Accessing bank credit in Eritrea

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Accessing Bank Credit in Eritrea: Bottlenecks for Small Firms and for the Commercial Bank of Eritrea

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Abstract

The Commercial Bank of Eritrea (CBE) deploys only 29% of the funds collected from its depositors. At the same time a lack of finance for small firms in Eritrea is an important obstacle for the development of the country. The paradox of the concomitant existence of ample money in the bank and scarcity of money with small firm owners can be explained by asymmetric information. Six mechanisms to overcome asymmetric information are presented. Interviews revealed that collateral was the sole relevant mechanism in reducing asymmetric information in Eritrea and that the collateral requirements were high. The other mechanisms had little impact. We, moreover, found that the scope of the problem was wider than asymmetric information theory suggests. Mutual mistrust, conservatism and rigid credit policies of the CBE, a lack of accounting knowledge within small firms, and general development related problems did also play a role.

Key words: Africa, Eritrea, credit gap, asymmetric information, credit trap

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1. Introduction

The financial institutions in Eritrea are involved in an extensive process of reconstruction. This also applies to the largest and oldest of the public Eritrean banks: the Commercial Bank of Eritrea (CBE). The bank is the main source of commercial - mostly short-term- credit in the country[2]. Despite of its dominant position in traditional loans, the CBE is not making profits on its main business. The reason for this is that the CBE has chronic excess liquidity (Haile, 1999; Sutton, 1995). In 1998 only 29% of the deposits were extended as loans and advances to customers. This means that most of the funds, for which interest is paid to depositors, do not generate revenues for the bank.

At the same time small firms, which are considered to be major actors in the economy, are constrained in their growth by a restricted access to credit. According to the National Survey (1995), the small firms in the country have financial, marketing, transportation, personal and other constraints. Finance is reported as the major barrier for start-ups and as the second -after marketing- during normal operations of small firms: 43 percent have financial constraints at the start-up and 20 percent face such constraints during normal operation. Moreover, according to the study by Tesfayohannes (1998), "*More than 65 percent of those who applied for a loan, were rejected by the bank for lack of adequate collateral and other regulatory reasons, and even those who received a loan bitterly complained that they got less than what they requested.*"

It is the objective of this article to study the puzzle of why the CBE is suffering from an excessive liquidity problem while at the same time the small firms in the country are reporting financial constraints as one of their major problems. This paper will explore the apparent bottleneck both from the bank's side as well as from the perspective of the small firms and by doing so it may contribute to knowledge on

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[2] Other banks are the Bank of Eritrea, the Housing Bank of Eritrea and the Eritrean Development and Investment Bank. The Bank of Eritrea is the central bank and it has the task to supervise the other banks and to take care of monetary policy. It, moreover, recommends the interest rates on loans, deposits and savings. The process of restructuring, a lack of manpower and absence of a clear line of authority, however, lead sometimes to disputes with other banks. The Housing Bank of Eritrea deals with housing and infrastructure development projects, and the Eritrean Development and Investment Bank's services are limited to specific sectors and in particular to agricultural and industrial ventures.

the credit gap in developing countries. For this reason a model based on asymmetric information was used in order to interview several bank and monetary officials as well as managers of small enterprises.

The article is structured as follows. Section 2 shows that the CBE has excess liquidity that hampers its profitability. Section 3 indicates that the bottleneck may be caused by information asymmetry. Section 4 discusses mechanisms that reduce the problem of information asymmetry. Section 5 describes how these mechanisms may work in the Eritrean situation, and discusses what both banks and small firms can do to alleviate the credit gap. Section 6, summarises the main findings and presents conclusions.

2. Loans and advances and CBE's profitability

The excessive liquidity problem of the CBE can be read from Table 1. The table shows that since the year of independence the CBE was only able to deploy a maximum of 30% of its deposits.

Table 1 Deposits and loans and advances (L&A) (Amounts in million Nakfa at the end of each year)

Year	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Total Deposits (A)	737	1,493	1,951	2,862	3,670	5,101	6,351	7,008
Total L&A (B)	87	451	321	567	1,112	1,508	1,653	2,008
Deployed Fund (B/A)	12%	30%	16%	20%	30%	30%	26%	29%

Source: CBE's financial documents

The rate of interest offered on deposits is 7.5% or less, while the interest charged on loans and advances ranges between 8% and 12%. Though this interest spread may be adequate, it is not enough to compensate for the lack of outstanding loans. Therefore the return on assets of the CBE is relatively small as can be seen from Table 2.

Table 2 Return on assets (ROA) of CBE (Amounts in million Nakfa).

Year	1992[a]	1993	1994	1995	1996	1997	1998	Average
Average Assets	1,173	2,000	2,982	4,142	5,009	5,868	6,513	3,955
Interest received	5	40	54	101	140	48	177	95
Interest paid	12	57	72	85	98	112	135	82
Provision for loan losses	2	3	12	16	43	43	53	25
Net other income	35	17	28	43	50	92	51	45
Net income Before tax	26	-3	-2	43	49	85	40	34
ROA (%)	2.3	-0.2	-0.1	1.0	1.0	1.4	0.6	0.9

[a] No information is available prior to 1992 on average assets

Source: CBE's financial documents and Haile (1999)

Table 2 shows that CBE's positive return on assets originates primarily from other (fee) income mainly from foreign currency transactions and not from interest revenues. For most years, the interest received is even smaller than the sum of interest paid and the provision for loan losses. Given the relative small amount of loans and advances presented in Table 1, it is clear that an increase of loans and advances at the prevailing interest rates would increase the profitability of the CBE. The question thus arises why the CBE is not (yet) offering more credits to companies that are in need for cash. In the corporate finance literature asymmetric information is considered as the main reason for discrepancies between supply and demand for credit. For this reason we discuss that concept in the next section.

3. Information asymmetry

In this section we argue that the reluctance of the CBE to extend credit in general and to small firms in particular, may be rooted in the problem of information asymmetry between the partners involved in a credit arrangement. This is a major issue in the debate on the functioning of financial markets. According to Binks, Ennew and Reed (1992), Scholtens (1999) and Angelini, Di Salvo and Ferri (1998), access to capital is not only attributable to size, but instead it is the result of problems associated with the availability of information through which projects can be evaluated. When the so-called information asymmetry between lender and borrower is bridged, borrowers can improve their access to bank credit. Information asymmetry gives rise to two types of problems, namely adverse selection and moral hazard.

Adverse selection (Akerlof, 1970) implies that there are qualitatively different types of credit applicants. In contrast with high quality applicants, low quality applicants are unable to use the borrowed money for valuable investments and they will have a relatively large chance to default on the loan. Banks therefore prefer to select high quality applicants and the major way of examining a potential borrower is by analysing all available information[3]. The selection problem results from the behaviour of low quality applicants that presume to submit high quality projects but do not forward all relevant negative information. Because many small firms barely keep records and do not prepare financial statements and financial plans, banks find it difficult to evaluate loan requests of these companies, and to distinguish good from bad projects. If there are proportionally many low quality credit applicants with small firms, banks might refrain from extending credit to these types of firms. It is even possible that banks do not want to offer credit to applicants that are prepared to pay high interest rates, because banks may consider that to be a signal of low credit quality. In that case credit rationing may take place (Stiglitz and Weiss, 1981).

A second issue related to information asymmetry is moral hazard (Pauly, 1968). If the concept of moral hazard is applied to a lending/borrowing situation, it means that the client to whom a loan has been extended controls the money of the bank. In such a case the client may use the money for his or her own interests and not consider the stakes of the bank. Banks thus try to monitor their clients as all principals do with their agents (Jensen and Meckling, 1976). Monitoring, however, requires some guarantees that proper information will be provided. But if repayment conditions are not fulfilled the client may not be inclined to inform the bank adequately.

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[3] In a competitive situation screening of loan applicants is one of the major instruments to compete. If a bank is able to decline loans of future failing clients and another bank would not be able to do so, the first bank will have a much larger chance to survive (Leland and Pyle, 1977).

The examination of credit applicants as well as the monitoring of existing clients is relatively easy if the applicant/client is a large firm. Large firms are usually well known and well equipped to provide the relevant information to the bank. Small firms are less prominent and are not so much accustomed, and sometimes not even able, to provide the required information. Therefore, banks perceive loans to small firms as risky. Moreover, investigating the creditworthiness of small firms requires a lot of time of bank employees while the loan requests are relatively small. Banks thus also consider loans to small firms as expensive. The question then arises how the problems of information asymmetry and relatively large costs can be reduced. For these reasons we present in the next section various ways in which information asymmetry can be reduced.

4. Information asymmetry controlling mechanisms

Several mechanisms are available to control information asymmetry (see also: Scholtens, 1999). Besides traditional banking instruments as collateral and covenants, business relationships, ownership, reputation and human capital can assist in bridging the information gap.

Collateral

Collateral is a powerful tool in bridging the information gap as it reduces the risks involved for the bank and, therefore, reduces the importance of the screening process. The guarantee provided by collateral allows financial institutions to offer credit on favourable terms to small firms even if uncertainty and informational opacity characterise the venture. Collateral accommodates both adverse selection and moral hazard, as the risk of failure is (partially) taken over by the owner of the asset. The high quality borrowers who enter the market can signal their status by their willingness to offer appropriate levels of collateral. Furthermore, the control of collateral by the banks can provide an incentive to ensure that the borrower will perform to the best of its abilities. Small firms however are usually less capital intensive, and thus have limited collateral. The literature provides some solutions for this problem.

According to Von Pischke (1991), collateral could be asset or cash flow based. *Cash flow lending* does not depend on the value of pledged assets, but on expected revenues and expenses. Therefore, cash flow lending enables more credit than would be possible through strict asset-based lending. Though this system requires detailed financial and operational information about the borrower, it may be interesting for small firms that lack the necessary assets for collateral.

Another way of alleviating the collateral problem is grouping. *Group lending*, if applicable in the country culture, not only reduces the costs of screening and monitoring credit (per individual), but also reduces the risk of default through the joint liability and social pressure involved. Group loans induce interdependence between borrowers and, subsequently, group pressure improves the repayment rate and access to bank credit may improve for the whole group (Besley and Coate, 1995).

Finally, governments often establish *guarantee schemes* to improve small firms' access to bank credit. Though in the past quite a number of these schemes have failed (Levitsky and Prasad, 1987), others were successful. For example in developed countries like Italy, USA, Japan, and Canada, and in developing countries like India, Korea, Paraguay and Cameroon (Levitsky, 1986).

Covenants

Financial institutions also reduce the information gap with covenants. These are intended to give the bank more control and to prevent borrowers from engaging in risk-shifting behaviour. By using specific financial ratios and activity restrictions, banks limit the firm's freedom to allocate financial resources and to recover losses (Berger and Udell, 1998).

In practice, however, accounting covenants cannot be effectively imposed on small firms that do not have audited financial statements. In these cases, other types of covenants can be established, like restrictions on additional borrowings and restrictions on changes of ownership. The incorporation of the option to renegotiate can also reduce the credit gap (Gorton and Kahn, 1993). Here the bank is supposed to be able to track performance and the option gives the right to the bank to change the contract. Of course, also the borrower may try (or contractually be allowed) to renegotiate the conditions of the loan. The most well known contract that incorporates this option is the line of credit. This gives the bank the possibility to monitor the borrower closely in order to reduce the risk of default, but it also enables the borrower to prove his or her creditworthiness and to be rewarded with favourable terms of credit at future times.

Business relationships

According to Berger and Udell (1998), lack of business relationships is a basic cause for information asymmetry. If the bank is able to construct tight relationships with its borrowers, it will more easily be able to classify its clients as well as to monitor and to influence their activities. Moreover, if the bank offers other services apart from financing, it will be more informed about the clients and the relationship could develop mutual trust. Equally the small firms should show their willingness to develop a relationship with the bank. They need to keep accounting records to signal their profitability and to convince banks of their creditworthiness.

Though there is a general agreement in the literature that a relationship minimises the cost of screening and monitoring, there is a controversy on how this gain is shared with the borrowers, and in particular if the bank has monopoly power in the market (Petersen and Rajan, 1994). The relationship reduces the bank's risk and expected costs, but it also increases its informational monopoly. The latter effect may reduce the incentives for the bank to pass part of the cost reductions to the borrower. This potential danger should not be overlooked, because the CBE is the largest and the only pure commercial bank in Eritrea.

Ownership

A major issue in the literature concerns the agency problem in corporate finance and in particular the separation of ownership and control. However, agency problems driven by the separation of owner and manager are often irrelevant for small firms (Berger and Udell, 1998). Generally, the owner of a small firm has direct control and is thus committed to its success. The bank may even have the opportunity to recover the loan from the owner's property in case of failure. Therefore, if the entrepreneur is the manager, the possibility of ignoring a contract will be reduced (Scholtens, 1999).

Reputation

It is more difficult for individual small firms to establish a reputation with the bank. Large firms are known, and their investments more visible. For small firms it is especially the personal character, the entrepreneurs' capabilities and a track record that allow the bank to assess the quality of the company. This may influence the bank's decision about a credit application. It is only after approval of a first application that it becomes easier for small firms to establish a reputation with the bank, as a firm may prove trustworthy when it pays interest punctually and meets obligations.

Human capital

Particularly in developing countries a lack of educated personnel may constrain the use of some of the mechanisms discussed. The problem has two sides: the bank needs educated personnel that is able to screen and monitor clients, while the small firm owners should be able to produce financial accounts in order to provide the bank with the requested information.

The various mechanisms that may be applied to overcome the information asymmetry problem are summarised in Figure 1. Moreover, several suggestions are made to make each of the mechanisms operational.

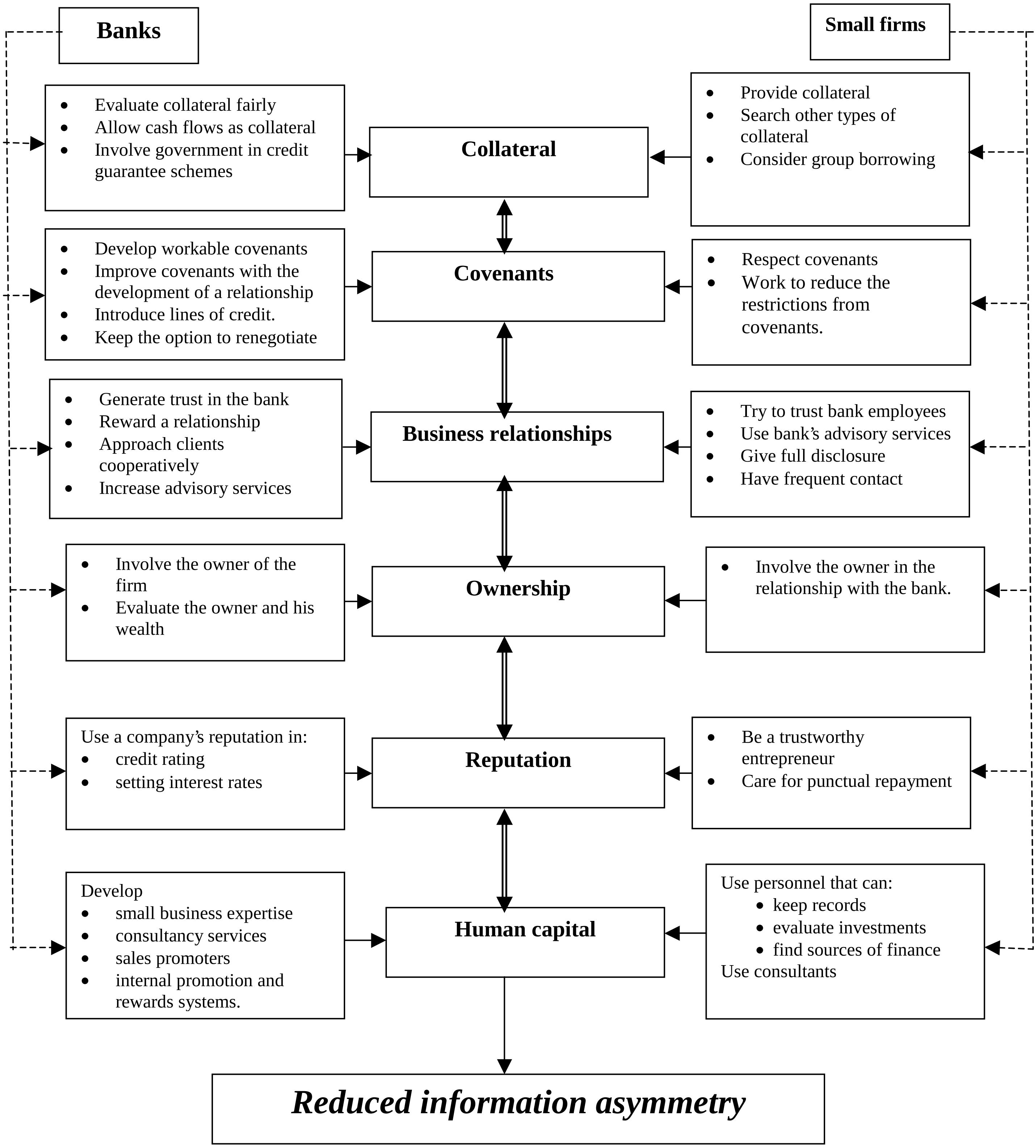

Figure 1 Controlling information asymmetry

As shown in Figure 1 both parties, the bank and the borrower, play an important role in bridging the information gap. The activities at the left-hand side give suggestions to the bank and small firms may use those at the right hand side. The double fat arrows signify the interrelationship between the controlling mechanisms. Six of them affect each other, and the presence or absence of one affects the need for the others. For example, if the parties have a strong business relationship, then the need for collateral or covenants will be less, as the information asymmetry between the parties will be reduced. In order to verify how information asymmetry influences the distribution of credit in Eritrea, several representatives were interviewed. The results of the interviews are presented in the next section.

5. What creates the credit gap in Eritrea?

From March to May 2000, interviews were held with several bank and monetary officials, as well as managers of small enterprises[4]. The interviews revealed that information asymmetry constrained the disbursement of credit and that collateral was the main mechanism used to reduce information asymmetry. The other instruments were used only to a limited extent or were not effective at all. We, moreover, found that the scope of the problem was wider than the asymmetric information theory suggests. We classified the issues, raised during the interviews as follows: problems related to collateral and mutual mistrust (Section 5.1), problems related to the bank (Section 5.2), problems related to small firms (Section 5.3) and problems related to the stage of development (Section 5.4).

5.1 Collateral and mistrust

We found that two of the mechanisms for controlling asymmetric information played a role. These were collateral and business relations, though the latter was not used in a positive sense, but negatively, because the relation between the CBE and small firms

[4] Interviews were carried out with thirteen small business owners within various industries, six officers from the Commercial Bank of Eritrea, two from the national Bank of Eritrea, one from the National Chamber of Commerce, one from the Ministry of Finance, and one from the Eritrean Investment and Development Bank.

can be characterised as a relation of mistrust. Therefore, collateral is by far the major instrument used to solve the problem of information asymmetry.

A drawback of the use of collateral, however, is that it seriously restricts access to credit. The bank requires that the collateral consists of buildings, blocked credit balance accounts under the bank's control or trucks. Land cannot be used as collateral in Eritrea, as it is state property that cannot be sold or privately owned. The bank does not accept potential cash flows, market opportunities or other valuable assets of the firm as collateral. Second, the bank requires more than 150 percent security on a loan requested. Third, the engineering department of the bank is the only authorised agent to value the pledged assets and its value estimations are very conservative. According to the interviewed customers, the bank never grants the full amount of the loan requested, even if the borrower pledges the required collateral. As a counter reaction, many of the clients systematically apply for a higher amount than they actually need, and feasibility studies are prepared to fit the amount applied for. The upshot is mistrust between the parties and credit allocated on fake feasibility plans.

There are also other reasons why there is a limited willingness from each side to build a strong relationship in order to bridge information asymmetry. According to a small firm owner "*the bank is only concerned with the return of the loan"*. There is not much concern for viability of the firm and for a long-term lending relationship with the client. But also firms are not eager to forward all the required information and to improve their creditworthiness through keeping applicable management and accounting systems. According to one of the credit officers, "*the applicants usually do not tell their accurate earnings, mainly because they fear taxes. They think the bank will reveal their earnings to the Inland Revenue for taxation."*

5.2 Restrictions within the CBE

The main restrictions within the CBE are related to conservatism and to specific policies and requirements. Banks in general are conservative, since they are dealing with other people's money and must be trusted as stable and secured repositories. This conservatism, however, affects the management and the staff of the CBE, which is trained to adhere rigorously and correctly to rules and procedures.

One reason that is deterring the bank from acting efficiently and flexibly in the credit market is the fact that the client is the major source of information for the credit officers. The bank does not have a special unit studying the small business sector nor any other valuable source of information, which could measure the creditworthiness of the credit applicant. Since, in general, small firms do not have well-organised recording systems either, the information is based mainly on interviews with the credit applicant. As this information may be biased the credit officers in the bank are conservative when it comes to granting loans.

Conservatism also comes from the fact that the information exchange between the lower level officers who are in a direct contact with the customer and those at the higher administrative level is lacking. According to the staff, the transfer of information to the higher echelons of the hierarchy is deficient and in general the higher administrators do not consult the lower level officers before any decision is made. This limits the power of the loan officers and makes the bank inflexible. These are serious barriers for a client-oriented atmosphere in the bank.

The formal requirements set by the bank (Commercial Bank of Eritrea, 1997) further constrain credit disbursement. Besides collateral the bank asks for financial statements or feasibility studies. These requirements deprive private small companies from obtaining bank loans, because the accounting data are not available while feasibility studies are expensive. Generally, consultants charge more than four thousand Nakfa (about 600 US dollars), depending on the period of the study and the complexity of the project. At times these costs represent more than 30 percent of the borrowings the small firm owners apply for. Furthermore, the policy of the bank does not permit rollovers or extensions of a term loan, which is an obstacle for firms in an expansion stage.

The bank also specifies that the principal responsibility for ensuring repayment rests with the branch managers and account officers who recommended approval of the loan. No incentives are given for finding and keeping profitable contracts. Some of the credit officers in the bank present this problem as an obstacle for their creativity and for the development of strong business relationships with the clients. They also expressed the general feeling that their work hardly influences the final decision about the application.

Finally, the operations of the CBE in the market do not seem to be driven by the costs and benefits of the respective services. Idle cash is not perceived as a cost to the bank and the bank seems to be more concerned about the repayment of the loans than about profitability. The bank is also not diversifying its offerings in order to use its excessive liquidity and with the conservatism and bureaucratic requirements the CBE is far from operating like an ideal venture capitalist (Harris and Bovaird, 1996).

5.3 Restrictions within small firms

In general small firms in Eritrea do not produce reliable accounts or business plans. The absence data can amongst others be attributed to a high illiteracy rate and a traditional way of managing companies. The lack of accounting data and sound business plans makes the bank insecure about the adequate use of financial resources and causes the bank to consider small firms as risky. It also implies that it is difficult for firms to make reasonable estimations for their need of finance. Tesfayohannes (1998) even indicated that some proprietors tend to overstate the importance of a lack of credit as a constraint for further business development and thereby understate the importance of their own management weaknesses. A lack of accounting data also creates problems when credit is provided, because companies cannot detect losses quickly enough to inform the bank on a forthcoming problem.

According to one of the credit officers, "*there is a habit of 'copying others' in the market. The proprietors copy other businesses (peers or friends) without studying the supply and demand in the market and, as a consequence, fail as soon as the market becomes saturated.*" As an example for this behaviour of small firms, the bank officers pointed at the newly opening pastry shops and brick factories in Asmara. This copying behaviour has a negative impact on the creditworthiness of the whole sector.

One final point raised by the bank is the lack of real collaboration from the small firm side. Though each party is pointing its finger to the other when it comes to collaboration, many small firm proprietors do not seem to understand that it would be difficult to access bank credit without effective co-operation.

5.4 Development related problems

A major problem for bridging the credit gap is rooted in the weak capacity of human resources. As indicated in Figure 1, the availability of human capital may help in alleviating asymmetric information problems. In developing countries the general expertise is, however, missing. In Eritrea, both the small firms and the CBE are suffering from the lack of technical and managerial expertise necessary to produce and screen financial accounts (Tesfayohannes, 1998). As a result, they have limited capabilities to implement the instruments that can reduce asymmetric information and the credit gap.

One might also argue that a history of bureaucratic domination and –again- a lack of skilled labour may induce developing countries to implement hierarchic and bureaucratic organisations (like the CBE). However, these types of organisations may not be the best in allocating resources when the information about investment projects is "soft" (Stein, 2002). It is therefore not amazing that only collateral as a "hard" fact can be processed in the hierarchy and that "soft" information provided by small firm owners remains unused.

Moreover, various public organisations do not (yet) assist in bridging the information gap. The government of Eritrea, for example, has been issuing loan guarantees to the ex-fighters and refugees. The objective was to help them to cope with the new market situation after the war. However, the rate of default was high for the loans provided to these groups. Though the government guarantee scheme had mainly a social objective, the high number of defaults affected the attitude of bank officers, and made them less confident in the repayment capabilities of small firm owners in general.

Other public organisations like the National Bank of Eritrea, National Chamber of Commerce, University of Asmara, Eritrean Development and Investment Bank could also help to alleviate the credit accessibility problem, but they are not involved in providing the services needed. These institutes could assist in the production of accounting reports for small firms; they could produce market studies and provide bank personnel with the proper knowledge necessary to screen and monitor small firms. Despite the fact that the macro-economic policy aims at promoting small-scale industries, state owned organisations are not eager to support small firms.

6. Summary and conclusions

The Commercial Bank of Eritrea is extending its branch network. Despite this development the bank has failed to identify new lending opportunities and to deploy the funds collected from depositors. In particular it has failed to play a major role in financing small enterprises. At the same time we observe that the lack of finance is an important obstacle for the development of small firms in Eritrea. The paradox of the concomitant existence of ample money in a dominant public bank and scarcity with small firm owners[5] may be explained by the problem of asymmetric information. We discussed six mechanisms to overcome asymmetric information and we studied what both the CBE and the small firms could do to reduce the credit gap.

Interviews revealed that only collateral was relevant in reducing asymmetric information and that the collateral requirements were high. The other mechanisms to reduce asymmetric information were not used or hampered by mutual mistrust, by conservatism and rigid credit policies of the CBE, by the lack of accounting knowledge within small firms, and by general development related problems in Eritrea. The sole reliance on collateral can in part be explained from the absence of a variety of other mechanisms and in part from the fact that it is a mechanism that can relatively easily be used in a bureaucratic organisation like the CBE. In contradiction to traditional economic views we see here a monopolist that is not concerned with making a profit, but with bureaucratic adherence to rules aimed at securing its possessions.

Though we presented here the Eritrean case, we think that the findings may have implications for other developing countries. If many of the mechanisms to reduce asymmetric information are absent in developing countries, we will find that collateral becomes even more important in developing countries than it is in developed countries. In that case the credit "gap" may result in a credit "trap". Small firms in developing countries do not have much collateral to offer, but neither do they have access to the other mechanisms that reduce the credit gap. When collateral is the only remaining mechanism, the collateral requirements will become very high and many small firms will be destitute of credit. Without the credit, however, the small companies will not be able to grow and to accumulate the assets needed for future collateral and further growth. This implies that companies without access to credit will remain deprived from credit and that the small firms cannot assist in developing the country. When small firms, however, are considered relevant for the development

[5] Of course some small firm owners may be able to find other sources of financing, like retained earnings, family and friends (from the diaspora) and trade credit. Each of these types of financing may have its own problems, like limited availability, personal conflicts and lack of trust, and high implicit interest rates. For these reasons bank loans remain very important for small firm owners.

of a country, the various parties in the country should develop ways in which the small firms could escape from such a credit trap.

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