INFORMAL FINANCE AS ALTERNATIVE ROUTE TO SME ACCESS TO FINANCE: EVIDENCE FROM ETHIOPIA

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Abstract

The problem of SME financing has received attention of policy makers and academics in recent years owing to the role of the sector in reducing unemployment, narrowing income gap and alleviating poverty. Alternative financing schemes were suggested but their success depends to a large extent on the development of legal, informational, and institutional frameworks. Existing body of literature grossly undermines SME ability in reacting towards financial restraint and generally assumes they are passive participants in the credit market. Through a survey of 102 randomly selected firms across 10 industrial sectors in the manufacturing sector, we examined how the Ethiopian manufacturing SMEs reacted to acute shortage of formal credit. We found that SME owners actively react towards financial restraint by resorting to alternative schemes such as iqqub(variant of rotating saving and credit association), customer advances, and trade credit. Although the alternative financing schemes are not the best but they are useful in evading the impact of credit restraint on their operation and growth.

Keywords: Trade Credit, Smes, Iqqub, Informal Finance, Ethiopia, Customer Advances

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1. Introduction

Literature shows that underdevelopment of the financial market coupled with imperfections are the prime causes of SME financing problems (see (Beck, Demirguc-Kunt 2006). Cross country studies reveal that whilst financial underdevelopment prevails in most of the developing and emerging economies, imperfections exist even in advanced economies, implying pervasiveness of SME financing problem. Although financing constraints also exist in advanced economies where financial markets are more developed, the extent of SME financial exclusion is by far less severe in developed economies owing to the fact that they have a better informational, legal, and financial framework.

Various SME friendly schemes were suggested (Beck and Demirguc-Kunt 2006; Berger et al. 2005; Frame and Woosley 2004; Klapper 2006) but their efficacy hinges on the existence of legal and financial institutions-the inexistence or inefficiency of which is the primary cause of SME financing problems in most developing countries. Besides, disparity in the level of economic development, the financial intermediary system, and characteristics of the SME sector, often renders a scheme effective in one country barely useful in others. This calls for both better understanding the each country's financial system including the informal financial market, and also the ways in which SMEs manage to shred off the financial obstacles. Most of the existing literature assumes the SME sector as passive that does not react towards hostile financing environment. Hence, studies that shed light on SME reaction to financial restraint are very scant. Only few studies have ventured into the issue (Lin and Sun, 2006; Vandenberg 2003), and it was reported that SMEs do react in many ways ranging from bootstrapping to active participation in the informal credit market. However, country case studies show that the way they react differs from country to country owing to the difference in each country's social, economic, and business setting.

Understanding the alternative financing schemes used in each country's SME sector paves the avenue for determining the economic soundness of the schemes, for setting up workable models that can enhance their efficiency, and also in standardizing them such that they are applicable elsewhere too. We argue that a closer study and analysis of these schemes helps in averting the severity of the credit market against small firms and can provide at least a short-term solution to their financing problems. We also contend that a critical look at the informal credit market helps in forging a link with the formal credit market. Such a scholarly engagement will foster transformation of the informal markets from their rudimentary level to essential elements in the credit market in developing countries.

Through a survey of 102 randomly selected firms across 10 industries in the manufacturing sector, we examined how the Ethiopian manufacturing SMEs coped with acute shortage of formal credit. We found that the SMEs use various

mechanisms to avert the impact of credit restraint on their operation and growth. The schemes they use can be fairly classified into three categories as *customer-based, vendor-based,* and *peer-based*.

The rest of the paper is organized as follows. Section 2 reviews the alternative financing mechanisms small firms employ in quenching their thirst for finance. Section 3 describes data and methodology. Section 4 dwells on the reaction of the Ethiopian manufacturing SMEs towards financial restraint. The last section concludes.

2. SME reaction: literature review

The general finance theory predicts that liberalized markets are vital in ensuring a widespread access to financial services. Consequently, financial deepening has been at the center of every financial reform initiative in many developing countries across the globe. However, financial reform in developing countries did not give rise to a better credit access to certain group of firms such as SMEs. For instance, Steel et al (1997) find that financial liberalization in most SSA countries did not yield in financial deepening and hence no improvement has been witnessed in SME credit access. SMEs, therefore, responded to repressive financial environment by participating in the informal financial market; establishing self-governed networks within a peer group; and using trade credit. The following paragraphs present alternative financing techniques employed by SMEs as a means of averting financial restraint.

2.1 Informal finance

Informal finance involves deposit and lending services offered outside the formal financial markets. Informal credit market is often characterized by being rudimentary, poorly organized, and mostly confined within a small friendship group or neighborhood. Yet it is crucial in offering alternative means of finance for firms with little or no access to the formal credit market. In his empirical study on the informal financial markets in Kenya, Atieno (2001) found that of those that ever accessed credit, 67% acquired credit from the informal market, showing the extent to which the informal market is used by firms. Compared to larger firms, SMEs tend to participate more in the informal market. This has been confirmed by Kan (2000) who finds that in Taiwan 35% of SMEs borrow from the informal market while the figure for larger firms is only 12%. And in China, underground banks[1] provide as much as a third of their loans to SMEs (The Economist, 2007).

Quite many SMEs turn to the informal credit markets after their attempt to acquire credit from the formal market proves futile, due to stringent lending policy or out of their resentment of the bureaucracy. In contrast, the informal credit market is easily accessible and more appealing to the specific attributes of small firms. While acquisition of loans takes weeks in the formal credit market, it is only a matter of few days in the informal market. The informal market thus allows firms to circumvent the often rigorous credit procedure banks follow in granting loans. Besides, while the formal lending institutions demand physical assets as collateral to resolve the problem of adverse selection and moral hazard, informal markets rely only on group guarantee. In most developing countries where legal framework is weak, informal lenders outshine formal financial institutions in enforcing collateral (Steel et al ,1997), giving them an edge over banks in satisfying small business demand for loan.

However, it is worth noting that except for its accessibility, the informal credit market is not the best alternative due to excessive cost of credit and its inability to supply loans of a desired size. Theoretically, informal credit should have been by far cheaper as informal lenders have little or no administrative costs and pay no income tax. Besides, their transaction cost is believed to be lower compared to those of banks. However, as reported by Steel et al (1997), informal rates are much higher than formal market rates although it tends to be lower in countries with diversified sources of informal credit. Moreover, informal lenders supply credit at smaller sizes, failing to satisfy SMEs need to finance large investment projects undertaken as part of their growth strategy. Confirming the foregoing notion, Ayyagari et al (2008) report that informal finance is not the major driver behind the fast growing private sector in China. They rather discovered that fast growth is associated with more attachment with formal credit market and less with the informal market. They confirmed that informal finance is predominantly used by firms in the private sector. SMEs in many developing countries continue to rely on the informal credit despite its excessive cost and low size.

SMEs also use self-governed ethnic based networks as an alternative. Evidence from Kenyan manufacturing sector shows that SME operators establish ethnic-based networks through which lending is carried out (see Biggs & Shah, 2006). Biggs & Shah (2006) claim that while such a network improves performance of the group, it has adverse repercussions on those outside the network. In an earlier study, Biggs et al (2002) find that while such networks are open to ethnic group member irrespective of their size, they are available only to

[1] Also called black banks these are illegal banks that conduct the banking business in the black market. Underground banking is a serious problem in countries where the formal credit market is inefficient (see The Economist, August 9, 2007). The Ethiopian government too has imprisoned illegal lenders in a fight against black banking (see AddisFortune, 2010).

large businesses owned by those outside the ethnic network.

2.2 Trade credit

Trade credit arises when vendors sell goods on credit. It serves as an alternative financing scheme satisfying the need to finance working capital. It is important to SMEs because the suppliers grant it in consideration of a long standing business relationship and also to keep it continue. Three theories exist justifying the essence of trade credit in the product market, namely, financing advantage theories, price discrimination theory, and transaction costs theory(see for details Peterson & Rajan, 1997). The financing advantage theory contends that suppliers enjoy superior advantage over financial institutions in handling the information asymmetry problem. First, they can exploit their business relationship to acquire customer information at a cheaper cost. Suppliers may at times hold captive customers with poor credit standing if they perceive there would be valuable business ahead. Secondly, in cases where the supplier acts as a sole vendor for the product, it can use its power to enforce repayment of the debt. The supplier can threaten to cut future delivery if it happens that the customer fails to honor his/her obligation. Thirdly, where default is eminent, the supplier has the power to repossess the products in order to recover the debt. Trade credit can also help suppliers to discriminate customers as cash purchasers and credit purchasers wherein the effective price of credit customers is higher compared with price paid by cash customers. Moreover, trade credit may appeal to the interests of a customer as it allows accumulation of bills to be paid periodically. This avoids the need to settle bills in a dispersed way every time delivery is due.

Trade credit is a significant part of short-term liabilities in both small and large enterprises. Trade credit is a common place in manufacturing, construction, wholesale and retail firms (Mach & Wolken, 2006). Literature conjectures that availability of trade credit is partly determined by the extent to which suppliers can access credit from financial institutions. Supply of trade credit is higher in countries where supplier can easily access credit whereas its supply is small in markets where credit is hard to come by. Hence, it can be implied that firms in developed countries are likely to have better access to trade credit than those in developing countries where financial markets are weak.

Examination of the existing empirical evidence shows that demand for trade credit is greater among smaller firms, due to the reason that these are more credit constrained firms. Confirming the above claim, Mach & Wolken (2006) in their survey of SMEs in US in 2003, found that 60% of small firms use trade credit. Large firms, on the other hand, prefer commercial paper. Trade credit is costly and firms use it as a last resort after exhausting other financing alternatives.

One legitimate question would be what advantages suppliers enjoy over financial institutions in extending credit. Chandler (2009) explains that supplier are better positioned in handling the problem of information asymmetry. Adverse selection and moral hazard can be best managed by a vendor. The supplier can elicit valuable customer information from a business relationship, general market conditions and demand for the product. This allows the supplier to assess whether the customer has the ability to honor its obligation, in a much better way than financial institutions (Cook, 1999). They can also manage the moral hazard problem more effectively. First of all, the very fact that credit is offered on the sales of tangible goods offers a room to exercise power related with the right of repossession. Besides, where the supplier acts as a sole vendor, it can use its power as leverage for enforcing repayment by threatening to discontinue delivery in case of default. Consequently, a firm that has been denied credit by financial institutions can acquire trade credit.

From debtor's perspective, trade credit has two important purposes: an alternative means of financing and a signaling tool for acquisition of bank credit. Trade credit can serve as both a complement and substitute for bank loan. Where bank loan is hard to come by, firms resort to trade credit despite that it is expensive. Most importantly, trade credit serves as a primary source of financing in times of financial restraints. This has been confirmed in many occasions. For instance Love et al (2007), from their study of 890 firms across six emerging economies, report that the magnitude of trade credit reaches its peak at the apex of financial crisis. In fact, if the financial crisis persists, suppliers tend to pull back their generosity in extending credit. This is often caused by fall in trust and also a dwindling of supplier's financing access. Trade credit is also used as a signal of creditworthiness that can help acquire bank loans. Small businesses that often have little chance to access bank loan due to lack of financial transparency can use trade credit as a testimony for their trustworthiness, and hence can get loans (Cook, 1999). In general, trade credit plays a crucial role in SME financing by mitigating the problem of information asymmetry as it can be used as a substitute for bank loans and as a tool to pave the way towards accessing bank credit.

3. Data and methodology

Data was collected through survey of 102 randomly selected manufacturing SMEs operating in Addis Ababa, the capital that hosts nearly one half of manufacturing SMEs. The sample represents 27.2% of manufacturing SMEs operating in the capital. The sample are drawn from 10 industrial sectors that

include Food Products and Beverages (31.4%), Wearing Apparel (5%), Tanning and Dressing of Leather (7.8%), Paper Products and Printing (15.7%), Chemical and Chemical Products (5%), Rubber and Plastic Products (6.9%), Non-metalic Mineral Products(5.9%), Fabricated Metal Products (2.9%), Machinery and Equipment (7.8%), and Furniture (11.8%). Survey response rate is 85%, implying that the survey outcome is clean from non-response bias. The survey was conducted using a door-to-door self-complete questionnaire filled by SME owners. A cross sectional data was generated from survey and analyzed using descriptive statistics.

4. Ethiopian SME reaction: *empirical evidence*

Survey results revealed that Ethiopian SMEs do react to financial restraint. The alternative financing schemes used by SMEs can be fairly grouped into three categories: client-based schemes, vendor-based schemes, and peer-based scheme.

As shown in Table 1, firms use retained earnings, *iqqub* (A term driven from the "Geez" language, meaning something that is safeguarded and is closer in meaning to the word saving, signifying the principal purpose it is set up by members.), credit from friends, customer advances and trade credit in lieu of bank loan. Retained earnings are the primary sources of financing operation and expansions. This is consistent with the pecking order theory set up by Myers (1984) who posited that internal capital is the most accessible source of finance. The next most commonly used sources include *iqqub*, customer advances, and credit purchases. However, as revealed by survey results, these techniques are not uniformly employed across industries. The kind of scheme used depended on SME specific conditions and networks with which they are linked. Moreover, we found that a single financing scheme is used by different industries for satisfying varying financing needs. For instance, some firms use *iqqub* to satisfy their short term financing needs while others use it for financing expansion projects as well. We tried to understand the financing practice of SME by inquiring streams of questions that are summarized into financing business operation and planned expansion.

Table 1. Alternative financing schemes

Rank	Financing scheme	Working Capital*	Financing expansion*
1.	Retained profit	Yes (47%)	Yes (83%)
2.	*"Iqqub"*	Yes (34%)	Yes (16%)
3.	Customer advances	Yes (8%)	No
4.	Credit from friends	Yes (6%)	Yes (1%)
5.	Trade Credit	Yes (5%)	No

Source: *field survey (*represents the percentage of SMEs using that type of financing)*

A glance at the table reveals that SMEs have more choices for financing working capital than expansion. While customer advances, credit purchases, and credit from friends and relatives are mainly used for financing working capital, *iqqub* is used for satisfying working capital needs such as payment of wages, taxes, servicing bank debts as well as long term financing needs such as business expansion.

4.1 Client-based scheme: Customer advance

Our survey has revealed that customer advance is an important client-based scheme used as an alternative source of financing operation. Firms require their clients to deposit portion of the negotiated price of a product whose delivery is expected to take place sometime in the future. This scheme is commonly used by firms that manufacture goods to customer order. We found that it is widely practiced among firms in the publishing and printing industry and furniture manufacturers. Customer advance serves the dual purposes of financing acquisition of raw materials and as a mechanism that ensures payment of the remaining balance of the invoice. This implies that firms also use advances in order to avoid the possibility that a customer cancels the order in favor of a less expensive or better quality producer. Customer advance therefore locks price and is also used as a mechanism of ensuring commitment by the customer.

We came to know that whilst the importance of customer advance as an alternative finance varies across sectors, its benefit as an insurance against possible customer infidelity is highly valued among most of them. We also noted that firms that face serious financing problems tend to rely on customer advance more heavily. For instance, those in the furniture industry are relatively smaller in size compared with firms in the publishing and printing sector and hence see customer advance as a principal source of financing raw material purchases. Although customer advance is mostly a short-term means of financing and often small in amount, its role on relieving firms from the heavy burden of credit restraint is significant.

4.2 Vendor –based scheme: Trade credit

Trade credit is a short term financing technique that comes into existence when a vendor sells goods to its customers on credit. Trade credit is a major component of the balance sheet and remains outstanding over a period of commonly 30 days, sometimes 60 days, and exceptionally 90 days. The length of the credit period, amount of discount for early payment varies across firms depending on the nature of the goods in question and the financial strength of the vendor. Vendors tend to allow a shorter credit period when goods are perishable and credit is scarcer.

Survey revealed that although not as popular as in developed countries, trade credit is used by some firms. Literature reports that besides its use as a source of financing, trade credit can be used as a signal of credit worthiness and hence a gateway to bank loan (Cook, 1999), but this does not happen in Ethiopia. There are two justifications. Firstly, trade credit is not created through a legally binding contract between the vendor and its client. It rather comes into existence only through a verbal agreement. The supplier decides to extend credit based on an indirect assessment of client's business, his personal integrity, and information from family and friends. Trade credit is often not backed by a more formal evidence of indebtedness. Consequently, documents in the customer's hand may not be validly used as evidence of an outstanding credit obligation. Secondly, banks may not use trade credit as a basis of their credit decision. This is because vendors extend credit to their clients not based on a prudent credit analysis, and thus a client that gets trade credit may not be the one with a good credit standing. Therefore, from a bank's perspective, the signaling power of the trade credit is negligible. Besides, collateral is crucial in banks' lending decisions, and any additional document that testifies credit worthiness of a client is considered only supplementary.

4.3 Peer-based schemes: "Iqqub"

Iqqub refers to an informal financing technique that belongs to what is generally known as Rotating Credit and Saving Associations (ROSCA). It is a scheme where closely associated group of individuals periodically contribute to a pool that is allocated to each member in a random rotation or according to a prescribed fashion. The group decides the amount of periodic contribution that in turn determines the size of the pool distributed to a member. The scheme can be initiated by one person or more people who have an urgent need for cash. The initiators usually take the responsibility of soliciting new members and getting drafted a mutually acceptable bylaw that prescribes, *inter alia*, the amount of the contribution, frequency of meeting (weekly, bi-weekly, monthly etc), size of a fund to be kept as a cushion against defaults. Size of *iqqub* is a factor of the number of members in the group and the amount of periodic contribution. For example, an *iqqub* with 20 members, each making a periodic contribution of ETB 1,000, has the size of ETB 20,000, that can be given out as a loan to its members. Each member periodically brings ETB 1,000 and a member chosen gets a credit of ETB 20,000. How much he owes the rest of the members and the number of periodic payments he has to make depends on the time at which he gets credit. In the foregoing example, a member that gets the pooled sum right at the beginning of the cycle owes ETB 19,000 while the one that gets it at the end owes nothing.

Despite its non-interest bearing features on deposit and loans, *iqqub* serves as a tool for saving and credit. It plays a vital role of encouraging households to postpone consumption and hence assists in developing the culture of saving in areas where banking services are unavailable. Until a member gets the credit he acts as a depositor, and he takes the position of a debtor immediately after getting the credit. Similarly periodic payments are all deposits until a member gets credit, they will then become repayments of an outstanding credit afterwards.

Iqqubs are widely practiced in most developing countries in Africa and Asia. In Ethiopia, they are claimed to have preceded the emergence of modern banking system in the country (Aredo, 1993). Their wider prevalence is evident from existing evidence on the number of households participating and amount of resources they managed to mobilize. For instance, 95 *iqqubs* surveyed by Mauri (1987) mobilized ETB 139 mill (approx €50 mill), and this represents 15.3% of household saving deposited at the Commercial Bank of Ethiopia in 1986, the sole commercial bank at the time.

We discuss in the following paragraphs three important aspects of *iqqub*, namely, membership requirements, amount of contribution, and technique used in allocating the fund.

(a) Membership

*Iqqub*s are often established among homogenous group of people representing individuals from the same firm, trade, ethnic background, or neighborhood (Aredo, 1993). The most important shared characteristics of members in the scheme is that they fall into roughly similar income category. Establishment of *iqqub* takes different forms. It is mostly initiated by one person or a group of individuals with an eminent expenditure that requires a sum bigger than they can afford with their current earning. Alternatively, in some areas *iqqub* may run in a more organized manner having a chairman and secretary who almost act like employees of the scheme charged with the responsibility of soliciting membership and handling various administrative matters. One notable aspect of *iqqub* is that any new member must be well known by the rest of the

members or at least by a few of them. A mutual trust among members arises from a personal relationship nurtured through working or trading together or living in the same neighborhood. Depending on the interest of the group, each member in the scheme may have one or more shares. It is also possible that two individuals co-own a single share. The former occurs when a member is relatively wealthier while the latter takes place when members are unable to afford a full share but need to join the scheme.

(b) Periodic contribution

Contribution is mostly in cash except in some places where people form *iqqub*s in which contributions are in kind such as butter, honey, sakes of wheat etc (see Aredo, 1993). Size of periodic contribution is set by the members by taking into account the amount they can afford to contribute on the one hand and the size of the scheme that is partly determined by the number of members on the other. The length of periods hinges on the frequency at which members generate income. For instance, traders often meet weekly or fortnightly while employees meet monthly. Every member is expected to make the periodic contribution on a regular basis and a failure often results in forfeiture. Some *iqqub*s collect additional contributions to keep a contingency fund that is used in cases where a member fails to make periodic contribution. Any remaining balance on such a special fund is distributed to members if it remains intact till end of the cycle.

(c) Allocation

Allocation of pooled money takes place at agreed upon interval that spans from a week to a month. Only one member is entitled to collect the pooled sum at each meeting. Three different techniques are used in identifying the one entitled to collect it: *random, discretionary,* or through *auction*. In a random allocation, a recipient is identified by a lottery in which the probability of each remaining member keeps on rising in each subsequent meeting. In a traditional *iqqub* where no consideration is given to time value of money, such an allocation is a real lottery for the first recipient and a bad luck for the one collecting it last. For the member who collects it first, it is tantamount to getting an interest free loan, whereas for the one who collects it last, it is a non-interest bearing deposit. In other words, all subsequent collectors indirectly subsidize interest that would have otherwise been paid by the first collector; the burden of subsidy steadily rises and reaches its peak on the last collector. However, people nowadays recognize the time value of money and hence have a mechanism in which every member gets similar amount of benefit. They do so by charging a discount from early collectors and distributing it to late collectors such that each receives the same amount of money.

While the first allocation technique is probabilistic, discretionary allocation and auction are not. In discretionary allocation, members mutually agree on a schedule that specifies the order in which allocation occurs. This takes place when degree of need for cash by members is not the same. In other words, while some of the members urgently need cash while others are indifferent as to the timing. This is common when *iqqub* is established within a closely tied family or friendship group whose relationship transcends beyond the scheme. Discretionary allocation is also employed when a member is under emergency situations arising from occurrence of unforeseen events. This signifies that *iqqub* is much more than a mere saving and credit technique as it plays a vital role in maintaining social ties among members. In auctions, on the other hand, the pooled sum is presented for a bid among members, and the one with the highest bid price is entitled to the money and the excess of the bid price over the value of the pooled sum is kept as a special fund to meet certain unforeseen needs and to cover administrative costs of the scheme. Auction has been introduced as a better alternative to random allocation where benefits may not be fairly distributed among members. In cases where all members need the money equally urgently, the auction offers the same chance to acquire it by paying a higher price.

Types of Iqqub

As has been indicated previously, *iqqub* is established within a group of individuals that earn a comparable amount of income. One way to understand *iqqub* is analyzing them into groups based on their income categories because the way the scheme functions in each group is different and formality increases as size of the scheme increases. Following Aredo (1993) and Mauri (1987), the salient features of the scheme can be presented by dividing it into three categories as household, small trader and large trader *iqqub*.

a) Household "Iqqub"

This is often established either within colleagues in an organization, individuals living in the same neighborhood, or among friends. Even employees of financial institutions join *iqqub* despite the fact that they work in a financial service industry. For instance, Bouman (1995) stated that 75% of Agricultural Bank of Egypt were members of *iqqub*. The most common characteristics of such a household *iqqub* is that the purpose is to accumulate money to meet household expenses such as furnishing, paying school fees for children, spending for holidays etc. Such schemes are also characterized by having closely related small number of members, often not well organized, and with limited number of cycles. It is more likely that allocation is random because the time value of money is not an issue of much concern as the cycle often ends within a short period of time. Individuals in such groups are mostly less affluent and hence lack access to the formal financial sector. The scheme therefore offers an alternative tool of saving for those who survive by meager earnings.

b) Small traders "Iqqub"

As opposed to household *iqqub*, small trader's iqqub is set up with the principal purpose of financing business related expenditures. This may include acquisition of raw materials, equipment, and machinery. Membership may be open to non-traders who afford the periodic contribution. One of the distinguishing characteristics of such types of schemes is that the members are mostly individuals engaged in small scale trading activities in the informal sector of the economy. This is a little more organized compared with household *iqqub* but less so compared with large trader *iqqub*.

c) Large[2] traders "iqqub"

Businessmen engaged in different types of trade often establish *iqqub* aimed at financing investment activities that require a larger sum. The group includes people engaged mostly in general wholesale and retail trade, bakery, restaurants, and hospitality services, who lack a physical collateral to access bank loan or afraid to present their property as a collateral in fear of possible foreclosure[3]. The most notable features of the large traders *iqqub* is that they are more institutionalized and hence operate in a more organized manner (Aredo, 1993). They often have a salaried chairman and secretary who almost act like employees of a legally registered organization. As full time workers, the chairman and secretary are vested with the responsibility to carry out activities including ensuring trustworthiness of a new member, bringing a defaulter before the court, imposing and collecting penalties from those who trespass bylaws of the *iqqub* etc.

In this type of *iqqub,* membership is a serious issue as the sum involved is big in amount and membership extends to large number of people. A new comer is admitted only after a serious scrutiny of his financial history and personal characters. Besides, some individuals from the incumbent members need to testify for him and must be ready to act like a guarantee in case of failure to abide by the rules. In some cases membership is open only to those who own a business concern or have a property in their possession. Where a person desiring to join is unable to bring guarantors, he may join only if he agrees to collect the sum at the end of the cycle.

While the length of periods is usually one month in household *iqqub*, in a large trader's *iqqub* a period may be as short as a week. Large trader *iqqub* raises a large sum of money, often more than ten times their periodic contribution. One SME owner, who uses *iqqub*, reported that he contributes ETB 20,000 weekly to an *iqqub* with 70 members, and he expects to collect a pooled sum of ETB 1.4million (equivalent to US$70,000[4]). He would have needed a collateralizable asset worth ETB 3.28million to secure loan from banks because according to World Bank(2014) bank in Ethiopia use collateral to loan ratio of 234%. Another SME owner reported that he belonged to iqqub with 80 members each contributing bi-weekly ETB 40,000. Members in the iqqub were entitled to collect ETB 3.2mill(aprox US$158,000), and the corresponding collateral value that would have been required by banks were ETB 7.5mill(approx. US$369,000). In both cases, pooled sum is many times more than what they can periodically save. The money is often used for acquisition of commercial vehicles, machinery, equipment, or to undertake expansionary projects.

The other distinguishing characteristics of such type if *iqqub* is the care with which the sum is given out to the winner. Because membership is spread across large number of people and also due to the size of the money at stake, much care is taken in handling probable default by winners. As stated previously, half the job is done upon admission because a member needs to have at least three other incumbent members testifying his personal traits and trustworthiness. This helps in avoiding erroneously admitting those with an evil intent. The remaining job of averting default is done by requiring the winner to bring at least three members as guarantee. The guarantors should agree to take the responsibility to pay on his behalf in case of default. In cases where the winner is unable to bring the required number of guarantors, the pooled sum is kept in a bank account.

Iqqub and information asymmetry

Information asymmetry is what plagues the formal financial market and also the reason behind disenfranchisement of SMEs. Literature shows that informal institutions outdo formal financial institutions in managing the problem of information asymmetry (see Steel et al,1997). The fact that they are built on close friendship makes them better in enforcing repayment of credit. It is therefore expedient that we discuss how *iqqub* manages the problem of adverse selection and moral hazard, the twine ingredients of information asymmetry.

Iqqub is established among people who know each other very well, owing to working together, trading together, living in the same neighborhood, or due to family ties. They learn about each other through long and multifaceted interactions. In effect, members possess information about each other that

[2] The word 'large' is used in this context to distinguish this group from small traders, and thus it does not necessarily reflect the size of their businesses.

[3] We learnt in our survey that business people, especially those who do business in a traditional way, have a considerable phobia against a bank loan following a massive foreclosure of defaulting borrower's property by commercial banks. Some traders fret that interest on bank loan may build up so large that their ordinary income may not be sufficient to service an outstanding debt.

[4] This is based on the exchange rate between USD and Ethiopian Birr of $1= ETB 20.2495 on January 22,2015

can hardly be obtained by financial institutions through their formal information acquisition techniques. This allows them to select out a potential member who is not as trustworthy as needed. Therefore, the problem of adverse selection is dealt with effectively. In *iqqub* where membership stretches to a large group of people, applicants are admitted only when they are recommended by at least three of the incumbent members. Where the applicant is unable to present a referee, he may still join provided he agrees to collect the pool only at the end of the cycle. In other words, such a member does not get credit from the scheme.

The resolutions to the problem of moral hazard are four folds. First, a defaulter faces social exclusion. There is a strongly held culture that if a person defaults he is not trusted for any responsibility any longer. Failure to repay debt has a serious consequence on a person's social life, hence people take much care in keeping their promises. Secondly, each winner must bring guarantors who are willing to take the responsibility to pay on his behalf in case of default. In case a debtor is unable to service his credit, these guarantors put pressure on him to relieve themselves of the potential responsibility. Thirdly, some *iqqubs* impose fines on members who fail to service their debts. A member who fails to pay the periodic contribution is penalized and required to pay a much higher amount in the next round. Fourthly, in case where all the above mechanisms fail, the defaulter is brought to court. The mechanisms described above are what *iqqubs* generally use to mitigate moral hazard; but the extent of emphasis on each differs based on the size of the *iqqub* and diversity of its members. For instance, smaller *iqqub* that are established within closely knit group rely more on social exclusion while larger ones rely on personal guaranty.

5. Conclusion

The problem of SME financing has received attention of policy makers in recent years owing to the role of the sector in reducing unemployment, narrowing income gap hence promote economic growth. Alternative financing schemes have been crafted but their success hinges to a large extent on the development of legal, informational, and institutional frameworks. These pre-requisites on the other hand are barely available in developing countries like Ethiopia, and are the principal missing factors that led to under-development of the formal credit market in the country. The extant body of literature grossly undermines SME ability in reacting towards financial restraint and generally assumes them to be passive participants in the credit market. Our study challenges this view and argues that SMEs can devise mechanisms wherein they circumvent financial restraints they often face.

Understanding the alternative financing schemes used in each country's SME sector paves the avenue for determining their economic soundness, setting up workable models that can enhance their efficiency, and also in standardizing them such that they are applicable elsewhere too. We argue that a closer study and analysis of those schemes helps in averting the severity of the credit market against small firms and can temporarily ease their financing problems. We also contend that a critical look at the informal credit market helps in forging a link with the formal credit market. Such a scholarly engagement will foster transformation of the informal markets from their rudimentary level to essential elements in the credit market of developing countries. Besides, it will help in widening financial services of the formal credit market to the hitherto neglected segments. This led us into the study of reaction of manufacturing SMEs in Ethiopia. Through a survey of 102 randomly selected firms across 10 industries in the manufacturing sector, we examined how the Ethiopian manufacturing SMEs cope with acute shortage of formal credit.

We found that SME owners actively react towards failure of the formal credit market to supply loan, and look for alternative financing mechanisms. Although the alternative financing schemes are not the best but they are useful in averting the impact of credit restraint on their operation and growth. The alternative financing schemes used by SMEs are grouped into three categories as customer-based, vendor-based, and peer-based schemes. It has been found that while customer based and vendor based schemes are exclusively used for working capital financing, peer-based schemes are used for financing start up as and growth as well.

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