needed credit, other factors or conditions will also have to be met.

There was no statistical difference established between UBs and MFIs in terms of their perceptions on whether the provision of collateral is sufficient to trigger approval of application or not [U = 1449, Z = - .03, p >.05]. Therefore lenders irrespective of whether they are UBs or MFIs will not supply small businesses with credit if all they can provide is collateral. There are thus other equally important issues that both UBs and MFIs are interested in when granting credit. The perceptions on whether the provision of collateral is sufficient or not was not associated with respondents' gender [χ^2 *(3) = 1.6, p >.05]* neither was it correlated with the level of experience [*rho = -.05, p >.05];* age *[rho = .001, p >.05];* and number of years at institution [*rho = -.01, p >.05]* (see Appendix C, Tables 16-19).

England

Investigations on the attitudes to the importance of collateral in granting credit to small businesses revealed that only 21% consider collateral as always necessary and 24% regard it as seldom necessary but a majority (55%) did perceive collateral as mostly necessary when dealing with small businesses. None perceived collateral as not been necessary at all. The

correlation test showed a significant difference between respondents with different levels of experience in terms of how important collateral is perceived [*rho* = -.35, $p < .01$]. This shows that more experienced lending officers may be relatively less stringent on their collateral requirements. The chi square test did not find an association between the perception on the importance of collateral and gender [$\chi^2(2) = 1.6, p > .05$] (see Appendix C, Tables 20-22). The above confirms statistics available in the literature that an estimated 60% to 70% of bank loans in the developed economies are collateralised (Menkhoff et al., 2003). In the United States for instance, 80% of small business loans are said to be collateralised (Inderst and Mueller, 2007). Even though most participants indicated that they would demand collateral when dealing with most small businesses, an overwhelming majority (73.7%) do agree that the provision of collateral per se is not sufficient to warrant credit supply to such businesses. Only 11.6% did agree that collateral is sufficient but 14.7% neither agreed nor disagreed. The level of experience of participants had no significant association with the perception of whether or not collateral is sufficient to trigger credit supply, [*rho* = -.177, $p > .05$] (see Appendix C, Tables 23-24).

A comparison between Ghana and England on lenders' attitudes to collateral shows that their perceptions on how important collateral is, when dealing with small businesses are significantly different. Ghanaian based lenders in this study did regard collateral more highly than their counterparts in England (see Appendix G). Whilst both sets of respondents did generally consider collateral as not sufficient to trigger credit supply, lenders in England had a significantly stronger disagreement to the assertion that collateral is a sufficient requirement. This is an indication that collateral based lending is more pronounced amongst the Ghanaian lenders. The theory of credit constraint identifies information asymmetry as the underlying factor responsible for the use of collateral in credit contracts. Going by this theory (explained in chapter four), one could argue that in the developed world like England where better information systems exist to help lenders in assessing credit applicants, collateral will be a less important part of credit contracts than in the developing world and this is what the results above appear to be pointing to.

6.2.3 Preferred forms of collateral when dealing with small businesses

Having established that most lending officials will in most cases require collateral when lending to small businesses, there is now the need to examine which forms of collateral they prefer most. Participants were asked to indicate on a four point scale, their level of preference for various forms of collateral (where 1 was least preferred and 4 most preferred).

Ghana

The results displayed in Table 9 below show that most respondents (about 64%) ranked landed property as a most preferred form of collateral. An estimated 95% ranked landed property as highly and most preferred. Landed property, treasury bills (T-bills) and cash/fixed deposits were the only forms of collateral that no respondent rated as least preferred. Third party guarantee (TPG), T-bills and cash deposits were also rated as most preferred respectively by 36%, 32% and 29% of the respondents. For all the other forms of collateral listed in Table 9 below, less than 20% of respondents rated each as most preferred. Landed property thus stands out above all the other forms of collateral as the most preferred.

Table 9: Level of Preference for Different Forms of Collateral When Dealing with SEs - Ghana

Forms of collateral	N=108 Least Preferred (%)	Preferred (%)	Highly preferred (%)	Most preferred (%)	Median	Category
Landed property	0	4.6	31.5	63.9	4	(1) Most preferred
T-Bills	0	30.6	38.0	31.5	3	(2) Highly preferred
Cash/fixed deposits	0	28.7	42.6	28.7	3	
Third party guarantee	9.3	19.4	35.2	36.1	3	
Automobiles	13.0	34.3	34.3	18.5	3	(3) unclassified
Machinery & tools	28.7	30.6	32.4	8.3	2	(4) Preferred
Shares/bonds	36.1	33.3	23.1	7.4	2	
General Goods (stock)	36.1	34.3	26.9	2.8	2	
Account Receivables	50.9	39.8	6.5	2.8	1	(5) Least preferred
Life policy	55.6	30.6	13.9	0	1	

More than 30% of respondents in each instance ranked life policy, account receivables and shares/bonds and stock as least preferred. Based on the median ranks of each collateral type above, they were classified into those that are least preferred, preferred, highly preferred and most preferred. Only landed property falls into the most preferred category. T-bills, cash/fixed deposits and TPG were classified as highly preferred. The least preferred category involves life policy and account receivables (see Table 9 above). To confirm whether there is a significant difference in preferences for these forms of collateral to warrant the classifications above, the Friedman's ANOVA test was conducted and the outcome indicates that a significant difference did exist in respondents' preferences [χ^2 (9) = 410.97, p < .001]. To determine where the actual differences were, the Wilcoxon and Friedman's tests were conducted for the different combinations of the forms of collateral shown in Table 9 above. The Wilcoxon's test shows that respondents had a significantly higher level of preference for

landed property *(Mn=3.59)* than T-bill *(Mn=3.01)* [$Z = -5.1$, $p < .001$]. Though the Friedman's test showed a significant difference in the preference for T-bills, cash/fixed deposits, TPG and automobiles [χ^2 (3) = 17.32, p < .001], when automobiles are taken out of the group, the test becomes insignificant for T-bills *(Mn=3.01)*, cash/fixed deposits *(Mn=3.0)* and TPG *(Mn=2.98)*, [χ^2 *(2) = .48, p >.05*]. This shows that T-bills, cash/fixed deposits and TPG belong to the same category as there is no difference in the level of preference attached to them.

The Friedman's tests did not also show a significant difference in preference for machinery/tools *(Mn=2.20)*, shares/bond *(Mn=2.02)* and general goods *(Mn=1.96)* [χ^2 *(2) = 2.12, p >.05]*. Finally, there was no difference in preference for account receivables *(Mn=1.61)* and life policy *(Mn=1.58)* [$Z = -.32$, $p > .05$] (see Appendix C, Tables 25-31). However, automobiles were statistically rated lower than the category 2 items but higher than the category 4 items. As such automobiles were put separately as the only item in category 3 (see Appendix C, Tables 27-29). Hence any group of items that had no significant difference between them were classified together under the same level of preference. Lenders in this study would generally go for a form of collateral in a higher category as shown in Table 9 if they had all the above options available to them. The actual form of collateral that may be taken may depend on other factors such as availability. Respondents who had been at their current institution for much longer showed a higher preference for landed property than those who have spent fewer years at their current institution [*rho = .244, p < .05*] but the preference for land was not associated with the level of experience of the respondents *[rho = .07, p >.05]* (see Appendix C, Tables 32 &33).

The very high preference attached to landed property relative to other forms of collateral in this study supports the argument in the literature that, collateral is more valuable the more immobile and immune to damage it is (Feder and Feeny, 199). The advantage of landed property over movable assets is articulated by Chaves (2001) who established that though assets such as equipment, machinery, inventories, livestock, and accounts receivable represented about 48% of the aggregate book value of assets of rural enterprises, they often have very limited capacity to carry debt because of imperfections in the country's legal regime, which severely limit the creation, perfection, and enforcement of security interests in moveable property. For instance, de Laiglesia (2004) observes in a study in Nicaragua that 60% of formal credit transactions were secured by land whilst moveable assets like harvest and cattle constituted only 7% and 12% respectively. In many countries, legal barriers restrict the use of movable property as collateral; as such real estate is the only viable form of security that may be widely available (Fleisig and de la Pena, 1996)

Furthermore, the certainty with which an assets' value is expected to appreciate or at least stay stable is relevant in the decision to accept it as collateral (Benjamin, 1978). As aptly observed by Rouse (2002) even though a crash in property prices is possible, the value of landed property could still be relatively considerable and can also be expected to generally rise over time. On the other hand, the saleability and ease with which a charge can be taken over an asset are equally important when taking collateral as argued in chapter four. Landed property doesn't appear to be the best when assessed against this latter criterion. Lenders thus have to choose between the immovability of the property, its virtual indestructibility and stability in value on one hand and the ease of foreclosure and perfection on the other hand. Table 10 below compares the UBs and MFIs in terms of their level of preference for the various forms of collateral. Apart from automobiles, there was a difference between UBs and MFIs in terms of their level of preference for all the others shown in Table 10 below.

Table 10: Mann-Whitney test between MFIs and UBs for the various forms of collateral

Ranks

	Institution Type	N	Mean Rank	Sum of Ranks
Land	Universal bank	57	59.76	3406.50
	MFI	51	48.62	2479.50
	Total	108		
Cash/fixed Deposit	Universal bank	57	38.96	2221.00
	MFI	51	71.86	3665.00
	Total	108		
Stock	Universal bank	57	40.70	2320.00
	MFI	51	69.92	3566.00
	Total	108		
Automobiles	Universal bank	57	53.84	3069.00
	MFI	51	55.24	2817.00
	Total	108		
Machinery	Universal bank	57	65.72	3746.00
	MFI	51	41.96	2140.00
	Total	108		
AccountRecievables	Universal bank	57	60.14	3428.00
	MFI	51	48.20	2458.00
	Total	108		
LifePolicy	Universal bank	57	59.61	3397.50
	MFI	51	48.79	2488.50
	Total	108		
shares/bonds	Universal bank	57	67.03	3820.50
	MFI	51	40.50	2065.50
	Total	108		
T-Bills	Universal bank	57	43.03	2452.50
	MFI	51	67.32	3433.50
	Total	108		
third party Guarantees	Universal bank	57	42.47	2421.00
	MFI	51	67.94	3466.00
	Total	108		

Test Statistics[a]

	Land	Cash/fixed Deposit	Stock	Automobiles	Machinery	Account Recievables	LifePolicy	shares/bonds	T-Bills	third party Guarantees
Mann-Whitney U	1153.500	568.000	667.000	1416.000	814.000	1132.000	1162.500	739.500	799.500	768.000
Wilcoxon W	2479.500	2221.000	2320.000	3069.000	2140.000	2458.000	2488.500	2065.500	2452.500	2421.000
Z	-2.194	-5.824	-5.121	-.242	-4.118	-2.206	-2.005	-4.624	-4.277	-4.444
Asymp. Sig. (2-tailed)	.028	.000	.000	.809	.000	.027	.045	.000	.000	.000

a. Grouping Variable: Institution Type

The Mann-Whitney test above shows that UBs have a higher level of preference for the following forms of collateral compared to their MFI counterparts; land, shares/bonds, [account receivables, machinery and tools and life policy. On the contrary, compared to the UBs, MFIs revealed a higher preference for the other forms of collateral (cash/fixed deposits, T-bills TPG, and general goods).

Within the MFI sub-group, the Friedman's test (see Appendix C, Table 34) shows there was no difference in the level of preference for landed property, T-bills, cash/fixed deposits and TPG which were generally rated as most preferred, [χ^2 *(3) = 1.38, p >.05]*. Hence, MFI based lenders did have an equal level of preference for these forms of collateral and appear to have an equal level of satisfaction from accepting any of the above four forms of collateral. On the contrary, landed property was the only form of collateral that UB based lenders on average rated as most preferred. The results depicted by Table 10 above reveal that the universal banks regard landed property more highly than the MFIs. The MFIs however, exhibited higher preference for the non-traditional forms of collateral such as cash deposits and guarantees. This is consistent with the argument in the literature that MFIs unlike the banks, specialise in the use of character-based and other specialised techniques to provide credit (Aryeetey, 2008). MFIs incorporate some of the features of informal lending into their credit schemes through the use of the solidarity group strategy and other character-based substitute for collateral (Berger, 1989).

The solidarity groups involve a joint liability for loans disbursed to the group; each member acts as a guarantor for the others. Since failure to repay on schedule affects each member's chance of getting any future credit, there is the strong incentive to keep up with repayment. Most microfinance schemes also involve a compulsory savings scheme. To qualify for a loan as an individual or a group, clients must show a track record of consistent savings in a savings account for a period. The accumulated savings serves as cash collateral for the loan to be advanced.

England

The levels of preference for the different forms of collateral in England are displayed in Table 11 below and it reveals that lenders in England do have a higher preference for some collateral over others. Based on the median ratings, landed property, cash deposits and T-bills were generally rated as most preferred. In fact, none of the participants rated landed property or T-bills as least preferred. Only 2% rated cash deposits as least preferred. The forms of collateral in category 2 (Shares, TPG and account receivables) were rated significantly lower than the category 1 items and were categorised as highly preferred. Further down the perking order is the third group of collateral made up of

machinery/equipment and life policy. Finally two items involving: automobiles and stock were rated as least important. In the least preferred category, no one rated automobiles either as highly preferred or most preferred. Whilst only 4% rated stock as highly preferred, no one rated it as most preferred.

Table 11: Preference for individual forms of collateral – England

N=95

Forms of Collateral	Least Preferred (%)	Preferred	Highly preferred (%)	Most preferred (%)	Median	Category
Land/Building	0	7.4	32.6	60.0	4	(1)
Cash deposits	2.1	9.5	32.6	55.8	4	Most
T-bills	0	13.7	35.8	50.5	4	preferred
Shares/bonds	12.6	27.4	46.3	13.7	3	(2) Highly
third party guarantee	13.7	29.5	40.0	16.8	3	Preferred
Account receivables	16.8	26.3	41.1	15.8	3	
Machinery & tools	12.6	53.7	24.21	9.5	2	(3) Preferred
life policy	22.1	38.9	34.7	4.2	2	
Automobiles	48.4	51.6	0	0	1	(4)
General Goods (stock)	61.1	34.7	4.2	0	1	Least Preferred

The Friedman's test was conducted to test for differences between items in categories 1 and 2 whilst the Wilcoxon's test was conducted for categories 3 and 4. The results (see Appendix C, Tables 35-38) show that there were no significant differences in respondents' level of preference for items in each of the categories in Table 11 above. This thus justifies the classifications above. Further analysis on the preferences exhibited for landed property shows that it was not associated with the respondents': level of experience [*rho = .14, p > 0.05];* level of familiarity with the institutions' policies [*rho = .11, p >.05];* perception of how necessary collateral is in dealing with small businesses [*rho = .11, p >.05]*(see Appendix C, Tables 39-41).

Unlike Ghana where only landed property was rated as the most preferred over all the other forms of collateral, in England, the most important form of collateral to lenders was not only landed property but also, cash deposits and T-bills. Indeed, apart from landed property and machinery/equipment, lenders from the two countries exhibited differences in their level of preference for the other forms of collateral (see Appendix G). Lenders in England showed a higher level of preference for cash deposits, T-bills, life policy, account receivables and shares/bonds. The Ghanaian lenders on the other hand had higher preferences for stock,

automobiles and guarantees. Landed property was however equally rated as most preferred in both countries.

6.2.4 Eligibility of landed property for use as collateral

Having established that landed property is most preferred by majority of lenders, the next stage of the analysis focused on whether or not property registration is required to make land eligible for use as collateral. To do this, respondents were first asked to indicate how much they agree or disagree that unregistered property is eligible for use as collateral (using a 5 point scale: 1 = strongly disagree and 5 = strongly agree). To check for consistency in the responses, participants were later asked to indicate which kind of documents they accept as proof of property ownership (this was used as a proxy for whether the lender accepts only registered property or both registered and unregistered property). They were also asked to indicate in order of importance which attributes they look out for when accepting landed property for collateral purposes using a six point scale (where ranks of 5 and above meant the attribute is critically important and cannot be ignored, from 3 – 4 meant factor may be ignored though important and below 3 meant the attribute was of least importance and should be ignored).

Ghana

A total of 45.4% of all 108 participants disagreed with the assertion that registration is not necessary to make landed property an acceptable collateral asset. In other words these respondents do regard registration as a necessary requirement when taking landed property. Those who agree that registration is not necessary constitute 38% of the sample whilst the remaining 17% neither agreed nor disagreed. However, respondents' attitude to the statement that registration is not necessary to make property eligible for use as collateral varied between UBs and MFIs. For the MFIs, 56.8% agree that registration is not necessary to make property eligible collateral compared to 21.6% who disagree. On the contrary, only 21.1% of UBs agree that registration is not necessary vis-à-vis 66.7% who disagree. The chi square test thus confirmed that a significant association exists between the perception on the eligibility of unregistered property as collateral and the type of lender [x^2 *(4) = 23.7, p < .001]* (see Appendix D, Table 1 & 2).

Thus unlike MFIs, UBs on average disagree that unregistered landed property is eligible for collateral purposes. The extent to which respondents agree that unregistered property is eligible collateral was negatively correlated to: respondents' level of preference for landed property [*rho = -.190, p < .01]*; the perception on how easy it is to verify ownership of landed property [*rho = -.208, p < .05]* (see Appendix D, Tables 3 & 4). Hence, the above

results show that the more highly landed property is rated as a form of collateral, the less respondents agree that unregistered property can be used as collateral and vice versa. In other words respondent with a higher preference for landed property, disagree more or agree less with the assertion that registration is not necessary to make land and acceptable collateral and vice versa. Also, the easier lenders perceived verification of property ownership to be, the less they agree that unregistered property is eligible collateral. This is an indication of the influence of registration on property ownership verification.

All the respondents (108) in this study indicated that they require documentary proof of property ownership when taking landed peoprety as collateral to secure credit. Since about 70% of landed property ownership in Ghana is under customary system and as such undocumented (Toulmin and Longbottom, 2001), most property owners especially in the rural areas may not have documentary evidence of their land rights and such properties by this finding are not eligible for collateral purposes. The kinds of documentation lenders require however vary but were broadly classified into three groups: registered documents only, unregistered documents only and a combination of registered and unregistered documents. The results in Table 12 indicate that overall, 53% accept both registered and unregistered documents as proof of ownership, 47% accept only registered documents such as title certificates or registered deeds/lease but none of the respondents accept only unregistered documents like allocation papers and unregistered deeds.

From Table 12 below, about 82% of all 51 lenders who accept only registered documents are UBs. About 74% of those who accept both registered and unregistered documents are MFIs. 74% of UB based respondents accept only registered documents vis-à-vis the 17.6% from MFIs. Therefore the probability that both registered and unregistered property will be accepted by lenders was 26% for UBs and 82% for MFIs. The chi square test in Table 12 below thus revealed a significant relationship between institution type and the type of documents accepted [χ^2 (1) = 33.91, $p < .001$]. UBs are more likely than MFIs to ask for only registered documents. This is consistent with earlier results (already reported) that UBs unlike MFIs generally did not consider unregistered property as eligible for use as collateral.

Table 12: Chi square Test for Accepted Property Documents and Institution Type

Documentation types * Institution Type Crosstabulation

			Institution Type		
			Universal bank	MFI	Total
Documentation types	ONLY registered documents	Count	42	9	51
		% within Documentation types	82.4%	17.6%	100.0%
		% within Institution Type	73.7%	17.6%	47.2%
		% of Total	38.9%	8.3%	47.2%
	Both registered & unregistered documents	Count	15	42	57
		% within Documentation types	26.3%	73.7%	100.0%
		% within Institution Type	26.3%	82.4%	52.8%
		% of Total	13.9%	38.9%	52.8%
Total		Count	57	51	108
		% within Documentation types	52.8%	47.2%	100.0%
		% within Institution Type	100.0%	100.0%	100.0%
		% of Total	52.8%	47.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	33.914[a]	1	.000		
Continuity Correction[b]	31.703	1	.000		
Likelihood Ratio	36.152	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	33.600	1	.000		
N of Valid Cases	108				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 24.08.
b. Computed only for a 2x2 table

Landed property registration has the ability to make independent verification of property ownership easier. Therefore one would expect that lenders who accept only registered property will have no problems with verifying their ownership. Respondents were asked to report on how easy it is to verify ownership of property presented for collateral purposes. About 56.4% of all the participants were able to verify property ownership with relative ease; only 23% could not verify property ownership with ease (see Appendix D, Table 8). From the chi square test a significant association was found between institution type and how easy it is to verify property ownership [χ^2 (4) = 11.82, $p < .05$]. For instance, only 10.5% of UB respondents did not find ownership verification easy compared to 37% of MFI respondents and whilst 68.5% of UB respondents found verification easy less than half (43%) of MFI respondents did (see Appendix D, Table 9).

Linking this with earlier results that UBs often accept only registered documents whilst MFIs accept both registered and unregistered documents, it could be argued that the acceptance of only registered documents is the reason why most UBs found it easier to verify ownership relative to MFIs. Indeed, how easy respondents found verification of property ownership had a significantly association with the kind of documents accepted [χ^2 (4) = 15.1, $p < .01$]. About 75% of all respondents who accept only registered documents found it easy to verify ownership compared to 40% of those who accept both registered and unregistered documents (see Appendix D, Table 10). The question then is, why do some lenders accept unregistered property even though verification of ownership is most likely to be difficult? The answer is quiet simple; if they can pass on the cost of verification (in terms of time and

resources spent) to the borrower then they wouldn't be deterred from accepting unregistered property. The Chi square test however, did not find an association between the type of landed property accepted by lenders on one hand and the respondents' number of years spent at their current institution [χ^2 (2) = .30, $p > .05$] or level of experience on the other hand [χ^2 (2) = 3.2, $p > .05$] (see Appendix D, Tables 13 & 14).

The land register is intended to provide the public with accurate information on all existing encumbrances such as mortgages. If the register is well functional and well patronised then each lender should be able to verify whether or not a given property has already been pledged to another lender. In general, about 82% of respondents in were able to verify whether or not a prior mortgage exists on the landed property in question but 18% could not do so. The chi square test shows that the ability to verify the existence of a prior mortgage was not significantly associated with the institution type [χ^2 (1) = 2.35, $p > .05$] neither was it associated with the type of documents accepted, [χ^2 (1) = .27, $p > .05$] (see Appendix D, Tables 11 & 12). Since the ability to verify the existence of prior mortgages was not found to be dependent on the acceptance of registered property, there must be an alternative explanation of how lenders verify whether a mortgage already exists on the property. This may be an indication that lenders are relying on the collateral register at the Bank of Ghana (and not the lands register) to verify existing mortgages. Any property whether registered or not can be filed at the collateral registry when used to secure credit. However, at the lands registry until the property itself is registered, no encumbrance can be registered on it. Hence the collateral registry is a better database for recording and verifying the existence of mortgages.

All the 108 participants were further asked whether there were instances during default where they experienced significant problems with taking over possession of accepted property and foreclosing it as a result of ownership disputes. About 74% of respondents said no. 57.5% of those who said no, were from UBs whilst 42.5% were from MFIs. Consequently, no significant association was found from the chi square test between the type of lender and whether or not there have been property repossession problems in the past [χ^2 (1) = 2.76, $p > .05$] (see Appendix D, Table 15) . However, in terms of the type of property accepted, just 10% of the respondents accepting only registered property has had such repossession problems compared 40% of respondents accepting both registered and unregistered land. The Chi-squared test that followed (see Appendix D, Table 16) showed that the kind of landed property accepted by lenders had a significant relationship with whether or not the lender had in the past encountered difficulties in repossessing and foreclosing property due to ownership conflicts [χ^2 (1) = 13.08, $p < .001$]. Therefore, the

likelihood of encountering property repossession and foreclosure problems was higher for lenders accepting both registered and unregistered property as compared to those accepting only registered property. Even though the incidence of property foreclosure problems arising from ownership disputes was lower for lenders accepting only registered property, this does not imply that property registration guarantees ownership security as argued in the literature (see chapter 2). This is because there were still other lenders who encountered disputes despite the fact that they accept only registered property. From the evidence above however, one could say that registration does reduce (not eliminate) ownership conflicts to some extent.

Overall, the result on the eligibility of unregistered landed property appear to confirm arguments by Dower and Potamites (2005) that landed property can be used as collateral even if it is not formally registered as people are able to use informal documents to demonstrate ownership. This appears to contradict a counter argument that unregistered property are dead capital and cannot be used as collateral for credit (de Soto, 2000). However, the results from this study show that each of these arguments is true only to a certain extent. De Soto's argument is valid for most of the Universal Banks in this study, but invalid for majority of the MFI. Indeed de Laiglesia (2004) establishes that 68% of the private banks in his study required registered land whilst only 6.7% accepted unregistered land. The argument concerning the eligibility of unregistered property therefore should be made within the context of the kind of lending institution under consideration.

The eligibility of landed property for use as collateral should not be limited to the issue of registration alone as there are other attributes that lenders consider before accepting any given property. Hence, there is the need to compare these other attributes to property registration in terms of their level of importance. Table 12 below shows the various attributes of landed property that lenders look out for when accepting such property as collateral. The attributes were first classified based on the median ranks and then confirmed using the Friedman and Wilcoxon's tests. Three attributes (the market value of the property, availability of documentary evidence of ownership as well as the property' location) were all generally rated as critically important. The average lender in this study will therefore not ignore any of these three attributes when accepting a landed property as security for advancing credit. The availability of insurance cover and whether or not the property is registered were generally rated to be less important than the critical attributes. Though these two were considered as important respondents agree they could be ignored. However, the nature of the rights held (whether leasehold or freehold) was of least importance and as such

was considered by majority of the lenders as the attributes that should be ignored when taking land-based collateral.

Table 13: Attributes of Land-Based Collateral in Decreasing Order of Importance - Ghana

Attributes	Mean	Median	Level of importance
Market value	5.18	6	Critically important: cannot be ignored
Documentation	5.13	6	
Location	4.56	5	
Registration	4.02	4	Important but may be ignored
Insurance	3.81	4	
Leasehold/freehold	2.51	2	Least important: should be ignored

The Friedman's test confirmed that lenders attach different levels of importance to the six attributes in Table 13 above [χ^2 (5) = 194.2, $p < .001$]. To determine exactly where the differences are, the Wilcoxon test was used to compare various combinations of these attributes. The availability of documentary proof of ownership was equally important to lenders as the market value of the property involved [$Z = -.58$, $p > .05$]. Even though location was also rated as critically important, the Wilcoxon test showed that it was less critical than both the market value [$Z = -4.25$, $p < .001$] and documentary evidence of ownership [$Z = -3.88$, $p < .001$] Compared to property registration and insurance however, location had a significantly higher rating. The ratings did not show any difference in the level of importance of property registration and insurance [$Z = -1.32$, $p > .05$].

Finally, the nature of the land rights (leasehold/freehold) was rated much lower than all the other factors (see Table 13); for instance it was significantly less important than property insurance [$Z = -5.9$, $p < .001$] (see Appendix D, Tables 17-24). The level of importance attached to the six attributes of land-based collateral did vary in some instances between UBs and MFIs. For instance, Table 14 below shows that all the attributes except the kind of land rights held are rated as critically important by UBs – an indication that UBs will not accept a landed property if there are significant deficiencies in any of the top five attributes in Table 14. MFIs on the other hand only rated market value and availability of documentary proof of property ownership as the only critical attributes. Registration insurance and location were however rated as attributes that may be ignored even though they are important.

Table 14: Important Attributes of Land-based Collateral by Institution Type –Ghana

	UBs		MFIs	
Attributes	Mean	Median	Mean	Median
Market value	5.33	6	5.00	5
Documentation	5.21	6	5.04	6
Location	4.98	5	4.08	4
Registration	4.56	5	3.49	3
Insurance	4.40	5	3.14	3
Leasehold/freehold	2.60	2	2.41	2

The Man-Whiteny test (see Appendix D, Table 25) showed no statistical difference between UBs and MFIs in terms of the level of importance attached to the property's market value *[U = 1325.5, Z = -.87, p. >.05]*, nature of the rights held [*U = 1309.5, Z = -.91, p. >.05]* and availability of documentary proof of ownership [*U = 1379.5, Z = -.50, p. >.05].* However, compared to MFIs, UBs attached a much higher level of importance to the following attributes: location [*U = 1065.5, Z = -2.47 p < .05];* property insurance [*U = 669, Z = -.76 p < .001]* and property registration [*U = 884, Z = -3.58 p < .001].* The level of importance attached to property registration thus varies depending on the type of lender. The level of importance attached to property registration as an attribute of land based collateral had a significantly negative correlation with: the respondents' level of experience [*rho* = -.195, *p* < .05]; how much respondents agreed or disagreed that registration is unnecessary to make landed property an acceptable collateral [*rho* = -.331, *p* < .001] but positively correlated with the relative ease with which lenders are able to verify property ownership [*rho = .241, p < .05]* (see Appendix D, Tables 26-28). This implies that, the more experienced respondents attached a lower level of importance to property registration than their less experienced counterparts. Also lenders who attached lower level of importance to registration often agreed more to the argument that registration is not necessary to make property eligible collateral. Finally, the easier respondents perceived property ownership verification to be, the more highly they rated property registration and vice versa.

The above results are consistent with what one would expect in practice because when lenders take collateral, they do so with the intention that during default the forced sale value will be sufficient to repay the outstanding debt. This explains why lenders typically lend amounts less than the estimated forced sale value of the collateral. Hence, the value of the property in itself may determine how much debt could be granted. This presupposes that lenders would equally be concerned with the ease of foreclosure of the property which is affected by the location of the property. Of course if the potential borrower cannot provide documentary proof of their entitlement to the property, the above arguments will not even be

considered. It is thus not surprising that these three attributes were duly rated as critically important (see Table 13 above). Indeed, location may affect demand for and the value of the property. A property must be located in an area that can attract buyers more quickly to make it more acceptable collateral to lenders. For instance, Lenders in Colombia are reported to have strict rules about the kinds of building as well as their locations that can be considered in advancing loans (Gilbert, 2000). Durand-Lasserve and Payne (2006) observe that there is a significant reduction in efficiency gains of taking land-based collateral where the lender for instance, places a value on the location of a land parcel as a slum. Bromley (2005) also notes that a good house in a bad neighbourhood is always burdened by its surroundings and as such less acceptable to lenders.

Whether the rights to the property is a leasehold or freehold was considered to be of very little importance possibly because some leases (such as 99 years and 999) are as good as a freehold. In addition, the Ghanaian constitution does not permit the granting of freehold on stool/skin lands but only on family lands. However, the number of years left for the lease to expire may be critical where a very long term credit facility is being sought. It was however, surprising that respondents considered property insurance as a factor that may be ignored in that, without property insurance, the lender is exposed to risks similar to that of an unsecured lender when a fire outbreak or a natural disaster destroys the property. This attitude however may be due to the fact that in Ghana the insurance culture is still poor (Appiatu-Ankrah, 2011). Acceptance of landed property could be more risky for MFIs than their UBs counterparts because they (MFIs) consider insurance as a factor that can be ignored whilst UBs will not accept a property unless it is insured at least for the term of the loan. For the MFIs however, this may not turn into actual losses as they tend to rely on other specialised techniques to ensure loan repayment. This could possibly be one of the reasons why MFIs also consider property registration as a factor that can be ignored when taking landed property. The finding that property registration is not a critical attribute that lenders look out for is consistent with the observation by Gilbert (2000) that in Bogota, the most serious problem faced by formal lenders is not the absence of registered property title but the nature of the property which people often offer as collateral. These findings re-enforce the argument by Brown et al. (2006) that though registered property title may be a necessary condition for using the property as collateral for a loan, it is by no means a sufficient one.

England

Just as in the case of Ghana, all the 95 participating lenders in England also revealed that they always require documentary proof of property ownership when they consider taking the property as collateral to secure a loan. Unlike the case of Ghana where most properties are

under customary ownership and not documented, documentation of property ownership in England is generally not a serious challenge for both lenders and borrowers as this appears to be widely available. Lenders were asked to indicate how much they agree or disagree with the assertion that registration is not necessary to make landed property an acceptable form of collateral. About 68% agreed that registration is not necessary but only 4% disagreed, in other words only 4% considered registration as a necessary requirement to make property an acceptable form of collateral (see Appendix D, Table 29). The extent to which participants agreed with the assertion that registration is not necessary was not influenced by their: level of experience [*rho = -.002, p >.05];* preference for landed property [*rho = -.16, p >.05];* and the perception on the ease of verifying property ownership [*rho = -.03, p >.05]* (see Appendix D, Tables 30-32).

Participants were asked to also indicate the kind of documents they often accept as proof of property ownership. Only 20% of the respondents indicated that they accept only property formally registered at HM Land Registry but a whopping 80% do accept both registered and unregistered property (see Appendix D, Table 33). Given that an average of about 75% of properties in England and Wales has already been registered (HM Land Registry, 2011), it appears that lenders will naturally have a rare encounter with situations involving unregistered property. Therefore those who indicated that they only accept registered property might be lenders who have only encountered registered property over the years. The rare incidence of land ownership disputes in this country indicates that ownership is quiet secure irrespective of whether it is registered or not. This might be the reason why majority of the lenders are not deterred from accepting unregistered property. The chi square tests (see Appendix D, Tables 34-37) found that the kind of landed property accepted had no relation with the respondents' experience [x^2 *(2) = 2.033, p > .05];* level of familiarity with institutions' policies, [x^2 *(2) = 2.5, p > .05];* and position held [x^2 *(2) = .2, p > .05].* The chi square test also showed that the kind of property accepted was not associated with the extent to which respondents' agreed that registration is not necessary to make property eligible for use as collateral [x^2 *(3) = 2.5, p > .05].* For instance, about 63%all the 19 respondents who said they accept only registered documents also agreed that registration is not necessary to make property an acceptable form of collateral. This is possibly a confirmation of the initial argument made above that people who accept only registered documents did so not because they consider unregistered property to be unsuitable for use as collateral but it was merely an indication that such respondents had only encountered situations involving only registered property.

When all 95 participants were asked how easy it is to verify property ownership, most of them (about 72%) indicated it was easy to do so. Whilst only 5% indicated it was not easy to verify property ownership. The correlation test shows that the perception on the ease with which property ownership can be verified was not associated with respondents: level of experience, *[rho = 0.03, p >.05];* and familiarity with the institution's policies [*rho = 0.27, p >.05].* It was however, established from the chi square test that, the perception on the ease with which property ownership can be verified was significantly associated with the kind of landed property accepted [χ^2 *(3) = 9.44, p < 0.05].* For instance, all the 19 respondents who accept only registered property are able to verify ownership with relative ease compared to 65.8% of the 76 respondents who accept both registered and unregistered documents (see Appendix D, Tables 38-40). Only four of the 95 respondents have reported repossession and foreclosure problems arising from ownership disputes. About 75% of these respondents accept both registered and unregistered property whilst 25% accept only registered property. However the chi square test did not establish a significant association between kind of property accepted and the possibility of encountering such repossession and foreclosure difficulties (see Appendix D, Table 41). This is further evidence that secure ownership in England is not dependent on registration.

Property registration was also compared to the other attributes of land-based collateral in terms of their level of importance. The results are displayed in Table 15 below. Four out of the six attributes were rated as critically important. The sampled lenders in England would therefore not compromise on issues regarding the property's value, location, insurance and documentary proof of ownership.

Table 15: Perception of the Importance of Various Attributes of Property - England

Attributes	Mean	Median	Level of importance
Market value	5.38	6	
Documentation	5.23	6	Critically important: cannot be ignored
Location	5.19	5	
Insurance	5.15	5	
Registration	3.00	3	Important but may be ignored
Leasehold/freehold	2.47	2	Least important: should be ignored

Property registration was considered as an attribute that is important but could be ignored whilst the nature of the rights (leasehold/freehold) was rated as least important one that they recommend should be ignored. All the top four attributes (see Table 15 above) were rated as critically important based on the median ranks. Further analysis based on the Friedman's test

revealed there was no difference in the level of importance lenders attached to these critically important attributes The Wilcoxon's test however showed a significant higher rating for property insurance compared to registration whilst registration was also rated much higher than the nature of land rights held (see Appendix D, Table 42-44). How important registration is as a sought for attribute of land-based collateral was found not to be significantly associated with the level of preference for landed property [*rho = -0.09, p >.05];* experience [*rho = 0.1, p >.05];* familiarity with institutions policies [*rho = 0.04, p >.05];* the perception on the ease with which ownership can be verified [*rho =- 0.04, p >.05];* and the kind of property documents accepted [$\chi^2(5) = 1.3, p > .05$] (see Appendix D, Tables 45-49).

There was a significant difference between lenders in the two countries regarding their perception on the eligibility of landed property for use as collateral (see appendix G). Lenders in England had a significantly greater disregard for registration when it comes to eligibility of property than their Ghanaian counterparts in that majority agreed much strongly that registration is not necessary to make property eligible for use as collateral. Indeed, there was a significant association between the kind of property accepted (registered or unregistered) and the country where the lender is based. The likelihood of a lender demanding for only registered property was significantly higher for Ghanaian lenders. Furthermore, when lenders were asked to indicate the importance of the various attributes of property which they look for when accepting any property for use as collateral, the Mann-Whitney test showed that lenders in both countries attached the same level of importance to the following: the market value of the property; the availability of documentary evidence of ownership; and the kind of rights held over the property (see Appendix G). Whilst the England based lenders attached a relatively higher level of importance to attributes such as the availability of property insurance and location of the property, the availability of a registered title over the given property was significantly more important to Ghanaian lenders.

Overall, the issue of property registration emerged as more important to the Ghanaian lenders than their England based counterparts. This could be attributed to two reasons. First is the fact that in England property ownership disputes are virtually absent even though some properties are not yet registered. Also, even for properties that are not registered, there are other forms of documentary evidence of ownership (lease/deed) which are also legally recognised. Hence lenders are able to rely on the other documentary evidence of ownership to take a charge over a property even where a registered title certificate is absent. The opposite is true in Ghana, not only is there a high prevalence of property disputes but also the customary system in existence means that most ownership is not documented in any form

and customary land transfers are not documented. Hence lenders might have equated the presence of a registered title to the availability of documentary proof of ownership albeit the two are slightly different. Secondly given the prevalence of land disputes, some lenders in Ghana may be accepting only registered property based on the somewhat wrong impression that registration is an indication of secure ownership. Even though registration per se is not a panacea to disputes as argued from chapter two to three, this may admittedly be the reason why some Ghanaian lenders place such a high value on property registration when it comes to taking land-based collateral.

The probability that a lender in the past had encountered property repossession and foreclosure problems arising from ownership dispute was also significantly higher for Ghana (26%) than for England (4%). It can thus be seen that even though lenders in England mostly accept both registered and unregistered property, very few have reported difficulties with such properties in the past. In the case of Ghana the distribution of past repossession problems arising from ownership disputes was significantly different for lenders accepting only registered property and those accepting both registered and unregistered property. Hence, in Ghana, the acceptance of only registered property per the findings of this study does appear to reduce the likelihood of the lender encountering repossession problems. This may thus explain why some lenders in Ghana accept only registered property whilst most lenders in England accept both registered and unregistered property.

6.2.5 Property registration and loan conditions

To investigate whether or not the possession of registered property titles enhances credit access by influencing the loan conditions that borrowers are offered, the lenders were given a scenario involving two identical borrowers who only differ in terms of the kind of property they possess (registered or unregistered) and asked to indicate the extent to which they either agree or disagree that borrowers with registered property titles are offered lower interest rates, lower fees, allowed to borrow larger amounts or offered different repayment periods. This was done using a five point likert scale where 1 is strongly disagree and 5 is strongly agree.

Ghana

The results shown in Table 16 below indicate that about 59% of the respondents in each case disagreed that registered property owners are offered larger loan amounts or different loan repayment times. Also, 62% and about 56% of respondents disagreed that registered property owners are charged lower fees and interest rates respectively. Only a minority of respondents in each case agreed that registered property owners may be offered different

loan conditions relative to unregistered property owners (see Table 16 below). These lenders could be considered as exceptions given that they constitute less than 20% of the total respondents in each case. On average therefore, respondents in this study indicated that they would not offer registered property owners better loan condition compared to unregistered property owners.

Table 16: Impact of Property Registration on Loan Conditions – Ghana

Loan conditions	% of total respondents (108)				
	Disagree	Neutral	Agree	Mean	Median
Lower interest rate	55.6	25.9	18.5	2.47	2
Lower fees	62.0	21.3	16.7	2.41	2
Larger amounts	59.3	23.1	17.6	2.27	2
Repayment time	59.3	36.1	4.6	2.15	2

The result of the Friedman's test (see Appendix E, Table 1) shows that there was no significant difference in respondents attitude on the extent to which the possession of registered property titles influences the conditions of the loan the offer borrowers, [χ^2 (3) = 5.5, p >.05]. If the possession of registered titles influences the loan conditions offered, this will be reflected in the responses of the group of lenders who accept both registered and unregistered documents. However, an examination of the responses by this group of lenders (see Appendix E, Tables 2-6) revealed that as far as each of the loan condition stated above is concerned, very few respondents (less than 16%) agreed that registered property owners may be offered better terms vis-à-vis over 60% who disagreed. There was no difference in the attitude of these respondents on the influence of registration on the above loan terms [χ^2 (3) = 1.9, p >.05]. Between lenders who accept only registered property and those who accept both registered and unregistered property, the Mann-Whitney test (see Table 17 below) did not find any difference in respondents' attitudes on the impact of registration on the loan terms. There was also no difference between UBs and MFIs regarding their attitudes on the impact of registration on loan terms (see Table 18).

Table 17: Mann-Whitney test for accepted property documents and loan conditions - Ghana

Ranks

	Documentation types	N	Mean Rank	Sum of Ranks
Interest	ONLY registered documents	51	59.33	3026.00
	Both registered & unregistered documents	57	50.18	2860.00
	Total	108		
fees	ONLY registered documents	51	55.28	2819.50
	Both registered & unregistered documents	57	53.80	3066.50
	Total	108		
Amount	ONLY registered documents	51	60.18	3069.00
	Both registered & unregistered documents	57	49.42	2817.00
	Total	108		
repayment time	ONLY registered documents	51	53.24	2715.00
	Both registered & unregistered documents	57	55.63	3171.00
	Total	108		

Test Statistics[a]

	Interest	fees	Amount	repayment time
Mann-Whitney U	1207.000	1413.500	1164.000	1389.000
Wilcoxon W	2860.000	3066.500	2817.000	2715.000
Z	-1.577	-.257	-1.848	-.418
Asymp. Sig. (2-tailed)	.115	.797	.065	.676

a. Grouping Variable: Documentation types

Table 18: Mann-Whitney test for type of lender and loan conditions – Ghana

Ranks

	Institution Type	N	Mean Rank	Sum of Ranks
Interest	Universal bank	57	56.96	3247.00
	MFI	51	51.75	2639.00
	Total	108		
fees	Universal bank	57	57.46	3275.50
	MFI	51	51.19	2610.50
	Total	108		
Amount	Universal bank	57	58.51	3335.00
	MFI	51	50.02	2551.00
	Total	108		
repayment time	Universal bank	57	53.68	3060.00
	MFI	51	55.41	2826.00
	Total	108		

Test Statistics[a]

	Interest	fees	Amount	repayment time
Mann-Whitney U	1313.000	1284.500	1225.000	1407.000
Wilcoxon W	2639.000	2610.500	2551.000	3060.000
Z	-.899	-1.085	-1.458	-.302
Asymp. Sig. (2-tailed)	.369	.278	.145	.763

a. Grouping Variable: Institution Type

De Laiglesia (2004) outlines that property registration through its ability to raise land values and increase its liquidity could increase the amount of credit that is made available to borrowers as well as reduce the interest rate charged and influence other loan terms. The above finding on interest rates contradicts that found in Peru by Field and Torrero (2004) that, loan applicants with registered property on condition of receiving a loan, faced interest rates that were on average 9 percentage points lower than untitled applicants but the measured effect was independent of banks' reported use of registered titles in loan transactions. Place and Migot-Adholla (1998) also investigated the impact of registered

property titles on loan size, interest rates and maturities and the extract below is what they established from their study.

> ...Concerning loan maturities, the mean number of months for repayment of loan is 19.6 on land-secured loans and 24.8 for others. As for loan amounts, the mean size of land-secured loans is 10,146 Kenya shillings as compared to 8,753 shillings for others ($1 = Ksh 22 during the time of the study). Neither result is statistically significant, and thus there is no evidence that land titles significantly alter the terms of formal sector loans (Place and Migot-Adholla, 1998, p.368).

In this study by Place and Migot-Adholla no evidence was found to support the argument that land registration significantly affects the terms of formal loans such as loan size, interest payment and maturity. The authors however, advised that the results be viewed with some caution since they did not stratify the loans according to the type of lender. This current research does not only show findings that are consistent with that of Place and Migot-Adholla but also goes an extra step to test for differences between types of lenders regarding the impact of property registration on loan terms as shown in Table 18 above. In another study conducted in Ghana, Kenya and Rwanda, Migot-Adholla et al. (1991) found that the average maturity of loans to the households surveyed was less than a year and the possession of registered title did not increase loan maturities for the sampled households. The possible explanation of the result on the impact of registration on loan terms in this study may be the fact that lenders decisions on the kind of loan terms to offer are determined by other more important factors such as regulatory requirements, institutional lending policy, competition amongst lenders, the cost of funds, risk, lender borrower relationship and the overall macroeconomic environment amongst others. In the case of MFIs for instance, the decision to offer better loan terms comes with every successful repayment made by the borrower. MFIs adopt a progressive approach to lending as a key for building long term relationships and trust to ensure continuous flow of funds to clients. Such relationship lending begins with smaller loan amounts which increase with each successive round of repayment success (Morduch, 1999). Clients have the assurance that the successful repayment of each loan received will pave the way for them to receive much larger loan amounts in the future. On the contrary, when they default on a current loan, in the future, they may only obtain lesser amounts or nothing at all.

England

Investigation on whether or not the possession of registered property influences the loan terms that small businesses are offered (see Table 19 below) shows that only a minority of lenders may consider offering better loan conditions to borrowers that possess registered

property. From Table 19 below, over half of the respondents in each case disagreed that the possession of registered property will attract lower interest rates, lower fees, larger loan amounts or different loan maturity. On average therefore, lenders in this sample will not offer borrowers different loan terms purely on the basis of whether they possess registered or unregistered property.

Table 19: Lenders Perceptions on the Influence of Registration on Loan Terms – England

Loan conditions	% of total respondents (108) Disagree	Neutral	Agree	Mean	Median
Lower interest rate	56.8	21.1	22.1	2.48	2
Lower fees	57.9	21.1	21.1	2.49	2
Larger amounts	61.1	22.1	16.8	2.25	2
Repayment time	62.1	32.6	5.3	2.08	2

Attitude towards the influence of property registration on the interest rates offered was not associated with experience [*rho =- 0.09, p >.05];* level familiarity with policies [*rho =.02, p >.05];* and the kind of property documents accepted [χ^2 *(4) = 2.04, p > .05].* Attitude to the influence of registration on the fees/commission charged was not also associated with experience [*rho =-.05, p >.05];* familiarity with policies [*rho =.12, p >.05];* and the kind of property documents accepted [χ^2 *(4) = 3.25, p > .05].* Similarly attitudes towards the influence of registration on loan amount was not associated with either experience, level of familiarity with policies, level of importance of registration as a sought for attribute of land-based collateral and the kind of property documents accepted. On the issue of loan maturity, the results were largely the same except that it was found to have a significantly negative correlation with experience, [*rho = -.22, p < .05]* (see Appendix E, Tables 7-18). Regardless of the differences exhibited by lenders from Ghana and England regarding the eligibility of landed property for use as collateral, both sets of respondents agreed that the possession of registered property per se will not influence their decision to offer small businesses different loan terms vis-à-vis the terms they would offer borrowers with unregistered property. There was no significant difference in lenders perception on the influence of property registration on the loan terms offered to small businesses in the two countries (see Appendix G). this is an indication that lenders in both countries take their decision on the terms to offer based not on the kind of property borrowers possess but on factors that are sometimes beyond the control of the borrowers such as the overall state of the macro-economy regulation and institutional policy issues amongst others.

6.3 Why Lenders Turn down Small Business Credit Applications

The results so far have shown that whilst property registration does not influence the credit terms that lenders are willing to offer, in some instances involving mostly UBs, registration is required to make landed property eligible for use as collateral. The credit effects of land registration as proposed by de Soto (2000) and his followers often attribute the incidence of credit constraints amongst small business and households in the developing world to the absence of formally registered property titles. Indeed, they argue as if the possession of registered property will guarantee access to credit. In this section, the reasons for turning down small businesses' credit applications and their levels of importance relative to the lack of registered property titles were investigated.

Respondents were required to rank 14 reasons that may be responsible for not granting credit to small businesses in order of importance on a 14 point scale (where ranks of 12 and above are of critical importance; 9-11 are classified as very important; 6-8 are important; 3-5 are least important; and finally, 2-1 are unimportant). Based on this the 14 point scale was recalibrated into a 5 point scale (where a score of 1 is unimportant, 2 is least important, 3 is important, 4 is very important and 5 is critically important). The critically important reasons are those that will always cause an application to be unsuccessful, the very important reasons will mostly (but not always) cause an application to be unsuccessful, the reasons rated as important are those that will sometimes cause an application to fail. The least important reasons on the other hand will rarely cause a failure whilst the unimportant reasons are not responsible for application failure.

6.3.1 Ghana

The reasons rated by respondents were classified according to the median ranks shown on Table 20 below. It reveals that there are four critically important reasons why some small businesses are denied credit either fully or partially. In other words, anytime small businesses fail to obtain the credit they require, this is always due to reasons such as: poor cash flows; low profitability; past loan repayment difficulties and the high vulnerability of such businesses to unforeseen future events. Unlike the critically important reasons, there were only two reasons which were rated as very important. Whilst six reasons were rated as important, two were rated as unimportant.

Table 20: Reasons Responsible for Turning down Credit Request and Their Levels of Importance - Ghana

Level of importance	N=108 Factors	Overall	
		Mean	Median
Critically important	poor cash flow	4.91	5
	poor profitability	4.89	5
	high vulnerability	4.82	5
	Past default	4.82	5
Very important	lack of property	4.27	4
	lack of guarantor	3.96	4
Important	customer still new to bank	3.20	3
	lack of records	3.13	3
	Inadequate Borrower's equity	3.13	3
	Lack of required documents	2.92	3
	lack of registered property	2.71	3
	Inadequate Borrower's experience	2.65	3
Unimportant	Kind of business to be financed	1.51	1
	high transaction cost involved	1.43	1

The Friedman's test amongst the critically important reasons (see Appendix F, Table 1) established that no difference exists in respondents' perception on the level of importance of these four reasons (poor cash flows, poor profitability, high vulnerability and past loan defaults). The inability of a business to generate sufficient cash, or proof that the business is sufficiently profitable to pay off the requested loan amount, high susceptibility to external events and the inability to meet past repayment arrangements would without a doubt cause credit application to be unsuccessful in one way or the other. Since cash flow and profitability are related to the financial health of the business and high vulnerability and past default relate to riskiness of the borrower, it could be said that high risk as well as poor state of a businesses' finances are critical to the failure of credit applications. Lenders are thus not only concerned with how profitable a venture is but whether or not it can also generate sufficient cash at least over the term of the loan to pay off the debt. Any doubt regarding the repayment ability of the borrowing business (as measured by the profitability, net cash flows amongst others) will increase the chances of a loan application being unsuccessful. That aside, lenders are also interested in the safety of the funds they lend. Evidence of past difficulties in meeting repayment obligations do not give lenders the assurance that their funds are safe and will thus affect success rate or the conditions of the loan.

For the very important reasons in Table 20 above, the Wilcoxon's test show that the lack of any acceptable property (that could be used as collateral) was a perceived by lenders as a more important reason for turning down loan applications compared to the inability to

provide a guarantor [$Z = -4.2\ p < .001$] (see Appendix F, Table 2). These two reasons will mostly reduce the probability of success for businesses applying for loans partly because of the inherent risk of such businesses. Small businesses are often regarded as very vulnerable to external events; this increases the need for a safety net in the form of collateral. Indeed, an earlier section of this chapter has already revealed that most lenders in this study will not advance credit unless some form of collateral is provided. Since most small businesses are considered as risky, the lack of any acceptable form of collateral will mostly lead to failure in terms of access to credit.

Six reasons were generally rated as important (see table 20). However, the Friedman's test shows that the top three (customer new to lender, lack of record and inadequate borrower's equity) were perceived to be of an equal level of importance [χ^2 (2) = 2.2, $p > .05$]. They were however rated more highly as causes of loan application failure than the other three (lack of required documents, lack of registered landed property title and inadequate experience) which were also of an equal level of importance [χ^2 (2) = 5.7, $p > .05$] (see Appendix F, Tables 3-4). These six reasons may or may not constitute a barrier to the approval of a loan application depending on the extent to which the critical and very important requirements are met. For instance the lack of registered land title may only be a barrier if the provision of landed property were the main requirement needed to trigger loan approval. Also being a new client to the lender will not necessarily constitute a barrier unless the credit history or strength of cash flow cannot be ascertained or the borrower is unable to provide any acceptable collateral. Finally, two of the 14 reasons (high transaction cost and the kind of business to be financed) were generally rated as unimportant when it comes to turning down small business loan applications. This was confirmed by the Wilcoxon's test which found no significant difference in the level of importance attached to them [$Z = -.64$, $p > .05$] (see Appendix F, Table 5).

This however appears to contradict the argument that links small business credit constraint to high transaction cost. There is a fixed transaction cost involved in loan processing and monitoring and this cost reduces as the loan size increases (Beck, 2007). Therefore lending to small businesses involves higher administrative cost relative to the returns. Lending to small businesses could thus be unattractive especially where the lenders are unable to pass this cost on to the borrower (Berger, 1989). However where lenders are able to pass on this cost to the borrowers through higher interest rates or other charges, then cost will not cause lenders to limit the credit made available to small businesses. This is possibly the main reason why participants rated transaction cost as unimportant. It should be pointed out however that though high transaction cost may not cause lenders to limit the amount of credit

made available to small business, it could affect demand and actual use of credit as such facilities may become unaffordable to these businesses.

It is now important to compare the relative importance of the lack of registered property titles as a reason for not approving a small business loan request to the other reasons as shown in Table 20. It was pointed out in chapter four that the pursuit of mass land registration across the developing world is often premised on the belief that businesses are unable to access credit to finance investment activities due to the absence of registered property titles. The results here show however, that the lack of property registration though rated as important was perceived as a factor that may or may not hinder credit access depending on the extent to which some other more critical factors are met. It was generally ranked as 11^{th} in the order of importance out of the 14 reasons shown in Table 20 above. There are therefore, 10 other more important factors responsible for explaining why small business loan applications are unsuccessful. The absence of registered property is thus of considerably less importance relative to the others presented in Table 20 above. Stressing on the critical importance of the other factors such as repayment ability, Deininger (2003) established that the credit effect of property registration depends on the individual wealth of borrowers. Indeed, Brown et al. (2006) observe that the main reason why people may be denied credit is the low borrower repayment capacity and not the absence of registered property titles; they report that among all studies in Peru, none found a direct causal link between land registration and credit access. Gilbert (2002) also established that the formal lending decision making process is based on the ability of borrowers to demonstrate that they have a regular income source and that in Bogotá the possession of registered title either made very little or no difference to formal credit availability.

Galeana (2004) did not also find any significant link between land registration and credit access in Mexico. In Argentina another study by Durand-Lasserve and Payne (2006) found that no significant changes in credit access occurred after the introduction of land registration. Other studies that have found no positive impact of land registration on credit access include: Place and Migot-Adholla (1998) and Mighot-Adholla et al., (1991) in Ghana, Rwanda and Kenya, Senegal, Uganda, Burkina Faso, Cameroon, Somalia; Broegaard et al (2002) in Nicaragua; Pender and Kerr (1999) in rural India and carter and Olinto (2003) in Paraguay. Consequently, Field and Torero (2004) establish from their study that land registration does not automatically make collateral-based lending viable for the majority of formal-sector credit applicants. Explaining this point further Dower and Potamites (2005) observe on the basis of evidence from Indonesia that registered property titles are not the most important factor determining credit supply. The Mann-Whitney test was conducted (see Appendix F) to

determine if MFIs and UBs attached different levels of importance to the 14 reasons shown in Table 20 above. The test showed no differences for the following: business type for which funding is being sought, lack of records; high transaction cost, lack of guarantors as well as the top four critically important reasons shown in Table 20 above. However there was a significant difference between the two groups of lenders in terms of the level of importance of: lack of property; lack of registered title; inadequate experience; lack of required documents; inadequate borrower equity as well as short borrower-lender relationship as evidenced by the client being relatively new to the lender. Though overall, the lack of registered titles is considered a tier three factor in terms of its level of importance, the results show that UBs generally gave it a much higher rating as very important compared to MFIs majority of who rated it as least important. This difference also reflects the earlier finding that, whilst property registration is a critical attribute of land based collateral that cannot be ignored for UBs, for MFIs it is considered as an attribute that may be ignored though important.

About 75% of all 51 lenders who accept only registered property also rated the lack of registered property titles as a very important cause of the failure of some business to obtain credit whilst 84% of the 57 lenders who accept both registered and unregistered documents rated it as unimportant or least important (unimportant - 42% and least important – 42%). The resultant chi square test showed a significant association [χ^2 (3) = 80.4, p <.001] (see Appendix F, Table 6). In addition, where land registration positively influences the outcome of a credit application, one would expect that lenders with higher preference for land-based collateral would also rate the lack of registered titles more highly as a reason for the failure to obtain loans and vice versa. In this study however, no significant correlation was established [*rho* = .07, p > .05] (see Appendix F, Table 7). Given the argument that registration of property enhances credit access by reducing the transaction cost, one would also expect lenders accepting only registered property to rate high transaction cost more highly as a cause of the failure of some businesses to obtain credit vis-à-vis those accepting both registered and unregistered property. This study also did not find any such association as per the chi square test [χ^2 (2) = .76, p > .05] (see Appendix F, Table 8). The fact that transaction cost has emerged as an unimportant factor influencing the success or failure of a loan application could be the reason why some lenders still accept both registered and unregistered property. Since the processing unregistered property is associated with a relatively higher cost, lenders may try as much as possible to avoid them. However if such cost can easily be transferred then some lenders may consider accepting them as indicated

earlier. Hence the acceptance or refusal to accept unregistered property may not be influenced by the cost of processing it.

Based on the ratings of the 14 reasons above, factor analysis was conducted to explore the interrelationships between them and to reduce them into fewer underlying components or factors responsible for the small business credit constraint. To begin with, since the study wanted to identify the important factors that are responsible for the credit constraint amongst small businesses, the two variables that were rated as unimportant (see Table 20 above) were first removed from the list. In the first test run, the KMO test of sampling adequacy was 0.576 and the Bartlett's test was significant [χ^2 (66) = 694.5, $p < .001$]. This first test extracted five components; there was a problem detected with one of the components which included the following variables: lack of records on business transactions; new customer; lack of registered property titles and lack of required documents. The problem with this component is that one variable (new customer) describes a completely different thing (lender-borrower relationship) from the others which are more of issues relating to documentary requirements. Consequently this variable was taken out and the test was conducted using 11 of the 14 variables in Table 20. As a result the there was a slight improvement in the KMO test which increased to 0.579; the Bartlett's test remained significant [χ^2 (55) = 664.9, $p < .001$]. Furthermore, the determinant of the R-matrix was 0.002 which indicates that no serious problem of multicollinearity existed (see Appendix F). The data was subsequently considered as fit for the conduct of factor analysis. Principal component analysis and varimax rotation were used. The number of components to be extracted was not determined a priori but was allowed to emerge from the data through the use of both the scree plot and the Kaiser's criteria

The scree plot shown in Figure 8 below appears to support the extraction of six components whilst the Kaiser's criteria came up with five (see the rotated component matrix in Appendix F). The scree plot becomes a reliable criterion for selecting factors if the sample size is more than 200 participants (Stevens, 2002 in Field, 2009, p.640). Given that the sample here was less than 200 a decision was made to go with the outcome of the Kaiser's criteria because, eigenvalues represent the variation explained by each factor and values of 1 or above are said to represent a significant amount of variation (Field, 2009). The five components extracted through the Kaisers criteria (see Table 21 below) were named by looking at the particular issue that each set of variables describe. An examination of the variables under each component suggests that component one represents poor financial strength, component two represents high default risk, component three represents lack of collateral, component four

represents lack of documentary requirements and component five represents the nature of the business (business start-ups).

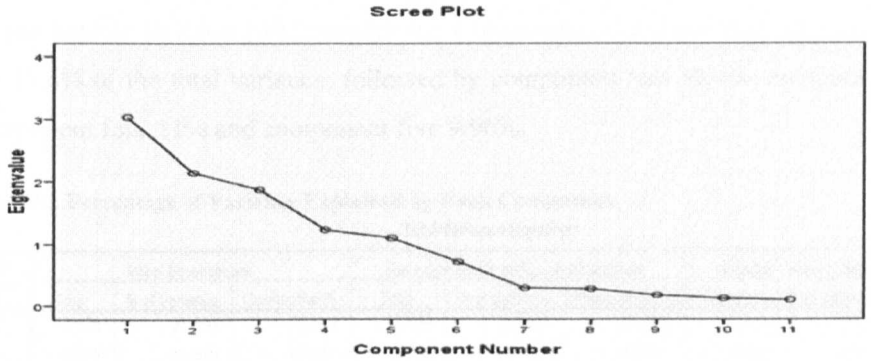

Figure 8: Scree Plot – Ghana

Table 21: Factors Responsible for the Credit Constraint amongst SEs – Ghana

Components	Factor Loading	Critically important (%)	Very important (%)	Important (%)	Least Important (%)	Unimportant (%)
Poor financial strength (repayment ability)						
Cronbach's Alpha = .948						
Poor cash flow	.970	90.7	9.3	0	0	0
Poor profitability of venture	.971	88.90	11.10	0	0	0
High default risk						
Cronbach's Alpha = .903						
High vulnerability to unforeseen future events	.945	83.30	15.70	.90	0	0
Difficulty in fulfilling past payment obligations	.942	78.7	20.4	.90	0	0
Lack of acceptable collateral						
Cronbach's Alpha =.918						
Lack of property	.920	38.90	50.00	11.10	0	0
Lack of guarantor	.947	32.40	45.40	22.20	0	0
Lack of documentary requirement (informality)						
Cronbach's Alpha =.677						
Lack of business records	.741	0	46.3	38.9	14.80	
Lack of required documents (personal IDs, proof of address, bank statements,	.793	0	16.70	58.30	25.00	
Lack of registered titles	.765	0	38.00	19.40	22.20	20.4
Nature of Business (start-ups)						
Cronbach's Alpha = .830						
Lack of experience	.881	0.90	19.40	31.50	39.80	8.30
Inadequate borrower equity	.918	4.60	24.10	56.50	9.30	5.60

Table 21 above shows the extracted components, their factor loadings, frequencies for the variables under each component as well as the Cronbach's alpha for each component. All the components except the fourth one have alpha values substantially above 0.7. The lowest value of 0.677 for component four was not significantly less than the acceptable threshold of 0.7 and as such was considered as reliable. Table 22 below also shows the relative

importance of each of the five components in terms of the proportion of the total variance explained. The five components accounted for a combined total of 85% of the variance. In other words 85% of the cases of unsuccessful loan applications were perceived by lenders to be attributable to these five components. Component 1 was the most important accounting for 27.6% of the total variance, followed by component two 19.4%, component three 17%, component four 11% and component five 9.96%.

Table 22: Percentage of Variance Explained by Each Component

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.036	27.599	27.599	3.036	27.599	27.599	1.923	17.485	17.485
2	2.139	19.448	47.047	2.139	19.448	47.047	1.896	17.235	34.720
3	1.871	17.009	64.055	1.871	17.009	64.055	1.883	17.122	51.842
4	1.223	11.121	75.176	1.223	11.121	75.176	1.854	16.852	68.694
5	1.096	9.966	85.142	1.096	9.966	85.142	1.809	16.448	85.142
6	.704	6.404	91.546						
7	.288	2.619	94.165						
8	.272	2.471	96.637						
9	.167	1.517	98.154						
10	.114	1.036	99.189						
11	.089	.811	100.000						

Extraction Method: Principal Component Analysis.

Therefore, going back to the debate on the influence of property registration on credit access, this factor model shows that though registration is important, its absence does not constitute a major cause of the credit constraint experienced by small businesses. The lack of registered title was classified under component four which together with the two other variables contributes only 11% of the variance. The lack of collateral (component 3) emerged as a more important cause of credit constraints relative to the absence of registered titles. This again, does not confirm de Soto's argument that credit constraints in the developing world is attributable to the lack of registered titles but not the lack of assets to be used as collateral. The factor model above is however consistent with the result of the survey involving proprietors of small businesses reported earlier, that only 4% of all constrained applicants attributed their failure to obtain credit to the lack of registered property titles. Hence, results from both the supply and demand sides of the credit market are pointing to the fact that the absence of registered property is not a major cause of credit constraint. The most likely reason why property registration has been found not to be a major cause of the credit constraint in this study is found in earlier results which revealed that most of the lenders admit to being able to verify property ownership and the existence of encumbrances. Even though this may be costly in the absence of registered titles, they do not appear to limit the credit available to businesses since this cost can be recouped through charges. The other

reasons can be found in the arguments concerning the limitations of property registration discussed in chapter three.

The above results are consistent with the findings of Durand-Lasserve and Payne (2006) who reviewed several cases of land registration and concluded that there was no evidence that registration had significantly increased access to formal credit. The authors attributed this finding to the fact that low income households are generally reluctant to borrow and the lenders are also reluctant to lend to such borrowers. They attributed this to: the fact that even people with registered freehold titles still exhibited income levels too low to attract formal lenders; the low market price of mortgaged land; and inappropriate locations amongst others. In India for instance, registered land owners were unable to obtain formal credit because their plots and settlement conditions did not meet the standards for building permission (Durand-Lasserve and Payne, 2006). Durand-Lasserve and Payne (2006) also found in their study that that the form of financial institution have more influence on access to credit than the possession of registered titles in that micro-credit institution were found to be successful in lending even though they rarely demand registered titles. However, limitations in the sample size did not permit the conduct of factor analysis for the different groups of lenders (UBs and MFIs). Since UBs initially rated registered titles much higher than MFIs, the outcome of the factor analysis could differ for each group of lenders.

6.3.2 England

Just as in the case of Ghana, lenders in England were also asked to rank 14 different reasons why they may turn down a loan application in order of importance. The results are shown in Table 23 below. Based on the median ranks assigned to each reason, four of them were classified as critically important and these were the same as those classified by the Ghanaian lenders as critically important. The Friedman's test conducted (see Appendix F, Table 9) for the reasons rated as critically important showed that a significant difference exist amongst these top four items [$\chi^2(3) = 36.2, p < .001$]. Only one reason (the lack of any acceptable property) was on average rated as very important and was significantly less important than the top four items [$Z = -7.6, p < .001$] (see Appendix F, Table 10). The next lower tier of items rated as important involved reasons such as inadequate equity, lack of experiences and the short lender-borrower relationship; based on the Friedman's test, these were not statistically distinct in terms of lenders perception on their level of importance [$\chi^2(2) = 4.5, p > .05$].

Table 23: Reasons Responsible for Turning down Credit Request and their Levels of Importance – England

	N=95	Ranks	
Level of importance	Factors	Mean	Median
Critically important	low profitability	4.97	5
	poor cash flow	4.93	5
	high vulnerability	4.85	5
	Past default	4.71	5
Very important	Lack of property	3.54	4
Important	Inadequate equity	2.93	3
	experience	2.85	3
	customer still new to bank	2.59	3
Least Important	Lack of guarantor	2.39	2
	Lack of records	2.16	2
	Lack of required documents	1.62	2
Unimportant	high transaction cost involved	1.40	1
	lack of registered title	1.34	1
	Kind of business to be financed	1.33	1

They were however perceived to be less important than the reasons rated as very important (see Appendix F, Table 11-12). There was also a difference in level of importance of the least important factors shown in Table 23 above [χ^2 *(2) = 61.7, p <.001]*. Finally, the three reasons that were each rated as unimportant include the absence of a registered title over the property to be used as collateral and the high transaction cost involved in lending to SEs amongst others. There was no difference in the level of importance of the factors rated as unimportant [χ^2 *(2) = 2.15, p >.05]* (see Appendix F, Table 13-14). Since majority of the respondents in England accept both registered and unregistered property documents it was not surprising that they rated the lack of registered title as an unimportant factor when deciding on whether or not to approve a small business loan request. The chi square test conducted did not identify an association between the kind of landed property accepted by lenders and their perceptions on the level of importance of the absence of registered property titles [χ^2 *(2) = 1.6, p >.05]* neither was the accepted property associated with lenders rating of transaction cost as a reason for turning down credit application [χ^2 *(1) = 0.70, p >.05]* (see Appendix F, Table 15-16). As explained earlier these are indications that registration does not play a major role in the lending decision making process.

Base on the ratings assigned to the 14 reasons in Table 23 above, factor analysis was then conducted to also explore interrelationships amongst them and reduce to them into fewer underlying components. To begin with the conduct of the analysis, the three reasons rated as

unimportant in Table 23 above were eliminated from the list and the initial analysis was done using the remaining 11 reasons. Though the Bartlett's test was significant and the KMO test marginally above 0.5 (0.533), one of the reasons (lack of required documents) had a KMO value significantly below 0.5 and was appropriately removed. In the second round of test conducted, four components were extracted but there were two odd items (lack of records on business transactions and new customer respectively) in component two. These two items were thus removed since their inclusion did not make any sense in terms of the general issues being described by the other items within the components (see Appendix F, Tables 17-19). Finally, the actual analysis was conducted using eight variables and the outcome is reported below. The Bartlett's test was significant [x^2 *(28) = 196.8, p <.05]* and the KMO test was 0.542; the determinant was 0.114 (see Appendix F). Four factors were extracted using both the scree plot and the Kaiser's criteria. There was a convergence of the results from the two criteria as both suggested the extraction of four factors (see Figure 9 and Table 24 below).

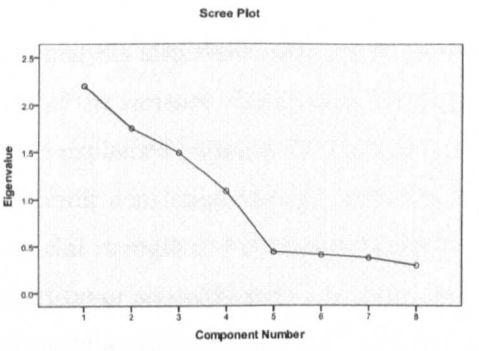

Figure 9: Scree Plot – England

Table 24: Extracted components –England

Rotated Component Matrix[a]

	Component			
	1	2	3	4
past default	.907			
high vulnerability	.899			
poor cash flow		.904		
poor profitability		.892		
inadequate equity			.904	
inadequate experience			.874	
Lack property				.871
Lack of guarantor				.861

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Component one represents the risk of default; component two represents the poor financial strength (poor repayment capability); component three represents the nature of the business (start-ups); and component four, lack of collateral. These four components are represented again in Table 25 below together with their factor loadings, Cronbach's Alpha and the frequencies of the items under each component. Each of the components has an alpha value greater than the recommended 0.7 which indicates that they are reliable.

Table 25: Factors Responsible for Credit Constraint amongst SEs - England

N=95 Components	Factor Loading	Critically important (%)	Very important (%)	Important (%)	Least Important (%)	Unimportant (%)
High default risk						
Cronbach's Alpha = .768						
High vulnerability to unforeseen future events	.899	85.3	14.7	0	0	0
Difficulty in fulfilling past payment obligations	.907	70.5	29.5	0	0	0
Poor financial strength						
Cronbach's Alpha = .744						
Poor cash flow	.904	92.6	7.4	0	0	0
Poor profitability of venture	.892	96.8	3.2	0	0	0
Business start-ups						
Cronbach's Alpha = .711						
Lack of experience	.874	1.1	16.8	49.5	31.6	1.1
Inadequate borrower equity	.904	11.6	22.1	25.3	29.5	11.6
Lack of acceptable collateral						
Cronbach's Alpha =.714						
Lack of property	.871	5.3	50.5	36.8	7.4	0
Lack of guarantor	.861	0	4.2	38.9	48.4	8.4

The analysis also shows that the four extracted components above together explained about 81% of the variance. Component one (high risk of default) contributes the highest proportion of the explained variance (27.5%) and is thus the most important component responsible for the credit constraint amongst small businesses in England. This is followed by the poor financial strength of businesses (21.8%). The nature of the business in terms of whether it is a start-up or an established business was third in the order of importance (18.5%). The lack of collateral accounted for 13.5% of the explained variance and is the least important of the extracted components (see Appendix F).

A comparison between Ghana and England revealed that differences and similarities do exist between lenders in terms of the reasons why they turn down small business applications (see appendix G). Indeed the four critically important reasons identified by Ghanaian lenders were the same as those identified by their counterparts in England. The statistical test showed that there was no significant difference in the perception of both sets of lenders on the importance of the following reasons: poor cash flows, high vulnerability and past defaults. There was however a marginally significant difference in relation to poor profitability. Similarly, there was no significant difference between both sets of lenders regarding the business type and the high transactions cost involved in lending to small businesses (these were both rated as unimportant by both sets of lenders). There was also no difference in the perceived level of importance of inadequate equity and experience of the

borrower as causes of small business credit constraint. However, compared to England, all the other reasons were rated significantly higher by Ghanaian lenders as underlying causes of credit constraint. For instance, whilst lenders in Ghana rated the lack of registered title as important, those in England rated it as unimportant. Eventually, the factor analysis for data from the two countries yielded five factors for Ghana and four for England. The results show that whilst the lack of collateral is a problem for lenders in both countries, it is a much bigger problem for the Ghanaian lenders.

6.4 Summary

This chapter has discussed the quantitative results obtained from the study and made a comparison of the finding between the two countries. The survey amongst small business owners in Ghana showed that a majority of loan applicants were credit constrained. The lack of collateral was identified by most small businesses as the reason why they were either fully or partially constrained. Regarding the influence of registration on credit access, it was established that significant differences exist between Ghana and England in terms of the eligibility of landed property for use as collateral. Whilst lenders in England did not largely consider registration as necessary to make landed property acceptable the opposite was true for Ghana. Despite this difference, both sets of lenders did agree that the possession of registered property title per se does not influence the loan terms they offer borrowers. Finally, there were similarities between lenders in the two countries regarding the factors responsible for the credit constraint amongst small businesses. It emerged that as far as the critical factors are concerned no difference existed between the two groups of lenders.

CHAPTER 7

QUALITATIVE RESULTS AND DISCUSSION

This chapter presents the findings from the qualitative data collected through semi-structured interviews. The aim of the qualitative study was to validate the findings from the earlier survey conducted amongst officials of various lending institutions. The participants were loans managers who were not part of the initial quantitative surveys. Interviews lasted for about 30 minutes. Interviews were conducted over the phone and recorded using a digital voice recorder. They were later transcribed and coded into Nvivo (see Appendix A for the coding summary report). The data was analysed based on predetermined topic areas related to the objectives of this research. The transcripts were thoroughly read to identify the main themes into which the various responses could be classified. The responses were then coded appropriately into the identified categories. In the case of Ghana there were 10 interviewees, all of whom were males. Four of the respondents were mangers of MFIs and the other six were managers of Universal Banks. However, seven business managers in the main high street banks were interviewed in England. The findings for both countries are discussed below.

7. 1 Attitude to Collateral as a Requirement for SE Credit

7.1.1 Ghana

Respondents were asked if they always required collateral when dealing with small businesses' credit request and why. The responses were varied but were coded into two main categories (collateral always necessary and collateral sometimes necessary). The results (see Table 26 below) show that 50% of the participants perceived the provision of collateral as a requirement that must always be met if SEs are to succeed in obtaining credit, whilst another 50% regarded collateral as sometimes necessary but not always necessary. About 80% of the five participants who perceived collateral as always necessary were from UBs and 20% from MFIs. Furthermore, 66.7% of all six UB based participants (GHUB) did regard collateral as always necessary whilst 75% of the MFI participants (GHMFI) regarded it as sometimes necessary. This to a large extent is similar to the quantitative results which revealed that significant differences existed between the UBs and MFIs in terms of how necessary they perceive collateral to be when dealing with small businesses. The above also confirms that UBs are more reliant on collateral when dealing with small businesses than MFIs.

Table 26: Participant's Attitude to the Taking of Collateral - Ghana

N=10 Interviewees	Collateral always necessary	Collateral sometimes necessary	Collateral alone not sufficient
GHUB1	√		√
GHUB2	√		√
GHUB3		√	√
GHUB4		√	√
GHUB5	√		√
GHUB6	√		√
GHMFI1		√	√
GHMFI2		√	√
GHMFI3		√	√
GHMFI4	√		√
percentage	50%	50	100%

Even though half of the interviewees always require collateral from small business borrowers, some of these participants (60%) were quick to admit that though they always take collateral there may be a few exceptions. One UB participant, noted for instance that,

...in extreme cases, our big men may want to guarantee the loan for somebody or for instance, if an MP needs a facility the bosses can ask us to grant it. We call them clean facilities they are not secured but we do that because of the calibre of person we are dealing with. We believe that the MP wouldn't come for a loan and then default because he wouldn't want his name to be tarnished.

The use of the word "extreme" in the above quote implies that it is very rare for these participants to provide credit without taking collateral. From the quote above, two instances were cited to explain what may lead to this exceptional situation. It was revealed that the personality or profile of the potential borrower is the critical factor that may influence such a rare decision to waive the collateral requirement. The potential of dragging one's image into disrepute should one default could be very costly for high profile individuals. Such cost could be equivalent to the cost of default incurred by a borrower in a secured loan situation. Also, the benefits of maintaining one's public reputation and especially reputation with the lender may be sufficient to motivate one to repay. Small business owners within the low income brackets may not have such a public reputation to protect and the only feasible way lenders can transfer the cost of default and motivate loan repayment is to take collateral.

The other instance is where top management within the financial institutions may use their personal relations with and knowledge of the customer to waive the collateral requirement. In that case however such top managers appear to provide some kind of guarantee (formal or

informal) that the facility will be repaid. The lender thus has some repayment assurances from the 'top management' who has a better knowledge of the customer through their personal relations. This of course could reduce the information asymmetry problem that then makes it possible for the lender to waive the collateral requirement whilst having the assurance that when things get difficult informal pressure could be used by the manager involved to encourage repayment. All participants irrespective of whether they were from UBs or MFIs were unanimous in their opinion that the provision of collateral per se is not sufficient to trigger loan supply (see Table 26 above). Indeed all of them did indicate that the provision of collateral alone is not good enough to warrant the granting of credit. The interviewees who considered collateral as always necessary and all those who also considered collateral as sometimes necessary were of the opinion that borrowers cannot simply provide collateral and expect to get credit (see Table 26). Though majority of lenders will not grant credit to businesses unless they are able to provide some form of acceptable collateral, the results show that the provision of collateral per se is not enough to convince lenders to provide the needed credit. The above generally reflects the results of the quantitative survey which established that though collateral is necessary in granting SE loans, it is not a sufficient condition in itself. This attitude is epitomised in the comments of one participant as follows:

...some people can provide 100% even 200% collateral cover but we can appraise them and say that you don't have the right character to be given a loan...

Another also said,

... Assuming you have a huge building you can't just come to us that because you have this building you want a loan, we will not grant it...

It was deemed necessary to try to establish the reasons why lenders exhibited the above attitudes with regards to collateral. The five participants who always require collateral from SEs (four from UBs and one from MFIs) cited a number of reasons for their actions and these have been displayed in Table 27 below. These reasons ranged from the risk involved in lending to SEs (80%), the need for a back-up (60%), motivating repayment (40%), and the policy of the bank (20%) to the lack of financial data (20%). The MFI participant cited only risk as the reason for always taking collateral. The other reason in Table 27 were reported by UB respondents

Table 27: Reasons Why Collateral is Always Required from SEs - Ghana

N=5	Reasons for always taking collateral				
Interviewees	Risk	Back-up	Motivation	No financial data	Bank policy
GHUB1	√	√	√	√	
GHUB2		√			√
GHUB5	√		√		
GHUB6	√	√			
GHMFI4	√				
Percentage	80	60	40	20	20

For these participants, risk emerged as their most prominent reason for always taking collateral. This is evidenced by the number that made reference to it. The risk mainly referred to here, was about the possibility of things going wrong after granting the credit facility. As one of the respondents aptly observed...*these small businesses cannot be trusted that much because they are highly susceptible to very petty issues, they can look good today and tomorrow they are gone*...Such high level vulnerability must be of concern to any lender dealing with these businesses. Therefore even where the finances of the business look good, these lenders may still insist on getting collateral to offset the possible effects of something unpredictable happening in the future and this was what one participant appeared to be referring to in the following statement,

...*The fact is when we assess your finances and ability to service the loan, we cannot be very sure of what tomorrow holds and that is a big concern especially when we are dealing with SMEs*...

The high level of uncertainty surrounding such small businesses underscores the need for a back-up or what may be referred to as a plan B – which is an alternative plan to loan recovery should the repayment plan fail. As already stated above, 60% of respondents identified this as the reason for always taking collateral. By acting as a back-up plan, collateral provides a safety net for these lenders in case things do not work out as planned. In this regard, a participant noted ...*Collateral is always the plan B out of a default... we need to cushion ourselves against any shocks in terms of default.* About 50% of respondents who identified risk as the reason for always taking collateral also made reference to the need for a back-up whilst another 50% talked about using collateral to motivate loan repayment (see Table 27 above). Lenders do not just require collateral for its own sake but to encourage loan

repayment. The fear of losing a priced asset will make one to strive to honour one's repayment obligations to the lender. One participant demonstrated the effect collateral can have on willingness to repay a loan in the statement that

...they will always try to find excuses as to why they cannot repay expecting you to be sympathetic, but we are not NGOs so the only way to force them to stop the excuses and pay the money is to take the collateral. When there is a problem and you tell them you will sell the property the next day they will find money to come and pay.

Only one participant each also pointed to the lack of financial records and institutional policy of the lender as other reasons reason why collateral is always necessary in SE lending (see Table 27 above). Regarding the lack of financial record the participant lamented *...however, because we don't have financials to back the payments we need to cushion ourselves against any shocks*. Without financial records lenders are less capable of determining the repayment capability of the borrower and such uncertainties also demand that collateral be taken. On the issue of policy the other participant emphatically stated that...*it is a standard, a policy of my bank, every loan we give out we need to secure it as much as possible*. This attitude could be due to the earlier explanations given. All the reasons identified above are related to risk in one way or the other. One could thus say that the risk involved in SE lending is the reason why most lenders always ask for collateral.

The five participants who indicated they sometimes demand collateral from small businesses but not always, often cited the fact that they provide both secured and unsecured credit facilities to such businesses as their evidence. This group of respondents were of the view that collateral requirement is triggered only by some factors or the occurrence of some events (see Table 28 below). It can be seen from Table 28 below that UBs mainly identified the amount required, the ability to repay a loan, risk of default and need to motivate borrowers as the reasons for not demanding collateral sometimes whilst the MFIs mainly pointed to their relationship with the client and the absence of suitable collateral. The most prominently reported reason why a lender may or may not take collateral sometimes is the relationship and trust between the lender and borrower (60%).

The lender-borrower relationship as may be evidenced by the length of time the lender has been dealing with a particular client provides benefits for both parties. The established relationship and trust allows the borrowers to be more honest with the lender. This provides lenders with the opportunity to detect any potential problems and device solutions for them before they escalate into loan default.

Table 28: Why Collateral is Sometimes Necessary but not Always – Ghana

N=5 Reasons	Interviewees					Percentage
	UB3	UB4	MFI1	MFI2	MFI3	
Relationship	√		√		√	60
Lack suitable collateral			√	√		40
Policy		√	√			40
Amount	√	√				40
Ability to repay	√					20
Risk		√				20
Motivation		√				20

In the long run customers can benefit from this trust as it may open the gate for more facilities and better conditions. This is aptly observed by one MFI participant as per the quote that follows...*we also prefer to build a relationship with our customers over time which allows us to know our customers very well and develop trust; with this mutual trust we may not worry too much about the collateral.* Some of the lenders (40%) who were all UBs, indicated they may not demand for collateral depending on the loan amount required. For instance, one participant stated that ...*There is a ceiling to which we do unsecured loans beyond which any amount you are asking for must be secured. So let's say if currently we do up to GH10,000 unsecured any amount above that then you have to present security.* The consequences of default for any lender could rise with the amount being advanced. Hence, to limit their potential losses, lenders may tend to put a cap on how much they can lend without security. As the amount increases so is the likelihood that collateral will be required. The risk tolerance of the lender will determine how much they are prepared to lend without collateral. With relatively smaller amounts lenders may not be willing to go through the sometimes costly process of taking collateral.

The lack of appropriate collateral also accounts for the reason why some lenders decide not to take collateral but to rely on other non-traditional forms of security. Some lenders (40%) all from MFIs were of the view that SE owners either do not possess collateral at all or the kind of collateral they possess is not considered suitable. This was one respondent's reaction to the question of whether his institution was not concerned about default given his earlier statement that they don't always require collateral.

We would have preferred collateral but these SMEs are people who do not even have any suitable collateral. Just give me an example of collateral, like a car, just imagine a trotro, it

is a risk in itself. No third party comprehensive insurance cover over these cars. How many of them own good landed property none at all. Give me other examples, shares, the least said about it the better, we are talking about raising funds to support their micro businesses and you are talking about shares, these are people who operate on table. Fixed deposits, where, if they had fixed deposits they wouldn't come to you for a loan, you get it? So because of these things we are not even motivated to take these forms of collateral because of the collateral problem and their inappropriateness. Also most of the landed properties are not properly registered with the lands commission. The statement above appears to imply that some lenders would prefer not to take any of these traditional forms of collateral at all rather than accept one that they consider unsuitable. Accepting an unsuitable form of collateral may provide a false sense of security which could be detrimental to the institution.

Furthermore, some of these lenders (20%) may sometimes not require collateral if they have sufficient proof that the borrower will be able to comfortably repay the facility. According to one participant, *"...the amount you can access unsecured depends on the turnover on your account"*. This shows that collateral may only be required where the lender has no sufficient confidence in the cash flows of the business and hence the ability to repay. About 20% of the lenders also mentioned the need to motivate borrowers to repay a facility as the reason why they sometimes demand collateral. This is portrayed in the following statement about the need for collateral...*it psychologically influences the repayment of the loan facility, especially where the value of the collateral is higher than the loan facility and especially where the person has shown signs of unwillingness to repay a loan in the past.* The past loan repayment behaviour of a borrower could raise concerns about not only ability to repay but also willingness to do so. This may cause lenders to look for other means of motivating repayment. Hence where a particular borrower is identified as having a motivation issue, the lender may also ask for collateral otherwise there will be no need to do so.

All the ten lenders interviewed did agree that they do not supply credit just because the client is able to provide collateral (see Table 26 above). The interviewees identified three broad categories of reasons to explain this behaviour. Whilst all ten interviewees did attribute this to the fact that there are other more critical factors they consider when lending to small businesses, about 40% also attributed this to the fact that collateral is considered just as a last resort to loan recovery. Another 20% also pointed to the possibility of encountering foreclosure difficulties. One of the participants who spoke about foreclosure difficulties related it to the time wasted in going through foreclosure procedures as seen in this statement...*no one wants to waste time going through foreclosure procedure.* Another participant related it to the implications of persistent foreclosure for the reputation of the

lender as reflected by this explanation *...one thing about security is that if you keep foreclosing on security your image is at stake, it affects your reputation ... so since I joined my new bank .... I have not seen a security being foreclosed.*

This implies that even though lenders may take collateral before advancing credit, in reality they may not be willing to foreclose because of the perceived damage it could have on their reputation. If that is the case, then it will be disastrous for them to grant credit on the mere basis that the borrower is able to provide collateral. This is because, the cost involved in the foreclosure procedure coupled with the fact that the taking of collateral does not mean it will definitely be foreclosed. Lenders must be more interested in factors that will prevent the credit facility from going bad. Some lenders as stated earlier saw collateral as a secondary requirement – a last resort to loan recovery. This is an indication that there are primary issues of concern that must be attended to before consideration is given to collateral; this is captured in one participant's statement below,

...we will rather want to know the kind of business that the person is doing with the money... we will look at the account performance ... that will tell us whether you warrant the facility or not. Because you may have the security alright but the business may not be able to have the needed cash flow to service the loan we are granting, so the cash flow to us is more important...

Since all participants (both MFI and UBs) indicated that collateral alone is not sufficient because there are other critical factors they consider in lending, they were probed further to identify the other critical factors that they were referring to and these are displayed in Table 29 below. Amongst these reasons identified, the ability of the client to repay the facility stood out as 90% of the interviewees made reference to it. Various terms such as cash flow, account performance or turnover were generally used by interviewees when referring to repayment ability. 40% of the respondents each referred to the lender-borrower relation and the business involved whilst 30% talked about the borrower's character. Table 29 below shows that UBs dominantly related the issue to the borrower's repayment capability and the business to be financed whilst MFIs were more critical about the repayment ability, relationship with borrowers and the borrower's character.

When a loan is granted, the ultimate aim of the lender is to get the money back within a scheduled time. It is thus not surprising that almost all the participants (see Table 29 below) regarded the ability to repay as more critical than the provision of collateral. Indeed, it was revealed earlier that the collateral requirement may even be waived if the client is able to demonstrate beyond doubt that repayment will not be a problem.

Table 29: The more critical reasons why collateral alone is not sufficient - Ghana

N=10 Interviewees	Reasons why Collateral alone is not sufficient: the other more critical factors			
	Ability to repay loan	Relationship with borrower	Borrower's character	The business
UB1	√	√	√	√
UB2	√			√
UB3	√			
UB4	√			
UB5	√			
UB6	√			√
MFI		√	√	√
MFI2	√			
MFI3	√	√	√	
MFI4	√	√		
Percentage (%)	90%	40%	30%	40%

It was in this regard that one participant said, ...*First, we consider the ability of the SME to finance their repayment monthly before we go on to look at the security they are using to back the loan. Ok, so if we assess the ability to pay back the loan based on the account turnovers for one year and it is not very strong however the person has collateral which is enough to cover the loan the person might not get the loan, they might get a lower amount or they might not even get the loan at all...*

With regards to the business, references were made not only to the type of business but its financial performance as well. In fact, almost all of the participants (75%) who talked about the business of the borrower also mentioned the ability to repay the loan (see Table 29 above) which probably points to the high interconnectivity between the two factors. One participant demonstrated this in the statement that follows...*If you provide collateral but we see that you cannot pay the loan back may be, because your business finances are not good enough or maybe we are not interested in your type of business, then we will still not give you the facility.*

The lender-borrower relationship in this case was used to refer to how long and how well the borrower has been known to the lender as reflected in this comment by an MFI participant...*we have to study all customers for a period to know their savings character and learn more about them and their businesses and be sure that if we give them a loan they will not disappear.* Finally, 30% of interviewees cited the character of the borrower as one critical reason why collateral alone may not be sufficient to make them approve a loan request. This covered a range of issues from the borrower's ability to manage the facility, credit history and willingness to repay. Referring to this issue an MFI respondent said ...*we have to look at other things; let's say your loans history how you performed on your previous loan, if there were major problems then we may not grant you the loan even if you*

had collateral. The above results have provided a confirmation of the quantitative results on lenders' attitudes towards collateral as a requirement for SE credit and also given insights into why they exhibit certain attitudes.

7.1.2 England

Participants in were also asked to indicate how necessary they consider collateral to be when granting credit to SEs. When asked whether they mostly require collateral before advancing credit to SEs, all the seven participants involved disagreed. Instead, they observed that collateral may or may not be necessary when dealing with such enterprises. This was what one participant had to say when asked if they mostly require collateral from SEs...*definitely no, as I have said before there are a range of credit products some of which do not require security... looking at our products, there are several credit products we advance without asking for security.* Another also said that...*it will vary depending on the nature of each individual proposition that we receive.* It can be inferred from the above quotes that participants were pointing to the fact that there are instances or certain conditions that trigger the demand for collateral and as long as the trigger event does not occur in a particular situation, collateral will not be a necessary requirement. This was what a participant was trying to say when he made this comment...*two people can apply for the same facility one may be required to provide security the other may not so it depends largely on each individual case we receive.*

The quantitative results indicated that lenders in England consider collateral as mostly necessary when dealing with SEs. In this part of the study however, participants fell short of admitting that they mostly take collateral preferring rather to say that they sometimes take collateral (that is less often than that reported in the quantitative findings). However, compared to the results from Ghana, this is still a demonstration that collateral-based lending is less entrenched amongst the lenders in England. This is much easier to understand given that information on borrowers' creditworthiness is much widely available (from credit reference bureaus) which reduces the information asymmetry problem and the need for collateral. The seven participants together, provided seven different reasons to explain why collateral is not mostly considered a necessary requirement when dealing with small businesses (see Table 30 below). A majority of the participant (about 71%) were of the view that the demand for collateral is dependent on the amount required as well as the risk of default. The 'amount' was linked to the amount of money the bank stands to lose should there be a default. The failure to require collateral when granting credit exposes lenders to the risk of losing funds if there is a default. There appears to be a level of risk acceptable to all the participants. This is determined by how much losses they can accept as evidenced by

the maximum amount they are prepared to advance without collateral. Beyond this threshold, they will seek to take some form of collateral. This was echoed by a participant when he noted that...*for amounts under £3,000 for instance, no security is required; this is the maximum risk we are prepared to take.*

Hence, the amount required by the business will influence the lender's decision whether to take collateral or not and in the example above, SEs seeking loan amounts below £3,000 will most likely not have to provide collateral. According to a participant, the amount that can be granted on unsecured basis varies from £3,000 up to £25,000 depending on the credit facility involved. Generally, £25,000 appeared to be the ceiling for unsecure credit. For instance, one respondent said...*we also provide arranged overdraft involving amounts from £500 to £25,000 without taking any security but overdrafts above £25,000 we take security.* Another participant when asked a question on the circumstances under which collateral must be taken responded ...*usually when the amount exceeds £25,000...* Therefore, for these participants any credit request involving amounts in excess of £25,000 must be secure and this according to one participant is because...*the larger the amount involved the more difficult it may be for small businesses to proof that repayment will not be a problem and this makes it more likely for us to ask for security.*

Table 30: Circumstances under which collateral may or may not be required - England

Factors	Interviewees (N=7)							
	ENG1	ENG2	ENG3	ENG4	ENG5	ENG6	ENG7	%
Amount	√	√	√	√			√	71
Risk	√	√	√		√	√		71
Type of facility	√		√		√		√	57
Repayment capability			√	√			√	43
Relationship with borrower				√	√			29
Cost		√				√		29
Purpose of facility	√						√	29

The type of facility required was also identified by 57% of the participants as another reason why banks may not ask for collateral sometimes. The responses under this category were related to; the fact that some credit products are provided on secured basis whilst others are on unsecured basis; and the term of the facility under consideration. For instance, according to one participant...*Some of the facilities are relatively short term and may not be worth the pain... it is often less likely that something very dramatic will happen in a year or two that will make default inevitable but this may be a different story for facilities that will take say 10yrs or more to repay. It is more difficult to predict what may happen in such a distant future and for that reason we may not be able to rely on only the track record and cash flow projections this is where security may be very relevant.* These participants also revealed that some credit facilities are provided under certain government guarantee programs (such as the Enterprise Guarantee Scheme). Therefore, any borrower applying for credit under such a scheme is not required to provide collateral as government provides a guarantee for all such loans. This scheme exists to support people who are unable to provide the required collateral on their own.

Furthermore, according to 43% of the participants, the ability to make the scheduled repayments will influence the decision on whether to take collateral or not. This was what a participant had to say in this regard...*if we are sure that you have the capacity to repay the amount involved we may not need to take security.* Another indicated that...*the importance of security becomes an issue when there are doubts about the repayment of the facility.* It should be noted that collateral acts as a back-up in case repayments are not met. So once the bank is certain that repayment obligation can be met comfortably, it loses its significance to some extent. About 29% of participants each identified the cost of taking collateral, the purpose for which the funding is being sought and the bank's relationship with the borrower as the other factors accounting for why collateral may not be required all the time (see Table 30 above). The cost item included the processing cost of taking collateral, the cost of monitoring its suitability over time and cost of foreclosure. The reason why cost is considered when taking a decision on whether to require collateral or not is found in the words of one participant who said...*you can't always ask for security because there are cost implications, though some of this cost could be passed to the client in fees charged, not all costs can be recouped in this manner.* Therefore the interviews have shown that collateral is sometimes necessary when dealing with SEs and that some other times it may not be necessary. The most important factor that influences whether or not collateral will be required is the amount required and the risk of default then followed by the type of facility,

the repayment ability and then the cost, purpose of the facility as well as the relationship with the bank.

The interviews further sort to establish whether or not participants perceived the provision of collateral as a sufficient requirement; that is to say that the ability to provide collateral triggers the approval of the needed credit. All the seven participants did not regard the provision of collateral alone as sufficient to cause the credit request to be granted because of these three main reasons: (a) there are other more critical factors (b) the need to be responsible lenders and (c) the problems associated with collateral foreclosure (see Table 31 below). Almost all participants alluded to the fact that other factors are more critical in deciding whether to grant credit or not whilst 57% talked about the need to be responsible lenders as the reason why collateral per se is not sufficient.

Table 31: Why Collateral Alone is not Sufficient - England

Factors	Interviewees							
	ENG1	ENG2	ENG3	ENG4	ENG5	ENG6	ENG7	%
Other factors more critical	√	√	√	√	√	√		85
Need to be responsible lender	√	√				√	√	57
Foreclosure difficulties						√	√	29

About 57% of the participants perceived any attempt to grant credit based on the client's ability to provide collateral as irresponsible on the part of the lender and a disregard for the lending code. The need for creating an image as a responsible lender or maintaining such a public image appears to be so important to them and as such they will not grant credit on the basis that a borrower has provided collateral so as to create or protect such an image. This was what one person had to say in relation to the issue...*we adhere strictly to the lending code which requires us to be responsible in lending not only to businesses but individuals. To maintain our status as a responsible lender we have to ensure that the business can repay the amount involved and not just the mere fact that they have provided collateral".*

Furthermore, 29% of participants were of the view that collateral per se is not sufficient because of issues regarding the willingness to pursue foreclosure when there is a default. The question to ask is, why do banks take collateral and yet are unwilling or less willing to pursue foreclosure? The answer may lie in the quote below by one participant...*I will tell you another reason why we cannot bank purely on security. As part of being a responsible lender, society expects us to act sympathetically and positively when things go wrong with repayments especially when dealing with small businesses. This means that though we may take security, foreclosure is not always the best available option.*

One participant noted that...*we don't allow people to hide behind their properties and pretend as if they were credit worthy.* This is an indication that collateral cannot be a substitute for the borrower's creditworthiness. One must thus be credit worthy even without collateral to qualify for crdit. It can hence be deduced that credit worthiness is the key criterion when granting credit to SEs and the ability to provide collateral per se is not what makes one creditworthy but other factors identified below. About six participants indicated that there are more critical factors that influence the approval of a loan request. These more critical factors were divided into two groups. Whilst all the six participants mentioned the repayment capacity of the borrower, 67% talked about the credit history of the business and particularly the proprietor of the business (see Table32 below).

Table 32: the other critical reasons why collateral alone is not sufficient- England

	Interviewees (N=6)							
	ENG1	ENG2	ENG3	ENG4	ENG5	ENG6	%	
Repayment capacity	√	√	√	√	√	√	86	
Credit history		√	√		√	√	57	

The importance of these critical factors is seen in one participant's statement to the effect that...*if you have a bad credit history no bank will grant you a loan even if you had dozens of security to provide".* Also, another participant makes it clear that...*we lend because we believe people can repay not because they have security.* Banks thus tend to focus more on how the facility will be repaid by ensuring there is adequate repayment cover as described by some participant below,

...there should be sufficient repayment cover; for example if the business is required to make a monthly repayment of £1000 (amounting £12,000 p.a.) we expect cash generated or at least profits to be 2 or 2.5 times the annual repayment amount; for existing customers and new customers respectively. Another respondent observed that...*we have to ensure that the*

business can repay the amount involved and to do this we are more concerned with things like the cash flows, profitability, the business and personal financial commitments, how past finances have been handled and also taking a look at what information the credit bureaus hold on the customer. Participants as indicated by Table 32 above thus made it clear that the ability to repay as well as the credit history of the borrower are the two most critical factors that underpin every credit decision taken. According to one participant...*my performance is assessed by the proportion of approved loans that are successfully repaid.*

The interviews thus confirm that collateral is more of a necessary requirement for Ghanaian based lenders (especially UBs) than lenders in England. However, both sets of participants observed that the provision of collateral is never sufficient for any business that is seeking credit and the reasons advanced were very similar for both countries.

7.2 Lenders' Preferred Forms of Collateral

This section seeks to identify if lenders have certain preferences for the kind of collateral presented by borrowers and why. Interviewees were directly asked if they had preferences when it comes to collateral and why they prefer some forms of collateral to others.

7.2.1 Ghana

The responses were categorised into two. Whilst all 10 participants did make references to the form of collateral they prefer in practice, about 40% of them (all from UBs) went on to also make reference to the collateral they would ideally have preferred. All the four participants who made references to the collateral they would have preferred in an ideal world did identify cash or cash equivalents (such as fixed deposits and T-bills) as their ideal preference. Indeed, 66.7% of all the six UB participants did indicate that they would have preferred collateral in the form of cash or its equivalents when dealing with small businesses. In line with this, one interviewee noted... *well I think rather, if the bank had a choice, we will prefer cash covered security, we would prefer a cash covered security to landed property actually.* Another also said...*so ideally I would say that cash or cash equivalents are better. When I say cash equivalents I'm referring to things like government bills or fixed deposits. So ideally, what we prefer most is the customer's deposits in the special savings account and also others like the fixed deposits.*

Three main reasons were cited to explain why cash and its equivalents are considered ideal for small businesses. First, is the ease of foreclosure, followed by the ease with which security interest in such collateral could be perfected as well as the inappropriateness of other forms of collateral. All four interviewees who ideally would have preferred cash or its equivalents did attribute this to the ease with which it could be foreclosed as well as the ease

of perfection. Perfection refers to the set of actions taken to ensure that a lender's security interest in an asset is enforceable. Only 25% attributed this to the inappropriateness of other forms of collateral in terms of the problems encountered in dealing with them as lamented by one participant...*such tangible assets are taken in practice but there are too many problems associated with them*... This was presumably referring to the problems of perfecting and foreclosing security interest in other forms of security such as landed property. Given the fact that collateral may be sold during default to recover amounts of the debt outstanding, foreclosure will be of critical importance to any lender accepting collateral and of course, if the processes involved in taking a charge over the security are complex, it might hinder perfection and consequently make the security difficult to foreclose.

In reality however, 50% of all 10 respondents indicated that landed property was their most preferred form of collateral whilst the other 50% identified cash or its equivalents as their preferred collateral (see Table 33 below). All the participants who most preferred cash in practice also talked about having preference for other forms of collateral such as personal and group guarantees and automobiles. Such participants were all from MFIs. All the UB participants except one preferred landed property in practice. Indeed, all those who said they ideally would have preferred cash collateral, in practice, indicated they prefer landed property and the reason for that is discussed later. Irrespective of the fact that MFIs do accept landed property sometimes, none of the MFI participants did indicate landed property as their most preferred form of collateral.

Table 33: Forms of Collateral Preferred in Practice by Lenders - Ghana

Interviewees	Preferences for forms of collateral in practice		
	Cash/near cash security	Landed property	Others
GHUB1	√		
GHUB2		√	
GHUB3		√	
GHUB4		√	
GHUB5		√	
GHUB6		√	
GHMFI	√		√
GHMFI2	√		√
GHMFI3	√		√
GHMFI4	√		√
Percentage	50%	50%	40%

The findings of the interviews thus throw light on the fact that when it comes to the issue of lenders' preference for various forms of collateral, the answer may not be as straight forward

as the quantitative findings seem to indicate. Having said that, the results from Table 33 above, clearly confirm the quantitative findings that UBs have a much higher preference for landed property than MFIs. Though this may be true in practice, the interviews reveal that ideally, most of the UBs would also have preferred more liquid forms of collateral to landed property. Though the quantitative findings show that landed property is most preferred over other forms of collateral for both UBs and MFIs, the qualitative results above show that as far as MFIs are concerned this is not true. The MFIs prefer to combine the liquid collateral with other forms of security such as guarantees as can be seen from the statement below by one MFI participant...*before you qualify to be considered for a loan we ask you to start depositing money into a savings accounts on a daily basis for a period ... this is to help them build up a pool of savings that can be used as security...for first time borrowers we ask for 2 or 3 guarantors in addition to this deposit".*

The reasons for which some lenders in practice prefer cash and near cash collateral are the same as those explained earlier namely the ease of foreclosure and ease of perfection. As can be seen from Table 34 below, the reason why in practice, most UBs prefer landed property to others were identified as follows: its immovability (60%); persistent appreciation in its value (40%); the fact that it is readily available (60%) and the fact that it provides a greater motivation for repayment than other forms of collateral (40%).

Table 34: Why landed property is preferred to others in practice - Ghana

(N=5) Interviewees	Why landed property is preferred to others in practice			
	Its immovable	Widely available	Persistent Value appreciation	Greater motivation to repay
GHUB2	√		√	
GHUB3		√		
GHUB4	√	√	√	√
GHUB5		√		
GHUB6	√			√
Percentage	60%	60%	40%	40%

Respondents appeared to appreciate the immovability of property which makes it more reliable compared to other assets like automobiles. Comparing these two assets one participant noted...w*hen you secure a loan with landed property and the borrower runs away, he cannot take the property along with him.* This certainty in the first place may even prevent borrowers from trying to abscond. Secondly, the acceptance of landed property appears to provide a sufficient sense of security for lenders due to not only its market value

being substantial but also the fact that it is likely to rise over time; this is captured in the words of a participant that...*in our part of the world such properties appreciate, they don't depreciate. Land in our part of the world keeps appreciating all the time unlike vehicles. You see a vehicle may be costing GHC10, 000 today but due to depreciation after a year or two you cannot value it the same. For landed property they keep on appreciating all the time and if you use that as a fall back it is better for the bank.*

In relation to the motivation it gives borrowers to repay the loan, one interviewee said...*People will not want to lose their property. You know it is not easy to put up a building in this country, so they wouldn't want to put their investment in jeopardy.* Another stated...*people value their buildings so much that they are more prepared to cooperate with us in terms of repaying the loan.* In the developing world given the low income levels, it might take some people a life time to build a property and those who use them to secure loans are less likely to allow the facility to go bad because of the fear that they will lose their lifetime investment. The property may be the only precious asset the borrower has and he will do everything to get the loan repaid in order not to lose their most priced asset.

Finally some of these lenders (60%) also go for landed property even though they would have preferred other more liquid assets because of availability issues. Whilst landed property may be widely available in various forms, participants lamented that cash collateral or its equivalents may not be widely available and hence they have to make do with what is available. Responding to this issue one participant noted...*but of course cash covered security is rare, if the person had the money in the form of cash somewhere they wouldn't come and take a loan anyway. In the kind of market that we work in, things like shares and bonds are very rare and when it comes to SME owners they are non-starters.* Another also observed that...*for the small business, they most prefer to use their houses as security for the loans they want because that is all most of them have. So mostly we have to make do with what is presented to us.* Therefore, these lenders in many instances are settling for what would be their second best forms of collateral due to the constraint factors just discussed above.

7.2.2 England

From the quantitative results discussed earlier, three different forms of collateral (landed property, cash deposits and T-bills) were generally rated by respondents as what they most prefer. There was no difference in the level of preference for these three items. The seven participants in the interviews were thus asked to reveal which form(s) of collateral they most prefer when dealing with SEs. Majority of the participants (57%) could not give a straight

forward answer. The quotes that follow exemplify their reaction when ask the above question...*this is a difficult one because it depends on the number of factors.* Another participant also commented that...*this will depend on each individual case. In one case I may say property in another I will say a more liquid security may be cash deposits or fixed deposits or its equivalent.* These participants identified a number of factors that may influence their choice of collateral to include the following: the amount required; the type of facility; and availability (see Table 35 below).

Table 35: Factors that Influence Lenders Choice of Collateral - England

	Interviewees (N=4)				
Factors	ENG2	ENG3	ENG5	ENG6	Percentage
Amount required	√	√		√	75%
Type of facility			√	√	50%
Availability		√			25%

From Table 35 above only a minority of the participant observed that the preferred form of collateral was dependent on what the borrower is able to provide. This is an indication that though lenders may have their own preferences they are often not so rigid with such preferences but rather they tend to be flexible and try to make the best out of the options available to them. The amount of money the borrower requires will determine which form of collateral the banks will prefer most. Various references were made to the effect that where small amounts are involved banks tend to prefer guarantees as a form of security as well as more liquid forms of security such as cash or its equivalents (fixed deposits or bonds). Though what is regarded a small amount is very subjective, it appears generally that participants were referring to amounts below £25,000. This is reflected by a participant who stated that...*for smaller amounts, I will say a guarantee will be ok. For amount of about £25,000, if the client has shares, fixed deposits or some bonds I will be happy. For amounts above this, we can still consider these securities but not many small businesses will have such security with large values. For that reason you will be looking at whether there are some assets of considerable value such as an office block or residential property.*

It could be deduced from this and previous results discussed above that there is a limit to which unsecured lending could be done. Beyond this limit, banks may start with just taking a guarantee and more liquid security but also up to some limited amount. As far as small businesses are concerned, the provision of sufficient security cover becomes a problem as the amount increases even further to about £30,000 and beyond and that is when banks' preference may be switched towards landed property. One participant explains why this is

so...*small business owners tend to have liquid investments that provide sufficient security cover for small loans under say £30,000 but with larger amounts such liquid investments are often not sufficient and they will have to provide some more tangible and high value assets.* Another reason why the preference only shifts to landed property when the credit amount required is relatively huge, according to a participant is because...*landed property is good but unless the amount is so huge I won't consider it given the processing and administration cost involved.* The taking of landed property could be relatively more costly than other forms of collateral. Some lenders therefore do not find it economic to take landed property unless the loan amount involved is large enough to yield returns that will offset such cost. Apart from the loan amount, the type of credit facility required is an essential determining factor of which form of security banks will prefer (see Table 35 above). The type of credit facility was described in terms of whether the borrower is asking for a conventional mortgage or invoice financing. Where the facility being sought for is that of invoice financing, the preferred security is the invoices and for commercial or residential mortgages the property in question will be the preferred security. Some lenders will tend to prefer different forms of collateral for different credit facilities. A participant's statement quoted below confirms this conclusion, "*we also offer fixed rate business loans for small businesses that need amounts between £25,000 and £250, 000; ...there is one condition though, to qualify for this facility, it must be fully secured by owner occupied property*".

Despite the fact that most interviewees could not give a straight forward answer as to which collateral was most preferred to other, further probing revealed that in general, 57% of the all seven participants involved prefer cash or its equivalents when lending to SEs whilst the remaining 43% would prefer landed property. The preference for liquid security according to the participants is due to the absence of complicated administrative procedures in taking a charge or foreclosing on such security. As one participant observed, *Taking liquid security virtually involves no cost.* Reference was also made to the difficulty in foreclosing other securities like landed property - the time it takes to sell as well as the cost involved. Finally the value of other securities such as landed property, shares or bonds can be volatile but as a participant observed the value of cash does not decline. Whilst this may be true, it only refers to the face value and not the real value of money.

That notwithstanding, other banks may prefer to go for the landed property because of its intrinsic value to the borrower especially small business owners. It is believed to be the most valuable asset of many small business owners and that they will only use it to secure a facility if they know they can repay. This is the idea portrayed by one participant when he said...*no one wants to lose what could be their most priced asset and that will put pressure*

on them to keep to the repayment plan and quickly discuss any difficulties with the bank for prompt action to prevent things going wrong. The market value of property is also considered to be substantial that even when its value falls the bank could still recoup a good amount of the outstanding debt. Results from this section show that in general many banks prefer cash security or its equivalent when dealing with SEs. However, at any point in time the preference for any form of security depends on different factors. So whilst one form of collateral may be preferred in one instance, the same bank may prefer a different form of security in another instance.

7.3 Issues of Concern When Taking Landed Property

To help the researcher determine whether property registration in any way affects the acceptability of landed property-based collateral, participants were asked to identify the issues that concern them most when taking landed property as collateral. In other words they were to identify the factors that will influence their decision to either accept or reject a landed property that is being offered for collateral purposes.

7.3.1 Ghana

The interview revealed five factors that lenders are most concerned about when taking landed property as security for a credit facility (see Table 36 below). The most prominent of these is the issue of property ownership. This is followed by the saleability of the property, value of the property, encumbrances on the property and insurance.

Table 36: Factors Influencing the Acceptability of Landed Property – Ghana

(N=10) Interviewees	Factors				
	Property ownership	Saleability	Property's value	Encumbrances	Insurance
GHUB1	√	√	√	√	√
GHUB2	√	√	√	√	√
GHUB3	√				
GHUB4	√	√	√		
GHUB5	√		√	√	
GHUB6	√	√		√	
GHMFI1	√	√	√		√
GHMFI2	√				
GHMFI3	√	√	√		
GHMFI4	√	√	√		
Percentage	100%	70%	70%	40%	30%

Property ownership

The issue of property ownership appeared more prominently than the others as all respondents were worried about one ownership issue or the other. The main concerns about landed property ownership were further split into four sub categories shown in Table 37 below. These concerns included: documentary evidence of ownership; verification of

ownership; ownership disputes; and family owned properties. The difference between MFIs and UBs responses is also clear from the table below.

Table 37: Concerns about Property Ownership - Ghana

(N=10) Interviewees	Factors			
	Documentary Evidence of ownership	Verification of property ownership	Ownership disputes	Family property
GHUB1	√	√	√	√
GHUB2	√	√	√	
GHUB3	√	√	√	
GHUB4	√	√	√	
GHUB5	√	√	√	
GHUB6	√	√	√	
GHMFI1	√			√
GHMFI2	√			√
GHMFI3	√	√	√	√
GHMFI4	√	√		√
Percentage	100%	80%	70%	50%

The concerns over documentary evidence of ownership were related to the kind of landed property documents which were regarded as acceptable to the various lenders. The documents identified ranged from the land title certificate, the lease/indenture, site plan, the statutory declaration and allocation papers. About 60% of the 10 interviewees with concerns over the documentary evidence of ownership would only accept the land title certificate and the official lease on the property registered at the Lands Registry and can independently be verified. Only 20% of the interviewees (all of whom were from MFIs) indicated that they accept both registered and unregistered documents but the remaining 20% did not indicate which documents are acceptable to them. As noted by one of these interviewees...*for my bank, the land must be registered with the lands commission before we can take it as security...we only accept registered property.* All those who accept only documents certified by the Lands Registry were from Universal banks. The extract below explains why unregistered landed property documents are not accepted.

...Before we accept a landed property ... we must see the title certificate. If there is a lease that can be verified from the Lands Registry, then we can accept it too. This is because, in Ghana if you don't have this official lease or title certificate, your legal ownership of the property is in. Some people have the allocation papers alright but we don't take them. With these kinds of documents somebody can spring up anywhere and challenge the ownership.

When a respondent was asked if he would accept the other unregistered documents, his response was, *No I won't, without the registration, it means it is a recipe for litigation one day. You see earlier on, we used to accept even allocation papers and experience showed that for most of these properties when the owners defaulted and we requested the property to be sold, they ended in ligations.* The registered documents are thus seen by some lenders as the only ones that properly confer legal ownership of a property to an individual as well as being perceived to be immune to ownership disputes. Even though there is evidence in Ghana that some registered titles have been quashed in the law courts it appears that lenders nonetheless uphold them highly at least in comparison to the unregistered documents. Indeed, Alhassan (2006b) argues that the unregistered documents available remain unstandardized and often interpreted differently. The lack of a common benchmark for interpretation and application he argues reduces their relevance. Another reason for not accepting unregistered land documents like statutory declaration and allocation notes is related to the problem of multiple sales and ownership uncertainty. This is explained by one participant as follows...*somebody can sell the land to Mr A and sell to Mr B and to Mr C, he will give all of them the allocation papers or and they can all get the statutory declaration but when you go to the Lands Registry for the title certificate it will just be for one person.* Another participant also noted...*for the borrower whose property is not registered, we cannot take that property as security because we cannot be 100% sure that the property belongs to him/her.*

Property ownership verification

The other concern raised about property ownership had to do with verifying ownership. Six of the eight respondents who cited such concerns conduct a formal search through the records at the Lands Registry and were all from UBs. The rest (all from MFIs) do an informal verification of the property ownership and according to one of them this is what it involves:

...we ascertain that it belongs to the customer through going to the local area and speaking to people around or even the elders and chiefs of the area or the indigenes... if we do not have much time to investigate we ask for guarantors to back the property they offer as security. The above is an admission that the informal verification process may be time consuming and the outcome could still be uncertain. To counter the effects of this, these lenders tend to take additional precautionary measures to protect themselves. Such actions as pointed out in the quote above may include asking the borrower to provide a guarantor in addition to the property should there be problems with the property ownership later within

the term of the facility, the guarantor could be liable for the outstanding debt. About 67% of the six interviewees who conduct a formal search as the means of verifying ownership made references to the use of insiders within the lands Registry to facilitate the search process. When asked about how difficult it is to verify ownership regarding the time involved, one interviewee confessed that...*As a bank we have also established our links in terms of those who carry out the search; so it takes a relatively shorter time.*

Ownership disputes

Another property ownership concern for lenders is the prevalence of disputes over who owns the property and for that matter, whether or not one has the right to mortgage it. Not only are lenders concerned about the issue of multiple sales of the same property but also they try to earmark certain locations that are noted for land disputes and avoid properties located in such areas as much as possible; this is shown in the following statement by one participant...*there are also some areas that are well known for land disputes and so if the building is in such an area we are a bit hesitant to accept it.* Another aspect of ownership disputes identified is litigation and the ability to proof legal ownership of the property in a law court. Lenders are mainly concerned with being able to challenge any counter claims to an assigned property in the court and the only way they believe that could be done is by accepting registered properties as the title certificate serves as the ultimate legal proof of ownership. Indeed a participant in reference to this stated...*you may build your own house and have the necessary allocation papers but without the property registered at the Lands Registry, you are not regarded as owner legally.* Even though the 1992 constitution gives recognition to customary ownership as evidenced by current occupation and use, lenders mostly from UBs as per the results of this interview appear to be driven by the perception that legal ownership is derived from the possession of registered documentary evidence of ownership.

Family ownership

Finally, the issue of family owned properties was of importance to 50% of interviewees. It was noted that any property documents being presented for use as security are expected to bear the names of the prospective borrowers. Properties that are communally owned by the whole family are not accepted mostly because of the likelihood of litigation by other members of the family and the time and effort involved in trying to get the consent of all family members. An interviewee noted that...*when you even investigate, you find out it is for a family made up of their fathers, uncles and others. How can we take such a property ...how long do you think it will take to find all the family members to get their consent. if we ignore*

this we will be found wanting in the law court. This is evidence that the problem may not be just about the issue of registration but rather the fundamental nature of property ownership. With the evidence that the tenure system in most parts of Africa is fast evolving due to rapid urbanisation (see chapter two), this problem is not expected to be an issue in the medium to long term.

Saleability of property

Apart from the several issues of property ownership discussed above, the next most important worry for lenders when taking landed property was identified to be how quickly the property can be liquidated. This, as one respondent noted is because...*if we can't sell it quickly, then our capital is locked up. The property may also depreciate in value over the time we take to look for a buyer and that can be costly as the value may not be sufficient to recover the entire loan amount.* Saleability has been explained to depend on not only the difficulties involved in getting a court order to sell but also the location of the property which may make it difficult to find a buyer. The following statement by a participant typifies this sentiment. *The courts don't protect the banks at all, because someone will come and use his landed property to secure a loan and default and yet you go to court and the court will give you the mere excuse that for moral reasons the bank cannot sell the property.* Another participant relating the problem of saleability to location observed...*a beautiful building in the village may not be taken as a security.* The whole essence of taking collateral is to sell it when there is a default. It is hence not surprising that participants did point to it as a big worry when taking property. As already noted, that is one reason why most lenders did not consider the provision of collateral as sufficient to obtain credit.

Value of property

The market value of the property was also of much concern to the participants. as pointed out earlier it does not only determine how much one can borrow but also how much protection may be available for the lender. Despite the fact that 75% of the four MFI respondents talked about the valuation of the property, 25% of the references were to the effect that the value is not a big problem because SEs typically apply for small loan amounts relative to the their property values. Another 25% were however concerned about the nature of the property and one of them commented ...*we will not accept any two by four building roofed with grass and those kinds of mud houses you find in a typical village.* On the contrary 67% of the six UB interviewees did speak about property values but in relation to the forced sale value of the property. This was described by one interviewee as...*how much the property will sell for*

under the worst case scenario. Another observed that the amount they lend is a percentage (about 75%) of the forced sale value of the property.

Encumbrances on the property

About 40% of all 10 interviewees in this study expressed concerns about the possible existence of encumbrances which could frustrate property repossession efforts. All such interviewees were however from UBs with none from MFIs having such concerns. The encumbrances they mentioned included third party interest in the landed property held by other individuals or lenders as well as whether or not there are any court injunctions over the property. Whilst all of these participants talked of encumbrances in terms of third party interest, one of them did relate it to whether or not there is some court injunction or an on-going court case on the property. The effect of such third party interest on the property can be seen from this illustration by one interviewee:

...Mr A brought his document for a loan, everything was genuine and we gave the loan, he defaulted, then the court gives the order to sell but his wife comes in with moral suasion. This is my husband, we have three children, if the court allows the bank to sell this building, we are going to stay on the street. Meanwhile we toiled together to build it and my interest was not taken into consideration before the house was used for this facility. They say this and mostly the court will oblige if the woman is able to proof indirectly or directly and so the bank is disadvantaged.

The encumbrance could also come in the form of another lender having prior claim to the property where the property has already been used to secure a credit facility from another lender. Without the prior claim to the property, a lender is prone to losses as other lenders' interest will have to be catered for first. The fear of this may hold back some lenders from accepting such properties. This is the fear expressed by one participant when he was asked a question on the circumstances under which he would not accept landed property as collateral for a loan.

...a report will be generated which will tell us whether that property is free of any encumbrances, whether that property has been used somewhere or not. So when we get the feedback that, that property has been used at another bank for us we wouldn't want to take it even if there is space to accommodate our risk. Assuming you have a building that is costing GHC500,000 and you have taken GHC100,000 from one bank, so it is like there is room for us to use the remaining but when a problem arises what happens is the first bank that registered its interest in the property will be catered for before we are catered for. That is

the legal requirement, so we will want take possession of a property that is free of any encumbrances.

Availability of property insurance

Finally, about 30% of the interviewees (two from UBs and one from MFI) were also concerned about property insurance. Those from UBs indicated that they do not compromise on insurance because as one said...*if we don't insure it and tomorrow there is fire outbreak and the building is burnt, we have nothing to fall back on.* There were concerns about the negative attitude of the average Ghanaian towards insurance. Nonetheless, the UBs indicated that they do not waive that requirement; one noted that...*even if it is a computer you must insure it.* Whilst some lenders consider insurance as a pre-disbursement requirement, others referred to it as a post disbursement requirement. The comments from interviewee below illustrate this point...*we insist on insurance but not at the point of disbursement, for us when we get the search result and the property is free of encumbrance we will go ahead to disburse the loan but we will also go ahead to insure the property and debit the customer's account.* Another also noted that...*all properties taken as security must be insured, comprehensively, we make sure you insure before we even accept.*

Indeed, the customer is made aware that the property will be insured over the term of the loan. So each client has to give his consent and pay for the cost. Given the concern expressed over the negative attitude of most Ghanaians towards insurance, it appears that many of the properties are not insured consequently many of these properties would not qualify for use as collateral unless borrowers are willing to bear the extra insurance cost. This is because insurance is one way through which the lenders protect their interest in the property. The only one MFI participant that did mention something about insurance, in response to the issue of whether or not they insist on property insurance remarked... *you will chase all your customers' away ooo.* Apparently he was saying that insurance is not something they insist on when taking landed property.

The above discussion has revealed in detail the issues that lenders are most worried about when taking landed property to secure credit facilities. In other words, it has revealed the factors that affect the eligibility of landed property for use as collateral. These findings in a lot of instances do confirm the quantitative findings already reported in the previous chapter. For instance, on the issue of property ownership, no participant talked about the nature of the land rights held by the borrower (leasehold/freehold) an indication that it is not a critical factor and confirming the quantitative results which revealed that this factor was largely considered as least important and one that should be ignored. Furthermore, about 60% of the

interviewees did acknowledge that they accept only registered property. Interestingly all these respondents were from UBs as the MFI participants admitted that they do not put priority on landed property but when necessary they accept both registered and unregistered property. This was also a confirmation of the quantitative finding that property must be registered to make them suitable collateral for UBs but not for MFIs. The same applies to the issue of property insurance and market value. The qualitative study did however provide other important issues that were not captured in the quantitative aspects and these include the issues of saleability and encumbrances amongst others.

7.3.2 England

The extent to which landed property may be considered as eligible for use as collateral in any SE credit contract was reported by interviewees to be influenced by several factors (see Table 38 below). The results show that about 86% of participants were each most concerned about the kind of encumbrances on the property and the property's value. The use of the term encumbrances by participants was mainly in reference to: the existence of prior mortgage(s) on the property; the presence of restrictive covenants on the use of the property; and the existence of a compulsory purchase order or a demolition order on the property.

Table 38: Factors Affecting Acceptability of Landed Property as Security - England

	Interviewees (N=7)							
Factors	ENG1	ENG2	ENG3	ENG4	ENG5	ENG6	ENG7	Percentage
Encumbrances	√	√		√	√	√	√	86%
Property's Value	√	√	√	√	√		√	86%
Ease of foreclosure	√			√	√	√	√	71%
Ownership	√		√	√				43%
Insurance		√	√	√				43%
Others	√							14%

Participants showed definite signs of worry about not having prior claim over the property because as one participant put it...*without the first legal right the facility may be as good as an unsecured loan.* These banks would not accept the property if any of the above mentioned encumbrances exists on the property. For instance, if the property has already been used to secure a loan somewhere it might not be accepted. As clearly pointed out by one participant...*it is also very rare for us to do a second mortgage we would rather refinance*

the existing mortgage and take over prior claim to the property. Refinancing is one way that lenders may try to go around or avoid the risk associated with second mortgages. In relation to this however, some lenders may agree to do a second mortgage on a given property provided its value is still sufficient to accommodate the mount required but this is the furthest lenders may be prepared to go as any property that already has a second mortgaged will not be accepted for another loan this is evidenced in the quote that follows, *"If there are already two separate charges on this property we will not accept it but one may be ok".* This is understandable because the higher the number of mortgages that already exists on a property the higher the risk exposure for any subsequent credit secured by that property due to reasons previously explained.

An equal level of worry was expressed about the value of the property intended for use as security (see Table 38 above). Whilst these participants focused on the adequacy of the cover provided by the property's value, there were concerns about the expected volatility in value and the forced sale value of the property. After considering everything if the forced sale value is regarded inadequate relative to the required loan amount, accepting the property may be a problem because as a participant observed...*that will determine how much protection the bank will get during default.* In such a case the best the borrower could get is a reduced amount which will mean their access to credit will be constrained by the inadequacy of the property's value.

In the worst case scenario, banks turn to foreclosure of security as the means to recover outstanding debts. Its importance was highlighted by 71% of the participants (see Table 38 above) who indicated they will most likely not accept a property if they were sure that foreclosure will be difficult if not impossible. When one participant was asked to identify the circumstances under which he will not accept a landed property, he said...*if I am reasonably convinced that selling it will be difficult for one reason or the other, then, I will hesitate taking it.* This was how another participant expressed his worry about the ease of foreclosure...*sometimes it can be quiet a daunting task when you have to sell the property. So my concern will be to consider all the issues that may affect the sale and then decide if there will be a problem or not.* So what issues affect the ease with which a property could be sold? One participant gave a hint to this question in his statement that...*I am concerned about how easy it will be to sell that property and this will usually depend on things like its location, accessibility to it, the facilities in it, and its state of repair or disrepair.*

Furthermore, issues bothering on property ownership and insurance were each of much concern to 43% of the participants. On ownership, participants spoke about the ability of the

borrower to provide a legal proof of ownership but there was no mention made of property registration. Since legal ownership could be ascertained through the provision of unregistered deeds, it could be assumed that any such documents would be sufficient evidence for lenders irrespective of whether they are registered or not. This could be the reason why participants talked about a wide range of issues but said nothing about property registration. Nonetheless the researcher subsequently prompted each participant to ask whether they would accept a property if it were not registered at the Lands Registry. All of them agreed that they would accept unregistered property provided that their own investigations provide a clear confirmation about the ownership of such property. In response to the question, one participant reacted...*that's absolutely fine. Occasionally we do encounter situations like that. So far as our investigation comes out clean and it meets the other requirements I mentioned then it passes for use and is accepted.* Another also noted that...*If not registered, it is more difficult to take a charge over property. There are a pile of deeds showing a series of sales to work through. The solicitors handle all such cases to investigate the legal ownership and authenticity of the deeds. Apart from that it is not much different from how we treat registered property.* Contributing to this point another participant also said...*As long as our lawyers can ascertain the right ownership and verify any related documents, location and boundaries of the property there shouldn't be many problems.*

The responses (quoted above) demonstrate and also confirm initial suspicion that banks will not reject a landed property because it is unregistered even though some do admit that processing such properties could be difficult. This finding is in conformity with the quantitative finding that about 80% of respondents accept both registered and unregistered property in England and that property must not necessarily be registered to make them eligible for use as collateral. The 43% of participants, who talked about insurance, said they will not accept a landed property as security unless it is insured or the owner is prepared to insure it. However, it appears that insurance is not a big problem to these banks because it appears property insurance is popular amongst people in this country. This notion is confirmed by one participant who stated that...*this is not usually a problem as most people would already have insured their properties.* This indicates a culture of safety in this country which was not identified in the Ghana study. Only one participant talked about other factors that may influence the decision not to accept a property such as the ability to provide a planning permission for that property. Indeed without the necessary planning permissions the property might have been put up illegally and hence subject to demolition with its associated consequences for lending banks.

7.4 Landed Property Registration and Loan Terms

The interviews also sought to establish whether or not borrowers who possess registered landed property could derive any benefits in terms of the loan terms they are offered relative to others with unregistered property. Interviewees were given a scenario involving two borrowers of similar credit worthiness except that one possesses a registered property whilst the other possesses an unregistered property; they were asked if they would offer the two borrowers different interest rates, fees/commissions, loan amounts and repayment periods.

7.4.1 Ghana

Interest rates and fees

In terms of the interest rates charged, about 80% of all ten interviewees did not agree that registered land owners are given or will be given preferential treatment in the form of lower interest rates. About 20% however, were of the view that the registered property owners may be offered lower interest rates. All the four MFI participants did disagree that registered property owners are offered lower interest rates compared to 67% of the six UB respondents. The interviewees from MFIs noted that the interest rates are not negotiable as they are often predetermined by the institution. To show his disagreement one MFI participant quizzed...*if the two borrowers are equally credit worthy without security, why then should we give preferential treatment to one at the expense of the other?* A UB participant also noted that...*having your property registered will not as it were influence the rate that we charge.* The possession of registered property is most likely not going to attract lower interest rates from both UBs and MFIs. The minority who indicated they may offer lower interest rates to registered property owners attributed this to their perception that registered property ownership has low risk. Not only are registered property owners considered by these interviewees as less risky but also the provision of registered property titles according to them gives lenders more assurance than an unregistered property does. The perceived lower level of risk associated with registered property titles may work to reduce the interest rates charged in a manner described below by one interviewee.

...definitely the one whose property is registered at the Lands Registry is considered by us as less risky. So in terms of the interest rate, that customer may get a lower interest rate because we have something called the scoring sheet. We score the customers on various points before we arrive at the interest rates that the customer will have to pay. So the one with a registered property will get a higher score and ranked higher and the interest rates will not be the same. Even if we decide to help the person that has a property not registered at the Lands Registry, that person will definitely be paying higher interest rates. The association of registered property titles with lower levels of risk by some lenders probably

stems from the perception that registration provides the ultimate legal prove of property ownership which is of prime concern to certain lenders when taking landed property. The fear of the legal risk regarding property ownership makes some lenders seek reassurance by taking registered property.

On the issue of the fees/commissions charged, all of the interviewees argued that such charges are a fixed proportion of the loan amount and therefore the actual amount paid as fees would only vary with the loan amount but the percentage is fixed and not negotiable. Such charges cover the administration and processing cost. Both MFI and UB interviewees noted that they charge standard fees and that will not change because a borrowers' property is registered.

Loan amount

Just like the findings on interest rate, 80% of respondents also disagreed that registered property owners can borrower larger loan amounts than those with unregistered property. Four of these participants were each from MFIs and UBs. The main reason why a majority of the participants disagree that registered property owners are allowed to borrow larger sums compared to unregistered property owners, according to participants is the fact that the amount one can borrow depends on some factors other than the provision of registered property titles. This can be deduced from one UB participant's statement to the effect that...*borrowers can only ask for larger amount and we will allow it if their finances can support such larger amounts.* A MFIs respondent also noted...*with the amount, businesses can borrow amount within certain limits that we set. When you come to us first, you can only borrow up to 300 Ghana cedis for a start and from then onwards we can gradually increase the amount depending on the way you went about paying the previous loans. So we will not say because you have a registered property you should borrow more than the other.* The ability to repay a loan as evidenced by the financial strength of the borrower was thus seen as most fundamental influence on the amount one can borrow. This is also evidence that some MFIs have policies which sets limits or defines how much borrowers can borrow. This process allows relationships to develop over time and the trust established reduces risk and allows lenders to increase how much borrower may be permitted to borrow.

Only 20% of the participants agreed that registered property owners may be allowed to borrow large amount compared to unregistered property owners and the perceived low risk associated with the possession of registered property was the reason cited. For instance, one interviewee's observed that...*the one with an unregistered property is seen as a risky venture. so we may want to try them may be on something smaller so that in case of default*

the problem will not be huge on our neck. So definitely the amount we will give to a person with unregistered property will be lower than those with registered property. The perception that unregistered property is more risky motivates some lenders to try to find ways of mitigating the potential losses that may be associated with this risk and this may be done by limiting the amount such a person is allowed to borrow so that when there is default, the banks actual losses will be minimised. Whilst a majority of participants disagree that the registered property owners will not be allowed to borrow larger amounts, there is little evidence from the interview that registration could still influence the loan amount that one can borrow provided it raises the value of the property. This was deduced from the comments of one UB participant that...*the only thing the borrower stand to benefit is, the higher the value of the property they are providing the higher the loan amount they can access but as to getting a concession on interest, fees and the rest, we don't have any package of a sort.* Indeed research has shown that land values do rise after registration (see chapter three). Hence, it could be argued that property registration could increase the loan amounts that people can borrow by increasing property values.

Repayment period

Only one interviewee agreed that the repayment time may be different for registered property owners relative to unregistered property owners. One participant did not say anything related to the repayment time but the remaining eight disagreed that the repayment time borrowers are allowed is influenced by the kind of property one possesses. .The findings so far on whether the possession of registered title influences the loan terms a borrower is offered have been nicely summarised by a participant who observed that...*we don't grant the credit because you have security. So if the two borrowers are equally credit worthy without security why then should we give preferential treatment to the registered property owner at the expense of the unregistered property owner?* This by implication is an admission that the conditions offered to borrowers are independent of the kind of landed property they present as collateral

7.4.2 England

In England, the reaction of participants to the issue of whether property registration affects the loan terms borrowers are offered was the same as that obtained from Ghana. All seven participants were unanimous in saying that the registered property owners in the scenario cited earlier would not be treated differently from the unregistered property owners in terms of the loan conditions they are offered. This was how one of them reacted to the issue...*the primary thing we take into consideration is the ability to repay the amount involved. Therefore if any two borrowers demonstrate a similar ability to repay a loan, they have both*

met the most important requirement and it will be unfair to give the one with registered property better terms than the other. This indeed points to the fact that the terms or conditions that are woven into a credit contract are mostly a function of the borrower's ability to service the facility being sought for. Participants also did not generally see any reason why the two borrowers in the scenario cited earlier will be treated differently provided both of them are able to provide a legal proof of their ownership of the said property. On whether or not interest rates are not negotiable, a participant said...*even though sometimes these could be negotiable, this may only be done based on the other things such as relationship with the bank and not whether their property is registered or not. That will not make a difference.* Other things that could influence the rates charged is the level of risk associated with the credit application but since participants in this country did not consider the possession of unregistered property as risky, they did not consider registration as a basis for deciding the interest rates to charge.

It was also pointed out that the fees charged are usually a fixed percentage of the loan amount (about 1.5% but varies across banks) and not negotiable. By way of further probing, participants were asked why fees are fixed for both registered and unregistered property owners given that cost of verifying unregistered property may be higher. The statement from one participant quoted below typifies the explanation provided...*fees involve money that come to us to cover the cost of the paperwork but the search charge goes to the Lands Registry and not us. So it's not part of our charges.* Hence, even though processing registered property may involve lower cost compared to unregistered property, it does not influence the charges of the banks. Nonetheless the overall cost of borrowing for businesses will be lower for the registered property owner. Regarding the cost of credit (interest rates and fees), it was established that credit facilities are not priced based on the kind of property (whether registered or unregistered) that is provided but rather other factors such as the banks cost of funds, riskiness of the borrower and relationship with the lender.

Just as the cost of borrowing, all seven participants did not also agree that the possession of registered property could allow property owners to borrow larger amounts of money than the unregistered property owner. In the words of a participant...*both borrowers can borrow any amounts they desire provided they can service the facility.* It was established that each borrower is able to require any amount they want. The bank however, only decides whether to grant that amount or reduce it based on the person's ability to repay. The only thing that limits the amount one can borrow is the ability to repay and the property's value but not the possession of unregistered property. With regard to the repayment time, all participants debunked the notion that registered property owners are offered loan repayment period

different from that offered to unregistered property owners. This was what one interviewee had to say...*repayment time is flexible for all borrowers and depends on their particular circumstances such as cash flow patterns*... Repayments could be scheduled to fit into cash flow patterns of the business to ensure that anytime repayments are due, the business will have cash inflow to honour its obligation. The above results have made clear that registered property owners are not treated differently compared to unregistered property owners in terms of the loan condition offered provided that both set of borrowers are credit worthy. The outcome of the interviews thus reinforces the quantitative study which established that the possession of registered property does not influence the loan terms that are offered to borrowers.

7.5 Factors Responsible for Turning down SEs Credit Applications

The literature is inundated with arguments that the reason why SEs cannot obtain credit to grow their businesses is the lack of registered property titles. The interviews further sought the opinions of lenders regarding the most important factors that influence their decision not to grant credit to small businesses. The findings from both countries are presented below.

7.5.1 Ghana

The 10 participants identified six different factors to explain why SEs sometimes have difficulties in accessing credit. The responses have been summarised in Table 39 below. The most important issue identified was the serviceability of the loan. This was followed by the high risk of lending to SEs, high degree of informality in the conduct of their businesses, the lack of suitable collateral, the low capacity to manage the business and other reasons in that order of importance (see Table 39 below).

Serviceability

Majority of the participants (90%) were of the view that the problem of serviceability (the inability of borrowers to demonstrate or proof that they can repay the amount they are asking for) is the most critical reason why SE loan applications are unsuccessful. A participant observed that...*for most of those who do not get the loans they want, it is because we are convinced that they cannot repay by looking at their incomes and expenses.*

Table 39: The Most Important Reasons for Turning Down SE Loan Applications - Ghana

(N=10) Interviewees	Factors					
	Poor Serviceability	High Risk	High informality	Lack suitable collateral	Low Mgt. Capacity	Others
GHUB1	√	√	√	√	√	
GHUB2	√	√		√		
GHUB3	√	√	√	√		
GHUB4	√	√	√	√		
GHUB5	√		√		√	√
GHUB6	√			√		
GHMFI1	√	√	√			√
GHMFI2	√	√				
GHMFI3	√		√			√
GHMFI4		√			√	
Percentage	90%	70%	60%	50%	30%	30%

On the issue of serviceability, these participants were mainly concerned about cash flows as may be reflected by the account performance of the borrower as well as the overall profitability of the business or its prospects. About 44% of the participants, who talked about loan serviceability, mentioned weak cash flows as the main cause of their worries about loan repayment. According to one participant, they are worried about weak cash flows because...*loans are serviced from the cash flows of the borrower. If they have a cash flow challenge meeting their repayment obligation will not be feasible.* This confirms the old saying in finance that cash is king. The business must not only be profitable but it must be generating sufficient cash to meet its obligations or else it could go into liquidation even though it is profitable. The borrower's ability to repay a loan could be assessed by looking at the amount of cash the business is bringing in and how much it is taking out. The net cash flow does not only determine how much debt one can take on (debt capacity) but also whether at all one is credit worthy. That is to say, can the current net cash flow support repayment of the required credit?

Regarding the relation between cash flows and credit access, one participant went on to complain that...*customers can open an account with us ok but maturity of their payments do not go through the account. They keep the money in the house and later come to ask for a loan but given the turnover on the accounts these customers have, they get a smaller loan or nothing. However, if they had brought every single penny that they had through the account that would have given them a higher turnover to enable them access more loan.* Indeed, what this participant was referring to is the fact that sometimes, the barrier to credit access for SEs is not that they cannot generate sufficient cash to repay loans but rather, they are unable to provide any proof of such cash flows. Cash flows may be good but due to the poor savings culture this may not reflect in the client's account and lenders may not have any evidence of

this. The lack of evidence of good cash flows causes lenders to assume cash flows are not good just to err on the side of caution. The ability to demonstrate that loan repayment will not be a problem will not only pave the way for the needed credit to be supplied but as note earlier, could also nullify the need to provide collateral.

About 56% of the participants who identified loan serviceability as the key to credit access related it to the business of the borrower. Three of them were concerned about the type of business (e.g. farming, transport etc.) as one participant emphasised...*also the business matters, for example we don't give credit to tro-tro and taxi drivers or farmers; most of our credit goes to traders and contractors".* Two were also concerned about the nature of the business whether it is a start-up or an already established and profitable business. For instance, one of them noted that...*about 95% of all banks shy away from lending to start-ups.* The same two participants who were concerned about the nature of the business also expressed worries about the industry within which the business operates and its prospects. This was how one of them put it...*another thing is the business prospect. May be you are into a particular line of business and may be the business sector is declining. Sometimes we are cautious in putting money in because if that business sector is declining then there is the likelihood that you may not be able to service the facility being offered but if that business sector is seen to have good prospect then we will assist you. You see now we have oil, so may be if the business has to do with that line of business we may want to do it because it has prospects.* Even though the performance of the industry may be out of the control of the borrower, it nonetheless affects their likelihood of obtaining credit because a declining industry can lead to default.

High risk

The second most important barrier to credit access identified by 70% of the participants is the high risk associated with lending to small businesses. The risks identified had to do with the possibility of the borrower not being able to keep up with repayment obligations.

Two of these participants generally perceived SEs as highly risky. Indeed, one of them in talking about the riskiness of SEs said...*all these things together make them too risky to deal with.* Another noted that...*these small businesses cannot be trusted that much because they are highly susceptible to very petty issues. They can look good today and tomorrow they are gone.* This vulnerability tends to make lenders cautious in dealing with SEs. They may not lend at all and when they decide to lend it is very restrictive.

About 57% of the seven participants who commented on risk were making references to the credit history or track record of the borrower whilst about 14% each made reference to the

personal life styles of borrowers, the prospects of the business and inappropriate address systems. Thus, credit history appears to be the best proxy of default risk. One participant's statement typified the responses regarding default risk...*if it happens that may be you have taken moneys from other banks and defaulted you may have operated a very good account with us but we may not give the loan.* Failure to fulfil past loan repayment obligations could have a devastating effect SEs prospect of obtaining loans now or in the future. A poor credit history could be a good indicator of the borrower's character and willingness to repay. Though the ability to repay may be excellent, if willingness to repay is low as evidenced by a poor credit history that could be disastrous for the lender and this is probably why 'ability' alone may not be sufficient to enhance access to credit. Of course, the prospects of the industry as noted above could also be a risk factor as it is capable of negatively influencing the fortunes of the business and hence its ability to repay the advanced credit.

Informality

Third in the order of importance is the high level of informality in the small business sector in the country. About 60% of all the participants identified the informal nature in which SEs are conducted as the reason why they have difficulty lending to the sector. Two of these participants related this problem of informality to the non-use of the banks by SEs for their transactions as most of them prefer to keep cash at home rather than in a bank account. This affects their account turnover and hinders their chances of getting a loan. The lack of integration into the formal banking system denies lenders an opportunity to gather essential financial information to assess the repayment capability of potential borrowers. This worsens the information asymmetry and increases the credit constraint problem. Two participants also related informality to the apparent lack of separation between business and personal transaction. Thus, the business and the proprietor are essentially the same. As noted by one participant...*every piece of expenditure, be it personal, business or domestic, passes through the same businesses' income and they can barely tell whether they are making a profit or not.* This problem is typical for most sole proprietors where the business and owner are inseparable. Usually the personal circumstances of the owner affect the performance of the business and vice versa which inevitably makes such businesses risky in the eye of the lender.

However, the majority of the respondents (five respondents) who saw informality as the cause of the credit constraint spoke of it in terms of the lack of appropriate documents and poor record keeping by SEs. Participants pointed to the fact that most of the SEs are not able to provide proper records of their business transactions. Their sales are not documented neither are the businesses' expenses. They are also unable to provide formal documentary

requirements such as the need to provide formal financial statements and banks statements amongst others. This was what a participant had to say in this regard...*the major thing is they don't have the right documents. Just ask one to provide their financial statement or even a bank statement and they cannot do it or even simple receipts or invoices and they have none.* The following statement also shows the frustration of one participant regarding the lack of financial records...*some have no records at all and in financial analysis you need records to do analysis; they sell so much but you are not able to quantify how much they sell over a period of time.* This situation does not auger well for businesses' quest to access credit because such records and documents are essential in assessing a credit proposal. So their absence could lead to a wrongful classification of the borrower as high risk and hence a decision not to advance the required credit.

Lack of collateral

As shown in Table 39 above, the lack of collateral was identified by 50% of the participants as another very important explanation why some SEs are denied credit. It must be pointed out that all these participants were from UBs. Not only does this confirm the level of importance that UBs place on collateral but it also confirms that for UBs the failure to obtain credit may be a direct consequence of the inability to provide the required collateral. Whilst generally these participants were referring to the inability of borrowers to provide any security at all, 40% (that is two respondents) argued that it was just not about providing the security but that the security had to be in its appropriate form especially with regard to landed property. The concern of these two respondents was that even where the borrower has a landed property, they will fail to get the loan if the property were unregistered. This sentiment is shown in this statement by one of them...*in the instance where you only have a landed property which you want to use as collateral, if we cannot verify its ownership at the Lands Registry then we can't be sure if there are no problems with it and because of that we cannot take it and therefore the loan will not be given.*

This does not come as a surprise at all since earlier results showed that a majority of UB participants indicated they do not accept unregistered properties as collateral; hence in a situation where landed property is required to trigger credit supply the lack of a registered property will be a barrier to credit access. Interestingly, none of the MFI participants mentioned the lack of collateral as the reason why SEs are credit constrained neither did any make mention of property registration. This is indeed a direct confirmation of the quantitative finding that the effect of property registration on SE access to credit varies depending on the type of lending institution. With the benefit of previous result discussed in this study it could be argued that even in the case of UBs the effect of property registration

may not be very significant if borrowers without registered title could afford to provide other more liquid forms of collateral such as fixed deposits. This is because as earlier on discussed some UBs did indicate that they would ideally have preferred such collateral to landed property.

Poor management capacity

The lack of managerial skills or poor management and organisation capacity of SE owners was also recognised as a barrier to credit access by 30% of all the participants. Some proprietors of SEs as noted by these participants do not have that experience or track record and the managerial experience for the kind of businesses for which they seek funding and that may be the weak point based on which they may be denied credit. The success of every business will to a large extent depend on how well it is managed. The lack of experience in a particular line of business may be a threat to loan repayments. Apart from the factors just discussed, 10% of all participants each identified one other minor reason why SEs may find it difficult to get credit for their business and these include the supply side inadequacies (which explains insufficient number of financial institutions to cater for all the needs of the huge SE sector), the lack of government support and finally the poor borrower-lender relationship. The findings on the reasons why SEs are credit constrained have shown a lot of similarities between the qualitative and quantitative findings as already discussed above. The quantitative results revealed that the financial strength of the business and default risk are more critical to credit access than the lack of collateral and this was confirmed in the qualitative study. The lack of required documents was also identified by participants in the qualitative study which they described as informality in the SE sector. The nature of the business which was identified in the quantitative study however, did not feature prominently in the qualitative findings. Finally the qualitative results revealed another factor (low management capacity) and other minor factors which were not present in the quantitative findings. Both the quantitative and qualitative findings however, point to the fact that property registration is not a prominent cause of the SE credit constraint.

7.5.2 England

The results from England are also presented in Table 40 below. About 86% of participants each identified the risk of default and the poor ability to service the credit facility as the main barriers to credit access for SEs. All the participants who talked about ability to repay also mentioned the risk of default which emphasises how these two factors are interrelated. The issues on the ability to service the facility were centred mainly on the poor business cash flows, unexplained fluctuations in cash flows and the inability to show evidence of sustained profits over a period of time as well as the feasibility of the proposed repayment plan.

Stressing on the importance of cash flow to credit access a participant made the following observation...*cash flow is very essential. It tells us about the ability to repay the loan...cash is the blood that flows through the business. So if the cash inflow is not looking good, it is a sign of potential problem. Having said that we take into consideration any associated seasonality in the cash flows.*

Table 40: Most Important Reasons for Turning Down SE Loan Applications - England

	Interviewees (N=7)							
Factors	ENG1	ENG2	ENG3	ENG4	ENG5	ENG6	ENG7	%
Poor Serviceability	√	√		√	√	√	√	86%
High Risk	√	√		√	√	√	√	86%
No Business Plans	√	√	√	√				57%
Inadequate equity	√	√	√					43%
Others	√	√						29%

The respondents also highlighted the need for businesses to be able to demonstrate that cash flows and profits shown to the lender are sustainable by showing a track record of good levels of profits over a given period of time as may be required by the bank. In the words of one participant...*there should be a track record of sustained profits over a period and if there were some losses in between that have to be explained satisfactorily.* It is thus essential that any short falls in cash flows or profits be satisfactorily explained as this may be due to seasonality problem depending on the line of business. Such seasonal fluctuations may not be a big problem as lenders often tend to schedule repayment to fit into cash flow cycle of each business.

The 86% of participants who talked about the high risk of default did not only relate this to the poor credit history of the business owners but also, external factors such as the political and economic uncertainties as noted by this participant...*there may be some political and economic factors as well. For instance, businesses involved transport sector may suffer from fuel price rise or even strikes which could affect their repayment ability.* The riskiness of the business in terms of the sector in which it operates and the general business environment as well as the lender's own expectations about the sector's performance over the term of the loan and how that might affect the particular business concerned were all issues raised by the participants as potential barriers to credit access for SEs. One participant pointed to the fact that most SEs are one man businesses and the personal indebtedness of the owner can also affect the businesses chances of obtaining credit. He noted that...*small business owners*

sometimes are to blame because they have personal debts or personal financial difficulties... though the business may be a good one you cannot lend to them.

More than half of all the participants (57%) also considered the lack of business plans as a main constraint to credit access. This was a participant's response when asked what he thought are the most important barriers to credit access...*they don't have good business plans that give a clear projection of where the business is going and how they will get there. If you can't demonstrate this then no one will give you a loan.* A good business plan contains information that can help lenders determine if a business is realistically profitable and worth funding. The absence of business plans or failure to prepare them well may deny borrowers the opportunity to sell their business in a manner that will capture the attention of lenders. Business plans are particularly essential when banks are dealing with newly established businesses that do not have any track record to rely on for credit. The business plan provides projections of cash flow and profitability and details on how such projections will be met. This allows the lender to determine if the business is sustainably viable and whether repayments will be feasible.

Another important barrier to credit access as identified by 43% of the participants is how much the business owner is contributing to the venture for which the funding is being sought. One of these participants explained that...*every business must demonstrate its personal commitment by contributing a portion of the amount required so that the bank doesn't shoulder all the risk. So if you came to us and say I need to buy an office apartment costing £100,000. I have 50,000 can you lend me the remaining 50,000? I will be more interested in your story.* The owner's contribution is not only seen as a demonstration of commitment to the venture but also it shows the confidence the owner has in its prospects and finally it is used as a way of sharing the potential risk of default. The danger is that borrowers who have not committed reasonable amounts themselves to the business have nothing to lose should the business fail. This could trigger moral hard and eventually lead to default. The above is usually a bigger problem for start-up businesses.

Finally, about 29% of participants also identified other barriers to SE credit access. These included the relationship with the potential borrower – whether he is an existing client or new client and the level of trust developed over the years. They also mentioned the nature of the business – that is whether it is a start-up or an already established business and also, they did talk about not providing collateral as a possible barrier. The absence of collateral they noted does not cut off the borrower as they are considered for other unsecured facilities provided by the bank. Even where clients don't qualify for any of their unsecured facilities

the participants noted that clients may still be considered under various government guarantee schemes run by the various banks for SMEs. Therefore it is only when all these avenues fail that a client may be denied credit if they fail to provide their own security. The interviews thus revealed that the lack of collateral did not feature prominently as a barrier to credit access and this is in conformity with the quantitative findings where the lack of collateral was found to be the least important of the four factors extracted from the factor analysis. Furthermore none of the participants said anything about property registration when asked to identify the barriers to small businesses' access to credit and given earlier findings that both registered and unregistered properties are accepted, it can be concluded that the absence of registered title to property is not a hindrance to credit access for SEs.

7.6 Summary

The aim of this chapter was to use interview data to validate the quantitative finding on property registration and credit access in both Ghana and England. The findings discussed above show that in most cases the interview findings were similar to the findings of the quantitative study. In Ghana for instance the interviews confirmed that most lenders particularly UB-based lenders do always require collateral before lending to SE and that landed property is most preferred in practice though ideally others would have preferred more liquid collateral. On the eligibility of collateral there was a confirmation that UBs do insist on accepting only registered properties but that registration does not affect the loan terms offered. The results from England were no different as discussed above. Having discussed all the findings it is time to summarise the whole research and make conclusions as well as recommendations that could be essential for policy and the future of research in this field. These will be the subject matter of the next chapter.

CHAPTER 8

Summary, Conclusions and Recommendations

This chapter provides the summary of the whole study as well as the main conclusions derived from the findings. Also outlined are the recommendations and contribution to knowledge.

8.1 Summary of study

The background to this study has been clearly outlined in chapter one which laid the main foundation for this work. This chapter identified the main research questions that required investigation, the aim and objectives of the study as well as the scope and justification of the study amongst others. In chapter one, the immense role of small enterprises in economic development around the globe was acknowledged. However, it was realised that despite their importance, small businesses especially in the developing world are faced with several challenges which hinder their growth and ability to play a leading role in the fight against poverty. Critical amongst these challenges is the problem of access to credit. Whilst some have linked this problem to the lack of collateral, others have argued that even the poor in the developing countries own landed property in one form or the other that could serve as collateral. According to the second school of thought, the available landed property constitutes dead capital due to the lack of registered titles over them which is perceived to make ownership of such property insecure and unacceptable for use as collateral. Property registration is thus being promoted all over the developing world on the basis that it guarantees ownership security, unlocks the capital potential of land by making it eligible for use as collateral for credit which then paves the way for greater investment activities and economic growth. The study thus sought to investigate the nature of the credit constraint and the influence of property registration on credit access.

Chapter two reviewed the literature on property rights, property ownership security and its economic implications. In chapter three, the researcher reviewed the literature on the concept of landed property registration – the various systems, its economic significance and limitations. Having done that, chapter four provided the theoretical framework for the study. The theories of market equilibrium, information asymmetry and credit constraint were the relevant economic theories adopted to provide the theoretical underpinnings of this research. There was also the need to discuss the research methodology adopted in the conduct of this research which was the focus of chapter five. This chapter broadly reviewed the available methodologies, strategies, sampling and data collection methods amongst others before

providing an outline of the specific ones used in this study. Having done that, the results obtained were split into two. The quantitative results were presented and discussed in chapter six whilst the qualitative results were discussed in chapter seven.

8.2 Conclusions

This section outlines the main findings of the study, and their possible implications using the objectives as the themes. In what follows, the main findings of the study are outlined.

8.2.1 Nature of the SE Credit Constraint in Ghana

Access to credit remains the most important problem of a majority of small enterprises which often exhibit a high level of desire for credit. In Ghana these enterprises are actively involved in the activities of the formal credit market contrary to the opinion that they rely on informal sources of funding for their business activities. The demand for credit amongst SEs is not associated with gender, level of education or size of the business. Hence, SEs irrespective of their associated characteristics have a high demand for credit. The desire for credit thus cut across all the types of SEs. However, SEs are selective when it comes to which lending institution to seek credit from. A majority prefer to seek credit from the MFIs. The amount that borrowers want to borrow influences their decision of the lending institution to approach. Businesses seeking relatively larger amounts select the UBs whilst those seeking smaller amounts go to the MFIs. This is an indication that MFIs are limited in the amount of funds they can lend due probably to limitedness of resources.

A majority of the SEs are credit constrained – they receive a significantly lower loan amount than what they apply for or want. The amount that businesses want to borrow was associated with their size in terms of the average amount of cash they generate per month. Therefore, most of these business owners are genuine and have no intentions of deliberately defaulting in repayment as there is evidence that they only borrow in accordance with what they can afford. Lending to them should therefore not be considered as too risky and unprofitable. The possibility of a small business being credit constrained is associated with the amount of cash generated per month and the amount applied for. Businesses generating larger sums of cash are less likely to be credit constrained and vice versa. The incidence and degree of credit constraint is also higher amongst businesses applying for relatively smaller amounts. These are the very small/microbusinesses. The incidence of credit constraint was also higher amongst businesses that seek credit from UBs and this is probably why most SEs prefer to approach MFIs. Evidence from this research also shows that access to credit is not reliable for both constrained and unconstrained businesses. This means that even businesses that reported no constraint at the time of the research could encounter constraints the next time

they attempt to obtain credit. The most frequently reported cause of the SE credit constraint is the lack of collateral followed by poor credit history and cash flow problems. The absence of registered property documents has not feature prominently amongst small business owners as a cause of the constraint. Quiet intriguing is the fact that majority of small businesses that did not apply for credit have also shown symptoms of credit constraint. Unlike the loan applicants, the most prominent reason why most of the non-applicants are constrained is the cost of credit followed by the lack of tailor-made facilities. The constraint encountered by small businesses in almost all instances emanate from supply side barriers.

8.2.2 Property registration and credit access

Ghana

Having established that the credit constraint problem amongst SEs in Ghana emanates almost entirely from the supply-side, this became the foundation for a supply-side study which investigated the influence of property registration on credit access as well as the relative importance of property registration in determining success of SE credit applications. In most instances, lenders in Ghana do not grant a credit request unless collateral is provided and this was true for both MFIs and UBs. However, the UBs are more heavily reliant on collateral than MFIs. The reason why most lenders require collateral before granting credit to SE is due to the perceived high risk involved, the need for a back-up and to motivate repayment and institutional policy. However, it has been established that there are some extreme exceptions to the requirement for collateral depending to on the personality, social status or profile of the borrower as well as the personal relationship of the borrower with top management within the lending institution. The provision of collateral per se is regarded as insufficient to trigger credit supply as there are more important factors influencing lenders decision on whether to lend or not. This is attributed to reasons such as foreclosure related problems and reputational issues associated with the habit of always foreclosing on collateral. The major reason however, is the fact that lenders are more concerned about other more critical factors like the ability to repay the required credit, the relationship with the borrower and borrowers' character.

England

In England, lenders also uphold the importance of collateral in SE lending. However, they are less stringent in their requirement for collateral as there are several unsecure credit facilities that borrowers are offered. Furthermore, there are a number of government support programs run through these lenders which permit them to lend to SEs without needing to ask for collateral. As such, SEs in England can in most instances borrow without needing to provide collateral. The decision to take collateral depends amongst other things on the

amount and risk involved. Thus, even though collateral may sometimes be necessary, lenders here do not regard its provision as sufficient to obtain credit due mainly to the fact that doing so will amount to being an irresponsible lender and a breach of lending code.

8.2.3 Preferred forms of collateral when dealing with small businesses

Ghana

In practice, UBs prefer landed property to other forms of collateral even though ideally some would have preferred cash and other liquid forms of security such as fixed deposits due the ease with which such collateral could be perfected and foreclosed relative to landed property. Landed property is preferred in practice however, because it is the most widely available and its value to borrowers plays a bigger role in ensuring repayment than other forms of collateral. The findings on MFIs was inconclusive since the quantitative results showed that the most preferred forms of collateral are landed property and cash/near cash collateral contrary to the qualitative results which indicate that only cash and near cash forms of collateral are most preferred by MFIs with no mention made of landed property. Based on theory it appears the qualitative result is more reliable. Though it cannot be concluded that landed property is most preferred form of collateral for MFIs, it is true that they do accept landed property in granting SE credit where the need arises.

England

Generally, lenders regard cash and its equivalents as well as landed property as the most preferred forms of collateral when dealing with SEs. The kind of collateral that is most preferred at any point in time however, varies depending on the loan amount required and the type of facility being sought for.

In terms of landed property lenders in both countries generally regard it as most preferred. However, both sets of lenders showed difference in preference for other forms of collateral.

8.2.4 Eligibility of landed property for use as collateral

Ghana

Though a majority of lenders consider registration as necessary to make landed property eligible for use as collateral, there are variations between UBs and MFIs. The UBs accept landed property only when it is registered but the MFIs are not too much bothered about whether the property is registered or not provided the borrower can provide other alternative documentary evidence of ownership (statutory declaration, allocation paper and unregistered deeds). The eligibility of unregistered property varies based on the type of lender and kind of property documents accepted. It also depends on the level of preference the lender has for landed property. Those with higher preferences for property disagree more that unregistered

property is eligible for use as collateral. Furthermore, lenders who find property ownership verification much easier generally do not regard unregistered property as acceptable collateral. The acceptance of only registered property significantly made ownership verification easier. The acceptance of only registered property is also associated with a lower incidence of past collateral repossession and foreclosure problems.

There are some attributes of landed property that are very critical to lenders and cannot be ignored whilst others are important but not necessary when accepting property for collateral purposes and could thus be ignored. The very critical attributes of property that UBs cannot ignore include: availability of documentary evidence of ownership, market value, location, insurance cover and evidence that the property is registered. MFIs on the other hand consider insurance and property registration as attributes that can be ignored though important to a certain extent. Both UBs and MFIs do not accept family owned properties due to the likelihood of encountering resistance from some family members during default. Other issues of concern are the saleability of the property the existence of encumbrances.

England

The issue of whether or not a property is registered is of less concern to lenders when taking such property as collateral. Majority accept both registered and unregistered property and this is due to the relatively high level of security enjoyed by both registered and unregistered property owners. Here too, the perception on the ease of property ownership verification is influenced by whether the lender accepts registered or unregistered property. Of critical importance to lenders when taking landed property are the provision of documentary evidence of ownership, location, market value and insurance but property registration was perceived as an attribute that can be ignored. Lenders are also highly concerned about not having prior claim to the property due to encumbrances already on the property and others such as planning permission.

Lenders in Ghana generally placed higher value on property registration than their counterparts in England probably due to the high prevalence of ownership disputes in Ghana.

8.2.5 Property registration and loan conditions

The conclusions here reflect the findings from both Ghana and England. The acceptability of landed property is enhanced by registration especially amongst UBs but the influence of registration is limited to that alone in that, there is no evidence that the possession of registered property reduces interest rates or fees that the lenders charge. Neither does it cause lenders to offer borrowers larger loan amounts or different repayment schedules. All lenders

irrespective of the kind of property they deemed acceptable (registered or unregistered) do not offer loan condition based on the kind of property the borrower possesses. The loan conditions offered are rather influenced by other factors such as the loan amount, relationship with borrowers and risk amongst others. Despite the fact that lenders in Ghana and England exhibit different perception regarding the acceptability of unregistered property, the loan conditions offered by both set of lenders are not influenced by the possession of registered landed property.

8.2.6 Why lenders turn down SEs credit applications

Ghana

Several factors are responsible for the credit constraint experienced by small enterprises. The most prominent of these identified by lenders in Ghana are the poor repayment ability, high risk, lack of collateral, the high level of informality, the nature of the business and poor management capacity. The lack of registered property titles even though has emerged as a less important cause of the credit constraint than most other factors such as the ability to repay, risk and the lack of collateral. Out of 14 possible reasons for declining SE loan requests, the lack of registered property titles was rated as 11^{th} important reason and was considered as a reason that may or may not lead to a decision to disapprove a loan application depending on the extent to which the more critical criteria are met. It should be reiterated that the absence of registered title does not automatically cause lenders to decline a loan request. It only becomes a barrier when landed property is required in a particular instance to trigger approval of an application. In such an instance, the absence of registered titles would cause UBs not to accept the property and hence declining to approve the request for credit. Thus though the lack of registration could be a barrier to credit access, it accounts for a small proportion of the problem and emphasis should not be placed too much on it. In the case of the MFIs however, the absence of such property do not constitute a barrier to credit access since they are able to rely on other mechanisms to encourage loan repayment and recover outstanding debts. Having established that the absence of property registration is not a major cause of the credit constraint amongst SEs, the problem could be tackled without embarking on the costly process of property registration. This is not to say that there is no need for registration but the purpose of doing so should be rightly placed.

England

In England however, the lack of registered property titles was considered by lenders as unimportant in explaining the difficulty that SEs may encounter in their quest to obtain credit. The factors responsible for the failure of SEs to obtain credit ranged from high risk, poor

financial strength, the nature of the business and lack of collateral in a decreasing order of importance. Contrary to the argument of de Soto (2000) that the developed world achieved its developed status because of property registration which allowed businesses to exploit the capital potential of property, there was no evidence from the study in England that property registration influences credit access. This argument should thus not be used as a yardstick for the introduction of registration the developing countries. Collateral is just one of the factors that lenders may consider when granting credit and property registration is of much less importance to lenders than the others identified above.

8.3 Recommendations

The findings of this study have a number of implications for policy as well as further research in the topic area.

8.3.1 Recommendation for policy

On the bases of these findings, there is an urgent need for interventions to tackle the problem of credit access. Since the credit constraint amongst SE in Ghana is almost entirely a supply side problem, policies should target lenders. Policies that will enhance the competitiveness of the financial sector could make lenders less stringent in their requirements and hence make it easier for businesses to obtain credit. Encouraging competition amongst lenders could also drive down the cost of credit which is one of the major causes of the credit constraint. There is the need to encourage the spread of MFIs across the length and breadth of the country since the success rate of credit applications is higher for such institutions. Furthermore, since the incidence and degree of credit constraint is higher amongst the very small business generating just a few hundred Ghana Cedis per month, they should be the focus of any intervention schemes.

Government's support for MFIs

The findings call for more government support for the MFIs for two basic reasons. First is the revelation that MFI do not rely much on landed property when lending to SEs and that even when they do demand landed property, they accept both registered and unregistered properties. Secondly, most of the SEs in Ghana use the MFIs as their main source of formal credit to fund their business activities. Hence, the absence of registration will have no consequence on access to credit for most SEs. The few SEs that seek credit from UBs do so because they require relatively larger amounts than they are able to obtain from MFIs. Therefore any government scheme that will channel resources to MFIs for on-lending to SEs will be a further boost to credit access. Enhancing the capacity of MFIs to meet the credit needs of SEs is particularly urgent since the study shows a higher incidence of credit

constraint amongst those seeking credit from UBs relative to others who approach MFIs for credit. Given the fact that most properties are not registered yet, government's support for MFIs will ensure that its potential impact on credit access is not felt by small businesses.

That said, it should be acknowledged that MFIs tend to charge very high interest rates to compensate for the risk of lending to SEs. Supporting MFIs with funds for on lending to SEs could still expose such businesses to affordability problems and perpetuate the constraint problem unless government subsidises such credit facilities. Encouraging competition amongst institutions could however, force the cost of credit downwards to take away the burden of subsidies from the already overstretched budget of the state. In addition, most of the credit applicants in this study preferred the MFIS to UBs despite the above cost implication. This appears to suggest that these businesses do not consider the current level of cost as excessive. Therefore, as long as cost remains within the current level, the benefits of taking credit will outweigh its associated cost, businesses will continue to demand credit and there will be no need for state subsidies.

Government's guarantee for loans granted to SEs

Alternatively, programs such as the enterprise guarantee scheme in England could be replicated in Ghana where the government undertakes to provide a guarantee for loans granted by the main banks to SEs. Such a program will make UBs less stringent in their collateral requirements without compromising the whole screening processes. This will enhance credit access for businesses that approach the UBs.

Training for SE owners

Proprietors of SEs also encounter several non-credit related challenges which often tend to affect their access to credit. Prominent amongst these are the high level of informality in the sector (the inability to keep simple records of transactions as well as their non-patronage of financial institutions for savings and other purposes) and the poor management capacity. These proprietors therefore equally require training on basic book keeping. Government and NGOs working with small businesses should make it a priority to empower such people with basic literacy and managerial skills to run successful businesses. These will help reduce the information asymmetry in the credit market and increase the confidence of lenders in such borrowers with positive consequences for credit access. Promoting the integration of most SE owners into the formal financial system is also key to enhancing credit access. A combination of educational programs for SEs and government support scheme operated through the financial institutions will help develop a savings culture where people will stop

keeping cash under their pillows. This will help many people to build a profile that can provide useful information signals to the banks in taking credit decision.

Documenting property ownership

Furthermore, it has been established that the lack of any form of documentation on landed property ownership makes such properties unacceptable to both UBs and MFIs. Hence, the current state of affairs where ownership of most properties is not documented at all is something to worry about. Indeed, wide spread documentation can be achieved without necessarily embarking on the costly process of property registration. The existing informal documents such as allocation notes and statutory declaration should be standardised and given full legal recognition as this will make them acceptable to lenders. Since multiple sales cannot be detected from such informal documents, it should be made mandatory for local chiefs to keep records of all plots of land sold within their jurisdiction to enable them avoid selling the same property to different people. Culprits should be penalised to serve as a deterrent to others. *This will however be difficult to implement for family or individual owned properties.*

8.3.2 Recommendations for industry

Co-operation between lenders

The UBs and MFIs should also be encouraged to collaborate in providing funding for SEs. Since MFIs tend to have a much closer working relationship with SEs than the UBs, the two sets of institutions could devise a scheme where the UBs support the MFIs with funds for on lending to SEs in return for some agreed percentage of the returns. This collaboration will do away with the need for government intervention in the manner proposed above. Furthermore, small business owners have demonstrated in this study that lending to them is profitable and not too risky as banks may perceive. Hence, if UBs do not want to collaborate with MFIs, they could also establish their own subsidiaries to deal solely with the small businesses based on the techniques used by MFIs.

8.3.3 Recommendations for future studies

This research did not provide answers to all the questions on SE credit access in Ghana. The areas that should be explored further through future research are as follows.

- On the nature of the SE credit constraint problem, future research should focus on a much larger sample drawn from either the same city or more than one major city in the country. This will help to determine whether these findings are applicable to other parts of the country. Such a study should use an extensive range of demographic and economic characteristics of loan applicants to identify what

determines the success rate of loan applications. Further demand side studies could be conducted on the effect of property registration on credit access with a much bigger sample and the results compared to the findings of this study.

- Given that the sample size used in this study was less than the minimum recommended for factor analysis, some variables as explained earlier were not included in the analysis. Therefore, the final factor analysis did not involve all relevant factors and does not explain the whole problem. Future research should consider a broader sample size and a much wider range of variables. These variables could be identified through both literature review and also conducting in-depth interviews with key stakeholders. Based on this a questionnaire could then be designed around the identified variables for a large sample and factor analysis used to identify the underlying components.
- Even though lenders do not offer registered property owners better loan conditions compared to unregistered property owners, there is evidence that borrowers are made to directly bear the cost of verifying property ownership. There is also evidence that the verification time is longer for unregistered property. Since the cost of credit emerged as one of the main barriers to credit access, future research should focus on estimating the cost of verifying property ownership (for both registered and unregistered property) in terms of the money and time spent in doing so. If one can estimate the proportion of the total cost of borrowing accounted for by the cost of verifying property ownership, it will provide a much clearer direction for policy and debate on the relationship between registration and credit access.
- The main reason why UBs refuse to accept unregistered property is the legal implication. Further studies could explore how MFIs manage to find sufficient protection in the acceptance of unregistered property and this could provide useful lessons for the UBs and change their attitude to such properties. For instance, there is the need to find out whether MFIs taking unregistered property are able to defend themselves in court when ownership disputes arise during default.
- Future research should also look to investigate if there is a differential effect of the deed and title registration systems on credit access.
- Furthermore, other business owners (such as building contractors, transport and hotel service providers) that are quiet visible in the Kumasi metropolis were not considered. These tend to be larger businesses in terms of the income they generate. Future studies should thus focus on such businesses with larger income generation capacity.

8.4 Originality and Contribution to knowledge

Existing studies on SE credit access in Ghana often fall short of revealing the true nature of the problem. This study has provided insights into the nature of the credit constraint problem faced by SEs in Ghana. This has revealed the particular segments of the market that should be the focus of government policy. Furthermore, even though previous studies have examined the link between landed property registration and access to credit across the developing world, they tend to be only demand side studies. Supply side studies are very rare and no study has considered both the supply and demand sides together. This particular study therefore, did not only approach the subject matter mainly from the supply side of the credit market but also included a demand side element. The demand side looked at the nature of the credit constraint and borrowers perception on the causes of the constraint which was then complemented by the supply side study on the influence of registration on credit access. Since there are no studies that have investigated the link between landed property registration and access to credit on a comparative basis between the developing and developed countries, the comparative approach adopted in this research has permitted the identification of differences and similarities between the developed and developing countries. In addition, the existing studies have primarily been interested in households and the agricultural sector whilst this study focused on non-agricultural based SEs.

Apart from the fact that the findings of this research could inform policy decisions on mitigating the credit constraint problem, there are other recommendations for further studies that provide directions to studying the property registration and credit access debate in the future. This research has also led to a number journal and conference publications (see list below) which have contributed to the debate on the subject matter.

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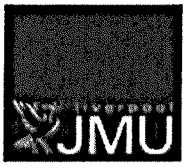
APPENDICES

APPENDIX A

QUESTIONNAIRE FOR SMALL BUSINESS OWNERS IN GHANA
LIVERPOOL JOHN MOORES UNIVERSITY



HENRY COTTON BUILDING, WEBSTER STREET, L3 2ET,
LIVERPOOL, UNITED KINGDOM

Please tick this box to indicate that you have read the participant information sheet attached and that you are happy to complete this questionnaire [ ]

1. Age
   Below 30yrs [ ] 30-45yrs [ ] 46-60yrs [ ] above 60yrs [ ]

2. Gender
   Male [ ] Female [ ]

3. Level of educational.
   Basic education [ ] Secondary education [ ] Tertiary education [ ] No formal education [ ]
   Vocational and technical education [ ]
   Other (specify).....

4. Number of dependants
   Below 5 [ ] 5 – 10 [ ] +10 [ ]

5. Main occupation.....

6. Number of Employees
   Below 5 [ ] 5 – 10 [ ] +10 [ ]

7. What is the average amount of cash you can generate from your main business per month?
   Below GHC500 [ ] GHC 500 – 1000 [ ] GHC1001 – 1500 [ ] GHC1500 [ ]

8. What is your average monthly expenditure
   Below GHC 300 [ ] GHC 300 – 500 [ ] GHC 501 – 700 [ ] +GHC 700 [ ]

9. What will you say is the most important problem facing your business
   .....

10. Have you applied for a loan in the last 24 months? Yes [ ] No [ ]
    If No, go to questions 14 and 17

11. Which of the following institutions did you apply to
    Universal Bank [ ] Rural Bank [ ] Savings and Loans [ ]

    Other (specify).....

12. How much did you apply for?
    Below GHC 500 [ ] GHC 500 – 1000 [ ] GHC 1001 – 2000] +GHC 2000 [ ]

13. Did you received the full amount applied for
    Yes [ ] No [ ]

14. I am able to obtain credit anytime I need it
    Strongly Disagree [ ] Disagree [ ] Neutral [ ] Agree [ ] strongly agree [ ]

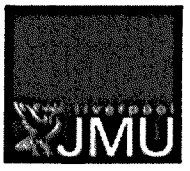
15. What proportion of the amount applied for were you given?
Zero [ ] >zero <50% [ ] 50% - 75% [ ] >76% <100% [ ] 100% [ ]

16. What was the main reason why you didn't obtain the full amount wanted or applied for?
.....
.....

17. **Main reason** for not applying for credit in the last 24 months.
Don't need it [ ] don't know where to get it [ ] Think I don't qualify [ ] Takes too long to process [ ] don't possess required documents [ ] Can't afford interest & other charges [ ] Couldn't get one with terms that meets my specific requirements [ ]
Otherspecify).....

QUESTIONNAIRE FOR BANK OFFICIALS

LIVERPOOL JOHN MOORES UNIVERSITY



HENRY COTTON BUILDING, WEBSTER STREET, L3 2ET, LIVERPOOL, UNITED KINGDOM

Please tick this (√) box to indicate that you have read the participant information sheet attached and that you are happy to complete this questionnaire [ ]

SECTION A (About Respondent)

1. Type of institution
Universal Bank [ ] Savings & Loans [ ] Rural bank [ ]

2. Age of respondent
Below 30yrs [ ] 30-45yrs [ ] above 45yrs [ ]

3. Gender
Male [ ] Female [ ]

4. Current position
Credit officer [ ] Loans advisor [ ] Branch manager [ ] Loans manager [ ] Business manager [ ]

5. How many years of experience do you have working in your current role
Below 5yrs [ ] 5-10yrs [ ] above 10yrs [ ]

6. Number of years at current institution
Below 5yrs [ ] 5-10yrs [ ] above 10yrs [ ]

SCETION B: Attitude to Collateral as a Requirement for Small Business Credit

7. To what extent do you regard collateral as a necessary requirement when dealing with small businesses?
Not necessary [ ] Seldom necessary [ ] Mostly necessary [ ] Always necessary [ ]

8. The ability to provide collateral is not sufficient to help small businesses obtain credit
Strongly disagree [ ] disagree [ ] Neutral [ ] Agree [ ] strongly agree [ ]

9. Please rank the following possible forms of collateral in order of preference on a scale of **1 to 4 (where 1 = Least preferred, 2 = preferred, 3 = highly preferred and 4 = most preferred)**. Tick (√) the appropriate box.

Forms of collateral	Ranking			
	1	2	3	4
Landed property				
Cash/fixed deposits				
General Goods (stock)				
Automobiles				
Machinery & tools				
Account Receivables				
Shares/bonds				
life policy				
T-bills				
third party guarantee				

SECTION C – Eligibility of Landed Property for Collateral Purposes (*the following questions relate to a situation where landed property is to be used as collateral).*

10. Do you always require documentary proof of property ownership?
Yes [ ] No [ ]

11. Landed property can be used as collateral even if it is not formally registered with the Land Registry
Strongly disagree [ ] disagree [ ] Neutral [ ] Agree [ ] strongly agree [ ]

12. Where documentary proof of ownership is required for collateral purposes, which documents are acceptable to you? (Tick all that apply).
Unregistered title deed/indenture [ ] registered title deed/indenture [ ] land title certificate [ ]
Land allocation note [ ] All of the above [ ] others (please specify).....

13. How easy is it to verify ownership of property brought to you for use as collateral
extremely not easy [ ] not easy [ ] not sure [ ] easy [ ] very easy [ ]

14. Are you able to verify whether or not the property has already been offered as to another lender? Yes [ ] No [ ]

15. Has there ever been an instance were you were unable to take possession of property pledged to you as collateral because someone else other than the borrower claimed to be the owner?
Yes [ ] No [ ]

16. If an individual wants to use a land/building owned by the whole family (family land/building) as collateral for a loan, will that be acceptable?
Yes [ ] No [ ]

17. The following are some factors that lenders may consider when taking land-based collateral. Please rank them in order of importance from **1 – 6 (where ranks above 5 mean the attribute is critically important & CANNOT BE IGNORED, from 3 – 4 mean factor is important but MAY BE IGNORED and below 3 means the attribute not important & SHOULD BE COMPLETELY IGNORED).** Please tick (√) the appropriate box to indicate how you rank each factor.

Important Attributes of Land-based Collateral	Ranks					
	1	2	3	4	5	6
Location of property						
Market value of property						
Kind of land rights (leasehold or freehold)						
Land Insurance						
Registration of the property with the land registry						
Availability of documentary proof of ownership						

Please use the scenario described below to respond to each statement in question 18.

Given two borrowers who exhibit the same characteristics in terms of credit worthiness except that one possesses a property registered at the lands registry whilst the other possesses an unregistered property, please indicate whether you will treat the two differently in terms of the conditions you offer them.

18. Based on the scenario above, please tick (√) the box that corresponds with the response which best describes how much you agree or disagree with each of the following statements.

	Responses				
	Fully Disagree	Disagree	Neutral	Agree	Fully Agree
Borrowers able to provide registered property pay lower interest rates on loans than those who provide unregistered property.					
Borrowers able to provide registered property pay lower fees/commissions than those who provide unregistered property.					
Borrowers with registered property titles are allowed to borrow larger amounts than those with unregistered property titles					
Borrowers with registered property are offered different repayment time relative to those with unregistered landed property					

SECTION D (Reasons for turning down loan applications)

19. Below are possible reasons why a small business' loan application may be turned down. Please rank these reasons in order of importance from **1 to 14 (where 14 is the most important reason for turning down the application and 1 is an unimportant reason for doing so)**. Please tick (√) the appropriate box to indicate how you rank each reason. Tick only one box for each reason.

Reasons for turning down small business loan applications	**Please tick (√) the appropriate box to indicate how you rank each reason stated in the column to the left.**													
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Lack of land/building (to be used as collateral)														
Failure to fulfil payment obligations in the past (Past default)														
Poor cash flow														
Low profitability														
Lack of business records														
Customer is still new to the bank														
Lack of required documents (eg. IDs, proof of address, bank statements, cash flow)														
Lack of guarantor														
Bank doesn't finance the kind of business for which credit is wanted														
Lack of registered property title														
Uncertainty about business environment, personal circumstances and consequent effect on future repayment ability														
High transaction cost involved														
Not experienced in running business														
Little or no personal financial contribution to business (Borrowers equity).														

Thank You

Contact Daniel: +44 (0) 1512314149

INTERVIEW GUIDE FOR BANK OFFICIAL

LIVERPOOL JOHN MOORES UNIVERSITY

Title of Research: Secure Property Rights and Access to Credit

This interview is being carried out as part of a PhD research at the above institution. The purpose of the interview is to solicit your opinions on the findings from an earlier survey carried out. It is expected to last for about 45 minutes.

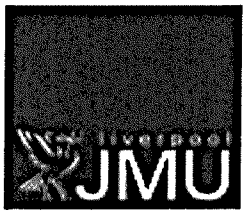
1. Land/building emerged as the most preferred over all other forms of collateral/security; do you agree and why?
2. Will you say collateral is always a necessary requirement in granting SE credit and why?
3. Does the provision of collateral guarantee the approval of a loan request? Please explain your answer.
4. Under what circumstance(s) will you **NOT** accept a land/building for use as collateral?
5. What issues concern you most when taking land-based collateral
6. How do you verify ownership of a land/building being presented for collateral purposes?
   - Which documents do you require as proof of land/building ownership?
   - Does verification take place before or after the loan approval and how does this affect the speed with which applications are processed
   - How easy or difficult is it to verify land ownership
   - How long does it take to verify ownership
   - About how much in monetary terms does it cost?
   - Who bears the cost of verifying ownership?
7. Given two borrowers (A and B) of the same characteristics except that 'A' possesses a land/building that is registered at the lands registry whilst the other possesses a land/building That is not registered at the lands registry, will you treat them differently in terms of the loan terms they are offered? (commission/fees, interest charges, amount and repayment time)

8. What do you think are the most important reasons for turning down SE loan applications and why?

Thank You

Contact: Tel. +44 (0) 151 231 4149

CONSENT FORM FOR INTERVIEWS



LIVERPOOL JOHN MOORES UNIVERSITY

CONSENT FORM

Title of Research: Secure Property Rights and Access to Credit

Name of Researcher: Daniel Domeher

School/faculty: School of the Built Environment

1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily	√
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and that this will not affect my legal rights.	√
3. I understand that any personal information collected during the study will be anonymised and remain confidential	√
4. I agree to take part in the above interview	√
5. I understand that the interview will be audio recorded and I am happy to proceed	√
6. I understand that parts of our conversation may be used verbatim in future publications or presentations but that such quotes will be anonymised.	√

Date Signature

PARTICIPANT INFORMATION SHEET

LIVERPOOL JOHN MOORES UNIVERSITY

PARTICIPANT INFORMATION SHEET

Title of Research: Secure Property Rights and Access to Credit

Name of Researcher: Daniel Domeher

You are being invited to take part in a research study. Before you decide whether to take part or not, it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Do not hesitate to ask for clarification where necessary.

1. What is the purpose of the study?
This survey is being carried out as part of a PhD research at the above institution. It is argued that by registering property into the national database, the evidence of registration enhances the ability of the property owners to access credit from financial institutions. With easy access to credit, property owners are able to undertake various investments to increase income levels and reduce poverty. The aim of this research is to examine the relationship between land registration and access to credit on a comparative basis between Ghana and England.

2. Do I have to take part?
No. Participation in this survey is purely VOLUNTARY. It is your right to decide whether or not to take part. You are free to withdraw at any time and without giving a reason.

3. Are there any risks / benefits involved?
There are no known risks associated with completing this questionnaire. The questionnaire could be completed at a time and place convenient to you. A copy of the results of this study could be made available to you if so desired.

4. Will my taking part in the study be kept confidential?
Your confidentiality is fully assured in this study. Your personal details will not be required. Information provided will be kept in a form that will not permit anyone to identify who provided it.

Contact Daniel: +44 (0)151 231 4149

Interview Coding Summary Report Exported from NVIVO

23/07/2012 11:00

Coding Summary

GhanaInterviews

23/07/2012 11:00

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Document				
Internals\\GHMFI1				
Node				
Nodes\\Attitude to Collateral	Yes	31.66 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	7.97 %	2	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	6.30 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	6.30 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Character	No	0.81 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\relationship	No	2.17 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\the business	No	3.32 %	2	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary	Yes	23.69 %	2	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason	Yes	22.40 %	0	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Policy	No	0.72 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Relationship	No	1.18 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\suitable collateral not available	No	20.48 %	17	1
Nodes\\Issues of concern when taking landed property	Yes	4.98 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	2.26 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	2.26 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation\both	No	1.06 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\family property	No	0.71 %	1	1
Nodes\\Issues of concern when taking landed property\Saleability	Yes	0.48 %	1	1
Nodes\\Issues of concern when taking landed property\Valuation	Yes	2.23 %	1	1
Nodes\\Preferred Collateral	Yes	19.23 %	0	1
Nodes\\Preferred Collateral\preference in practice	Yes	19.23 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash	Yes	8.67 %	2	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason	Yes	3.78 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\ease of foreclosure	No	1.68 %	1	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\Easy to perfect	No	2.09 %	2	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Preferred Collateral\preference in practice\others	Yes	13.18 %	1	1
Nodes\\Preferred Collateral\preference in practice\others\guarantors	No	3.38 %	3	1
Nodes\\Preferred Collateral\preference in practice\others\no capacity to handle property	No	0.90 %	1	1
Nodes\\Preferred Collateral\preference in practice\others\reason	Yes	7.17 %	0	1
Nodes\\Preferred Collateral\preference in practice\others\reason\no suitable collateral available	No	7.17 %	2	1
Nodes\\Preferred Collateral\preference in practice\others\Relationship	No	1.18 %	1	1
Nodes\\Registered property benefit	Yes	7.89 %	0	1
Nodes\\Registered property benefit\Larger amount	Yes	4.91 %	0	1
Nodes\\Registered property benefit\Larger amount\No	No	4.91 %	2	1
Nodes\\Registered property benefit\Longer repayment time	Yes	1.03 %	0	1
Nodes\\Registered property benefit\Longer repayment time\No	No	1.03 %	1	1
Nodes\\Registered property benefit\Lower fees	Yes	1.94 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	1.94 %	1	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	1.94 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\No	No	1.94 %	1	1
Nodes\\Turning down Credit applications	Yes	6.57 %	0	1
Nodes\\Turning down Credit applications\High Level Informality	Yes	3.12 %	0	1
Nodes\\Turning down Credit applications\High Level Informality\lack appropriate documents and record keeping	No	3.12 %	2	1
Nodes\\Turning down Credit applications\Others	No	0.91 %	1	1
Nodes\\Turning down Credit applications\Risk	Yes	1.83 %	1	1
Nodes\\Turning down Credit applications\serviceability	Yes	0.68 %	0	1
Nodes\\Turning down Credit applications\serviceability\The business	Yes	0.68 %	0	1
Nodes\\Turning down Credit applications\serviceability\The business\Type	No	0.68 %	1	1

Person

Nodes\\GHMFI1	No	100.00 %	1	1

Internals\\GHMFI2

Node

Nodes\\Attitude to Collateral	Yes	22.26 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	2.01 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	2.01 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	2.01 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	2.01 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary	Yes	20.24 %	3	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason	Yes	12.46 %	0	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\suitable collateral not available	No	12.46 %	10	1
Nodes\\Issues of concern when taking landed property	Yes	8.10 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	8.10 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	6.20 %	2	1
Nodes\\Issues of concern when taking landed property\Ownership\family property	No	1.90 %	1	1
Nodes\\Preferred Collateral	Yes	14.73 %	0	1
Nodes\\Preferred Collateral\preference in practice	Yes	14.73 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash	Yes	4.91 %	3	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason	Yes	0.73 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\Easy to perfect	No	0.73 %	1	1
Nodes\\Preferred Collateral\preference in practice\others	Yes	10.69 %	0	1
Nodes\\Preferred Collateral\preference in practice\others\guarantors	No	2.95 %	3	1
Nodes\\Preferred Collateral\preference in practice\others\no capacity to handle property	No	2.62 %	1	1
Nodes\\Preferred Collateral\preference in practice\others\reason	Yes	5.11 %	0	1
Nodes\\Preferred Collateral\preference in practice\others\reason\no suitable collateral available	No	5.11 %	3	1
Nodes\\Registered property benefit	Yes	11.77 %	1	1
Nodes\\Registered property benefit\Improves acceptability of property	Yes	1.17 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property\Yes	No	1.17 %	1	1
Nodes\\Registered property benefit\Larger amount	Yes	4.47 %	0	1
Nodes\\Registered property benefit\Larger amount\No	No	4.47 %	1	1
Nodes\\Registered property benefit\Longer repayment time	Yes	4.47 %	0	1
Nodes\\Registered property benefit\Longer repayment time\No	No	4.47 %	1	1
Nodes\\Registered property benefit\Lower fees	Yes	3.36 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	3.36 %	1	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	4.47 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\No	No	4.47 %	1	1
Nodes\\Turning down Credit applications	Yes	4.49 %	0	1
Nodes\\Turning down Credit applications\Risk	Yes	1.66 %	0	1
Nodes\\Turning down Credit applications\Risk\Track record	No	1.66 %	1	1
Nodes\\Turning down Credit applications\serviceability	Yes	2.82 %	0	1
Nodes\\Turning down Credit applications\serviceability\cash flow	No	2.82 %	1	1

Person

Nodes\\GHMFI2	No	100.00 %	1	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Internals\\GHMFI3				
Node				
Nodes\\Attitude to Collateral	Yes	11.50 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	7.53 %	2	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	5.03 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	5.03 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	1.31 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Character	No	1.96 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\relationship	No	1.75 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary	Yes	3.96 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason	Yes	2.06 %	0	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Relationship	No	2.06 %	1	1
Nodes\\Issues of concern when taking landed property	Yes	17.63 %	0	1
Nodes\\Issues of concern when taking landed property\Insurance	Yes	2.33 %	2	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	13.02 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	6.60 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation\both	No	6.60 %	2	1
Nodes\\Issues of concern when taking landed property\Ownership\family property	No	1.35 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\ownership disputes	No	2.31 %	2	1
Nodes\\Issues of concern when taking landed property\Ownership\verification	Yes	2.75 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\informal	No	2.75 %	1	1
Nodes\\Issues of concern when taking landed property\Saleability	Yes	1.25 %	1	1
Nodes\\Issues of concern when taking landed property\Valuation	Yes	2.27 %	1	1
Nodes\\Preferred Collateral	Yes	8.24 %	0	1
Nodes\\Preferred Collateral\preference in practice	Yes	8.24 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash	Yes	4.16 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason	Yes	4.16 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\ease of foreclosure	No	1.54 %	1	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\Easy to perfect	No	2.61 %	1	1
Nodes\\Preferred Collateral\preference in practice\others	Yes	8.24 %	0	1
Nodes\\Preferred Collateral\preference in practice\others\guarantors	No	0.15 %	1	1
Nodes\\Preferred Collateral\preference in practice\others\no capacity to handle property	No	0.70 %	1	1
Nodes\\Preferred Collateral\preference in practice\others\reason	Yes	7.38 %	0	1
Nodes\\Preferred Collateral\preference in practice\others\reason\easy to handle	No	3.14 %	1	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Preferred Collateral\preference in practice\others\reason\no suitable collateral available	No	4.23 %	2	1
Nodes\\Registered property benefit	Yes	4.80 %	0	1
Nodes\\Registered property benefit\Larger amount	Yes	2.63 %	0	1
Nodes\\Registered property benefit\Larger amount\No	No	2.63 %	3	1
Nodes\\Registered property benefit\Longer repayment time	Yes	4.11 %	0	1
Nodes\\Registered property benefit\Longer repayment time\No	No	4.11 %	2	1
Nodes\\Registered property benefit\Lower fees	Yes	3.64 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	3.64 %	3	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	2.71 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\No	No	2.71 %	2	1
Nodes\\Turning down Credit applications	Yes	6.32 %	0	1
Nodes\\Turning down Credit applications\High Level Informality	Yes	1.81 %	1	1
Nodes\\Turning down Credit applications\High Level Informality\No seperation of business and personal	No	0.72 %	1	1
Nodes\\Turning down Credit applications\High Level Informality\non-use of banks	No	0.88 %	1	1
Nodes\\Turning down Credit applications\Others	No	1.44 %	1	1
Nodes\\Turning down Credit applications\serviceability	Yes	3.06 %	1	1
Nodes\\Turning down Credit applications\serviceability\The business	Yes	1.74 %	0	1
Nodes\\Turning down Credit applications\serviceability\The business\Type	No	1.74 %	1	1

Person

Nodes\\GHMFI3	No	100.00 %	1	1

Internals\\GHMFI4

Node

Nodes\\Attitude to Collateral	Yes	15.03 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary	Yes	6.05 %	3	1
Nodes\\Attitude to Collateral\Collateral Always necessary\exception	No	1.34 %	1	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason	Yes	2.33 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Risk	No	2.33 %	2	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	8.97 %	3	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	3.69 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Only a last resort	No	0.55 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	3.13 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	0.39 %	1	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\relationship	No	2.74 %	1	1
Nodes\\Issues of concern when taking landed property	Yes	13.62 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	9.47 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	0.95 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\family property	No	4.10 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification	Yes	4.41 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\informal	No	4.41 %	2	1
Nodes\\Issues of concern when taking landed property\Saleability	Yes	1.74 %	2	1
Nodes\\Issues of concern when taking landed property\Valuation	Yes	2.40 %	0	1
Nodes\\Issues of concern when taking landed property\Valuation\Nature of property	No	2.40 %	1	1
Nodes\\Preferred Collateral	Yes	13.61 %	0	1
Nodes\\Preferred Collateral\preference in practice	Yes	13.61 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash	Yes	5.32 %	2	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason	Yes	1.65 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\ease of foreclosure	No	1.65 %	2	1
Nodes\\Preferred Collateral\preference in practice\others	Yes	10.10 %	2	1
Nodes\\Preferred Collateral\preference in practice\others\guarantors	No	4.09 %	3	1
Nodes\\Preferred Collateral\preference in practice\others\reason	Yes	4.78 %	0	1
Nodes\\Preferred Collateral\preference in practice\others\reason\easy to handle	No	0.46 %	1	1
Nodes\\Preferred Collateral\preference in practice\others\reason\no suitable collateral available	No	4.31 %	1	1
Nodes\\Registered property benefit	Yes	2.64 %	0	1
Nodes\\Registered property benefit\Larger amount	Yes	0.95 %	0	1
Nodes\\Registered property benefit\Larger amount\No	No	0.95 %	2	1
Nodes\\Registered property benefit\Longer repayment time	Yes	2.61 %	0	1
Nodes\\Registered property benefit\Longer repayment time\No	No	2.61 %	1	1
Nodes\\Registered property benefit\Lower fees	Yes	2.61 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	2.61 %	1	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	2.61 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\No	No	2.61 %	1	1
Nodes\\Turning down Credit applications	Yes	4.32 %	0	1
Nodes\\Turning down Credit applications\Capacity	Yes	0.95 %	1	1
Nodes\\Turning down Credit applications\Risk	Yes	3.37 %	1	1
Nodes\\Turning down Credit applications\Risk\Track record	No	3.00 %	1	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Person				
Nodes\\GHMFI4	No	100.00 %	1	1

Internals\\GHUB1

Node

Nodes\\Attitude to Collateral	Yes	13.43 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary	Yes	7.39 %	2	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason	Yes	6.90 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Back-up	No	1.29 %	5	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\lack financial data	No	5.15 %	1	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Motivation	No	0.39 %	1	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Risk	No	1.06 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	6.03 %	5	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	4.63 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	4.63 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	1.36 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Character	No	3.02 %	4	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\relationship	No	0.25 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\the business	No	0.88 %	1	1
Nodes\\Issues of concern when taking landed property	Yes	20.05 %	2	1
Nodes\\Issues of concern when taking landed property\Encumbrances	Yes	2.90 %	2	1
Nodes\\Issues of concern when taking landed property\Insurance	Yes	1.62 %	4	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	13.19 %	5	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	6.68 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation\Registered	No	6.67 %	13	1
Nodes\\Issues of concern when taking landed property\Ownership\family property	No	0.17 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\ownership disputes	No	1.74 %	3	1
Nodes\\Issues of concern when taking landed property\Ownership\verification	Yes	5.35 %	3	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\formal	No	1.84 %	4	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\insiders	No	0.43 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\verification time and effects	No	3.07 %	5	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Issues of concern when taking landed property\Saleability	Yes	1.61 %	3	1
Nodes\\Issues of concern when taking landed property\Valuation	Yes	0.09 %	1	1
Nodes\\Preferred Collateral	Yes	9.84 %	0	1
Nodes\\Preferred Collateral\preference in practice	Yes	9.84 %	1	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash	Yes	9.84 %	8	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason	Yes	7.75 %	0	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\approriate for SMEs	No	2.81 %	4	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\ease of foreclosure	No	1.65 %	3	1
Nodes\\Preferred Collateral\preference in practice\cash and near cash\Reason\Easy to perfect	No	3.29 %	3	1
Nodes\\Registered property benefit	Yes	2.33 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property	Yes	1.37 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property\Yes	No	1.37 %	2	1
Nodes\\Registered property benefit\Larger amount	Yes	1.10 %	0	1
Nodes\\Registered property benefit\Larger amount\No	No	1.10 %	1	1
Nodes\\Registered property benefit\Longer repayment time	Yes	1.10 %	0	1
Nodes\\Registered property benefit\Longer repayment time\No	No	1.10 %	1	1
Nodes\\Registered property benefit\Lower fees	Yes	1.10 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	1.10 %	1	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	1.53 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\No	No	1.53 %	2	1
Nodes\\Turning down Credit applications	Yes	7.25 %	0	1
Nodes\\Turning down Credit applications\Capacity	Yes	0.62 %	2	1
Nodes\\Turning down Credit applications\High Level Informality	Yes	2.15 %	0	1
Nodes\\Turning down Credit applications\High Level Informality\lack appropriate documents and record keeping	No	1.18 %	2	1
Nodes\\Turning down Credit applications\High Level Informality\No seperation of business and personal	No	0.96 %	1	1
Nodes\\Turning down Credit applications\Lack of suitable collateral	Yes	0.49 %	1	1
Nodes\\Turning down Credit applications\Risk	Yes	2.15 %	0	1
Nodes\\Turning down Credit applications\Risk\inappropriate address system	No	1.51 %	1	1
Nodes\\Turning down Credit applications\Risk\Personal profile	No	0.64 %	1	1
Nodes\\Turning down Credit applications\serviceability	Yes	1.82 %	0	1
Nodes\\Turning down Credit applications\serviceability\Amount	No	0.94 %	1	1
Nodes\\Turning down Credit applications\serviceability\The business	Yes	0.87 %	0	1
Nodes\\Turning down Credit applications\serviceability\The business\Industry & Prospect	No	0.24 %	1	1
Nodes\\Turning down Credit applications\serviceability\The business\nature	No	0.63 %	3	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Person				
Nodes\\GHUB1	No	100.00 %	1	1

Internals\\GHUB2

Node

Nodes\\Attitude to Collateral	Yes	10.37 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary	Yes	5.04 %	5	1
Nodes\\Attitude to Collateral\Collateral Always necessary\exception	No	3.19 %	4	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason	Yes	0.44 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Back-up	No	0.26 %	1	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Policy	No	0.18 %	2	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	5.59 %	4	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	4.89 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\foreclosure difficulties	No	0.88 %	3	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Only a last resort	No	0.26 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	3.74 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	2.45 %	6	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\the business	No	1.31 %	3	1
Nodes\\Issues of concern when taking landed property	Yes	28.18 %	1	1
Nodes\\Issues of concern when taking landed property\Encumbrances	Yes	4.93 %	9	1
Nodes\\Issues of concern when taking landed property\Insurance	Yes	3.42 %	5	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	13.07 %	3	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	3.56 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation\Registered	No	3.56 %	5	1
Nodes\\Issues of concern when taking landed property\Ownership\ownership disputes	No	3.73 %	6	1
Nodes\\Issues of concern when taking landed property\Ownership\verification	Yes	4.79 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\formal	No	1.77 %	4	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\verification time and effects	No	2.53 %	4	1
Nodes\\Issues of concern when taking landed property\Saleability	Yes	3.59 %	8	1
Nodes\\Issues of concern when taking landed property\Valuation	Yes	2.81 %	2	1
Nodes\\Issues of concern when taking landed property\Valuation\Forced sale value	No	1.71 %	4	1
Nodes\\Preferred Collateral	Yes	4.24 %	0	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Preferred Collateral\preference in practice	Yes	4.24 %	0	1
Nodes\\Preferred Collateral\preference in practice\Landed property	Yes	4.24 %	4	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason	Yes	2.80 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\immovability	No	0.71 %	2	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\persistent value appreciation	No	2.09 %	2	1
Nodes\\Registered property benefit	Yes	7.25 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property	Yes	2.36 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property\Yes	No	2.36 %	3	1
Nodes\\Registered property benefit\Larger amount	Yes	1.56 %	0	1
Nodes\\Registered property benefit\Larger amount\Yes	Yes	1.56 %	1	1
Nodes\\Registered property benefit\Lower fees	Yes	0.18 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	0.18 %	1	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	3.14 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\Yes	Yes	3.14 %	3	1
Nodes\\Registered property benefit\Lower Interest rates\Yes\Reason	No	1.73 %	2	1
Nodes\\Turning down Credit applications	Yes	7.14 %	0	1
Nodes\\Turning down Credit applications\Lack of suitable collateral	Yes	0.30 %	1	1
Nodes\\Turning down Credit applications\Risk	Yes	5.58 %	0	1
Nodes\\Turning down Credit applications\Risk\Business prospect & risk	No	2.33 %	3	1
Nodes\\Turning down Credit applications\Risk\Track record	No	3.24 %	3	1
Nodes\\Turning down Credit applications\serviceability	Yes	3.16 %	0	1
Nodes\\Turning down Credit applications\serviceability\The business	Yes	3.16 %	0	1
Nodes\\Turning down Credit applications\serviceability\The business\Industry & Prospect	No	1.90 %	2	1
Nodes\\Turning down Credit applications\serviceability\The business\legaility	No	0.93 %	1	1
Nodes\\Turning down Credit applications\serviceability\The business\Type	No	0.31 %	1	1

Person

Nodes\\GHUB2	No	100.00 %	1	1

Internals\\GHUB3

Node

Nodes\\Attitude to Collateral	Yes	11.39 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	4.08 %	2	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	3.49 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Only a last resort	No	0.56 %	1	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	2.93 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	2.93 %	2	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary	Yes	7.31 %	3	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason	Yes	5.65 %	0	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Ability to repay	No	2.80 %	4	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Amount	No	2.27 %	4	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Relationship	No	0.56 %	1	1
Nodes\\Issues of concern when taking landed property	Yes	14.20 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	14.20 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	5.87 %	2	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation\Registered	No	2.52 %	2	1
Nodes\\Issues of concern when taking landed property\Ownership\ownership disputes	No	2.32 %	4	1
Nodes\\Issues of concern when taking landed property\Ownership\verification	Yes	5.99 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\formal	No	1.72 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\insiders	No	0.99 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\verification time and effects	No	4.18 %	3	1
Nodes\\Preferred Collateral	Yes	8.48 %	0	1
Nodes\\Preferred Collateral\Ideal Preference	Yes	4.37 %	3	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash	Yes	3.63 %	3	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason	Yes	1.06 %	0	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\Easy to foreclose	No	0.61 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\Easy to perfect	No	0.44 %	1	1
Nodes\\Preferred Collateral\preference in practice	Yes	4.89 %	2	1
Nodes\\Preferred Collateral\preference in practice\Landed property	Yes	3.04 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason	Yes	2.22 %	0	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\readily available	No	2.22 %	4	1
Nodes\\Registered property benefit	Yes	3.46 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property	Yes	1.52 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property\Yes	No	1.52 %	1	1
Nodes\\Registered property benefit\Larger amount	Yes	1.94 %	0	1
Nodes\\Registered property benefit\Larger amount\No	No	1.94 %	1	1
Nodes\\Registered property benefit\Longer repayment time	Yes	1.94 %	0	1
Nodes\\Registered property benefit\Longer repayment time\No	No	1.94 %	1	1
Nodes\\Registered property benefit\Lower fees	Yes	1.94 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	1.94 %	1	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	1.94 %	0	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Registered property benefit\Lower Interest rates\No	No	1.94 %	1	1
Nodes\\Turning down Credit applications	Yes	8.10 %	0	1
Nodes\\Turning down Credit applications\High Level Informality	Yes	5.77 %	2	1
Nodes\\Turning down Credit applications\High Level Informality\lack appropriate documents and record keeping	No	0.88 %	2	1
Nodes\\Turning down Credit applications\High Level Informality\non-use of banks	No	3.56 %	2	1
Nodes\\Turning down Credit applications\Lack of suitable collateral	Yes	0.51 %	0	1
Nodes\\Turning down Credit applications\Lack of suitable collateral\No registered property titles	No	0.51 %	1	1
Nodes\\Turning down Credit applications\Risk	Yes	1.80 %	2	1
Nodes\\Turning down Credit applications\serviceability	Yes	2.31 %	0	1
Nodes\\Turning down Credit applications\serviceability\cash flow	No	2.31 %	1	1

Person

Nodes\\GHUB3	No	100.00 %	1	1

Internals\\GHUB4

Node

Nodes\\Attitude to Collateral	Yes	11.13 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	3.90 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	2.80 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Only a last resort	No	1.63 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	1.16 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	1.16 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary	Yes	7.90 %	4	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason	Yes	6.48 %	0	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Amount	No	1.36 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\motivation	No	2.93 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Policy	No	0.85 %	1	1
Nodes\\Attitude to Collateral\Collateral Sometimes Necessary\Reason\Risk	No	1.32 %	1	1
Nodes\\Issues of concern when taking landed property	Yes	11.52 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	9.80 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	2.99 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation\Registered	No	2.65 %	3	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Issues of concern when taking landed property\Ownership\ownership disputes	No	0.44 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification	Yes	7.01 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\formal	No	1.21 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\insiders	No	0.95 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\verification time and effects	No	4.84 %	4	1
Nodes\\Issues of concern when taking landed property\Saleability	Yes	1.26 %	2	1
Nodes\\Issues of concern when taking landed property\Valuation	Yes	0.45 %	1	1
Nodes\\Preferred Collateral	Yes	12.56 %	0	1
Nodes\\Preferred Collateral\Ideal Preference	Yes	7.80 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash	Yes	7.77 %	2	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason	Yes	3.34 %	0	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\Easy to foreclose	No	1.61 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\Easy to perfect	No	1.73 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\inappropriateness of others	No	1.17 %	1	1
Nodes\\Preferred Collateral\preference in practice	Yes	6.74 %	2	1
Nodes\\Preferred Collateral\preference in practice\Landed property	Yes	5.64 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason	Yes	4.78 %	0	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\greater motivation for repayment	No	2.54 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\immovability	No	0.65 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\persistent value appreciation	No	0.68 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\readily available	No	0.90 %	1	1
Nodes\\Preferred Collateral\preference in practice\others	Yes	1.10 %	0	1
Nodes\\Preferred Collateral\preference in practice\others\guarantors	No	1.10 %	1	1
Nodes\\Registered property benefit	Yes	6.69 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property	Yes	2.81 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property\Yes	No	2.81 %	1	1
Nodes\\Registered property benefit\Larger amount	Yes	3.88 %	0	1
Nodes\\Registered property benefit\Larger amount\Yes	Yes	3.88 %	2	1
Nodes\\Registered property benefit\Longer repayment time	Yes	3.88 %	0	1
Nodes\\Registered property benefit\Longer repayment time\Yes	Yes	3.88 %	2	1
Nodes\\Registered property benefit\Lower fees	Yes	0.53 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	0.53 %	1	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	3.88 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\Yes	Yes	3.88 %	1	1
Nodes\\Registered property benefit\Lower Interest rates\Yes\Reason	No	1.73 %	1	1
Nodes\\Turning down Credit applications	Yes	5.95 %	0	1
Nodes\\Turning down Credit applications\High Level Informality	Yes	1.59 %	0	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Turning down Credit applications\High Level Informality\lack appropriate documents and record keeping	No	1.59 %	1	1
Nodes\\Turning down Credit applications\Lack of suitable collateral	Yes	1.37 %	1	1
Nodes\\Turning down Credit applications\Risk	Yes	1.20 %	0	1
Nodes\\Turning down Credit applications\Risk\Track record	No	1.20 %	1	1
Nodes\\Turning down Credit applications\serviceability	Yes	1.77 %	0	1
Nodes\\Turning down Credit applications\serviceability\cash flow	No	1.77 %	2	1
Person				
Nodes\\GHMFI3	No	6.07 %	1	1
Nodes\\GHUB4	No	100.00 %	1	1

Internals\\GHUB5

Node

Nodes\\Attitude to Collateral	Yes	28.94 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary	Yes	24.51 %	2	1
Nodes\\Attitude to Collateral\Collateral Always necessary\exception	No	6.25 %	1	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason	Yes	14.92 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Motivation	No	8.28 %	1	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Risk	No	6.63 %	2	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	4.43 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	3.35 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\foreclosure difficulties	No	1.60 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	1.75 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	1.75 %	1	1
Nodes\\Issues of concern when taking landed property	Yes	14.99 %	0	1
Nodes\\Issues of concern when taking landed property\Encumbrances	Yes	3.43 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	12.64 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	3.60 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation\Registered	No	3.60 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\ownership disputes	No	5.28 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification	Yes	5.90 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\formal	No	5.90 %	1	1
Nodes\\Issues of concern when taking landed property\Valuation	Yes	2.35 %	0	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Issues of concern when taking landed property\Valuation\Forced sale value	No	2.35 %	1	1
Nodes\\Preferred Collateral	Yes	12.51 %	0	1
Nodes\\Preferred Collateral\Ideal Preference	Yes	3.43 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash	Yes	3.15 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason	Yes	3.07 %	0	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\Easy to foreclose	No	1.37 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\Easy to perfect	No	1.70 %	1	1
Nodes\\Preferred Collateral\preference in practice	Yes	9.08 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property	Yes	9.08 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason	Yes	7.76 %	0	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\readily available	No	7.76 %	2	1
Nodes\\Registered property benefit	Yes	8.01 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property	Yes	5.75 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property\Yes	No	5.75 %	1	1
Nodes\\Registered property benefit\Larger amount	Yes	5.63 %	0	1
Nodes\\Registered property benefit\Larger amount\No	No	5.63 %	2	1
Nodes\\Registered property benefit\Longer repayment time	Yes	5.63 %	0	1
Nodes\\Registered property benefit\Longer repayment time\No	No	5.63 %	2	1
Nodes\\Registered property benefit\Lower fees	Yes	5.63 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	5.63 %	2	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	5.63 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\No	No	5.63 %	2	1
Nodes\\Turning down Credit applications	Yes	10.36 %	0	1
Nodes\\Turning down Credit applications\Capacity	Yes	1.25 %	1	1
Nodes\\Turning down Credit applications\High Level Informality	Yes	6.28 %	0	1
Nodes\\Turning down Credit applications\High Level Informality\lack appropriate documents and record keeping	No	6.28 %	1	1
Nodes\\Turning down Credit applications\Others	No	1.02 %	1	1
Nodes\\Turning down Credit applications\serviceability	Yes	1.80 %	1	1
Nodes\\Turning down Credit applications\serviceability\The business	Yes	1.22 %	0	1
Nodes\\Turning down Credit applications\serviceability\The business\nature	No	1.22 %	1	1

Person

Nodes\\GHUB5	No	100.00 %	1	1

Internals\\GHUB6

Node

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Attitude to Collateral	Yes	10.70 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary	Yes	5.43 %	1	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason	Yes	3.39 %	0	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Back-up	No	1.01 %	1	1
Nodes\\Attitude to Collateral\Collateral Always necessary\Reason\Risk	No	2.37 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient	Yes	5.26 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason	Yes	2.96 %	0	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical	Yes	2.96 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\Ability to repay	No	2.96 %	1	1
Nodes\\Attitude to Collateral\Collateral Not Sufficient\Reason\Other factors more critical\the business	No	2.96 %	1	1
Nodes\\Issues of concern when taking landed property	Yes	22.92 %	0	1
Nodes\\Issues of concern when taking landed property\Encumbrances	Yes	2.41 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership	Yes	11.82 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation	Yes	1.44 %	0	1
Nodes\\Issues of concern when taking landed property\Ownership\documentation\Registered	No	1.44 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\ownership disputes	No	0.88 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification	Yes	9.48 %	1	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\formal	No	3.53 %	2	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\insiders	No	2.27 %	2	1
Nodes\\Issues of concern when taking landed property\Ownership\verification\verification time and effects	No	3.06 %	1	1
Nodes\\Issues of concern when taking landed property\Saleability	Yes	8.69 %	3	1
Nodes\\Preferred Collateral	Yes	10.86 %	0	1
Nodes\\Preferred Collateral\Ideal Preference	Yes	4.41 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash	Yes	4.41 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason	Yes	2.02 %	0	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\Easy to foreclose	No	2.02 %	1	1
Nodes\\Preferred Collateral\Ideal Preference\cash & near cash\reason\Easy to perfect	No	1.37 %	1	1
Nodes\\Preferred Collateral\preference in practice	Yes	6.45 %	0	1
Nodes\\Preferred Collateral\preference in practice\Landed property	Yes	6.45 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason	Yes	4.14 %	0	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\greater motivation for repayment	No	2.08 %	1	1
Nodes\\Preferred Collateral\preference in practice\Landed property\reason\immovability	No	2.05 %	2	1
Nodes\\Registered property benefit	Yes	10.21 %	0	1

Hierarchical Name	Aggregate	Coverage	Number Of Coding References	Number Of Users Coding
Nodes\\Registered property benefit\Improves acceptability of property	Yes	3.55 %	0	1
Nodes\\Registered property benefit\Improves acceptability of property\Yes	No	3.55 %	1	1
Nodes\\Registered property benefit\Larger amount	Yes	2.58 %	0	1
Nodes\\Registered property benefit\Larger amount\No	No	2.58 %	2	1
Nodes\\Registered property benefit\Longer repayment time	Yes	2.68 %	0	1
Nodes\\Registered property benefit\Longer repayment time\No	No	2.68 %	2	1
Nodes\\Registered property benefit\Lower fees	Yes	2.47 %	0	1
Nodes\\Registered property benefit\Lower fees\No	No	2.47 %	2	1
Nodes\\Registered property benefit\Lower Interest rates	Yes	2.42 %	0	1
Nodes\\Registered property benefit\Lower Interest rates\No	No	2.42 %	2	1
Nodes\\Turning down Credit applications	Yes	10.44 %	0	1
Nodes\\Turning down Credit applications\Lack of suitable collateral	Yes	6.01 %	1	1
Nodes\\Turning down Credit applications\Lack of suitable collateral\No registered property titles	No	3.62 %	1	1
Nodes\\Turning down Credit applications\serviceability	Yes	4.43 %	1	1
Nodes\\Turning down Credit applications\serviceability\cash flow	No	2.12 %	1	1
Person				
Nodes\\GHMFI2	No	4.35 %	2	1
Nodes\\GHUB6	No	100.00 %	1	1

Number of questionnaires distributed and number received - England

Selected cities & towns	Number of questionnaires distributed	Number of questionnaires completed & returned
Manchester	80	32
Liverpool	59	34
Chester	44	21
Southport	10	5
St. Helens	7	3
Total	200	95

APPENDIX B

The Nature of SE Credit Constraints in Ghana

Respondent Characteristics

Table 1

Education * Gender Crosstabulation

			Gender		
			male	female	Total
Education	no formal education	Count	10	21	31
		% within Education	32.3%	67.7%	100.0%
		% within Gender	17.5%	28.4%	23.7%
		% of Total	7.6%	16.0%	23.7%
	Basic education	Count	26	22	48
		% within Education	54.2%	45.8%	100.0%
		% within Gender	45.6%	29.7%	36.6%
		% of Total	19.8%	16.8%	36.6%
	secondary/vocational/technical education	Count	18	24	42
		% within Education	42.9%	57.1%	100.0%
		% within Gender	31.6%	32.4%	32.1%
		% of Total	13.7%	18.3%	32.1%
	tertiary education	Count	3	7	10
		% within Education	30.0%	70.0%	100.0%
		% within Gender	5.3%	9.5%	7.6%
		% of Total	2.3%	5.3%	7.6%
Total		Count	57	74	131
		% within Education	43.5%	56.5%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	43.5%	56.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.564[a]	3	.207
Likelihood Ratio	4.617	3	.202
Linear-by-Linear Association	.010	1	.920
N of Valid Cases	131		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.35.

Table 2

Correlations

			Education	Age
Spearman's rho	Education	Correlation Coefficient	1.000	.029
		Sig. (2-tailed)	.	.744
		N	131	131
	Age	Correlation Coefficient	.029	1.000
		Sig. (2-tailed)	.744	.
		N	131	131

Table 3

Correlations

			Age	Dependants
Spearman's rho	Age	Correlation Coefficient	1.000	.573**
		Sig. (2-tailed)	.	.000
		N	131	131
	Dependants	Correlation Coefficient	.573**	1.000
		Sig. (2-tailed)	.000	.
		N	131	131

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4

Correlations

			Education	Dependants
Spearman's rho	Education	Correlation Coefficient	1.000	-.192*
		Sig. (2-tailed)	.	.028
		N	131	131
	Dependants	Correlation Coefficient	-.192*	1.000
		Sig. (2-tailed)	.028	.
		N	131	131

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5

Dependants * Gender Crosstabulation

			Gender		Total
			male	female	
Dependants	below 5	Count	15	18	33
		% within Dependants	45.5%	54.5%	100.0%
		% within Gender	26.3%	24.3%	25.2%
		% of Total	11.5%	13.7%	25.2%
	5-10	Count	37	47	84
		% within Dependants	44.0%	56.0%	100.0%
		% within Gender	64.9%	63.5%	64.1%
		% of Total	28.2%	35.9%	64.1%
	+10	Count	5	9	14
		% within Dependants	35.7%	64.3%	100.0%
		% within Gender	8.8%	12.2%	10.7%
		% of Total	3.8%	6.9%	10.7%
Total		Count	57	74	131
		% within Dependants	43.5%	56.5%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	43.5%	56.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.407a	2	.816
Likelihood Ratio	.413	2	.813
Linear-by-Linear Association	.274	1	.601
N of Valid Cases	131		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.09.

Table 6

number of employees * Business type Crosstabulation

			Business type				
			trader	Mechanic	catering	carpenter	Total
number of employees	less than 5	Count	69	4	5	3	81
		% within number of employees	85.2%	4.9%	6.2%	3.7%	100.0%
		% within Business type	79.3%	23.5%	38.5%	21.4%	61.8%
		% of Total	52.7%	3.1%	3.8%	2.3%	61.8%
	5-10	Count	16	5	7	9	37
		% within number of employees	43.2%	13.5%	18.9%	24.3%	100.0%
		% within Business type	18.4%	29.4%	53.8%	64.3%	28.2%
		% of Total	12.2%	3.8%	5.3%	6.9%	28.2%
	+10	Count	2	8	1	2	13
		% within number of employees	15.4%	61.5%	7.7%	15.4%	100.0%
		% within Business type	2.3%	47.1%	7.7%	14.3%	9.9%
		% of Total	1.5%	6.1%	.8%	1.5%	9.9%
Total		Count	87	17	13	14	131
		% within number of employees	66.4%	13.0%	9.9%	10.7%	100.0%
		% within Business type	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	66.4%	13.0%	9.9%	10.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	54.685[a]	6	.000
Likelihood Ratio	46.034	6	.000
Linear-by-Linear Association	21.822	1	.000
N of Valid Cases	131		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is 1.29.

Table 7

Business type * Gender Crosstabulation

			Gender		Total
			male	female	
Business type	trader	Count	24	63	87
		% within Business type	27.6%	72.4%	100.0%
		% within Gender	42.1%	85.1%	66.4%
		% of Total	18.3%	48.1%	66.4%
	Mechanic	Count	17	0	17
		% within Business type	100.0%	.0%	100.0%
		% within Gender	29.8%	.0%	13.0%
		% of Total	13.0%	.0%	13.0%
	catering	Count	3	10	13
		% within Business type	23.1%	76.9%	100.0%
		% within Gender	5.3%	13.5%	9.9%
		% of Total	2.3%	7.6%	9.9%
	carpenter	Count	13	1	14
		% within Business type	92.9%	7.1%	100.0%
		% within Gender	22.8%	1.4%	10.7%
		% of Total	9.9%	.8%	10.7%
Total		Count	57	74	131
		% within Business type	43.5%	56.5%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	43.5%	56.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.125[a]	3	.000
Likelihood Ratio	55.656	3	.000
Linear-by-Linear Association	18.066	1	.000
N of Valid Cases	131		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.66.

Table 8

average monthly cash generated * Business type Crosstabulation

			Business type				Total
			trader	Mechanic	catering	carpenter	
average monthly cash generated	Below GHC 500	Count	18	3	2	2	25
		% within average monthly cash generated	72.0%	12.0%	8.0%	8.0%	100.0%
		% within Business type	20.7%	17.6%	15.4%	14.3%	19.1%
		% of Total	13.7%	2.3%	1.5%	1.5%	19.1%
	GHC 500-1000	Count	32	5	4	5	46
		% within average monthly cash generated	69.6%	10.9%	8.7%	10.9%	100.0%
		% within Business type	36.8%	29.4%	30.8%	35.7%	35.1%
		% of Total	24.4%	3.8%	3.1%	3.8%	35.1%
	GHC 1001-1500	Count	22	8	3	5	38
		% within average monthly cash generated	57.9%	21.1%	7.9%	13.2%	100.0%
		% within Business type	25.3%	47.1%	23.1%	35.7%	29.0%
		% of Total	16.8%	6.1%	2.3%	3.8%	29.0%
	+GHC 1500	Count	15	1	4	2	22
		% within average monthly cash generated	68.2%	4.5%	18.2%	9.1%	100.0%
		% within Business type	17.2%	5.9%	30.8%	14.3%	16.8%
		% of Total	11.5%	.8%	3.1%	1.5%	16.8%
Total		Count	87	17	13	14	131
		% within average monthly cash generated	66.4%	13.0%	9.9%	10.7%	100.0%
		% within Business type	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	66.4%	13.0%	9.9%	10.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.175[a]	9	.722
Likelihood Ratio	6.025	9	.737
Linear-by-Linear Association	.599	1	.439
N of Valid Cases	131		

a. 11 cells (68.8%) have expected count less than 5. The minimum expected count is 2.18.

Table 9

most important business problem * Business type Crosstabulation

			Business type				Total
			trader	Mechanic	catering	carpenter	
most important business problem	lack of funds	Count	43	7	4	6	60
		% within most important business problem	71.7%	11.7%	6.7%	10.0%	100.0%
		% within Business type	49.4%	41.2%	30.8%	42.9%	45.8%
		% of Total	32.8%	5.3%	3.1%	4.6%	45.8%
	frequent price increament by suppliers	Count	6	5	5	1	17
		% within most important business problem	35.3%	29.4%	29.4%	5.9%	100.0%
		% within Business type	6.9%	29.4%	38.5%	7.1%	13.0%
		% of Total	4.6%	3.8%	3.8%	.8%	13.0%
	lack of business space & poor location	Count	12	0	0	0	12
		% within most important business problem	100.0%	.0%	.0%	.0%	100.0%
		% within Business type	13.8%	.0%	.0%	.0%	9.2%
		% of Total	9.2%	.0%	.0%	.0%	9.2%
	high import duty & bureaucracy	Count	9	5	0	0	14
		% within most important business problem	64.3%	35.7%	.0%	.0%	100.0%
		% within Business type	10.3%	29.4%	.0%	.0%	10.7%
		% of Total	6.9%	3.8%	.0%	.0%	10.7%
	competition	Count	11	0	0	1	12
		% within most important business problem	91.7%	.0%	.0%	8.3%	100.0%
		% within Business type	12.6%	.0%	.0%	7.1%	9.2%
		% of Total	8.4%	.0%	.0%	.8%	9.2%
	lack of raw material	Count	0	0	4	6	10
		% within most important business problem	.0%	.0%	40.0%	60.0%	100.0%
		% within Business type	.0%	.0%	30.8%	42.9%	7.6%
		% of Total	.0%	.0%	3.1%	4.6%	7.6%
	others	Count	6	0	0	0	6
		% within most important business problem	100.0%	.0%	.0%	.0%	100.0%
		% within Business type	6.9%	.0%	.0%	.0%	4.6%
		% of Total	4.6%	.0%	.0%	.0%	4.6%
Total		Count	87	17	13	14	131
		% within most important business problem	66.4%	13.0%	9.9%	10.7%	100.0%
		% within Business type	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	66.4%	13.0%	9.9%	10.7%	100.0%

Credit market experiences

Table 10

Applied for loan in last 24 months * Gender Crosstabulation

			Gender		
			male	female	Total
Applied for loan in last 24 months	No	Count	21	16	37
		% within Applied for loan in last 24 months	56.8%	43.2%	100.0%
		% within Gender	36.8%	21.6%	28.2%
		% of Total	16.0%	12.2%	28.2%
	Yes	Count	36	58	94
		% within Applied for loan in last 24 months	38.3%	61.7%	100.0%
		% within Gender	63.2%	78.4%	71.8%
		% of Total	27.5%	44.3%	71.8%
Total		Count	57	74	131
		% within Applied for loan in last 24 months	43.5%	56.5%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	43.5%	56.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.680[a]	1	.055		
Continuity Correction[b]	2.968	1	.085		
Likelihood Ratio	3.662	1	.056		
Fisher's Exact Test				.078	.043
Linear-by-Linear Association	3.652	1	.056		
N of Valid Cases	131				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.10.

b. Computed only for a 2x2 table

Table 11: Applied for loan in last 24 months * Age

Crosstab

			Age				Total
			Below 30yrs	30-45yrs	46-60yr	60yrs+	
Applied for loan in last 24 months	No	Count	8	18	5	6	37
		% within Applied for loan in last 24 months	21.6%	48.6%	13.5%	16.2%	100.0%
		% within Age	38.1%	29.5%	13.9%	46.2%	28.2%
		% of Total	6.1%	13.7%	3.8%	4.6%	28.2%
	Yes	Count	13	43	31	7	94
		% within Applied for loan in last 24 months	13.8%	45.7%	33.0%	7.4%	100.0%
		% within Age	61.9%	70.5%	86.1%	53.8%	71.8%
		% of Total	9.9%	32.8%	23.7%	5.3%	71.8%
Total		Count	21	61	36	13	131
		% within Applied for loan in last 24 months	16.0%	46.6%	27.5%	9.9%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	16.0%	46.6%	27.5%	9.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.772[a]	3	.080
Likelihood Ratio	7.078	3	.069
Linear-by-Linear Association	.339	1	.560
N of Valid Cases	131		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.67.

Table 12: Applied for loan in last 24 months * Education

Crosstab

			Education				Total
			no formal education	Basic education	secondary/vocational/technical education	tertiary education	
Applied for loan in last 24 months	No	Count	11	15	8	3	37
		% within Applied for loan in last 24 months	29.7%	40.5%	21.6%	8.1%	100.0%
		% within Education	35.5%	31.3%	19.0%	30.0%	28.2%
		% of Total	8.4%	11.5%	6.1%	2.3%	28.2%
	Yes	Count	20	33	34	7	94
		% within Applied for loan in last 24 months	21.3%	35.1%	36.2%	7.4%	100.0%
		% within Education	64.5%	68.8%	81.0%	70.0%	71.8%
		% of Total	15.3%	25.2%	26.0%	5.3%	71.8%
Total		Count	31	48	42	10	131
		% within Applied for loan in last 24 months	23.7%	36.6%	32.1%	7.6%	100.0%
		% within Education	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	23.7%	36.6%	32.1%	7.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.784[a]	3	.426
Likelihood Ratio	2.888	3	.409
Linear-by-Linear Association	1.535	1	.215
N of Valid Cases	131		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.82.

Table 13: Applied for loan in last 24 months * number of employees

Crosstab

			number of employees			Total
			less than 5	5-10	+10	
Applied for loan in last 24 months	No	Count	20	14	3	37
		% within Applied for loan in last 24 months	54.1%	37.8%	8.1%	100.0%
		% within number of employees	24.7%	37.8%	23.1%	28.2%
		% of Total	15.3%	10.7%	2.3%	28.2%
	Yes	Count	61	23	10	94
		% within Applied for loan in last 24 months	64.9%	24.5%	10.6%	100.0%
		% within number of employees	75.3%	62.2%	76.9%	71.8%
		% of Total	46.6%	17.6%	7.6%	71.8%
Total		Count	81	37	13	131
		% within Applied for loan in last 24 months	61.8%	28.2%	9.9%	100.0%
		% within number of employees	100.0%	100.0%	100.0%	100.0%
		% of Total	61.8%	28.2%	9.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.356[a]	2	.308
Likelihood Ratio	2.283	2	.319
Linear-by-Linear Association	.408	1	.524
N of Valid Cases	131		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.67.

Table 14: Applied for loan in last 24 months * average monthly cash generated

Crosstab

			average monthly cash generated				Total
			Below GHC 500	GHC 500-1000	GHC 1001-1500	+GHC 1500	
Applied for loan in last 24 months	No	Count	7	16	8	6	37
		% within Applied for loan in last 24 months	18.9%	43.2%	21.6%	16.2%	100.0%
		% within average monthly cash generated	28.0%	34.8%	21.1%	27.3%	28.2%
		% of Total	5.3%	12.2%	6.1%	4.6%	28.2%
	Yes	Count	18	30	30	16	94
		% within Applied for loan in last 24 months	19.1%	31.9%	31.9%	17.0%	100.0%
		% within average monthly cash generated	72.0%	65.2%	78.9%	72.7%	71.8%
		% of Total	13.7%	22.9%	22.9%	12.2%	71.8%
Total		Count	25	46	38	22	131
		% within Applied for loan in last 24 months	19.1%	35.1%	29.0%	16.8%	100.0%
		% within average monthly cash generated	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	19.1%	35.1%	29.0%	16.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.951[a]	3	.583
Likelihood Ratio	1.971	3	.578
Linear-by-Linear Association	.373	1	.542
N of Valid Cases	131		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.21.

Table 15

Applied for loan in last 24 months * most important business problem Crosstabulation

			most important business problem		Total
			lack of funds	others	
Applied for loan in last 24 months	No	Count	17	20	37
		% within Applied for loan in last 24 months	45.9%	54.1%	100.0%
		% within most important business problem	28.3%	28.2%	28.2%
		% of Total	13.0%	15.3%	28.2%
	Yes	Count	43	51	94
		% within Applied for loan in last 24 months	45.7%	54.3%	100.0%
		% within most important business problem	71.7%	71.8%	71.8%
		% of Total	32.8%	38.9%	71.8%
Total		Count	60	71	131
		% within Applied for loan in last 24 months	45.8%	54.2%	100.0%
		% within most important business problem	100.0%	100.0%	100.0%
		% of Total	45.8%	54.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.000[a]	1	.983		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.000	1	.983		
Fisher's Exact Test				1.000	.568
Linear-by-Linear Association	.000	1	.983		
N of Valid Cases	131				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.95.

b. Computed only for a 2x2 table

Table 16

Lending Institution * Gender Crosstabulation

			Gender		
			male	female	Total
Lending Institution	Universal bank	Count	7	16	23
		% within Lending Institution	30.4%	69.6%	100.0%
		% within Gender	17.9%	29.1%	24.5%
		% of Total	7.4%	17.0%	24.5%
	MFI	Count	32	39	71
		% within Lending Institution	45.1%	54.9%	100.0%
		% within Gender	82.1%	70.9%	75.5%
		% of Total	34.0%	41.5%	75.5%
Total		Count	39	55	94
		% within Lending Institution	41.5%	58.5%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	41.5%	58.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.533[a]	1	.216		
Continuity Correction[b]	.989	1	.320		
Likelihood Ratio	1.572	1	.210		
Fisher's Exact Test				.236	.160
Linear-by-Linear Association	1.517	1	.218		
N of Valid Cases	94				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.54.

b. Computed only for a 2x2 table

Table 17

Lending Institution * Education Crosstabulation

			Education				
			no formal education	Basic education	secondary/vocational/technical education	tertiary education	Total
Lending Institution	Universal bank	Count	6	12	4	1	23
		% within Lending Institution	26.1%	52.2%	17.4%	4.3%	100.0%
		% within Education	30.0%	31.6%	14.3%	12.5%	24.5%
		% of Total	6.4%	12.8%	4.3%	1.1%	24.5%
	MFI	Count	14	26	24	7	71
		% within Lending Institution	19.7%	36.6%	33.8%	9.9%	100.0%
		% within Education	70.0%	68.4%	85.7%	87.5%	75.5%
		% of Total	14.9%	27.7%	25.5%	7.4%	75.5%
Total		Count	20	38	28	8	94
		% within Lending Institution	21.3%	40.4%	29.8%	8.5%	100.0%
		% within Education	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	21.3%	40.4%	29.8%	8.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.562[a]	3	.313
Likelihood Ratio	3.779	3	.286
Linear-by-Linear Association	2.499	1	.114
N of Valid Cases	94		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.96.

Constraint Status of Loan Applicants

Table 18

Loan amount wanted

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below GHC 500	7	7.4	7.4	7.4
	GHC 500-1000	31	33.0	33.0	40.4
	GHC 1001-2000	31	33.0	33.0	73.4
	+GHC 2000	25	26.6	26.6	100.0
	Total	94	100.0	100.0	

Table 19: Selected lending institution and loan amount wanted

Crosstab

			Lending Institution		
			Universal Bank	MFI	Total
Loan amount wanted	Below GHC 500	Count	3	4	7
		% within Loan amount wanted	42.9%	57.1%	100.0%
		% within Lending Institution	13.0%	5.6%	7.4%
		% of Total	3.2%	4.3%	7.4%
	GHC 500-1000	Count	3	28	31
		% within Loan amount wanted	9.7%	90.3%	100.0%
		% within Lending Institution	13.0%	39.4%	33.0%
		% of Total	3.2%	29.8%	33.0%
	GHC 1001-2000	Count	5	26	31
		% within Loan amount wanted	16.1%	83.9%	100.0%
		% within Lending Institution	21.7%	36.6%	33.0%
		% of Total	5.3%	27.7%	33.0%
	+GHC 2000	Count	12	13	25
		% within Loan amount wanted	48.0%	52.0%	100.0%
		% within Lending Institution	52.2%	18.3%	26.6%
		% of Total	12.8%	13.8%	26.6%
Total		Count	23	71	94
		% within Loan amount wanted	24.5%	75.5%	100.0%
		% within Lending Institution	100.0%	100.0%	100.0%
		% of Total	24.5%	75.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.607[a]	3	.003
Likelihood Ratio	13.324	3	.004
Linear-by-Linear Association	4.183	1	.041
N of Valid Cases	94		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 1.71.

Table 20

Loan amount applied for * average monthly cash generated Crosstabulation

			average monthly cash generated				
			Below GHC 500	GHC 500-1000	GHC 1001-1500	+GHC 1500	Total
Loan amount applied for	Below GHC 500	Count	4	3	0	0	7
		% within Loan amount applied for	57.1%	42.9%	.0%	.0%	100.0%
		% within average monthly cash generated	16.0%	6.5%	.0%	.0%	5.3%
		% of Total	3.1%	2.3%	.0%	.0%	5.3%
	GHC 500-1000	Count	12	16	3	0	31
		% within Loan amount applied for	38.7%	51.6%	9.7%	.0%	100.0%
		% within average monthly cash generated	48.0%	34.8%	7.9%	.0%	23.7%
		% of Total	9.2%	12.2%	2.3%	.0%	23.7%
	GHC 1001-2000	Count	2	10	14	2	28
		% within Loan amount applied for	7.1%	35.7%	50.0%	7.1%	100.0%
		% within average monthly cash generated	8.0%	21.7%	36.8%	9.1%	21.4%
		% of Total	1.5%	7.6%	10.7%	1.5%	21.4%
	+GHC 2000	Count	0	1	13	14	28
		% within Loan amount applied for	.0%	3.6%	46.4%	50.0%	100.0%
		% within average monthly cash generated	.0%	2.2%	34.2%	63.6%	21.4%
		% of Total	.0%	.8%	9.9%	10.7%	21.4%
	N/A	Count	7	16	8	6	37
		% within Loan amount applied for	18.9%	43.2%	21.6%	16.2%	100.0%
		% within average monthly cash generated	28.0%	34.8%	21.1%	27.3%	28.2%
		% of Total	5.3%	12.2%	6.1%	4.6%	28.2%
Total		Count	25	46	38	22	131
		% within Loan amount applied for	19.1%	35.1%	29.0%	16.8%	100.0%
		% within average monthly cash generated	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	19.1%	35.1%	29.0%	16.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	70.390[a]	12	.000
Likelihood Ratio	80.541	12	.000
Linear-by-Linear Association	17.174	1	.000
N of Valid Cases	131		

a. 6 cells (30.0%) have expected count less than 5. The minimum expected count is 1.18.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.733	.000
	Cramer's V	.423	.000
N of Valid Cases		131	

Table 21

Proportion of loan amount recieved

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	zero percent	10	10.6	10.6	10.6
	Below 50%	16	17.0	17.0	27.7
	50% - 75%	31	33.0	33.0	60.6
	+76 but less than 100%	11	11.7	11.7	72.3
	100%	26	27.7	27.7	100.0
	Total	94	100.0	100.0	

Table 22: Wilcoxon's test for difference between loan amount wanted and amount received

Ranks

		N	Mean Rank	Sum of Ranks
Proportion of loan amount recieved - Loan amount applied for	Negative Ranks	22[a]	26.55	584.00
	Positive Ranks	49[b]	40.24	1972.00
	Ties	23[c]		
	Total	94		

a. Proportion of loan amount recieved < Loan amount applied for

b. Proportion of loan amount recieved > Loan amount applied for

c. Proportion of loan amount recieved = Loan amount applied for

Test Statistics[b]

	Proportion of loan amount recieved - Loan amount applied for
Z	-4.032[a]
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Table 23

Recieved full amount * Monthly Cash generated Crosstabulation

			Monthly Cash generated				
			Below GHC 500	GHC 500-1000	GHC 1001-1500	+GHC 1500	Total
Recieved full amount	no	Count	17	26	21	4	68
		% within Recieved full amount	25.0%	38.2%	30.9%	5.9%	100.0%
		% within Monthly Cash generated	85.0%	86.7%	63.6%	36.4%	72.3%
		% of Total	18.1%	27.7%	22.3%	4.3%	72.3%
	yes	Count	3	4	12	7	26
		% within Recieved full amount	11.5%	15.4%	46.2%	26.9%	100.0%
		% within Monthly Cash generated	15.0%	13.3%	36.4%	63.6%	27.7%
		% of Total	3.2%	4.3%	12.8%	7.4%	27.7%
Total		Count	20	30	33	11	94
		% within Recieved full amount	21.3%	31.9%	35.1%	11.7%	100.0%
		% within Monthly Cash generated	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	21.3%	31.9%	35.1%	11.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.044[a]	3	.005
Likelihood Ratio	12.714	3	.005
Linear-by-Linear Association	10.446	1	.001
N of Valid Cases	94		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.04.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.373	.005
	Cramer's V	.373	.005
N of Valid Cases		94	

Table 24

Recieved full amount * Loan amount applied for Crosstabulation

			Loan amount applied for				
			Below GHC 500	GHC 500-1000	GHC 1001-2000	+GHC 2000	Total
Recieved full amount	no	Count	7	26	25	10	68
		% within Recieved full amount	10.3%	38.2%	36.8%	14.7%	100.0%
		% within Loan amount applied for	100.0%	83.9%	80.6%	40.0%	72.3%
		% of Total	7.4%	27.7%	26.6%	10.6%	72.3%
	yes	Count	0	5	6	15	26
		% within Recieved full amount	.0%	19.2%	23.1%	57.7%	100.0%
		% within Loan amount applied for	.0%	16.1%	19.4%	60.0%	27.7%
		% of Total	.0%	5.3%	6.4%	16.0%	27.7%
Total		Count	7	31	31	25	94
		% within Recieved full amount	7.4%	33.0%	33.0%	26.6%	100.0%
		% within Loan amount applied for	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.4%	33.0%	33.0%	26.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.873[a]	3	.000
Likelihood Ratio	19.361	3	.000
Linear-by-Linear Association	14.958	1	.000
N of Valid Cases	94		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 1.94.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.448	.000
	Cramer's V	.448	.000
N of Valid Cases		94	

Table 25: chi square test for Constraint status and Age

Crosstab

			Age				
			Below 30yrs	30-45yrs	46-60yr	60yrs+	Total
Recieved full amount	no	Count	11	26	21	10	68
		% within Recieved full amount	16.2%	38.2%	30.9%	14.7%	100.0%
		% within Age	61.1%	65.0%	84.0%	90.9%	72.3%
		% of Total	11.7%	27.7%	22.3%	10.6%	72.3%
	yes	Count	7	14	4	1	26
		% within Recieved full amount	26.9%	53.8%	15.4%	3.8%	100.0%
		% within Age	38.9%	35.0%	16.0%	9.1%	27.7%
		% of Total	7.4%	14.9%	4.3%	1.1%	27.7%
Total		Count	18	40	25	11	94
		% within Recieved full amount	19.1%	42.6%	26.6%	11.7%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	19.1%	42.6%	26.6%	11.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.806[a]	3	.121
Likelihood Ratio	6.327	3	.097
Linear-by-Linear Association	5.156	1	.023
N of Valid Cases	94		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 3.04.

Table 26: chi square test for Constraint status and gender

Crosstab

			Gender		Total
			male	female	
Recieved full amount	no	Count	28	40	68
		% within Recieved full amount	41.2%	58.8%	100.0%
		% within Gender	71.8%	72.7%	72.3%
		% of Total	29.8%	42.6%	72.3%
	yes	Count	11	15	26
		% within Recieved full amount	42.3%	57.7%	100.0%
		% within Gender	28.2%	27.3%	27.7%
		% of Total	11.7%	16.0%	27.7%
Total		Count	39	55	94
		% within Recieved full amount	41.5%	58.5%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	41.5%	58.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.010[a]	1	.921		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.010	1	.921		
Fisher's Exact Test				1.000	.551
Linear-by-Linear Association	.010	1	.921		
N of Valid Cases	94				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.79.

b. Computed only for a 2x2 table

Table 27: chi square test for Constraint status and education

Crosstab

			Education				Total
			no formal education	Basic education	secondary/vocational/technical education	tertiary education	
Recieved full amount	no	Count	12	31	19	6	68
		% within Recieved full amount	17.6%	45.6%	27.9%	8.8%	100.0%
		% within Education	60.0%	81.6%	67.9%	75.0%	72.3%
		% of Total	12.8%	33.0%	20.2%	6.4%	72.3%
	yes	Count	8	7	9	2	26
		% within Recieved full amount	30.8%	26.9%	34.6%	7.7%	100.0%
		% within Education	40.0%	18.4%	32.1%	25.0%	27.7%
		% of Total	8.5%	7.4%	9.6%	2.1%	27.7%
Total		Count	20	38	28	8	94
		% within Recieved full amount	21.3%	40.4%	29.8%	8.5%	100.0%
		% within Education	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	21.3%	40.4%	29.8%	8.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.453[a]	3	.327
Likelihood Ratio	3.476	3	.324
Linear-by-Linear Association	.180	1	.672
N of Valid Cases	94		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.21.

Table 28: chi square test for Constraint status and number of dependents

Crosstab

			Dependants			Total
			below 5	5-10	+10	
Recieved full amount	no	Count	16	43	9	68
		% within Recieved full amount	23.5%	63.2%	13.2%	100.0%
		% within Dependants	57.1%	76.8%	90.0%	72.3%
		% of Total	17.0%	45.7%	9.6%	72.3%
	yes	Count	12	13	1	26
		% within Recieved full amount	46.2%	50.0%	3.8%	100.0%
		% within Dependants	42.9%	23.2%	10.0%	27.7%
		% of Total	12.8%	13.8%	1.1%	27.7%
Total		Count	28	56	10	94
		% within Recieved full amount	29.8%	59.6%	10.6%	100.0%
		% within Dependants	100.0%	100.0%	100.0%	100.0%
		% of Total	29.8%	59.6%	10.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.344[a]	2	.069
Likelihood Ratio	5.433	2	.066
Linear-by-Linear Association	5.188	1	.023
N of Valid Cases	94		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.77.

Table 29: chi square test for Constraint status and monthly expenditure

Crosstab

			Average monthly expenditure				Total
			Below GHC 300	GHC 300-500	GHC 501-700	+GHC 700	
Recieved full amount	no	Count	18	28	14	8	68
		% within Recieved full amount	26.5%	41.2%	20.6%	11.8%	100.0%
		% within Average monthly expenditure	78.3%	73.7%	60.9%	80.0%	72.3%
		% of Total	19.1%	29.8%	14.9%	8.5%	72.3%
	yes	Count	5	10	9	2	26
		% within Recieved full amount	19.2%	38.5%	34.6%	7.7%	100.0%
		% within Average monthly expenditure	21.7%	26.3%	39.1%	20.0%	27.7%
		% of Total	5.3%	10.6%	9.6%	2.1%	27.7%
Total		Count	23	38	23	10	94
		% within Recieved full amount	24.5%	40.4%	24.5%	10.6%	100.0%
		% within Average monthly expenditure	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	24.5%	40.4%	24.5%	10.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.243[a]	3	.524
Likelihood Ratio	2.182	3	.536
Linear-by-Linear Association	.368	1	.544
N of Valid Cases	94		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.77.

Table 30: chi square test for Constraint status and lending institution

Proportion of loan amount recieved * Lending Institution Crosstabulation

			Lending Institution		
			Universal bank	MFI	Total
Proportion of loan amount recieved	zero percent	Count	5	5	10
		% within Proportion of loan amount recieved	50.0%	50.0%	100.0%
		% within Lending Institution	21.7%	7.0%	10.6%
		% of Total	5.3%	5.3%	10.6%
	Below 50%	Count	2	14	16
		% within Proportion of loan amount recieved	12.5%	87.5%	100.0%
		% within Lending Institution	8.7%	19.7%	17.0%
		% of Total	2.1%	14.9%	17.0%
	50% - 75%	Count	8	23	31
		% within Proportion of loan amount recieved	25.8%	74.2%	100.0%
		% within Lending Institution	34.8%	32.4%	33.0%
		% of Total	8.5%	24.5%	33.0%
	+76 but less than 100%	Count	5	6	11
		% within Proportion of loan amount recieved	45.5%	54.5%	100.0%
		% within Lending Institution	21.7%	8.5%	11.7%
		% of Total	5.3%	6.4%	11.7%
	100%	Count	3	23	26
		% within Proportion of loan amount recieved	11.5%	88.5%	100.0%
		% within Lending Institution	13.0%	32.4%	27.7%
		% of Total	3.2%	24.5%	27.7%
Total		Count	23	71	94
		% within Proportion of loan amount recieved	24.5%	75.5%	100.0%
		% within Lending Institution	100.0%	100.0%	100.0%
		% of Total	24.5%	75.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.771[a]	4	.044
Likelihood Ratio	9.528	4	.049
Linear-by-Linear Association	2.375	1	.123
N of Valid Cases	94		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 2.45.

Table 31

obtain credit anytime needed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	8	8.5	8.5	8.5
	disagree	35	37.2	37.2	45.7
	neither agree not disagree	23	24.5	24.5	70.2
	agree	23	24.5	24.5	94.7
	strongly agree	5	5.3	5.3	100.0
	Total	94	100.0	100.0	

Table 32

Recieved full amount * obtain credit anytime needed Crosstabulation

			obtain credit anytime needed					
			strongly disagree	disagree	neither agree not disagree	agree	strongly agree	Total
Recieved full amount	no	Count	8	25	19	14	2	68
		% within Recieved full amount	11.8%	36.8%	27.9%	20.6%	2.9%	100.0%
		% within obtain credit anytime needed	100.0%	71.4%	82.6%	60.9%	40.0%	72.3%
		% of Total	8.5%	26.6%	20.2%	14.9%	2.1%	72.3%
	yes	Count	0	10	4	9	3	26
		% within Recieved full amount	.0%	38.5%	15.4%	34.6%	11.5%	100.0%
		% within obtain credit anytime needed	.0%	28.6%	17.4%	39.1%	60.0%	27.7%
		% of Total	.0%	10.6%	4.3%	9.6%	3.2%	27.7%
Total		Count	8	35	23	23	5	94
		% within Recieved full amount	8.5%	37.2%	24.5%	24.5%	5.3%	100.0%
		% within obtain credit anytime needed	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	8.5%	37.2%	24.5%	24.5%	5.3%	100.0%

Reported causes of the constraint faced by loan applicants

Table 33

main reason for unsucessful application * Lending institution Crosstabulation

			Lending institution		
			Universal bank	MFI	Total
main reason for unsucessful application	Lack of guarantor	Count	3	9	12
		% within main reason for unsucessful application	25.0%	75.0%	100.0%
		% within Lending institution	18.8%	17.3%	17.6%
		% of Total	4.4%	13.2%	17.6%
	Lack of landed property	Count	5	13	18
		% within main reason for unsucessful application	27.8%	72.2%	100.0%
		% within Lending institution	31.3%	25.0%	26.5%
		% of Total	7.4%	19.1%	26.5%
	insufficient funds in savings a/c	Count	2	6	8
		% within main reason for unsucessful application	25.0%	75.0%	100.0%
		% within Lending institution	12.5%	11.5%	11.8%
		% of Total	2.9%	8.8%	11.8%
	poor cash flow	Count	3	8	11
		% within main reason for unsucessful application	27.3%	72.7%	100.0%
		% within Lending institution	18.8%	15.4%	16.2%
		% of Total	4.4%	11.8%	16.2%
	repayment difficulties in the past	Count	0	14	14
		% within main reason for unsucessful application	.0%	100.0%	100.0%
		% within Lending institution	.0%	26.9%	20.6%
		% of Total	.0%	20.6%	20.6%
	lack registered property documents	Count	3	0	3
		% within main reason for unsucessful application	100.0%	.0%	100.0%
		% within Lending institution	18.8%	.0%	4.4%
		% of Total	4.4%	.0%	4.4%
	don't know	Count	0	2	2
		% within main reason for unsucessful application	.0%	100.0%	100.0%
		% within Lending institution	.0%	3.8%	2.9%
		% of Total	.0%	2.9%	2.9%
Total		Count	16	52	68
		% within main reason for unsucessful application	23.5%	76.5%	100.0%
		% within Lending institution	100.0%	100.0%	100.0%
		% of Total	23.5%	76.5%	100.0%

Constraint status of non-applicants

Table 34

main reason for not applying for credit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't need it	10	7.6	7.6	7.6
	Don't know where& how to get it	2	1.5	1.5	9.2
	think I dont qualify	3	2.3	2.3	11.5
	takes too long to process	2	1.5	1.5	13.0
	don't possess required documents	1	.8	.8	13.7
	cannt afford charges	11	8.4	8.4	22.1
	terms don't meet my requirements	8	6.1	6.1	28.2
	N/A	94	71.8	71.8	100.0
	Total	131	100.0	100.0	

SE credit constraint - Validation Output

Table 35

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 30yrs	4	14.8	14.8	14.8
	30-45yrs	15	55.6	55.6	70.4
	46-60yr	8	29.6	29.6	100.0
	Total	27	100.0	100.0	

Table 36

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	8	29.6	29.6	29.6
	female	19	70.4	70.4	100.0
	Total	27	100.0	100.0	

Table 37

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no formal education	8	29.6	29.6	29.6
	Basic education	13	48.1	48.1	77.8
	secondary/vocational/technical education	6	22.2	22.2	100.0
	Total	27	100.0	100.0	

Table 38

Dependants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 5	5	18.5	18.5	18.5
	5-10	18	66.7	66.7	85.2
	+10	4	14.8	14.8	100.0
	Total	27	100.0	100.0	

Table 39

Employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 5	20	74.1	74.1	74.1
	5-10	7	25.9	25.9	100.0
	Total	27	100.0	100.0	

Table 40

Cash per month

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below GHC 500	8	29.6	29.6	29.6
	GHC 500-1000	7	25.9	25.9	55.6
	GHC 1001-1500	12	44.4	44.4	100.0
	Total	27	100.0	100.0	

Table 41

Average monthly expenditure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below GHC 300	4	14.8	14.8	14.8
	GHC 300-500	14	51.9	51.9	66.7
	GHC 501-700	8	29.6	29.6	96.3
	+GHC 700	1	3.7	3.7	100.0
	Total	27	100.0	100.0	

Table 42

most important business problem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	lack of funds	15	55.6	55.6	55.6
	frequent price increament by suppliers	4	14.8	14.8	70.4
	shop location not conducive for business	3	11.1	11.1	81.5
	high importt duties	5	18.5	18.5	100.0
	Total	27	100.0	100.0	

Table 43

Applied for loan in last 24 months

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	5	18.5	18.5	18.5
	Yes	22	81.5	81.5	100.0
	Total	27	100.0	100.0	

Table 44

Lending institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Universal bank	7	25.9	25.9	25.9
	Rural Bank	6	22.2	22.2	48.1
	Savings and Loans Institution	9	33.3	33.3	81.5
	N/A	5	18.5	18.5	100.0
	Total	27	100.0	100.0	

Table 45

Loan amount wanted

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below GHC 500	2	7.4	7.4	7.4
	GHC 500-1000	6	22.2	22.2	29.6
	GHC 1001-2000	6	22.2	22.2	51.9
	+GHC 2000	8	29.6	29.6	81.5
	N/A	5	18.5	18.5	100.0
	Total	27	100.0	100.0	

Table 46

Recieved full amount

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	19	70.4	70.4	70.4
	yes	3	11.1	11.1	81.5
	N/A	5	18.5	18.5	100.0
	Total	27	100.0	100.0	

Table 47

obtain credit anytime needed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	5	18.5	18.5	18.5
	disagree	14	51.9	51.9	70.4
	neither agree not disagree	5	18.5	18.5	88.9
	agree	3	11.1	11.1	100.0
	Total	27	100.0	100.0	

Table 48

Proportion of loan amount recieved

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	zero percent	3	11.1	11.1	11.1
	Below 50%	7	25.9	25.9	37.0
	50% - 75%	7	25.9	25.9	63.0
	+76 but less than 100%	2	7.4	7.4	70.4
	100%	3	11.1	11.1	81.5
	N/A	5	18.5	18.5	100.0
	Total	27	100.0	100.0	

Table 49

main reason for unsucessful application

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lack of landed property	8	29.6	29.6	29.6
	defaulted in the past	6	22.2	22.2	51.9
	don't know	5	18.5	18.5	70.4
	N/A	8	29.6	29.6	100.0
	Total	27	100.0	100.0	

Table 50

main reason for not applying for credit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't need it	1	3.7	3.7	3.7
	cann't afford charges	4	14.8	14.8	18.5
	N/A	22	81.5	81.5	100.0
	Total	27	100.0	100.0	

Table 51

obtain credit anytime needed * Recieved full amount Crosstabulation

			Recieved full amount			
			no	yes	N/A	Total
obtain credit anytime needed	strongly disagree	Count	3	0	2	5
		% within obtain credit anytime needed	60.0%	.0%	40.0%	100.0%
		% within Recieved full amount	15.8%	.0%	40.0%	18.5%
		% of Total	11.1%	.0%	7.4%	18.5%
	disagree	Count	10	3	1	14
		% within obtain credit anytime needed	71.4%	21.4%	7.1%	100.0%
		% within Recieved full amount	52.6%	100.0%	20.0%	51.9%
		% of Total	37.0%	11.1%	3.7%	51.9%
	neither agree not disagree	Count	4	0	1	5
		% within obtain credit anytime needed	80.0%	.0%	20.0%	100.0%
		% within Recieved full amount	21.1%	.0%	20.0%	18.5%
		% of Total	14.8%	.0%	3.7%	18.5%
	agree	Count	2	0	1	3
		% within obtain credit anytime needed	66.7%	.0%	33.3%	100.0%
		% within Recieved full amount	10.5%	.0%	20.0%	11.1%
		% of Total	7.4%	.0%	3.7%	11.1%
Total		Count	19	3	5	27
		% within obtain credit anytime needed	70.4%	11.1%	18.5%	100.0%
		% within Recieved full amount	100.0%	100.0%	100.0%	100.0%
		% of Total	70.4%	11.1%	18.5%	100.0%

Table 52: Proportion of Loan Amount Actually Received and Constraint Status – Ghana

Proportion of loan amount received	N=22	Valid %	Constraint Status
zero	3	13.6	Fully constrained applicants
< 50%	7	31.8	Partially constrained applicants
50-75%	7	31.8	
>76% but <100%	2	9.0	
100%	3	13.6	Unconstrained applicants

APPENDIX C

Property Registration and Credit Access in Ghana and England

Respondents' characteristics - Ghana

Table 1

yrs at current position * Institution Type Crosstabulation

			Institution Type		
			Universal bank	MFI	Total
yrs at current position	Below 5yrs	Count	14	25	39
		% within yrs at current position	35.9%	64.1%	100.0%
		% within Institution Type	24.6%	49.0%	36.1%
		% of Total	13.0%	23.1%	36.1%
	5-10yrs	Count	28	18	46
		% within yrs at current position	60.9%	39.1%	100.0%
		% within Institution Type	49.1%	35.3%	42.6%
		% of Total	25.9%	16.7%	42.6%
	10yrs+	Count	15	8	23
		% within yrs at current position	65.2%	34.8%	100.0%
		% within Institution Type	26.3%	15.7%	21.3%
		% of Total	13.9%	7.4%	21.3%
Total		Count	57	51	108
		% within yrs at current position	52.8%	47.2%	100.0%
		% within Institution Type	100.0%	100.0%	100.0%
		% of Total	52.8%	47.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.095[a]	2	.029
Likelihood Ratio	7.168	2	.028
Linear-by-Linear Association	5.946	1	.015
N of Valid Cases	108		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.86.

Table 2

yrs at institution * Institution Type Crosstabulation

			Institution Type		
			Universal bank	MFI	Total
yrs at institution	less than 5	Count	14	20	34
		% within yrs at institution	41.2%	58.8%	100.0%
		% within Institution Type	24.6%	39.2%	31.5%
		% of Total	13.0%	18.5%	31.5%
	5-10	Count	27	15	42
		% within yrs at institution	64.3%	35.7%	100.0%
		% within Institution Type	47.4%	29.4%	38.9%
		% of Total	25.0%	13.9%	38.9%
	10+	Count	16	16	32
		% within yrs at institution	50.0%	50.0%	100.0%
		% within Institution Type	28.1%	31.4%	29.6%
		% of Total	14.8%	14.8%	29.6%
Total		Count	57	51	108
		% within yrs at institution	52.8%	47.2%	100.0%
		% within Institution Type	100.0%	100.0%	100.0%
		% of Total	52.8%	47.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.167[a]	2	.124
Likelihood Ratio	4.208	2	.122
Linear-by-Linear Association	.563	1	.453
N of Valid Cases	108		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.11.

Table 3

position * Age Crosstabulation

			Age			
			Below 30yrs	30-45yrs	+45yrs	Total
position	credit officer	Count	16	28	10	54
		% within position	29.6%	51.9%	18.5%	100.0%
		% within Age	69.6%	53.8%	30.3%	50.0%
		% of Total	14.8%	25.9%	9.3%	50.0%
	loans manager	Count	6	23	12	41
		% within position	14.6%	56.1%	29.3%	100.0%
		% within Age	26.1%	44.2%	36.4%	38.0%
		% of Total	5.6%	21.3%	11.1%	38.0%
	branch manager	Count	1	1	11	13
		% within position	7.7%	7.7%	84.6%	100.0%
		% within Age	4.3%	1.9%	33.3%	12.0%
		% of Total	.9%	.9%	10.2%	12.0%
Total		Count	23	52	33	108
		% within position	21.3%	48.1%	30.6%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%
		% of Total	21.3%	48.1%	30.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.873[a]	4	.000
Likelihood Ratio	22.900	4	.000
Linear-by-Linear Association	14.803	1	.000
N of Valid Cases	108		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 2.77.

Respondents' characteristics – England

Table 4

yrs at current position * position Crosstabulation

			position			
			loans advisors	business managers	branch managers	Total
yrs at current position	Below 5yrs	Count	10	15	1	26
		% within yrs at current position	38.5%	57.7%	3.8%	100.0%
		% within position	26.3%	32.6%	9.1%	27.4%
		% of Total	10.5%	15.8%	1.1%	27.4%
	5-10yrs	Count	17	15	9	41
		% within yrs at current position	41.5%	36.6%	22.0%	100.0%
		% within position	44.7%	32.6%	81.8%	43.2%
		% of Total	17.9%	15.8%	9.5%	43.2%
	+10yrs	Count	11	16	1	28
		% within yrs at current position	39.3%	57.1%	3.6%	100.0%
		% within position	28.9%	34.8%	9.1%	29.5%
		% of Total	11.6%	16.8%	1.1%	29.5%
Total		Count	38	46	11	95
		% within yrs at current position	40.0%	48.4%	11.6%	100.0%
		% within position	100.0%	100.0%	100.0%	100.0%
		% of Total	40.0%	48.4%	11.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.831[a]	4	.065
Likelihood Ratio	9.145	4	.058
Linear-by-Linear Association	.008	1	.929
N of Valid Cases	95		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 3.01.

Table 5

yrs at current position * genda Crosstabulation

			genda		
			male	female	Total
yrs at current position	Below 5yrs	Count	22	4	26
		% within yrs at current position	84.6%	15.4%	100.0%
		% within genda	32.4%	14.8%	27.4%
		% of Total	23.2%	4.2%	27.4%
	5-10yrs	Count	28	13	41
		% within yrs at current position	68.3%	31.7%	100.0%
		% within genda	41.2%	48.1%	43.2%
		% of Total	29.5%	13.7%	43.2%
	+10yrs	Count	18	10	28
		% within yrs at current position	64.3%	35.7%	100.0%
		% within genda	26.5%	37.0%	29.5%
		% of Total	18.9%	10.5%	29.5%
Total		Count	68	27	95
		% within yrs at current position	71.6%	28.4%	100.0%
		% within genda	100.0%	100.0%	100.0%
		% of Total	71.6%	28.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.122[a]	2	.210
Likelihood Ratio	3.364	2	.186
Linear-by-Linear Association	2.659	1	.103
N of Valid Cases	95		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.39.

Table 6

yrs at current position * Age Crosstabulation

			Age			Total
			Below 30yrs	30-45yrs	+45	
yrs at current position	Below 5yrs	Count	17	7	2	26
		% within yrs at current position	65.4%	26.9%	7.7%	100.0%
		% within Age	100.0%	20.0%	4.7%	27.4%
		% of Total	17.9%	7.4%	2.1%	27.4%
	5-10yrs	Count	0	27	14	41
		% within yrs at current position	.0%	65.9%	34.1%	100.0%
		% within Age	.0%	77.1%	32.6%	43.2%
		% of Total	.0%	28.4%	14.7%	43.2%
	+10yrs	Count	0	1	27	28
		% within yrs at current position	.0%	3.6%	96.4%	100.0%
		% within Age	.0%	2.9%	62.8%	29.5%
		% of Total	.0%	1.1%	28.4%	29.5%
Total		Count	17	35	43	95
		% within yrs at current position	17.9%	36.8%	45.3%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%
		% of Total	17.9%	36.8%	45.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	89.011[a]	4	.000
Likelihood Ratio	92.221	4	.000
Linear-by-Linear Association	56.605	1	.000
N of Valid Cases	95		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 4.65.

Attitudes to collateral as a requirement for small business credit - Ghana

Table 7

How necessary is collateral

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not necessary	3	2.8	2.8	2.8
	seldom necessary	13	12.0	12.0	14.8
	mostly necessary	37	34.3	34.3	49.1
	always necessary	55	50.9	50.9	100.0
	Total	108	100.0	100.0	

Table 8

How necessary is collateral * Institution Type Crosstabulation

			Institution Type		Total
			Universal bank	MFI	
How necessary is collateral	not necessary	Count	0	3	3
		% within How necessary is collateral	.0%	100.0%	100.0%
		% within Institution Type	.0%	5.9%	2.8%
		% of Total	.0%	2.8%	2.8%
	seldom necessary	Count	2	11	13
		% within How necessary is collateral	15.4%	84.6%	100.0%
		% within Institution Type	3.5%	21.6%	12.0%
		% of Total	1.9%	10.2%	12.0%
	mostly necessary	Count	15	22	37
		% within How necessary is collateral	40.5%	59.5%	100.0%
		% within Institution Type	26.3%	43.1%	34.3%
		% of Total	13.9%	20.4%	34.3%
	always necessary	Count	40	15	55
		% within How necessary is collateral	72.7%	27.3%	100.0%
		% within Institution Type	70.2%	29.4%	50.9%
		% of Total	37.0%	13.9%	50.9%
Total		Count	57	51	108
		% within How necessary is collateral	52.8%	47.2%	100.0%
		% within Institution Type	100.0%	100.0%	100.0%
		% of Total	52.8%	47.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.652[a]	3	.000
Likelihood Ratio	23.809	3	.000
Linear-by-Linear Association	21.104	1	.000
N of Valid Cases	108		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.42.

Table 9

Ranks

	Institution Type	N	Mean Rank	Sum of Ranks
How necessary is collateral	Universal bank	57	66.40	3785.00
	MFI	51	41.20	2101.00
	Total	108		

Test Statistics[a]

	How necessary is collateral
Mann-Whitney U	775.000
Wilcoxon W	2101.000
Z	-4.594
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Institution Type

Table 10

How necessary is collateral * gender Crosstabulation

			gender		Total
			male	female	
How necessary is collateral	not necessary	Count	3	0	3
		% within How necessary is collateral	100.0%	.0%	100.0%
		% within gender	4.3%	.0%	2.8%
		% of Total	2.8%	.0%	2.8%
	seldom necessary	Count	8	5	13
		% within How necessary is collateral	61.5%	38.5%	100.0%
		% within gender	11.4%	13.2%	12.0%
		% of Total	7.4%	4.6%	12.0%
	mostly necessary	Count	23	14	37
		% within How necessary is collateral	62.2%	37.8%	100.0%
		% within gender	32.9%	36.8%	34.3%
		% of Total	21.3%	13.0%	34.3%
	always necessary	Count	36	19	55
		% within How necessary is collateral	65.5%	34.5%	100.0%
		% within gender	51.4%	50.0%	50.9%
		% of Total	33.3%	17.6%	50.9%
Total		Count	70	38	108
		% within How necessary is collateral	64.8%	35.2%	100.0%
		% within gender	100.0%	100.0%	100.0%
		% of Total	64.8%	35.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.814[a]	3	.612
Likelihood Ratio	2.785	3	.426
Linear-by-Linear Association	.114	1	.736
N of Valid Cases	108		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.06.

Table 11

Correlations

			Age	How necessary is collateral
Spearman's rho	Age	Correlation Coefficient	1.000	.009
		Sig. (2-tailed)	.	.925
		N	108	108
	How necessary is collateral	Correlation Coefficient	.009	1.000
		Sig. (2-tailed)	.925	.
		N	108	108

Table 12

Correlations

			How necessary is collateral	yrs at institution
Spearman's rho	How necessary is collateral	Correlation Coefficient	1.000	.029
		Sig. (2-tailed)	.	.763
		N	108	108
	yrs at institution	Correlation Coefficient	.029	1.000
		Sig. (2-tailed)	.763	.
		N	108	108

Table 13

Correlations

			How necessary is collateral	yrs at current position
Spearman's rho	How necessary is collateral	Correlation Coefficient	1.000	.060
		Sig. (2-tailed)	.	.535
		N	108	108
	yrs at current position	Correlation Coefficient	.060	1.000
		Sig. (2-tailed)	.535	.
		N	108	108

Table 14: collateral not sufficient to trigger loan supply (CONOSUFF)

CONOSUFF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	7	6.5	6.5	6.5
	Neither agree nor disagree	23	21.3	21.3	27.8
	agree	51	47.2	47.2	75.0
	fully agree	27	25.0	25.0	100.0
	Total	108	100.0	100.0	

Table 15: Mann-Whitney test for CONOSUFF and type of lender

Ranks

	Institution Type	N	Mean Rank	Sum of Ranks
CONOSUFF	Universal bank	57	54.58	3111.00
	MFI	51	54.41	2775.00
	Total	108		

Test Statistics[a]

	CONOSUFF
Mann-Whitney U	1449.000
Wilcoxon W	2775.000
Z	-.030
Asymp. Sig. (2-tailed)	.976

a. Grouping Variable: Institution Type

Table 16: chi square test for CONOSUFF and gender

CONOSUFF * gender Crosstabulation

			gender		
			male	female	Total
CONOSUFF	disagree	Count	4	3	7
		Expected Count	4.5	2.5	7.0
		% within CONOSUFF	57.1%	42.9%	100.0%
		% within gender	5.7%	7.9%	6.5%
		% of Total	3.7%	2.8%	6.5%
	Neither agree nor disagree	Count	15	8	23
		Expected Count	14.9	8.1	23.0
		% within CONOSUFF	65.2%	34.8%	100.0%
		% within gender	21.4%	21.1%	21.3%
		% of Total	13.9%	7.4%	21.3%
	agree	Count	31	20	51
		Expected Count	33.1	17.9	51.0
		% within CONOSUFF	60.8%	39.2%	100.0%
		% within gender	44.3%	52.6%	47.2%
		% of Total	28.7%	18.5%	47.2%
	fully agree	Count	20	7	27
		Expected Count	17.5	9.5	27.0
		% within CONOSUFF	74.1%	25.9%	100.0%
		% within gender	28.6%	18.4%	25.0%
		% of Total	18.5%	6.5%	25.0%
Total		Count	70	38	108
		Expected Count	70.0	38.0	108.0
		% within CONOSUFF	64.8%	35.2%	100.0%
		% within gender	100.0%	100.0%	100.0%
		% of Total	64.8%	35.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.561[a]	3	.668
Likelihood Ratio	1.601	3	.659
Linear-by-Linear Association	.683	1	.408
N of Valid Cases	108		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.46.

Table 17: correlation between CONOSUFF and experience

Correlations

			yrs at current position	CONOSUFF
Spearman's rho	yrs at current position	Correlation Coefficient	1.000	-.045
		Sig. (2-tailed)	.	.644
		N	108	108
	CONOSUFF	Correlation Coefficient	-.045	1.000
		Sig. (2-tailed)	.644	.
		N	108	108

Table 18: correlation between CONOSUFF and age

Correlations

			CONOSUFF	Age
Spearman's rho	CONOSUFF	Correlation Coefficient	1.000	.000
		Sig. (2-tailed)	.	.996
		N	108	108
	Age	Correlation Coefficient	.000	1.000
		Sig. (2-tailed)	.996	.
		N	108	108

Table 19: correlation between CONOSUFF and number of years at institution

Correlations

			CONOSUFF	yrs at institution
Spearman's rho	CONOSUFF	Correlation Coefficient	1.000	-.090
		Sig. (2-tailed)	.	.354
		N	108	108
	yrs at institution	Correlation Coefficient	-.090	1.000
		Sig. (2-tailed)	.354	.
		N	108	108

Attitudes to collateral as a requirement for small business credit – England

Table 20

How necessary is collateral

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom necessary	23	24.2	24.2	24.2
	mostly necessary	52	54.7	54.7	78.9
	always necessary	20	21.1	21.1	100.0
	Total	95	100.0	100.0	

Table 21

Correlations

			How necessary is collateral	yrs at current position
Spearman's rho	How necessary is collateral	Correlation Coefficient	1.000	-.348**
		Sig. (2-tailed)	.	.001
		N	95	95
	yrs at current position	Correlation Coefficient	-.348**	1.000
		Sig. (2-tailed)	.001	.
		N	95	95

**. Correlation is significant at the 0.01 level (2-tailed).

Table 22

How necessary is collateral * genda Crosstabulation

			genda		
			male	female	Total
How necessary is collateral	seldom necessary	Count	15	8	23
		% within How necessary is collateral	65.2%	34.8%	100.0%
		% within genda	22.1%	29.6%	24.2%
		% of Total	15.8%	8.4%	24.2%
	mostly necessary	Count	40	12	52
		% within How necessary is collateral	76.9%	23.1%	100.0%
		% within genda	58.8%	44.4%	54.7%
		% of Total	42.1%	12.6%	54.7%
	always necessary	Count	13	7	20
		% within How necessary is collateral	65.0%	35.0%	100.0%
		% within genda	19.1%	25.9%	21.1%
		% of Total	13.7%	7.4%	21.1%
Total		Count	68	27	95
		% within How necessary is collateral	71.6%	28.4%	100.0%
		% within genda	100.0%	100.0%	100.0%
		% of Total	71.6%	28.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.613[a]	2	.446
Likelihood Ratio	1.609	2	.447
Linear-by-Linear Association	.002	1	.960
N of Valid Cases	95		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.68.

Table 23

Collateral Not sufficient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	11	11.6	11.6	11.6
	Neither agree nor disagree	14	14.7	14.7	26.3
	agree	20	21.1	21.1	47.4
	fully agree	50	52.6	52.6	100.0
	Total	95	100.0	100.0	

Table 24

Correlations

			yrs at current position	Collateral Not sufficient
Spearman's rho	yrs at current position	Correlation Coefficient	1.000	-.177
		Sig. (2-tailed)	.	.086
		N	95	95
	Collateral Not sufficient	Correlation Coefficient	-.177	1.000
		Sig. (2-tailed)	.086	.
		N	95	95

Preferred forms of collateral – Ghana

Table 25

Friedman Test for different forms of collateral

Ranks

	Mean Rank
Land	8.60
Cash/fixed Deposit	7.00
Stock	4.20
Automobiles	5.84
Machinery	4.99
AccountReclevables	3.35
LifePolicy	3.21
shares/bonds	3.86
T-Bills	7.01
third party Guarantees	6.95

Test Statistics[a]

N	108
Chi-Square	410.971
df	9
Asymp. Sig.	.000

a. Friedman Test

Table 26: Wilcoxon test for landed property and T-bills

Ranks

		N	Mean Rank	Sum of Ranks
T-Bills - Land	Negative Ranks	59[a]	38.80	2289.00
	Positive Ranks	15[b]	32.40	486.00
	Ties	34[c]		
	Total	108		

a. T-Bills < Land

b. T-Bills > Land

c. T-Bills = Land

Test Statistics[b]

	T-Bills - Land
Z	-5.065[a]
Asymp. Sig. (2-tailed)	.000

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

Tables 27: Friedman's test

Ranks

	Mean Rank
T-Bills	2.63
Cash/fixed Deposit	2.59
third party Guarantees	2.67
Automobiles	2.12

Test Statistics[a]

N	108
Chi-Square	17.319
df	3
Asymp. Sig.	.001

a. Friedman Test

Table 28: Friedman's test

Ranks

	Mean Rank
T-Bills	1.99
Cash/fixed Deposit	1.97
third party Guarantees	2.04

Test Statistics[a]

N	108
Chi-Square	.482
df	2
Asymp. Sig.	.786

a. Friedman Test

Table 29:

Ranks

		N	Mean Rank	Sum of Ranks
Machinery - Automobiles	Negative Ranks	49[a]	39.79	1949.50
	Positive Ranks	26[b]	34.63	900.50
	Ties	33[c]		
	Total	108		

a. Machinery < Automobiles

b. Machinery > Automobiles

c. Machinery = Automobiles

Test Statistics[b]

	Machinery - Automobiles
Z	-2.862[a]
Asymp. Sig. (2-tailed)	.004

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

30: Friedman's test

Ranks

	Mean Rank
Machinery	2.10
Stock	1.95
shares/bonds	1.94

Test Statistics[a]

N	108
Chi-Square	2.116
df	2
Asymp. Sig.	.347

a. Friedman Test

Table 31: Wilcoxon test for account receivables and life policy

Ranks

		N	Mean Rank	Sum of Ranks
LifePolicy - AccountReclevables	Negative Ranks	31[a]	30.81	955.00
	Positive Ranks	29[b]	30.17	875.00
	Ties	48[c]		
	Total	108		

a. LifePolicy < AccountReclevables

b. LifePolicy > AccountReclevables

c. LifePolicy = AccountReclevables

Test Statistics[b]

	LifePolicy - Account Reclevables
Z	-.316[a]
Asymp. Sig. (2-tailed)	.752

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

Table 32

Correlations

			Land	yrs at Institution
Spearman's rho	Land	Correlation Coefficient	1.000	.244*
		Sig. (2-tailed)	.	.011
		N	108	108
	yrs at institution	Correlation Coefficient	.244*	1.000
		Sig. (2-tailed)	.011	.
		N	108	108

*. Correlation is significant at the 0.05 level (2-tailed).

Table 33

Correlations

			Land	yrs at current position
Spearman's rho	Land	Correlation Coefficient	1.000	.072
		Sig. (2-tailed)	.	.460
		N	108	108
	yrs at current position	Correlation Coefficient	.072	1.000
		Sig. (2-tailed)	.460	.
		N	108	108

Table 34: Friedman Test

Ranks

Institution Type		Mean Rank
Universal bank	Land	3.61
	T-Bills	2.23
	Cash/fixed Deposit	2.02
	third party Guarantees	2.14
MFI	Land	2.54
	T-Bills	2.35
	Cash/fixed Deposit	2.54
	third party Guarantees	2.57

Test Statistics[a]

Universal bank	N	57
	Chi-Square	73.305
	df	3
	Asymp. Sig.	.000
MFI	N	51
	Chi-Square	1.378
	df	3
	Asymp. Sig.	.711

a. Friedman Test

Preferred forms of collateral – England

Table 35: Friedman Test

Ranks

	Mean Rank
Prefor Land	2.07
Cash	2.01
T-bills	1.92

Test Statistics[a]

N	95
Chi-Square	1.730
df	2
Asymp. Sig.	.421

a. Friedman Test

Table 36: Friedman Test

Ranks

	Mean Rank
accout receivables	1.99
Prefor Shares/bonds	1.98
Prefor third party Guarantees	2.03

Test Statistics[a]

N	95
Chi-Square	.192
df	2
Asymp. Sig.	.909

a. Friedman Test

Table 37: Wilcoxon's test

Ranks

		N	Mean Rank	Sum of Ranks
machines and tools - Prefor LifePolicy	Negative Ranks	27[a]	27.83	751.50
	Positive Ranks	30[b]	30.05	901.50
	Ties	38[c]		
	Total	95		

a. machines and tools < Prefor LifePolicy

b. machines and tools > Prefor LifePolicy

c. machines and tools = Prefor LifePolicy

Test Statistics[b]

	machines and tools - Prefor LifePolicy
Z	-.619[a]
Asymp. Sig. (2-tailed)	.536

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Table 38: Wilcoxon's test

Ranks

		N	Mean Rank	Sum of Ranks
Prefor Automobiles - Prefor Stock	Negative Ranks	18[a]	25.06	451.00
	Positive Ranks	28[b]	22.50	630.00
	Ties	49[c]		
	Total	95		

a. Prefor Automobiles < Prefor Stock

b. Prefor Automobiles > Prefor Stock

c. Prefor Automobiles = Prefor Stock

Test Statistics[b]

	Prefor Automobiles - Prefor Stock
Z	-1.101[a]
Asymp. Sig. (2-tailed)	.271

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Table 39

Correlations

			yrs at current position	Prefor Land
Spearman's rho	yrs at current position	Correlation Coefficient	1.000	.137
		Sig. (2-tailed)	.	.185
		N	95	95
	Prefor Land	Correlation Coefficient	.137	1.000
		Sig. (2-tailed)	.185	.
		N	95	95

Table 40

Correlations

			Prefor Land	yrs at institution
Spearman's rho	Prefor Land	Correlation Coefficient	1.000	-.109
		Sig. (2-tailed)	.	.294
		N	95	95
	yrs at institution	Correlation Coefficient	-.109	1.000
		Sig. (2-tailed)	.294	.
		N	95	95

Table 41

Correlations

			Prefor Land	How necessary is collateral
Spearman's rho	Prefor Land	Correlation Coefficient	1.000	-.111
		Sig. (2-tailed)	.	.284
		N	95	95
	How necessary is collateral	Correlation Coefficient	-.111	1.000
		Sig. (2-tailed)	.284	.
		N	95	95

APPENDIX D

Eligibility of landed property for use as collateral

Ghana

Table 1: Registration not necessary to make landed property eligible collateral (RENNEC)

RENNEC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	18	16.7	16.7	16.7
	disagree	31	28.7	28.7	45.4
	Neither agree nor disagree	18	16.7	16.7	62.0
	agree	26	24.1	24.1	86.1
	strongly agree	15	13.9	13.9	100.0
	Total	108	100.0	100.0	

Table 2

RENNEC * Institution Type Crosstabulation

			Institution Type		
			Universal bank	MFI	Total
RENNEC	strongly disagree	Count	15	3	18
		% within RENNEC	83.3%	16.7%	100.0%
		% within Institution Type	26.3%	5.9%	16.7%
		% of Total	13.9%	2.8%	16.7%
	disagree	Count	23	8	31
		% within RENNEC	74.2%	25.8%	100.0%
		% within Institution Type	40.4%	15.7%	28.7%
		% of Total	21.3%	7.4%	28.7%
	Neither agree nor disagree	Count	7	11	18
		% within RENNEC	38.9%	61.1%	100.0%
		% within Institution Type	12.3%	21.6%	16.7%
		% of Total	6.5%	10.2%	16.7%
	agree	Count	9	17	26
		% within RENNEC	34.6%	65.4%	100.0%
		% within Institution Type	15.8%	33.3%	24.1%
		% of Total	8.3%	15.7%	24.1%
	strongly agree	Count	3	12	15
		% within RENNEC	20.0%	80.0%	100.0%
		% within Institution Type	5.3%	23.5%	13.9%
		% of Total	2.8%	11.1%	13.9%
Total		Count	57	51	108
		% within RENNEC	52.8%	47.2%	100.0%
		% within Institution Type	100.0%	100.0%	100.0%
		% of Total	52.8%	47.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.748[a]	4	.000
Likelihood Ratio	25.152	4	.000
Linear-by-Linear Association	21.930	1	.000
N of Valid Cases	108		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.08.

Symmetric Measures

		Value	Approx Sig.
Nominal by Nominal	Phi	.469	.000
	Cramer's V	.469	.000
N of Valid Cases		108	

Table 3:

Correlations

			RENNEC	Prefor Land
Spearman's rho	RENNEC	Correlation Coefficient	1.000	-.190*
		Sig. (2-tailed)	.	.049
		N	108	108
	Prefor Land	Correlation Coefficient	-.190*	1.000
		Sig. (2-tailed)	.049	.
		N	108	108

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4

Correlations

			RENNEC	Documentation verification
Spearman's rho	RENNEC	Correlation Coefficient	1.000	-.208*
		Sig. (2-tailed)	.	.031
		N	108	108
	Documentation verification	Correlation Coefficient	-.208*	1.000
		Sig. (2-tailed)	.031	.
		N	108	108

*. Correlation is significant at the 0.05 level (2-tailed).

Table 6

RENNEC * Repossession problems due to ownership dispute in past 2 yrs Crosstabulation

			Repossession problems due to ownership dispute in past 2 yrs		
			no	yes	Total
RENNEC	strongly disagree	Count	13	5	18
		% within RENNEC	72.2%	27.8%	100.0%
		% within Repossession problems due to ownership dispute in past 2 yrs	16.3%	17.9%	16.7%
		% of Total	12.0%	4.6%	16.7%
	disagree	Count	24	7	31
		% within RENNEC	77.4%	22.6%	100.0%
		% within Repossession problems due to ownership dispute in past 2 yrs	30.0%	25.0%	28.7%
		% of Total	22.2%	6.5%	28.7%
	Neither agree nor disagree	Count	14	4	18
		% within RENNEC	77.8%	22.2%	100.0%
		% within Repossession problems due to ownership dispute in past 2 yrs	17.5%	14.3%	16.7%
		% of Total	13.0%	3.7%	16.7%
	agree	Count	17	9	26
		% within RENNEC	65.4%	34.6%	100.0%
		% within Repossession problems due to ownership dispute in past 2 yrs	21.3%	32.1%	24.1%
		% of Total	15.7%	8.3%	24.1%
	strongly agree	Count	12	3	15
		% within RENNEC	80.0%	20.0%	100.0%
		% within Repossession problems due to ownership dispute in past 2 yrs	15.0%	10.7%	13.9%
		% of Total	11.1%	2.8%	13.9%
Total		Count	80	28	108
		% within RENNEC	74.1%	25.9%	100.0%
		% within Repossession problems due to ownership dispute in past 2 yrs	100.0%	100.0%	100.0%
		% of Total	74.1%	25.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.638[a]	4	.802
Likelihood Ratio	1.601	4	.809
Linear-by-Linear Association	.020	1	.888
N of Valid Cases	108		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 3.89.

Table 7

RENNEC * verifying encumbrances Crosstabulation

			verifying encumbrances		
			no	yes	Total
RENNEC	strongly disagree	Count	4	14	18
		% within RENNEC	22.2%	77.8%	100.0%
		% within verifying encumbrances	21.1%	15.7%	16.7%
		% of Total	3.7%	13.0%	16.7%
	disagree	Count	3	28	31
		% within RENNEC	9.7%	90.3%	100.0%
		% within verifying encumbrances	15.8%	31.5%	28.7%
		% of Total	2.8%	25.9%	28.7%
	Neither agree nor disagree	Count	5	13	18
		% within RENNEC	27.8%	72.2%	100.0%
		% within verifying encumbrances	26.3%	14.6%	16.7%
		% of Total	4.6%	12.0%	16.7%
	agree	Count	3	23	26
		% within RENNEC	11.5%	88.5%	100.0%
		% within verifying encumbrances	15.8%	25.8%	24.1%
		% of Total	2.8%	21.3%	24.1%
	strongly agree	Count	4	11	15
		% within RENNEC	26.7%	73.3%	100.0%
		% within verifying encumbrances	21.1%	12.4%	13.9%
		% of Total	3.7%	10.2%	13.9%
Total		Count	19	89	108
		% within RENNEC	17.6%	82.4%	100.0%
		% within verifying encumbrances	100.0%	100.0%	100.0%
		% of Total	17.6%	82.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.403[a]	4	.354
Likelihood Ratio	4.428	4	.351
Linear-by-Linear Association	.136	1	.712
N of Valid Cases	108		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 2.64.

Table 8

Documentation verification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	extremely not easy	9	8.3	8.3	8.3
	not easy	16	14.8	14.8	23.1
	not sure	22	20.4	20.4	43.5
	easy	44	40.7	40.7	84.3
	very easy	17	15.7	15.7	100.0
	Total	108	100.0	100.0	

Table 9

Documentation verification * Institution Type Crosstabulation

			Institution Type		
			Universal bank	MFI	Total
Documentation verification	extremely not easy	Count	2	7	9
		% within Documentation verification	22.2%	77.8%	100.0%
		% within Institution Type	3.5%	13.7%	8.3%
		% of Total	1.9%	6.5%	8.3%
	not easy	Count	4	12	16
		% within Documentation verification	25.0%	75.0%	100.0%
		% within Institution Type	7.0%	23.5%	14.8%
		% of Total	3.7%	11.1%	14.8%
	not sure	Count	12	10	22
		% within Documentation verification	54.5%	45.5%	100.0%
		% within Institution Type	21.1%	19.6%	20.4%
		% of Total	11.1%	9.3%	20.4%
	easy	Count	27	17	44
		% within Documentation verification	61.4%	38.6%	100.0%
		% within Institution Type	47.4%	33.3%	40.7%
		% of Total	25.0%	15.7%	40.7%
	very easy	Count	12	5	17
		% within Documentation verification	70.6%	29.4%	100.0%
		% within Institution Type	21.1%	9.8%	15.7%
		% of Total	11.1%	4.6%	15.7%
Total		Count	57	51	108
		% within Documentation verification	52.8%	47.2%	100.0%
		% within Institution Type	100.0%	100.0%	100.0%
		% of Total	52.8%	47.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.818[a]	4	.019
Likelihood Ratio	12.239	4	.016
Linear-by-Linear Association	10.645	1	.001
N of Valid Cases	108		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 4.25.

Table 10

Documentation verification * Documentation types Crosstabulation

			Documentation types		Total
			ONLY registered documents	Both registered & unregistered documents	
Documentation verification	extremely not easy	Count	3	6	9
		% within Documentation verification	33.3%	66.7%	100.0%
		% within Documentation types	5.9%	10.5%	8.3%
		% of Total	2.8%	5.6%	8.3%
	not easy	Count	5	11	16
		% within Documentation verification	31.3%	68.8%	100.0%
		% within Documentation types	9.8%	19.3%	14.8%
		% of Total	4.6%	10.2%	14.8%
	not sure	Count	5	17	22
		% within Documentation verification	22.7%	77.3%	100.0%
		% within Documentation types	9.8%	29.8%	20.4%
		% of Total	4.6%	15.7%	20.4%
	easy	Count	25	19	44
		% within Documentation verification	56.8%	43.2%	100.0%
		% within Documentation types	49.0%	33.3%	40.7%
		% of Total	23.1%	17.6%	40.7%
	very easy	Count	13	4	17
		% within Documentation verification	76.5%	23.5%	100.0%
		% within Documentation types	25.5%	7.0%	15.7%
		% of Total	12.0%	3.7%	15.7%
Total		Count	51	57	108
		% within Documentation verification	47.2%	52.8%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.092[a]	4	.005
Likelihood Ratio	15.746	4	.003
Linear-by-Linear Association	10.055	1	.002
N of Valid Cases	108		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 4.25.

Table 11

Institution Type * verifying encumbrances Crosstabulation

			verifying encumbrances		Total
			no	yes	
Institution Type	Universal bank	Count	7	50	57
		% within Institution Type	12.3%	87.7%	100.0%
		% within verifying encumbrances	36.8%	56.2%	52.8%
		% of Total	6.5%	46.3%	52.8%
	MFI	Count	12	39	51
		% within Institution Type	23.5%	76.5%	100.0%
		% within verifying encumbrances	63.2%	43.8%	47.2%
		% of Total	11.1%	36.1%	47.2%
Total		Count	19	89	108
		% within Institution Type	17.6%	82.4%	100.0%
		% within verifying encumbrances	100.0%	100.0%	100.0%
		% of Total	17.6%	82.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.349[a]	1	.125		
Continuity Correction[b]	1.637	1	.201		
Likelihood Ratio	2.361	1	.124		
Fisher's Exact Test				.138	.100
Linear-by-Linear Association	2.328	1	.127		
N of Valid Cases	108				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.97.

b. Computed only for a 2x2 table

Table 12

Documentation types * verifying encumbrances Crosstabulation

			verifying encumbrances		Total
			no	yes	
Documentation types	ONLY registered documents	Count	10	41	51
		% within Documentation types	19.6%	80.4%	100.0%
		% within verifying encumbrances	52.6%	46.1%	47.2%
		% of Total	9.3%	38.0%	47.2%
	Both registered & unregistered documents	Count	9	48	57
		% within Documentation types	15.8%	84.2%	100.0%
		% within verifying encumbrances	47.4%	53.9%	52.8%
		% of Total	8.3%	44.4%	52.8%
Total		Count	19	89	108
		% within Documentation types	17.6%	82.4%	100.0%
		% within verifying encumbrances	100.0%	100.0%	100.0%
		% of Total	17.6%	82.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.271[a]	1	.603		
Continuity Correction[b]	.071	1	.789		
Likelihood Ratio	.270	1	.603		
Fisher's Exact Test				.623	.394
Linear-by-Linear Association	.268	1	.605		
N of Valid Cases	108				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.97.

b. Computed only for a 2x2 table

Table 13

Crosstab

			yrs at institution			Total
			less than 5	5-10	10+	
Documentation types	ONLY registered documents	Count	16	21	14	51
		% within Documentation types	31.4%	41.2%	27.5%	100.0%
		% within yrs at institution	47.1%	50.0%	43.8%	47.2%
		% of Total	14.8%	19.4%	13.0%	47.2%
	Both registered & unregistered documents	Count	18	21	18	57
		% within Documentation types	31.6%	36.8%	31.6%	100.0%
		% within yrs at institution	52.9%	50.0%	56.3%	52.8%
		% of Total	16.7%	19.4%	16.7%	52.8%
Total		Count	34	42	32	108
		% within Documentation types	31.5%	38.9%	29.6%	100.0%
		% within yrs at institution	100.0%	100.0%	100.0%	100.0%
		% of Total	31.5%	38.9%	29.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.285[a]	2	.867
Likelihood Ratio	.286	2	.867
Linear-by-Linear Association	.067	1	.796
N of Valid Cases	108		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.11.

Table 14

Crosstab

			yrs at current position			
			Below 5yrs	5-10yrs	10yrs+	Total
Documentation types	ONLY registered documents	Count	14	25	12	51
		% within Documentation types	27.5%	49.0%	23.5%	100.0%
		% within yrs at current position	35.9%	54.3%	52.2%	47.2%
		% of Total	13.0%	23.1%	11.1%	47.2%
	Both registered & unregistered documents	Count	25	21	11	57
		% within Documentation types	43.9%	36.8%	19.3%	100.0%
		% within yrs at current position	64.1%	45.7%	47.8%	52.8%
		% of Total	23.1%	19.4%	10.2%	52.8%
Total		Count	39	46	23	108
		% within Documentation types	36.1%	42.6%	21.3%	100.0%
		% within yrs at current position	100.0%	100.0%	100.0%	100.0%
		% of Total	36.1%	42.6%	21.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.170[a]	2	.205
Likelihood Ratio	3.203	2	.202
Linear-by-Linear Association	2.058	1	.151
N of Valid Cases	108		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.86.

Table 15

Repossession problems due to ownership dispute in past 2 yrs * Institution Type Crosstabulation

			Institution Type		
			Universal bank	MFI	Total
Repossession problems due to ownership dispute in past 2 yrs	no	Count	46	34	80
		% within Repossession problems due to ownership dispute in past 2 yrs	57.5%	42.5%	100.0%
		% within Institution Type	80.7%	66.7%	74.1%
		% of Total	42.6%	31.5%	74.1%
	yes	Count	11	17	28
		% within Repossession problems due to ownership dispute in past 2 yrs	39.3%	60.7%	100.0%
		% within Institution Type	19.3%	33.3%	25.9%
		% of Total	10.2%	15.7%	25.9%
Total		Count	57	51	108
		% within Repossession problems due to ownership dispute in past 2 yrs	52.8%	47.2%	100.0%
		% within Institution Type	100.0%	100.0%	100.0%
		% of Total	52.8%	47.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.761[a]	1	.097		
Continuity Correction[b]	2.078	1	.149		
Likelihood Ratio	2.769	1	.096		
Fisher's Exact Test				.125	.075
Linear-by-Linear Association	2.735	1	.098		
N of Valid Cases	108				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.22.

b. Computed only for a 2x2 table

Table 16

Repossession problems due to ownership dispute in past 2 yrs * Documentation types Crosstabulation

			Documentation types		
			ONLY registered documents	Both registered & unregistered documents	Total
Repossession problems due to ownership dispute in past 2 yrs	no	Count	46	34	80
		% within Repossession problems due to ownership dispute in past 2 yrs	57.5%	42.5%	100.0%
		% within Documentation types	90.2%	59.6%	74.1%
		% of Total	42.6%	31.5%	74.1%
	yes	Count	5	23	28
		% within Repossession problems due to ownership dispute in past 2 yrs	17.9%	82.1%	100.0%
		% within Documentation types	9.8%	40.4%	25.9%
		% of Total	4.6%	21.3%	25.9%
Total		Count	51	57	108
		% within Repossession problems due to ownership dispute in past 2 yrs	47.2%	52.8%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.078[a]	1	.000		
Continuity Correction[b]	11.536	1	.001		
Likelihood Ratio	14.013	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	12.957	1	.000		
N of Valid Cases	108				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.22.

b. Computed only for a 2x2 table

Table 17: Friedman's test

Ranks

	Mean Rank
Location	3.66
Market value	4.62
Land rights	1.83
Land insurance	2.90
Registration	3.43
Documentation	4.56

Test Statistics[a]

N	108
Chi-Square	194.210
df	5
Asymp. Sig.	.000

a. Friedman Test

Table 18: Wilcoxon's test

Ranks

		N	Mean Rank	Sum of Ranks
Documentation - Market value	Negative Ranks	17[a]	17.32	294.50
	Positive Ranks	15[b]	15.57	233.50
	Ties	76[c]		
	Total	108		

a. Documentation < Market value

b. Documentation > Market value

c. Documentation = Market value

Test Statistics[b]

	Documentation - Market value
Z	-.583[a]
Asymp. Sig. (2-tailed)	.560

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

Table 19:

Ranks

		N	Mean Rank	Sum of Ranks
Market value - Location	Negative Ranks	23[a]	38.17	878.00
	Positive Ranks	62[b]	44.79	2777.00
	Ties	23[c]		
	Total	108		

a. Market value < Location

b. Market value > Location

c. Market value = Location

Test Statistics[b]

	Market value - Location
Z	-4.246[a]
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Table 20:

Ranks

		N	Mean Rank	Sum of Ranks
Documentation - Location	Negative Ranks	22[a]	38.75	852.50
	Positive Ranks	59[b]	41.84	2468.50
	Ties	27[c]		
	Total	108		

a. Documentation < Location

b. Documentation > Location

c. Documentation = Location

Test Statistics[b]

	Documentation - Location
Z	-3.882[a]
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Table 21:
Ranks

		N	Mean Rank	Sum of Ranks
Registration - Location	Negative Ranks	50[a]	51.54	2577.00
	Positive Ranks	40[b]	37.95	1518.00
	Ties	18[c]		
	Total	108		

a. Registration < Location

b. Registration > Location

c. Registration = Location

Test Statistics[b]

	Registration - Location
Z	-2.155[a]
Asymp. Sig. (2-tailed)	.031

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

Table 22:
Ranks

		N	Mean Rank	Sum of Ranks
Land insurance - Location	Negative Ranks	54[a]	39.82	2150.50
	Positive Ranks	21[b]	33.31	699.50
	Ties	33[c]		
	Total	108		

a. Land insurance < Location

b. Land insurance > Location

c. Land insurance = Location

Test Statistics[b]

	Land insurance - Location
Z	-3.882[a]
Asymp. Sig. (2-tailed)	.000

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

Table 23:
Ranks

		N	Mean Rank	Sum of Ranks
Registration - Land insurance	Negative Ranks	35[a]	45.89	1606.00
	Positive Ranks	52[b]	42.73	2222.00
	Ties	21[c]		
	Total	108		

a. Registration < Land insurance

b. Registration > Land insurance

c. Registration = Land insurance

Test Statistics[b]

	Registration - Land insurance
Z	-1.320[a]
Asymp. Sig. (2-tailed)	.187

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Table 24
Ranks

		N	Mean Rank	Sum of Ranks
Land rights - Land insurance	Negative Ranks	65[a]	48.70	3165.50
	Positive Ranks	20[b]	24.48	489.50
	Ties	23[c]		
	Total	108		

a. Land rights < Land insurance

b. Land rights > Land insurance

c. Land rights = Land insurance

Test Statistics[b]

	Land rights - Land insurance
Z	-5.930[a]
Asymp. Sig. (2-tailed)	.000

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

Table 25: Man-Whitney test for the land attribute between UBs and MFIs

Ranks

	Institution Type	N	Mean Rank	Sum of Ranks
Location	Universal bank	57	61.31	3494.50
	MFI	51	46.89	2391.50
	Total	108		
Market value	Universal bank	57	56.75	3234.50
	MFI	51	51.99	2651.50
	Total	108		
Land rights	Universal bank	57	57.03	3250.50
	MFI	51	51.68	2635.50
	Total	108		
Land insurance	Universal bank	57	67.74	3861.00
	MFI	51	39.71	2025.00
	Total	108		
Registration	Universal bank	57	64.49	3676.00
	MFI	51	43.33	2210.00
	Total	108		
Documentation	Universal bank	57	55.80	3180.50
	MFI	51	53.05	2705.50
	Total	108		

Test Statistics[a]

	Location	Market value	Land rights	Land insurance	Registration	Documentation
Mann-Whitney U	1065.500	1325.500	1309.500	699.000	884.000	1379.500
Wilcoxon W	2391.500	2651.500	2635.500	2025.000	2210.000	2705.500
Z	-2.468	-.872	-.911	-4.761	-3.576	-.501
Asymp. Sig. (2-tailed)	.014	.383	.362	.000	.000	.616

a. Grouping Variable: Institution Type

Table 26

Correlations

			yrs at current position	Registration
Spearman's rho	yrs at current position	Correlation Coefficient	1.000	-.195*
		Sig. (2-tailed)	.	.043
		N	108	108
	Registration	Correlation Coefficient	-.195*	1.000
		Sig. (2-tailed)	.043	.
		N	108	108

*. Correlation is significant at the 0.05 level (2-tailed).

Table 27

Correlations

			Registration	RENNEC
Spearman's rho	Registration	Correlation Coefficient	1.000	-.331**
		Sig. (2-tailed)	.	.000
		N	108	108
	RENNEC	Correlation Coefficient	-.331**	1.000
		Sig. (2-tailed)	.000	.
		N	108	108

**. Correlation is significant at the 0.01 level (2-tailed).

Table 28

Correlations

			Registration	Documentation verification
Spearman's rho	Registration	Correlation Coefficient	1.000	.241*
		Sig. (2-tailed)	.	.012
		N	108	108
	Documentation verification	Correlation Coefficient	.241*	1.000
		Sig. (2-tailed)	.012	.
		N	108	108

*. Correlation is significant at the 0.05 level (2-tailed).

England

Table 29

Registration not necessary

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	4	4.2	4.2	4.2
	Neither agree nor disagree	26	27.4	27.4	31.6
	agree	42	44.2	44.2	75.8
	strongly agree	23	24.2	24.2	100.0
	Total	95	100.0	100.0	

Table 30

Correlations

			Registration not necessary	yrs at current position
Spearman's rho	Registration not necessary	Correlation Coefficient	1.000	-.002
		Sig. (2-tailed)	.	.985
		N	95	95
	yrs at current position	Correlation Coefficient	-.002	1.000
		Sig. (2-tailed)	.985	.
		N	95	95

Table 31

Correlations

			Registration not necessary	Prefor Land
Spearman's rho	Registration not necessary	Correlation Coefficient	1.000	-.160
		Sig. (2-tailed)	.	.121
		N	95	95
	Prefor Land	Correlation Coefficient	-.160	1.000
		Sig. (2-tailed)	.121	.
		N	95	95

Table 32

Correlations

			Registration not necessary	Documentation verification
Spearman's rho	Registration not necessary	Correlation Coefficient	1.000	.028
		Sig. (2-tailed)	.	.788
		N	95	95
	Documentation verification	Correlation Coefficient	.028	1.000
		Sig. (2-tailed)	.788	.
		N	95	95

Table 33

Documentation types

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	registered documents	19	20.0	20.0	20.0
	both registered and unregistered documents	76	80.0	80.0	100.0
	Total	95	100.0	100.0	

Table 34

Documentation types * yrs at current position Crosstabulation

			yrs at current position			
			Below 5yrs	5-10yrs	+10yrs	Total
Documentation types	registered documents	Count	5	6	8	19
		% within Documentation types	26.3%	31.6%	42.1%	100.0%
		% within yrs at current position	19.2%	14.6%	28.6%	20.0%
		% of Total	5.3%	6.3%	8.4%	20.0%
	both registered and unregistered documents	Count	21	35	20	76
		% within Documentation types	27.6%	46.1%	26.3%	100.0%
		% within yrs at current position	80.8%	85.4%	71.4%	80.0%
		% of Total	22.1%	36.8%	21.1%	80.0%
Total		Count	26	41	28	95
		% within Documentation types	27.4%	43.2%	29.5%	100.0%
		% within yrs at current position	100.0%	100.0%	100.0%	100.0%
		% of Total	27.4%	43.2%	29.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.033[a]	2	.362
Likelihood Ratio	1.979	2	.372
Linear-by-Linear Association	.775	1	.379
N of Valid Cases	95		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.20.

Table 35

Documentation types * yrs at institution Crosstabulation

			yrs at institution			
			less than 5	5-10	10+	Total
Documentation types	registered documents	Count	7	10	2	19
		% within Documentation types	36.8%	52.6%	10.5%	100.0%
		% within yrs at institution	17.1%	27.8%	11.1%	20.0%
		% of Total	7.4%	10.5%	2.1%	20.0%
	both registered and unregistered documents	Count	34	26	16	76
		% within Documentation types	44.7%	34.2%	21.1%	100.0%
		% within yrs at institution	82.9%	72.2%	88.9%	80.0%
		% of Total	35.8%	27.4%	16.8%	80.0%
Total		Count	41	36	18	95
		% within Documentation types	43.2%	37.9%	18.9%	100.0%
		% within yrs at institution	100.0%	100.0%	100.0%	100.0%
		% of Total	43.2%	37.9%	18.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.470[a]	2	.291
Likelihood Ratio	2.500	2	.286
Linear-by-Linear Association	.019	1	.892
N of Valid Cases	95		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.60.

Table 36

Documentation types * position Crosstabulation

			position			
			loans advisors	business managers	branch managers	Total
Documentation types	registered documents	Count	7	10	2	19
		% within Documentation types	36.8%	52.6%	10.5%	100.0%
		% within position	18.4%	21.7%	18.2%	20.0%
		% of Total	7.4%	10.5%	2.1%	20.0%
	both registered and unregistered documents	Count	31	36	9	76
		% within Documentation types	40.8%	47.4%	11.8%	100.0%
		% within position	81.6%	78.3%	81.8%	80.0%
		% of Total	32.6%	37.9%	9.5%	80.0%
Total		Count	38	46	11	95
		% within Documentation types	40.0%	48.4%	11.6%	100.0%
		% within position	100.0%	100.0%	100.0%	100.0%
		% of Total	40.0%	48.4%	11.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.169[a]	2	.919
Likelihood Ratio	.169	2	.919
Linear-by-Linear Association	.024	1	.877
N of Valid Cases	95		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.20.

Table 37

Registration not necessary * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
Registration not necessary	disagree	Count	0	4	4
		% within Registration not necessary	.0%	100.0%	100.0%
		% within Documentation types	.0%	5.3%	4.2%
		% of Total	.0%	4.2%	4.2%
	Neither agree nor disagree	Count	7	19	26
		% within Registration not necessary	26.9%	73.1%	100.0%
		% within Documentation types	36.8%	25.0%	27.4%
		% of Total	7.4%	20.0%	27.4%
	agree	Count	9	33	42
		% within Registration not necessary	21.4%	78.6%	100.0%
		% within Documentation types	47.4%	43.4%	44.2%
		% of Total	9.5%	34.7%	44.2%
	strongly agree	Count	3	20	23
		% within Registration not necessary	13.0%	87.0%	100.0%
		% within Documentation types	15.8%	26.3%	24.2%
		% of Total	3.2%	21.1%	24.2%
Total		Count	19	76	95
		% within Registration not necessary	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.528[a]	3	.470
Likelihood Ratio	3.330	3	.343
Linear-by-Linear Association	.314	1	.575
N of Valid Cases	95		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .80.

Table 38

Correlations

			Documentation verification	yrs at current position
Spearman's rho	Documentation verification	Correlation Coefficient	1.000	.032
		Sig. (2-tailed)	.	.757
		N	95	95
	yrs at current position	Correlation Coefficient	.032	1.000
		Sig. (2-tailed)	.757	.
		N	95	95

Table 39

Correlations

			Documentation verification	yrs at institution
Spearman's rho	Documentation verification	Correlation Coefficient	1.000	.027
		Sig. (2-tailed)	.	.792
		N	95	95
	yrs at institution	Correlation Coefficient	.027	1.000
		Sig. (2-tailed)	.792	.
		N	95	95

Table 40

Documentation verification * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
Documentation verification	not easy	Count	0	5	5
		% within Documentation verification	.0%	100.0%	100.0%
		% within Documentation types	.0%	6.6%	5.3%
		% of Total	.0%	5.3%	5.3%
	not sure	Count	0	21	21
		% within Documentation verification	.0%	100.0%	100.0%
		% within Documentation types	.0%	27.6%	22.1%
		% of Total	.0%	22.1%	22.1%
	easy	Count	8	17	25
		% within Documentation verification	32.0%	68.0%	100.0%
		% within Documentation types	42.1%	22.4%	26.3%
		% of Total	8.4%	17.9%	26.3%
	very easy	Count	11	33	44
		% within Documentation verification	25.0%	75.0%	100.0%
		% within Documentation types	57.9%	43.4%	46.3%
		% of Total	11.6%	34.7%	46.3%
Total		Count	19	76	95
		% within Documentation verification	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.438[a]	3	.024
Likelihood Ratio	14.247	3	.003
Linear-by-Linear Association	5.243	1	.022
N of Valid Cases	95		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.00.

Table 41

Repossession problems due to ownership dispute * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
Repossession problems due to ownership dispute	no	Count	18	73	91
		% within Repossession problems due to ownership dispute	19.8%	80.2%	100.0%
		% within Documentation types	94.7%	96.1%	95.8%
		% of Total	18.9%	76.8%	95.8%
	yes	Count	1	3	4
		% within Repossession problems due to ownership dispute	25.0%	75.0%	100.0%
		% within Documentation types	5.3%	3.9%	4.2%
		% of Total	1.1%	3.2%	4.2%
Total		Count	19	76	95
		% within Repossession problems due to ownership dispute	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.065[a]	1	.798		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.062	1	.804		
Fisher's Exact Test				1.000	.597
Linear-by-Linear Association	.065	1	.799		
N of Valid Cases	95				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .80.

b. Computed only for a 2x2 table

Table 42

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of Market value , Land insurance , Documentation and Location are the same.	Related-Samples Friedman's Two-Way Analysis of Variance by Ranks	.167	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 43

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Registration and Land insurance equals 0.	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 44

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Registration and Land rights equals 0.	Related-Samples Wilcoxon Signed Rank Test	.014	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 45

Correlations

			Prefor Land	Registration
Spearman's rho	Prefor Land	Correlation Coefficient	1.000	-.085
		Sig. (2-tailed)	.	.412
		N	95	95
	Registration	Correlation Coefficient	-.085	1.000
		Sig. (2-tailed)	.412	.
		N	95	95

Table 46

Correlations

			Registration	yrs at current position
Spearman's rho	Registration	Correlation Coefficient	1.000	.006
		Sig. (2-tailed)	.	.953
		N	95	95
	yrs at current position	Correlation Coefficient	.006	1.000
		Sig. (2-tailed)	.953	.
		N	95	95

Table 47

Correlations

			Registration	yrs at institution
Spearman's rho	Registration	Correlation Coefficient	1.000	.039
		Sig. (2-tailed)	.	.709
		N	95	95
	yrs at institution	Correlation Coefficient	.039	1.000
		Sig. (2-tailed)	.709	.
		N	95	95

Table 48

Correlations

			Registration	Documentation verification
Spearman's rho	Registration	Correlation Coefficient	1.000	-.040
		Sig. (2-tailed)	.	.703
		N	95	95
	Documentation verification	Correlation Coefficient	-.040	1.000
		Sig. (2-tailed)	.703	.
		N	95	95

Table 49

Registration * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
Registration	Least Important	Count	3	9	12
		% within Registration	25.0%	75.0%	100.0%
		% within Documentation types	15.8%	11.8%	12.6%
		% of Total	3.2%	9.5%	12.6%
	Less Important	Count	6	21	27
		% within Registration	22.2%	77.8%	100.0%
		% within Documentation types	31.6%	27.6%	28.4%
		% of Total	6.3%	22.1%	28.4%
	Quiet Important	Count	6	20	26
		% within Registration	23.1%	76.9%	100.0%
		% within Documentation types	31.6%	26.3%	27.4%
		% of Total	6.3%	21.1%	27.4%
	Important	Count	2	14	16
		% within Registration	12.5%	87.5%	100.0%
		% within Documentation types	10.5%	18.4%	16.8%
		% of Total	2.1%	14.7%	16.8%
	Very Important	Count	1	6	7
		% within Registration	14.3%	85.7%	100.0%
		% within Documentation types	5.3%	7.9%	7.4%
		% of Total	1.1%	6.3%	7.4%
	Most Important	Count	1	6	7
		% within Registration	14.3%	85.7%	100.0%
		% within Documentation types	5.3%	7.9%	7.4%
		% of Total	1.1%	6.3%	7.4%
Total		Count	19	76	95
		% within Registration	20.0%	80.0%	100.0%
		% within Documentation	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.273[a]	5	.938
Likelihood Ratio	1.346	5	.930
Linear-by-Linear Association	.849	1	.357
N of Valid Cases	95		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 1.40.

APPENDIX E

Property Registration and Loan Conditions

Ghana

Table 1: Friedman's test

Ranks

	Mean Rank
Interest	2.69
fees	2.54
Amount	2.43
repayment time	2.34

Test Statistics[a]

N	108
Chi-Square	5.498
df	3
Asymp. Sig.	.139

a. Friedman Test

Table 2

Crosstab

			Documentation types		
			ONLY registered documents	Both registered & unregistered documents	Total
Interest	strongly disagree	Count	7	14	21
		% within Interest	33.3%	66.7%	100.0%
		% within Documentation types	13.7%	24.6%	19.4%
		% of Total	6.5%	13.0%	19.4%
	disagree	Count	18	21	39
		% within Interest	46.2%	53.8%	100.0%
		% within Documentation types	35.3%	36.8%	36.1%
		% of Total	16.7%	19.4%	36.1%
	Neither agree nor disagree	Count	14	14	28
		% within Interest	50.0%	50.0%	100.0%
		% within Documentation types	27.5%	24.6%	25.9%
		% of Total	13.0%	13.0%	25.9%
	agree	Count	11	5	16
		% within Interest	68.8%	31.3%	100.0%
		% within Documentation types	21.6%	8.8%	14.8%
		% of Total	10.2%	4.6%	14.8%
	strongly agree	Count	1	3	4
		% within Interest	25.0%	75.0%	100.0%
		% within Documentation types	2.0%	5.3%	3.7%
		% of Total	.9%	2.8%	3.7%
Total		Count	51	57	108
		% within Interest	47.2%	52.8%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.498[a]	4	.240
Likelihood Ratio	5.629	4	.229
Linear-by-Linear Association	1.994	1	.158
N of Valid Cases	108		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.89.

Table 3

Crosstab

			Documentation types		
			ONLY registered documents	Both registered & unregistered documents	Total
fees	strongly disagree	Count	11	14	25
		% within fees	44.0%	56.0%	100.0%
		% within Documentation types	21.6%	24.6%	23.1%
		% of Total	10.2%	13.0%	23.1%
	disagree	Count	20	22	42
		% within fees	47.6%	52.4%	100.0%
		% within Documentation types	39.2%	38.6%	38.9%
		% of Total	18.5%	20.4%	38.9%
	Neither agree nor disagree	Count	11	12	23
		% within fees	47.8%	52.2%	100.0%
		% within Documentation types	21.6%	21.1%	21.3%
		% of Total	10.2%	11.1%	21.3%
	agree	Count	6	2	8
		% within fees	75.0%	25.0%	100.0%
		% within Documentation types	11.8%	3.5%	7.4%
		% of Total	5.6%	1.9%	7.4%
	strongly agree	Count	3	7	10
		% within fees	30.0%	70.0%	100.0%
		% within Documentation types	5.9%	12.3%	9.3%
		% of Total	2.8%	6.5%	9.3%
Total		Count	51	57	108
		% within fees	47.2%	52.8%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.777[a]	4	.437
Likelihood Ratio	3.905	4	.419
Linear-by-Linear Association	.001	1	.971
N of Valid Cases	108		

a.3 cells (30.0%) have expected count less than 5. The minimum expected count is 3.78.

Table 4

Crosstab

			Documentation types		
			ONLY registered documents	Both registered & unregistered documents	Total
Amount	strongly disagree	Count	11	23	34
		% within Amount	32.4%	67.6%	100.0%
		% within Documentation types	21.6%	40.4%	31.5%
		% of Total	10.2%	21.3%	31.5%
	disagree	Count	17	13	30
		% within Amount	56.7%	43.3%	100.0%
		% within Documentation types	33.3%	22.8%	27.8%
		% of Total	15.7%	12.0%	27.8%
	Neither agree nor disagree	Count	11	14	25
		% within Amount	44.0%	56.0%	100.0%
		% within Documentation types	21.6%	24.6%	23.1%
		% of Total	10.2%	13.0%	23.1%
	agree	Count	12	7	19
		% within Amount	63.2%	36.8%	100.0%
		% within Documentation types	23.5%	12.3%	17.6%
		% of Total	11.1%	6.5%	17.6%
Total		Count	51	57	108
		% within Amount	47.2%	52.8%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.130[a]	3	.105
Likelihood Ratio	6.222	3	.101
Linear-by-Linear Association	3.319	1	.068
N of Valid Cases	108		

a.0 cells (.0%) have expected count less than 5. The minimum expected count is 8.97.

Table 5

Crosstab

			Documentation types		
			ONLY registered documents	Both registered & unregistered documents	Total
repayment time	strongly disagree	Count	18	15	33
		% within repayment time	54.5%	45.5%	100.0%
		% within Documentation types	35.3%	26.3%	30.6%
		% of Total	16.7%	13.9%	30.6%
	disagree	Count	11	20	31
		% within repayment time	35.5%	64.5%	100.0%
		% within Documentation types	21.6%	35.1%	28.7%
		% of Total	10.2%	18.5%	28.7%
	Neither agree nor disagree	Count	21	18	39
		% within repayment time	53.8%	46.2%	100.0%
		% within Documentation types	41.2%	31.6%	36.1%
		% of Total	19.4%	16.7%	36.1%
	agree	Count	1	4	5
		% within repayment time	20.0%	80.0%	100.0%
		% within Documentation types	2.0%	7.0%	4.6%
		% of Total	.9%	3.7%	4.6%
Total		Count	51	57	108
		% within repayment time	47.2%	52.8%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.597[a]	3	.204
Likelihood Ratio	4.749	3	.191
Linear-by-Linear Association	.290	1	.590
N of Valid Cases	108		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.36.

Table 6: Friedman's test

Ranks

Documentation types		Mean Rank
ONLY registered documents	Interest	2.79
	fees	2.47
	Amount	2.51
	repayment time	2.23
Both registered & unregistered documents	Interest	2.60
	fees	2.61
	Amount	2.35
	repayment time	2.45

Test Statistics[a]

ONLY registered documents	N	51
	Chi-Square	6.305
	df	3
	Asymp. Sig.	.098
Both registered & unregistered documents	N	57
	Chi-Square	1.911
	df	3
	Asymp. Sig.	.591

a. Friedman Test

England

Table 7:

Correlations

			Interest	yrs at current position
Spearman's rho	Interest	Correlation Coefficient	1.000	-.094
		Sig. (2-tailed)	.	.367
		N	95	95
	yrs at current position	Correlation Coefficient	-.094	1.000
		Sig. (2-tailed)	.367	.
		N	95	95

Table 8

Correlations

			Interest	yrs at institution
Spearman's rho	Interest	Correlation Coefficient	1.000	.023
		Sig. (2-tailed)	.	.827
		N	95	95
	yrs at institution	Correlation Coefficient	.023	1.000
		Sig. (2-tailed)	.827	.
		N	95	95

Table 9

Interest * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
Interest	strongly disagree	Count	3	16	19
		% within Interest	15.8%	84.2%	100.0%
		% within Documentation types	15.8%	21.1%	20.0%
		% of Total	3.2%	16.8%	20.0%
	disagree	Count	9	26	35
		% within Interest	25.7%	74.3%	100.0%
		% within Documentation types	47.4%	34.2%	36.8%
		% of Total	9.5%	27.4%	36.8%
	Neither agree nor disagree	Count	3	17	20
		% within Interest	15.0%	85.0%	100.0%
		% within Documentation types	15.8%	22.4%	21.1%
		% of Total	3.2%	17.9%	21.1%
	agree	Count	4	14	18
		% within Interest	22.2%	77.8%	100.0%
		% within Documentation types	21.1%	18.4%	18.9%
		% of Total	4.2%	14.7%	18.9%
	strongly agree	Count	0	3	3
		% within Interest	.0%	100.0%	100.0%
		% within Documentation types	.0%	3.9%	3.2%
		% of Total	.0%	3.2%	3.2%
Total		Count	19	76	95
		% within Interest	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.043[a]	4	.728
Likelihood Ratio	2.621	4	.623
Linear-by-Linear Association	.077	1	.781
N of Valid Cases	95		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is .60.

Table 10

Correlations

			fees/commission	yrs at current position
Spearman's rho	fees/commission	Correlation Coefficient	1.000	-.045
		Sig. (2-tailed)	.	.662
		N	95	95
	yrs at current position	Correlation Coefficient	-.045	1.000
		Sig. (2-tailed)	.662	.
		N	95	95

Table 11

Correlations

			fees/commission	yrs at institution
Spearman's rho	fees/commission	Correlation Coefficient	1.000	.124
		Sig. (2-tailed)	.	.231
		N	95	95
	yrs at institution	Correlation Coefficient	.124	1.000
		Sig. (2-tailed)	.231	.
		N	95	95

Table 12

fees/commission * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
fees/commission	strongly disagree	Count	7	15	22
		% within fees/commission	31.8%	68.2%	100.0%
		% within Documentation types	36.8%	19.7%	23.2%
		% of Total	7.4%	15.8%	23.2%
	disagree	Count	4	29	33
		% within fees/commission	12.1%	87.9%	100.0%
		% within Documentation types	21.1%	38.2%	34.7%
		% of Total	4.2%	30.5%	34.7%
	Neither agree nor disagree	Count	4	16	20
		% within fees/commission	20.0%	80.0%	100.0%
		% within Documentation types	21.1%	21.1%	21.1%
		% of Total	4.2%	16.8%	21.1%
	agree	Count	2	9	11
		% within fees/commission	18.2%	81.8%	100.0%
		% within Documentation types	10.5%	11.8%	11.6%
		% of Total	2.1%	9.5%	11.6%
	strongly agree	Count	2	7	9
		% within fees/commission	22.2%	77.8%	100.0%
		% within Documentation types	10.5%	9.2%	9.5%
		% of Total	2.1%	7.4%	9.5%
Total		Count	19	76	95
		% within fees/commission	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.251[a]	4	.517
Likelihood Ratio	3.197	4	.525
Linear-by-Linear Association	.248	1	.619
N of Valid Cases	95		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.80.

Table 13

Correlations

			yrs at institution	Amount
Spearman's rho	yrs at institution	Correlation Coefficient	1.000	-.076
		Sig. (2-tailed)	.	.462
		N	95	95
	Amount	Correlation Coefficient	-.076	1.000
		Sig. (2-tailed)	.462	.
		N	95	95

Table 14

Correlations

			Amount	yrs at current position
Spearman's rho	Amount	Correlation Coefficient	1.000	-.046
		Sig. (2-tailed)	.	.656
		N	95	95
	yrs at current position	Correlation Coefficient	-.046	1.000
		Sig. (2-tailed)	.656	.
		N	95	95

Table 15

Amount * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
Amount	strongly disagree	Count	5	24	29
		% within Amount	17.2%	82.8%	100.0%
		% within Documentation types	26.3%	31.6%	30.5%
		% of Total	5.3%	25.3%	30.5%
	disagree	Count	8	21	29
		% within Amount	27.6%	72.4%	100.0%
		% within Documentation types	42.1%	27.6%	30.5%
		% of Total	8.4%	22.1%	30.5%
	Neither agree nor disagree	Count	6	15	21
		% within Amount	28.6%	71.4%	100.0%
		% within Documentation types	31.6%	19.7%	22.1%
		% of Total	6.3%	15.8%	22.1%
	agree	Count	0	16	16
		% within Amount	.0%	100.0%	100.0%
		% within Documentation types	.0%	21.1%	16.8%
		% of Total	.0%	16.8%	16.8%
Total		Count	19	76	95
		% within Amount	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.145[a]	3	.105
Likelihood Ratio	9.125	3	.028
Linear-by-Linear Association	.827	1	.363
N of Valid Cases	95		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 3.20.

Table 16

Correlations

			maturity	yrs at current position
Spearman's rho	maturity	Correlation Coefficient	1.000	-.221*
		Sig. (2-tailed)	.	.031
		N	95	95
	yrs at current position	Correlation Coefficient	-.221*	1.000
		Sig. (2-tailed)	.031	.
		N	95	95

*. Correlation is significant at the 0.05 level (2-tailed).

Table 17

Correlations

			maturity	yrs at institution
Spearman's rho	maturity	Correlation Coefficient	1.000	.037
		Sig. (2-tailed)	.	.725
		N	95	95
	yrs at institution	Correlation Coefficient	.037	1.000
		Sig. (2-tailed)	.725	.
		N	95	95

Table 18

maturity * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
maturity	strongly disagree	Count	7	26	33
		% within maturity	21.2%	78.8%	100.0%
		% within Documentation types	36.8%	34.2%	34.7%
		% of Total	7.4%	27.4%	34.7%
	disagree	Count	4	22	26
		% within maturity	15.4%	84.6%	100.0%
		% within Documentation types	21.1%	28.9%	27.4%
		% of Total	4.2%	23.2%	27.4%
	Neither agree nor disagree	Count	6	25	31
		% within maturity	19.4%	80.6%	100.0%
		% within Documentation types	31.6%	32.9%	32.6%
		% of Total	6.3%	26.3%	32.6%
	agree	Count	2	3	5
		% within maturity	40.0%	60.0%	100.0%
		% within Documentation types	10.5%	3.9%	5.3%
		% of Total	2.1%	3.2%	5.3%
Total		Count	19	76	95
		% within maturity	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.635[a]	3	.652
Likelihood Ratio	1.454	3	.693
Linear-by-Linear Association	.145	1	.703
N of Valid Cases	95		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.00.

APPENDIX F

Why Lenders Turn down Small Business Credit Applications

Ghana

Table 1: Friedman's test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of Past Default, Poor Cashflow, High Vulnerability and Poor profitability are the same.	Related-Samples Friedman's Two-Way Analysis of Variance by Ranks	.125	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 2: Wilcoxon's test

Ranks

		N	Mean Rank	Sum of Ranks
Lack guarantors - Lack property	Negative Ranks	24[a]	13.96	335.00
	Positive Ranks	2[b]	8.00	16.00
	Ties	82[c]		
	Total	108		

a. Lack guarantors < Lack property

b. Lack guarantors > Lack property

c. Lack guarantors = Lack property

Test Statistics[b]

	Lack guarantors - Lack property
Z	-4.185[a]
Asymp. Sig. (2-tailed)	.000

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

Table 3: Friedman's test

Ranks

	Mean Rank
New customer	1.95
Lack records on business transactions	2.09
Inadequate borrower equity	1.95

Test Statistics[a]

N	108
Chi-Square	2.182
df	2
Asymp. Sig.	.336

a. Friedman Test

Table 4: Friedman's test

Ranks

	Mean Rank
Lack experience	1.89
Lack registered title	1.94
Lack required documents	2.16

Test Statistics[a]

N	108
Chi-Square	5.666
df	2
Asymp. Sig.	.059

a. Friedman Test

Table 5: Wilcoxon's test

Ranks

		N	Mean Rank	Sum of Ranks
Business type - High Transaction cost	Negative Ranks	33[a]	28.82	951.00
	Positive Ranks	31[b]	36.42	1129.00
	Ties	44[c]		
	Total	108		

a. Business type < High Transaction cost

b. Business type > High Transaction cost

c. Business type = High Transaction cost

Test Statistics[b]

	Business type - High Transaction cost
Z	-.641[a]
Asymp. Sig. (2-tailed)	.521

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Table 6

Lack registered title * Documentation types Crosstabulation

			Documentation types		
			ONLY registered documents	Both registered & unregistered documents	Total
Lack registered title	unimportant	Count	0	24	24
		% within Lack registered title	.0%	100.0%	100.0%
		% within Documentation types	.0%	42.1%	22.2%
		% of Total	.0%	22.2%	22.2%
	least important	Count	0	24	24
		% within Lack registered title	.0%	100.0%	100.0%
		% within Documentation types	.0%	42.1%	22.2%
		% of Total	.0%	22.2%	22.2%
	important	Count	13	6	19
		% within Lack registered title	68.4%	31.6%	100.0%
		% within Documentation types	25.5%	10.5%	17.6%
		% of Total	12.0%	5.6%	17.6%
	very important	Count	38	3	41
		% within Lack registered title	92.7%	7.3%	100.0%
		% within Documentation types	74.5%	5.3%	38.0%
		% of Total	35.2%	2.8%	38.0%
Total		Count	51	57	108
		% within Lack registered title	47.2%	52.8%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.372a	3	.000
Likelihood Ratio	104.223	3	.000
Linear-by-Linear Association	72.417	1	.000
N of Valid Cases	108		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.97.

Table 7

Correlations

			Lack registered title	Prefor Land
Spearman's rho	Lack registered title	Correlation Coefficient	1.000	.066
		Sig. (2-tailed)	.	.497
		N	108	108
	Prefor Land	Correlation Coefficient	.066	1.000
		Sig. (2-tailed)	.497	.
		N	108	108

Table 8

High Transaction cost * Documentation types Crosstabulation

			Documentation types		
			ONLY registered documents	Both registered & unregistered documents	Total
High Transaction cost	unimportant	Count	28	36	64
		% within High Transaction cost	43.8%	56.3%	100.0%
		% within Documentation types	54.9%	63.2%	59.3%
		% of Total	25.9%	33.3%	59.3%
	least important	Count	22	20	42
		% within High Transaction cost	52.4%	47.6%	100.0%
		% within Documentation types	43.1%	35.1%	38.9%
		% of Total	20.4%	18.5%	38.9%
	important	Count	1	1	2
		% within High Transaction cost	50.0%	50.0%	100.0%
		% within Documentation types	2.0%	1.8%	1.9%
		% of Total	.9%	.9%	1.9%
Total		Count	51	57	108
		% within High Transaction cost	47.2%	52.8%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.764[a]	2	.682
Likelihood Ratio	.764	2	.682
Linear-by-Linear Association	.678	1	.410
N of Valid Cases	108		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .94.

Mann-Whitney test for type of lender and reasons for turning down loan applications - Ghana

Ranks

	Institution Type	N	Mean Rank	Sum of Ranks
Lack property	Universal bank	57	63.61	3625.50
	MFI	51	44.32	2260.50
	Total	108		
Past Default	Universal bank	57	56.41	3215.50
	MFI	51	52.36	2670.50
	Total	108		
Poor Cashflow	Universal bank	57	55.71	3175.50
	MFI	51	53.15	2710.50
	Total	108		
Poor profitability	Universal bank	57	56.71	3232.50
	MFI	51	52.03	2653.50
	Total	108		
Lack records on business transactions	Universal bank	57	59.46	3389.50
	MFI	51	48.95	2496.50
	Total	108		
New customer	Universal bank	57	60.20	3431.50
	MFI	51	48.13	2454.50
	Total	108		
Lack required documents	Universal bank	57	62.79	3579.00
	MFI	51	45.24	2307.00
	Total	108		
Lack guarantors	Universal bank	57	59.00	3363.00
	MFI	51	49.47	2523.00
	Total	108		
Business type	Universal bank	57	54.87	3127.50
	MFI	51	54.09	2758.50
	Total	108		
Lack registered title	Universal bank	57	70.71	4030.50
	MFI	51	36.38	1855.50
	Total	108		
High Vulnerability	Universal bank	57	53.96	3075.50
	MFI	51	55.11	2810.50
	Total	108		
High Transaction cost	Universal bank	57	58.38	3327.50
	MFI	51	50.17	2558.50
	Total	108		
Lack experience	Universal bank	57	63.43	3615.50
	MFI	51	44.52	2270.50
	Total	108		
inadequate borrower equity	Universal bank	57	62.04	3536.00
	MFI	51	46.08	2350.00
	Total	108		

Test Statistics[a]

	Lack property	Past Default	Poor Cashflow	Poor profitability	Lack records on business transactions	New customer	Lack required documents	Lack guarantors	Business type	Lack registered title	High Vulnerability	High Transaction cost	Lack experience	inadequate borrower equity
Mann-Whitney U	934.500	1344.500	1384.500	1327.500	1170.500	1128.500	981.000	1197.000	1432.500	529.500	1422.500	1232.500	944.500	1024.000
Wilcoxon W	2260.500	2670.500	2710.500	2653.500	2496.500	2454.500	2307.000	2523.000	2758.500	1855.500	3075.500	2558.500	2270.500	2350.000
Z	-3.538	-.945	-.846	-1.424	-1.902	-2.212	-3.290	-1.700	-.151	-5.933	-.295	-1.588	-3.306	-2.946
Asymp. Sig. (2-tailed)	.000	.345	.398	.154	.057	.027	.001	.089	.880	.000	.768	.112	.001	.003

a. Grouping Variable: Institution Type

Factor Analysis - Ghana

Correlation Matrix[a]

		Lack property	Past Default	Poor Cashflow	Poor profitability	Lack records on business transactions	Lack required documents	Lack guarantors	Lack registered title	High Vulnerability	Lack experience	inadequate borrower equity
Correlation	Lack property	1.000	-.011	-.109	-.030	.210	.323	.855	.496	.045	.335	.219
	Past Default	-.011	1.000	-.016	-.045	-.072	.066	-.074	.127	.826	-.172	-.097
	Poor Cashflow	-.109	-.016	1.000	.904	.007	-.141	-.086	-.069	.019	.052	.124
	Poor profitability	-.030	-.045	.904	1.000	.032	-.092	-.031	.000	-.008	.089	.158
	Lack records on business transactions	.210	-.072	.007	.032	1.000	.280	.151	.384	-.065	.127	.039
	Lack required documents	.323	.066	-.141	-.092	.280	1.000	.235	.656	.122	.108	.071
	Lack guarantors	.855	-.074	-.086	-.031	.151	.235	1.000	.334	-.033	.302	.261
	Lack registered title	.496	.127	-.069	.000	.384	.656	.334	1.000	.182	.360	.332
	High Vulnerability	.045	.826	.019	-.008	-.065	.122	-.033	.182	1.000	-.167	-.122
	Lack experience	.335	-.172	.052	.089	.127	.108	.302	.360	-.167	1.000	.712
	inadequate borrower equity	.219	-.097	.124	.158	.039	.071	.261	.332	-.122	.712	1.000
Sig. (1-tailed)	Lack property		.456	.130	.378	.015	.000	.000	.000	.322	.000	.011
	Past Default	.456		.434	.322	.229	.248	.224	.095	.000	.038	.160
	Poor Cashflow	.130	.434		.000	.473	.072	.187	.240	.423	.298	.101
	Poor profitability	.378	.322	.000		.371	.172	.374	.500	.467	.179	.051
	Lack records on business transactions	.015	.229	.473	.371		.002	.060	.000	.253	.096	.343
	Lack required documents	.000	.248	.072	.172	.002		.007	.000	.104	.133	.233
	Lack guarantors	.000	.224	.187	.374	.060	.007		.000	.366	.001	.003
	Lack registered title	.000	.095	.240	.500	.000	.000	.000		.030	.000	.000
	High Vulnerability	.322	.000	.423	.467	.253	.104	.366	.030		.042	.104
	Lack experience	.000	.038	.298	.179	.096	.133	.001	.000	.042		.000
	Inadequate borrower equity	.011	.160	.101	.051	.343	.233	.003	.000	.104	.000	

a. Determinant = .002

Inverse of Correlation Matrix

	Lack property	Past Default	Poor Cashflow	Poor profitability	Lack records on business transactions	Lack required documents	Lack guarantors	Lack registered title	High Vulnerability	Lack experience	inadequate borrower equity
Lack property	4.889	.037	.580	-.540	.020	.196	-3.793	-1.249	-.198	-.600	.738
Past Default	.037	3.221	.030	.126	.008	.128	.108	-.075	-2.649	.215	-.209
Poor Cashflow	.580	.030	5.765	-5.174	-.084	.134	-.229	.209	-.283	-.063	-.027
Poor profitability	-.540	.126	-5.174	5.697	.006	.009	.290	-.198	.102	.101	-.198
Lack records on business transactions	.020	.008	-.084	.006	1.231	-.032	-.054	-.532	.188	-.077	.228
Lack required documents	.196	.128	.134	.009	-.032	1.881	-.232	-1.363	-.057	.141	.225
Lack guarantors	-3.793	.108	-.229	.290	-.054	-.232	4.147	.746	.079	.282	-.679
Lack registered title	-1.249	-.075	.209	-.198	-.532	-1.363	.746	2.854	-.367	-.245	-.623
High Vulnerability	-.198	-2.649	-.283	.102	.188	-.057	.079	-.367	3.336	.087	.249
Lack experience	-.600	.215	-.063	.101	-.077	.141	.282	-.245	.087	2.298	-1.481
inadequate borrower equity	.738	-.209	-.027	-.198	.228	.225	-.679	-.623	.249	-1.481	2.296

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.579
Bartlett's Test of Sphericity	Approx. Chi-Square	664.859
	df	55
	Sig.	.000

Anti-image Matrices

		Lack property	Past Default	Poor Cashflow	Poor profitability	Lack records on business transactions	Lack required documents	Lack guarantors	Lack registered title	High Vulnerability	Lack experience	inadequate borrower equity
Anti-image Covariance	Lack property	.205	.002	.021	-.019	.003	.021	-.187	-.090	-.012	-.053	.066
	Past Default	.002	.311	.002	.007	.002	.021	.008	-.008	-.247	.029	-.028
	Poor Cashflow	.021	.002	.173	-.158	-.012	.012	-.010	.013	-.015	-.005	-.002
	Poor profitability	-.019	.007	-.158	.176	.001	.001	.012	-.012	.005	.008	-.015
	Lack records on business transactions	.003	.002	-.012	.001	.812	-.014	-.011	-.152	.046	-.027	.081
	Lack required documents	.021	.021	.012	.001	-.014	.532	-.030	-.254	-.009	.033	.052
	Lack guarantors	-.187	.008	-.010	.012	-.011	-.030	.241	.063	.006	.030	-.071
	Lack registered title	-.090	-.008	.013	-.012	-.152	-.254	.063	.350	-.039	-.037	-.095
	High Vulnerability	-.012	-.247	-.015	.005	.046	-.009	.006	-.039	.300	.011	.033
	Lack experience	-.053	.029	-.005	.008	-.027	.033	.030	-.037	.011	.435	-.281
	inadequate borrower equity	.066	-.028	-.002	-.015	.081	.052	-.071	-.095	.033	-.281	.435
Anti-image Correlation	Lack property	.583[a]	.009	.109	-.102	.008	.065	-.842	-.334	-.049	-.179	.220
	Past Default	.009	.530[a]	.007	.029	.004	.052	.030	-.025	-.808	.079	-.077
	Poor Cashflow	.109	.007	.512[a]	-.903	-.032	.041	-.047	.052	-.065	-.017	-.008
	Poor profitability	-.102	.029	-.903	.508[a]	.002	.003	.060	-.049	.023	.028	-.055
	Lack records on business transactions	.008	.004	-.032	.002	.741[a]	-.021	-.024	-.284	.093	-.046	.136
	Lack required documents	.065	.052	.041	.003	-.021	.659[a]	-.083	-.588	-.023	.068	.108
	Lack guarantors	-.842	.030	-.047	.060	-.024	-.083	.569[a]	.217	.021	.091	-.220
	Lack registered title	-.334	-.025	.052	-.049	-.284	-.588	.217	.646[a]	-.119	-.095	-.243
	High Vulnerability	-.049	-.808	-.065	.023	.093	-.023	.021	-.119	.530[a]	.031	.090
	Lack experience	-.179	.079	-.017	.028	-.046	.068	.091	-.095	.031	.661[a]	-.645
	inadequate borrower equity	.220	-.077	-.008	-.055	.136	.108	-.220	-.243	.090	-.645	.565[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
Lack property	1.000	.933
Past Default	1.000	.893
Poor Cashflow	1.000	.950
Poor profitability	1.000	.948
Lack records on business transactions	1.000	.594
Lack required documents	1.000	.688
Lack guarantors	1.000	.931
Lack registered title	1.000	.819
High Vulnerability	1.000	.904
Lack experience	1.000	.838
Inadequate borrower equity	1.000	.866

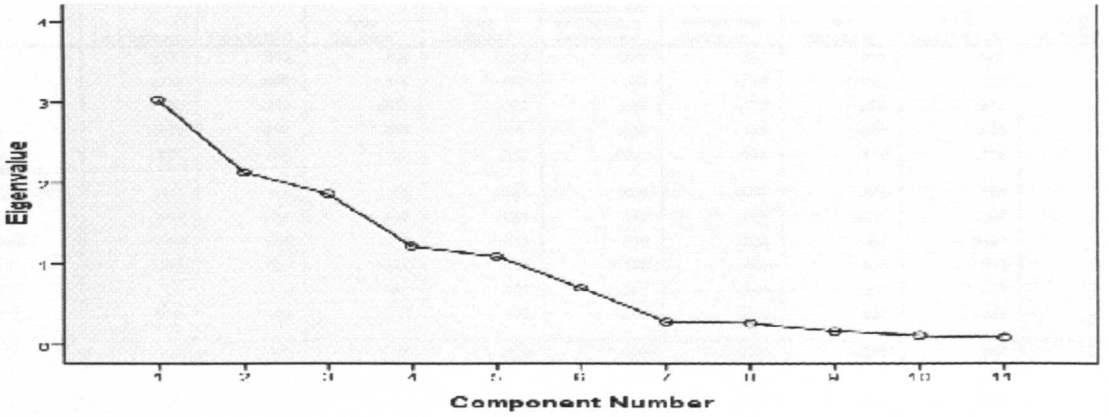
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.036	27.599	27.599	3.036	27.599	27.599	1.923	17.485	17.485
2	2.139	19.448	47.047	2.139	19.448	47.047	1.896	17.235	34.720
3	1.871	17.009	64.055	1.871	17.009	64.055	1.883	17.122	51.842
4	1.223	11.121	75.176	1.223	11.121	75.176	1.854	16.852	68.694
5	1.096	9.966	85.142	1.096	9.966	85.142	1.809	16.448	85.142
6	.704	6.404	91.546						
7	.288	2.619	94.165						
8	.272	2.471	96.637						
9	.167	1.517	98.154						
10	.114	1.036	99.189						
11	.089	.811	100.000						

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix[a]

	Component				
	1	2	3	4	5
Lack property	.804				-.521
Lack registered title	.783				
Lack guarantors	.736				-.602
Lack experience	.635			-.406	
Lack required documents	.579			.426	
inadequate borrower equity	.556	.422		-.481	
Poor profitability		.670	.664		
High Vulnerability		-.615	.689		
Poor Cashflow		.659	.678		
Past Default		-.616	.655		
Lack records on business transactions	.417			.621	

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

Reproduced Correlations

		Lack property	Past Default	Poor Cashflow	Poor profitability	Lack records on business transactions	Lack required documents	Lack guarantors	Lack registered title	High Vulnerability	Lack experience	inadequate borrower equity
Reproduced Correlation	Lack property	.933[a]	-.012	-.105	-.032	.201	.351	.918	.489	.046	.322	.234
	Past Default	-.012	.893[a]	-.010	-.037	-.169	.118	-.090	.169	.894	-.187	-.106
	Poor Cashflow	-.105	-.010	.950[a]	.945	.039	-.173	-.090	-.072	.025	.050	.131
	Poor profitability	-.032	-.037	.945	.948[a]	.082	-.125	-.021	-.013	.002	.094	.165
	Lack records on business transactions	.201	-.169	.039	.082	.594[a]	.556	.112	.516	-.125	.067	-.003
	Lack required documents	.351	.118	-.173	-.125	.556	.688[a]	.229	.694	.160	.137	.070
	Lack guarantors	.918	-.090	-.090	-.021	.112	.229	.931[a]	.367	-.036	.317	.231
	Lack registered title	.489	.169	-.072	-.013	.516	.694	.367	.819[a]	.212	.410	.362
	High Vulnerability	.046	.894	.025	.002	-.125	.160	-.036	.212	.904[a]	-.194	-.119
	Lack experience	.322	-.187	.050	.094	.067	.137	.317	.410	-.194	.838[a]	.839
	inadequate borrower equity	.234	-.106	.131	.165	-.003	.070	.231	.362	-.119	.839	.866[a]
Residual[b]	Lack property		.001	-.005	.002	.009	-.028	-.064	.007	-.001	.014	-.014
	Past Default	.001		-.007	-.007	.097	-.052	.016	-.041	-.069	.015	.009
	Poor Cashflow	-.005	-.007		-.042	-.032	.031	.003	.004	-.006	.002	-.007
	Poor profitability	.002	-.007	-.042		-.050	.033	-.010	.013	-.010	-.005	-.007
	Lack records on business transactions	.009	.097	-.032	-.050		-.276	.039	-.132	.060	.060	.042
	Lack required documents	-.028	-.052	.031	.033	-.276		.006	-.038	-.038	-.029	.001
	Lack guarantors	-.064	.016	.003	-.010	.039	.006		-.033	.003	-.015	.030
	Lack registered title	.007	-.041	.004	.013	-.132	-.038	-.033		-.029	-.050	-.030
	High Vulnerability	-.001	-.069	-.006	-.010	.060	-.038	.003	-.029		.027	-.003
	Lack experience	.014	.015	.002	-.005	.060	-.029	-.015	-.050	.027		-.127
	inadequate borrower equity	-.014	.009	-.007	-.007	.042	.001	.030	-.030	-.003	-.127	

Extraction Method: Principal Component Analysis.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 9 (16.0%) nonredundant residuals with absolute values greater than 0.05.

Rotated Component Matrix[a]

	Component				
	1	2	3	4	5
Poor profitability	.971				
Poor Cashflow	.970				
High Vulnerability		.945			
Past Default		.942			
Lack guarantors			.947		
Lack property			.920		
Lack required documents				.793	
Lack registered title				.765	
Lack records on business transactions				.741	
inadequate borrower equity					.918
Lack experience					.881

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

England

Table 9: Friedman's test

Ranks

	Mean Rank
poor cash flow	2.63
poor profitability	2.71
high vulnerability	2.48
past default	2.18

Test Statistics[a]

N	95
Chi-Square	36.200
df	3
Asymp. Sig.	.000

a. Friedman Test

Table 10: Wilcoxon's test

Ranks

		N	Mean Rank	Sum of Ranks
past default - Lack property	Negative Ranks	1[a]	21.50	21.50
	Positive Ranks	74[b]	38.22	2828.50
	Ties	20[c]		
	Total	95		

a. past default < Lack property

b. past default > Lack property

c. past default = Lack property

Test Statistics[b]

	past default - Lack property
Z	-7.627[a]
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

Table 11: Friedman's test

Ranks

	Mean Rank
inadequate experience	2.03
inadequate equity	2.11
New customer	1.86

Test Statistics[a]

N	95
Chi-Square	4.532
df	2
Asymp. Sig.	.104

a. Friedman Test

Table 12: Wilcoxon's test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between inadequate equity and Lack property equals 0.	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 13: Friedman's test

Ranks

	Mean Rank
Lack of guarantor	2.37
Lack required documents	1.49
Lack records on business transactions	2.14

Test Statistics[a]

N	95
Chi-Square	61.739
df	2
Asymp. Sig.	.000

a. Friedman Test

Table 14:

Ranks

	Mean Rank
High transaction cost	2.08
Business type	1.98
Lack registered title	1.93

Test Statistics[a]

N	95
Chi-Square	2.149
df	2
Asymp. Sig.	.342

a. Friedman Test

Table 15: Chi square test

Lack registered title * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
Lack registered title	unimportant	Count	15	54	69
		% within Lack registered title	21.7%	78.3%	100.0%
		% within Documentation types	78.9%	71.1%	72.6%
		% of Total	15.8%	56.8%	72.6%
	least important	Count	4	16	20
		% within Lack registered title	20.0%	80.0%	100.0%
		% within Documentation types	21.1%	21.1%	21.1%
		% of Total	4.2%	16.8%	21.1%
	important	Count	0	6	6
		% within Lack registered title	0.0%	100.0%	100.0%
		% within Documentation types	0.0%	7.9%	6.3%
		% of Total	0.0%	6.3%	6.3%
Total		Count	19	76	95
		% within Lack registered title	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.630[a]	2	.443
Likelihood Ratio	2.805	2	.246
Linear-by-Linear Association	1.072	1	.300
N of Valid Cases	95		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.20.

Table 16: Chi square test

High transaction cost * Documentation types Crosstabulation

			Documentation types		
			registered documents	both registered and unregistered documents	Total
High transaction cost	unimportant	Count	13	44	57
		% within High transaction cost	22.8%	77.2%	100.0%
		% within Documentation types	68.4%	57.9%	60.0%
		% of Total	13.7%	46.3%	60.0%
	least important	Count	6	32	38
		% within High transaction cost	15.8%	84.2%	100.0%
		% within Documentation types	31.6%	42.1%	40.0%
		% of Total	6.3%	33.7%	40.0%
Total		Count	19	76	95
		% within High transaction cost	20.0%	80.0%	100.0%
		% within Documentation types	100.0%	100.0%	100.0%
		% of Total	20.0%	80.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.702[a]	1	.402		
Continuity Correction[b]	.332	1	.565		
Likelihood Ratio	.718	1	.397		
Fisher's Exact Test				.445	.285
Linear-by-Linear Association	.694	1	.405		
N of Valid Cases	95				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.60.

b. Computed only for a 2x2 table

Table 17

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.533
Bartlett's Test of Sphericity	Approx. Chi-Square	238.865
	df	55
	Sig.	.000

Table:18

Anti-image Matrices

		Lack property	poor profitability	high vulnerability	past default	Lack of guarantor	poor cash flow	inadequate experience	inadequate equity	Lack records on business transactions	New customer	Lack required documents
Anti-image Covariance	Lack property	.599	.000	.061	.007	-.308	.065	-.008	.017	.166	-.132	.002
	poor profitability	.000	.529	-.013	.039	.082	-.328	-.049	.071	-.121	-.027	.090
	high vulnerability	.061	-.013	.543	-.356	.024	.067	.011	-.056	-.039	-.094	.080
	past default	.007	.039	-.356	.550	-.066	-.029	-.030	.072	.019	.084	-.058
	Lack of guarantor	-.308	.082	.024	-.066	.539	-.030	-.103	-.033	-.225	-.015	.030
	poor cash flow	.065	-.328	.067	-.029	-.030	.568	.012	-.045	-.033	-.018	-.019
	inadequate experience	-.008	-.049	.011	-.030	-.103	.012	.581	-.341	.032	.008	.005
	inadequate equity	.017	.071	-.056	.072	-.033	-.045	-.341	.586	.055	-.066	.045
	Lack records on business transactions	.166	-.121	-.039	.019	-.225	-.033	.032	.055	.725	-.190	-.015
	New customer	-.132	-.027	-.094	.084	-.015	-.018	.008	-.066	-.190	.813	-.164
	Lack required documents	.002	.090	.080	-.058	.030	-.019	.005	.045	-.015	-.164	.934
Anti-image Correlation	Lack property	.545[a]	-.001	.108	.013	-.542	.112	-.014	.028	.253	-.189	.003
	poor profitability	-.001	.564[a]	-.025	.072	.154	-.598	-.088	.128	-.195	-.042	.128
	high vulnerability	.108	-.025	.479[a]	-.651	.044	.120	.020	-.100	-.062	-.142	.112
	past default	.013	.072	-.651	.480[a]	-.121	-.051	-.054	.127	.030	.126	-.081
	Lack of guarantor	-.542	.154	.044	-.121	.542[a]	-.054	-.183	-.059	-.361	-.022	.042
	poor cash flow	.112	-.598	.120	-.051	-.054	.571[a]	.020	-.078	-.051	-.027	-.026
	inadequate experience	-.014	-.088	.020	-.054	-.183	.020	.577[a]	-.584	.050	.011	.007
	inadequate equity	.028	.128	-.100	.127	-.059	-.078	-.584	.546[a]	.084	-.095	.061
	Lack records on business transactions	.253	-.195	-.062	.030	-.361	-.051	.050	.084	.477[a]	-.247	-.019
	New customer	-.189	-.042	-.142	.126	-.022	-.027	.011	-.095	-.247	.558[a]	-.188
	Lack required documents	.003	.128	.112	-.081	.042	-.026	.007	.061	-.019	-.188	.406[a]

a. Measures of Sampling Adequacy(MSA)

Table 19

Component Matrix[a]

	Component			
	1	2	3	4
Lack of guarantor	.689			
Lack property	.649			-.404
inadequate experience	.610			.561
poor cash flow	-.455	.650		
poor profitability	-.533	.617		
Lack records on business transactions		.528	.429	
New customer		.459		
high vulnerability			.817	
past default			.775	
inadequate equity	.591			.601

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

Final Factor analysis - England

Correlation Matrix[a]

		Lack property	poor profitability	high vulnerability	past default	Lack of guarantor	poor cash flow	inadequate experience	inadequate equity
Correlation	Lack property	1.000	-.203	-.104	-.032	.555	-.185	.191	.146
	poor profitability	-.203	1.000	-.075	-.117	-.157	.640	-.036	-.112
	high vulnerability	-.104	-.075	1.000	.643	.019	-.117	.038	.049
	past default	-.032	-.117	.643	1.000	.096	-.094	.027	-.040
	Lack of guarantor	.555	-.157	.019	.096	1.000	-.073	.314	.235
	poor cash flow	-.185	.640	-.117	-.094	-.073	1.000	-.002	-.017
	inadequate experience	.191	-.036	.038	.027	.314	-.002	1.000	.617
	inadequate equity	.146	-.112	.049	-.040	.235	-.017	.617	1.000
Sig. (1-tailed)	Lack property		.024	.157	.381	.000	.037	.032	.079
	poor profitability	.024		.235	.130	.064	.000	.365	.141
	high vulnerability	.157	.235		.000	.427	.129	.359	.319
	past default	.381	.130	.000		.178	.183	.396	.351
	Lack of guarantor	.000	.064	.427	.178		.240	.001	.011
	poor cash flow	.037	.000	.129	.183	.240		.493	.434
	inadequate experience	.032	.365	.359	.396	.001	.493		.000
	inadequate equity	.079	.141	.319	.351	.011	.434	.000	

a. Determinant = .114

Inverse of Correlation Matrix

	Lack property	poor profitability	high vulnerability	past default	Lack of guarantor	poor cash flow	inadequate experience	inadequate equity
Lack property	1.535	.068	.182	.038	-.820	.204	-.039	-.003
poor profitability	.068	1.779	-.113	.179	.134	-1.109	-.140	.237
high vulnerability	.182	-.113	1.775	-1.139	.003	.204	.046	-.197
past default	.038	.179	-1.139	1.776	-.172	-.083	-.102	.243
Lack of guarantor	-.820	.134	.003	-.172	1.590	-.138	-.291	-.069
poor cash flow	.204	-1.109	.204	-.083	-.138	1.752	.042	-.130
inadequate experience	-.039	-.140	.046	-.102	-.291	.042	1.716	-1.006
inadequate equity	-.003	.237	-.197	.243	-.069	-.130	-1.006	1.681

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.542
Bartlett's Test of Sphericity	Approx. Chi-Square	196.846
	df	28
	Sig.	.000

Anti-Image Matrices

		Lack property	poor profitability	high vulnerability	past default	Lack of guarantor	poor cash flow	inadequate experience	inadequate equity
Anti-image Covariance	Lack property	.652	.025	.067	.014	-.336	.076	-.015	-.001
	poor profitability	.025	.562	-.036	.057	.047	-.356	-.046	.079
	high vulnerability	.067	-.036	.564	-.361	.001	.066	.015	-.066
	past default	.014	.057	-.361	.563	-.061	-.027	-.034	.081
	Lack of guarantor	-.336	.047	.001	-.061	.629	-.050	-.107	-.026
	poor cash flow	.076	-.356	.066	-.027	-.050	.571	.014	-.044
	inadequate experience	-.015	-.046	.015	-.034	-.107	.014	.583	-.349
	inadequate equity	-.001	.079	-.066	.081	-.026	-.044	-.349	.595
Anti-image Correlation	Lack property	.597[a]	.041	.110	.023	-.525	.124	-.024	-.002
	poor profitability	.041	.535[a]	-.064	.101	.080	-.628	-.080	.137
	high vulnerability	.110	-.064	.498[a]	-.642	.002	.116	.027	-.114
	past default	.023	.101	-.642	.495[a]	-.102	-.047	-.059	.140
	Lack of guarantor	-.525	.080	.002	-.102	.602[a]	-.083	-.176	-.042
	poor cash flow	.124	-.628	.116	-.047	-.083	.518[a]	.024	-.076
	inadequate experience	-.024	-.080	.027	-.059	-.176	.024	.569[a]	-.593
	inadequate equity	-.002	.137	-.114	.140	-.042	-.076	-.593	.536[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
Lack property	1.000	.797
poor profitability	1.000	.816
high vulnerability	1.000	.822
past default	1.000	.830
Lack of guarantor	1.000	.794
poor cash flow	1.000	.825
inadequate experience	1.000	.799
inadequate equity	1.000	.825

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component			
	1	2	3	4
Lack of guarantor	.684			.525
Lack property	.626			.531
inadequate experience	.604		.443	
inadequate equity	.579			-.469
poor profitability	-.560		.537	
past default		-.724	.453	
high vulnerability		-.721	.508	
poor cash flow	-.483	.433	.572	

Extraction Method: Principal Component Analysis.
a. 4 components extracted.

Reproduced Correlations

		Lack property	poor profitability	high vulnerability	past default	Lack of guarantor	poor cash flow	inadequate experience	inadequate equity
Reproduced Correlation	Lack property	.797[a]	-.241	-.150	-.033	.753	-.185	.194	.108
	poor profitability	-.241	.816[a]	-.098	-.099	-.133	.815	-.050	-.116
	high vulnerability	-.150	-.098	.822[a]	.811	.029	-.107	.068	.037
	past default	-.033	-.099	.811	.830[a]	.131	-.109	.007	-.046
	Lack of guarantor	.753	-.133	.029	.131	.794[a]	-.064	.346	.244
	poor cash flow	-.185	.815	-.107	-.109	-.064	.825[a]	.033	-.038
	inadequate experience	.194	-.050	.068	.007	.346	.033	.799[a]	.799
	inadequate equity	.108	-.116	.037	-.046	.244	-.038	.799	.825[a]
Residual[b]	Lack property		.038	.046	.001	-.198	.001	-.002	.037
	poor profitability	.038		.023	-.017	-.025	-.175	.014	.004
	high vulnerability	.046	.023		-.168	-.010	-.010	-.030	.012
	past default	.001	-.017	-.168		-.035	.015	.020	.006
	Lack of guarantor	-.198	-.025	-.010	-.035		-.009	-.032	-.009
	poor cash flow	.001	-.175	-.010	.015	-.009		-.035	.021
	inadequate experience	-.002	.014	-.030	.020	-.032	-.035		-.161
	inadequate equity	.037	.004	.012	.006	-.009	.021	-.161	

Extraction Method: Principal Component Analysis.

a. Reproduced communalities

b. Residuals are computed between observed and reproduced correlations. There are 4 (14.0%) nonredundant residuals with absolute values greater than 0.05.

Rotated Component Matrix[a]

	Component			
	1	2	3	4
past default	.907			
high vulnerability	.899			
poor cash flow		.904		
poor profitability		.892		
inadequate equity			.904	
inadequate experience			.874	
Lack property				.871
Lack of guarantor				.861

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.203	27.542	27.542	2.203	27.542	27.542	1.658	20.729	20.729
2	1.743	21.788	49.330	1.743	21.788	49.330	1.651	20.639	41.368
3	1.483	18.538	67.869	1.483	18.538	67.869	1.636	20.449	61.817
4	1.081	13.507	81.375	1.081	13.507	81.375	1.565	19.558	81.375
5	.431	5.383	86.758						
6	.400	4.998	91.756						
7	.369	4.612	96.369						
8	.291	3.631	100.000						

Extraction Method: Principal Component Analysis.

APPENDIX G

Comparison between Ghana and England

Ranks

	Country	N	Mean Rank	Sum of Ranks
Land	Ghana	108	104.23	11257.00
	England	95	99.46	9449.00
	Total	203		
Cash/fixed Deposit	Ghana	108	87.31	9430.00
	England	95	118.69	11276.00
	Total	203		
Stock	Ghana	108	118.11	12755.50
	England	95	83.69	7950.50
	Total	203		
Automobiles	Ghana	108	131.77	14231.50
	England	95	68.15	6474.50
	Total	203		
Machinery	Ghana	108	99.37	10731.50
	England	95	104.99	9974.50
	Total	203		
AccountRecievables	Ghana	108	76.27	8237.50
	England	95	131.25	12468.50
	Total	203		
LifePolicy	Ghana	108	82.75	8937.00
	England	95	123.88	11769.00
	Total	203		
shares/bonds	Ghana	108	85.44	9228.00
	England	95	120.82	11478.00
	Total	203		
T-Bills	Ghana	108	90.23	9744.50
	England	95	115.38	10961.50
	Total	203		
third party Guarantees	Ghana	108	112.88	12191.00
	England	95	89.63	8515.00
	Total	203		

Test Statistics[a]

	Land	Cash/fixed Deposit	Stock	Automobiles	Machinery	Account Recievables	LifePolicy	shares/bonds	T-Bills	third party Guarantees
Mann-Whitney U	4889.000	3544.000	3390.500	1914.500	4845.500	2351.500	3051.000	3342.000	3858.500	3955.000
Wilcoxon W	9449.000	9430.000	7950.500	6474.500	10731.500	8237.500	8937.000	9228.000	9744.500	8515.000
Z	-.676	-4.079	-4.529	-8.156	-.720	-6.984	-5.300	-4.475	-3.260	-2.946
Asymp. Sig. (2-tailed)	.499	.000	.000	.000	.472	.000	.000	.000	.001	.003

a. Grouping Variable: Country

Documentation types * Country Crosstabulation

			Country		Total
			Ghana	England	
Documentation types	ONLY registered documents	Count	51	19	70
		% within Documentation types	72.9%	27.1%	100.0%
		% within Country	47.2%	20.0%	34.5%
		% of Total	25.1%	9.4%	34.5%
	Both registered & unregistered documents	Count	57	76	133
		% within Documentation types	42.9%	57.1%	100.0%
		% within Country	52.8%	80.0%	65.5%
		% of Total	28.1%	37.4%	65.5%
Total		Count	108	95	203
		% within Documentation types	53.2%	46.8%	100.0%
		% within Country	100.0%	100.0%	100.0%
		% of Total	53.2%	46.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	16.578[a]	1	.000		
Continuity Correction[b]	15.395	1	.000		
Likelihood Ratio	17.077	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	16.497	1	.000		
N of Valid Cases	203				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 32.76.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.286	.000
	Cramer's V	.286	.000
N of Valid Cases		203	

Ranks

	Country	N	Mean Rank	Sum of Ranks
Documentation verification	Ghana	108	85.20	9202.00
	England	95	121.09	11504.00
	Total	203		
Registration not necessary	Ghana	108	81.78	8832.50
	England	95	124.98	11873.50
	Total	203		
How necessary is collateral	Ghana	108	115.96	12523.50
	England	95	86.13	8182.50
	Total	203		
Collateral not sufficient	Ghana	108	92.72	10013.50
	England	95	112.55	10692.50
	Total	203		

Test Statistics[a]

	Documentation verification	Registration not necessary	How necessary is collateral	Collateral not sufficient
Mann-Whitney U	3316.000	2946.500	3622.500	4127.500
Wilcoxon W	9202.000	8832.500	8182.500	10013.500
Z	-4.521	-5.393	-3.893	-2.536
Asymp. Sig. (2-tailed)	.000	.000	.000	.011

a. Grouping Variable: Country

verifying encumbrances * Country Crosstabulation

			Country		
			Ghana	England	Total
verifying encumbrances	no	Count	19	0	19
		% within verifying encumbrances	100.0%	.0%	100.0%
		% within Country	17.6%	.0%	9.4%
		% of Total	9.4%	.0%	9.4%
	yes	Count	89	95	184
		% within verifying encumbrances	48.4%	51.6%	100.0%
		% within Country	82.4%	100.0%	90.6%
		% of Total	43.8%	46.8%	90.6%
Total		Count	108	95	203
		% within verifying encumbrances	53.2%	46.8%	100.0%
		% within Country	100.0%	100.0%	100.0%
		% of Total	53.2%	46.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	18.439[a]	1	.000		
Continuity Correction[b]	16.423	1	.000		
Likelihood Ratio	25.702	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	18.348	1	.000		
N of Valid Cases	203				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.89.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.301	.000
	Cramer's V	.301	.000
N of Valid Cases		203	

Ranks

	Country	N	Mean Rank	Sum of Ranks
Interest	Ghana	108	101.88	11003.00
	England	95	102.14	9703.00
	Total	203		
fees/commission	Ghana	108	100.20	10822.00
	England	95	104.04	9884.00
	Total	203		
Amount	Ghana	108	102.31	11049.50
	England	95	101.65	9656.50
	Total	203		
repayment time	Ghana	108	103.93	11224.50
	England	95	99.81	9481.50
	Total	203		

Test Statistics[a]

	Interest	fees/commis sion	Amount	repayment time
Mann-Whitney U	5117.000	4936.000	5096.500	4921.500
Wilcoxon W	11003.000	10822.000	9656.500	9481.500
Z	-.032	-.483	-.083	-.526
Asymp. Sig. (2-tailed)	.974	.629	.934	.599

a. Grouping Variable: Country

Ranks

	Country	N	Mean Rank	Sum of Ranks
Location	Ghana	108	86.37	9327.50
	England	95	119.77	11378.50
	Total	203		
Market value	Ghana	108	99.52	10748.00
	England	95	104.82	9958.00
	Total	203		
Land rights	Ghana	108	102.33	11051.50
	England	95	101.63	9654.50
	Total	203		
Land Insurance	Ghana	108	83.38	9004.50
	England	95	123.17	11701.50
	Total	203		
Registration	Ghana	108	119.76	12934.50
	England	95	81.81	7771.50
	Total	203		
Documentation	Ghana	108	106.68	11521.50
	England	95	96.68	9184.50
	Total	203		

Test Statistics[a]

	Location	Market value	Land rights	Land Insurance	Registration	Documentatio n
Mann-Whitney U	3441.500	4862.000	5094.500	3118.500	3211.500	4624.500
Wilcoxon W	9327.500	10748.000	9654.500	9004.500	7771.500	9184.500
Z	-4.221	-.715	-.088	-4.980	-4.674	-1.304
Asymp. Sig. (2-tailed)	.000	.475	.930	.000	.000	.192

a. Grouping Variable: Country

Repossession problems due to ownership dispute in past 2 yrs * Country Crosstabulation

			Country		
			Ghana	England	Total
Repossession problems due to ownership dispute in past 2 yrs	no	Count	80	91	171
		% within Repossession problems due to ownership dispute in past 2 yrs	46.8%	53.2%	100.0%
		% within Country	74.1%	95.8%	84.2%
		% of Total	39.4%	44.8%	84.2%
	yes	Count	28	4	32
		% within Repossession problems due to ownership dispute in past 2 yrs	87.5%	12.5%	100.0%
		% within Country	25.9%	4.2%	15.8%
		% of Total	13.8%	2.0%	15.8%
Total		Count	108	95	203
		% within Repossession problems due to ownership dispute in past 2 yrs	53.2%	46.8%	100.0%
		% within Country	100.0%	100.0%	100.0%
		% of Total	53.2%	46.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	17.949[a]	1	.000		
Continuity Correction[b]	16.351	1	.000		
Likelihood Ratio	20.123	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	17.860	1	.000		
N of Valid Cases	203				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.98.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.297	.000
	Cramer's V	.297	.000
N of Valid Cases		203	

Ranks

	Country	N	Mean Rank	Sum of Ranks
Documentation	Ghana	108	106.68	11521.50
	England	95	96.68	9184.50
	Total	203		
Lack property	Ghana	108	126.19	13629.00
	England	95	74.49	7077.00
	Total	203		
Past Default	Ghana	108	105.75	11421.50
	England	95	97.73	9284.50
	Total	203		
Poor Cashflow	Ghana	108	101.10	10919.00
	England	95	103.02	9787.00
	Total	203		
Lack records on business transactions	Ghana	108	137.07	14804.00
	England	95	62.13	5902.00
	Total	203		
Business type	Ghana	108	105.53	11397.00
	England	95	97.99	9309.00
	Total	203		
Lack guarantors	Ghana	108	143.59	15508.00
	England	95	54.72	5198.00
	Total	203		
Lack experience	Ghana	108	95.67	10332.00
	England	95	109.20	10374.00
	Total	203		
High Vulnerability	Ghana	108	101.02	10910.00
	England	95	103.12	9796.00
	Total	203		
Poor profitability	Ghana	108	98.22	10608.00
	England	95	106.29	10098.00
	Total	203		
Lack registered title	Ghana	108	133.04	14368.00
	England	95	66.72	6338.00
	Total	203		
Inadequate borrower equity	Ghana	108	107.76	11638.50
	England	95	95.45	9067.50
	Total	203		
New customer	Ghana	108	122.79	13261.50
	England	95	78.36	7444.50
	Total	203		
Lack required documents	Ghana	108	140.08	15129.00
	England	95	58.71	5577.00
	Total	203		
High Transaction cost	Ghana	108	102.70	11092.00
	England	95	101.20	9614.00
	Total	203		

Test Statistics[a]

	Documentation	Lack property	Past Default	Poor Cashflow	Lack records on business transactions	Business type	Lack guarantors	Lack experience	High Vulnerability	Poor profitability	Lack registered title	inadequate borrower equity	New customer	Lack required documents	High Transaction cost
Mann-Whitney U	4624.500	2517.000	4724.500	5033.000	1342.000	4749.000	638.000	4446.000	5024.000	4722.000	1778.000	4507.500	2884.500	1017.000	5054.000
Wilcoxon W	9184.500	7077.000	9284.500	10919.000	5902.000	9309.000	5198.000	10332.000	10910.000	10608.000	6338.000	9067.500	7444.500	5577.000	9614.000
Z	-1.304	-6.793	-1.291	-.484	-9.626	-1.092	-11.104	-1.742	-.402	-2.156	-8.512	-1.565	-5.924	-10.357	-.213
Asymp. Sig. (2-tailed)	.192	.000	.197	.628	.000	.275	.000	.081	.688	.031	.000	.117	.000	.000	.831

a. Grouping Variable: Country