

THE IMPACT OF BANK OWNERSHIP ON TRANSACTION COSTS IN IRAN BANK SYSTEM

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ABSTRACT

Transaction cost is the unpredicted costs that are imposed on one transaction's parties due to the lack of adherence for several reasons such as lack of information symmetry on another party. Transaction costs are introduced as the one of the factor that leads to limitation in availability to the credits in development countries. This paper analyzes the differences in Transaction cost across Iran banks characterized by different types of ownership. For reaching this purpose, using data on Iran bank system during the period 2000–2015 and performed a panel in the selected banks of Iran Bank system and by using from Logit and EViews statistical software.

According to the results of the study, investing effect on special capitals by Bank on transaction cost is affected by ownership. So collateral increasing for Bank loan and uncertainty level in bank will always increase the operators' performance determination in bank transaction costs. Transaction costs model in bank system of Iran which state ownership are more than the Private Banks. In during the crisis period (2008–2011) transaction costs is Increased.

KEYWORDS: Bank Ownership, Transaction Costs, Bank System

INTRODUCTION

Transaction costs in credit markets therefore are indirect financial costs generated by various processes, including the costs of searching and collecting relevant information. They are indirect costs caused by frictions in the flow of credit funds, preventing credit markets from reaching efficient market equilibrium (Nalukenge, 2003). Many governments and ownerships of financial institutions have tried to address the problems of high transaction costs. Therefore the existence of transaction costs in loan market implies that financial institutions must become more actively involved in monitoring activities and strategic behavior of firms because financial institutions invest substantial amounts of funds in business firms (Williamson, 1985). In empirical studies, transaction costs are not directly measured, but rather proxies such as uncertainty, transaction frequency, asset specificity, opportunism and so on are used instead. These are believed to critically affect the costs of transactions (Pessali, 2006).

Consequently transaction costs of lending consist of the costs of administering credit, coordination costs and the costs of the risk of default. It's further highlighted that administrative costs are those, which are directly attributable to the processing, delivering and administering of loans while coordination costs are those resources a financial institution dedicates to ensuring that clients adhere to terms stipulated in loan contracts (Saito & Villanueva, 1981). According to Polski and Kearney (2001), banking activities generate two types of transaction costs, which are subject to different

political and economic influences. They further note that one type of transaction costs, interest expense, reflects the costs of funds for banking activities and the second type, noninterest expense, reflects the costs of information and co-ordination.

This paper is related to studies that explore the reasons why different bank ownership types may differ in terms of transaction costs. During the last decade, the ownership structure of banking sectors in developing countries changed substantially: most developing countries e. g. Iran witnessed a sharp increase in private bank participation and a decline in government bank ownership. Between 2005 and 2015, on average, the share of bank assets held by private banks in developing countries rose from 6% to 46%, while government bank ownership declined from 94% to 54%. These changes in banking structure were in part motivated by increasing evidence that while private bank participation brought many benefits to developing countries, especially in terms of competition and banking sector efficiency, government bank ownership was often detrimental to the financial sector.

Informational barriers between ownership of loan officers and borrowers might affect banks' lending behavior & so transaction costs. In comparing the behavior of state & Private banks, the argument is that the former, by virtue of being, Private have less access to or ability to interpret "soft" information (i.e., information garnered through direct knowledge of the borrower and its interactions with clients, suppliers, and the community in general). Hence, Private Banks are less likely to lend to certain borrowers (such as SMEs) for which most of the information available on them tends to be soft (see e.g., Berger et al., 2001).

Implications of differences in mission and ownership the central feature of Private & state banks are that their aim is not profit maximization. A key difference with respect to ownership structure is that Private Banks are owned by their members, whereas state banks either have no owners (i.e., they are non-profit organizations) or are owned by the public sector.

The information monopoly of the main bank can cause opportunistic behavior on the part of the bank, such as tougher credit conditions and inefficient credit negotiation procedures.

The availability of external funding, especially access to credit and cost of credit, influences firms' investments when there are frictions in the economy. Cash flow problems, limited access to credit, and high costs of credit are major determinants of financial constraints that prevent firms from funding all desired investments. Financial constraints of private firms given that banks are the main providers of credit to SMEs we examine whether and how differences in bank ownership affect firms' financial constraints. Bank lending generally contributes to financial deepening of an economy, which has a positive impact on aggregate output and economic activity (e.g., King, 2000). However, bank lending behavior is neither uniform in the cross section nor over time. Instead, it is largely driven by the business model chosen by bank owners. Privately owned banks typically follow business models that aim at profit maximization, while state-owned banks tend to follow social welfare-oriented objectives and deviate from strict profit maximization.

The differentiation of bank lending behavior by ownership is interesting for several reasons. First, government ownership of banks is pervasive and large (e.g., La Porta et al., 2002), and it has increased in many countries in response to the recent financial crisis. Note that government involvement can take different forms, such as direct state-ownership in banks, government sponsoring via guarantees, or state-led lending or savings programs. Second, evidence on the role of state-owned banks is rather mixed. On the one hand, there are studies that emphasize the positive aspects of state-owned banks, the so-called social view, for economic development and social welfare (e.g., Ostergaard et al., 2009).

Such government involvement in retail or commercial banking, for example, to fight poverty, to promote homeownership through mortgage lending, or to ensure the credit supply to SMEs, has often resulted from a market failure, i.e., financial markets and/or privately owned banks failed to provide these financial services to households and the corporate sector. On the other hand, research documents negative aspects of government ownership in banks, such as underperformance and inefficient credit allocation because of agency problems, political influence, fraud and corruption.

Third, there is evidence that suggests that the outcomes of government involvement in the banking industry depend on the legal and political institutions of a country.

Because of significant differences between private and state owned banks' business models we expect a different lending behavior and therefore a different impact on transaction costs. Our main hypothesis is that state-owned banks are with a transaction costs higher than private bank. Although we use data from a single country we believe that the results on Iran have implications for other countries in which banks follow similar business models.

IMPORTANCE OF TRANSACTION COSTS IN CREDIT MARKETS

Base Nalukenge study (2003), Transaction costs in credit markets are indirect financial costs generated by various processes, including the costs of searching and collecting relevant information about agents, negotiation procedures and agreements, opportunistic behavior of agents failing to fulfill loan terms, risk-averse behavior associated with credit rationing, and monitoring and enforcement costs incurred to determine whether agents are adhering to contract terms. Transaction costs are important in credit markets because first; they directly influence the level of efficiency at which a financial institution operates and second; they have a negative effect on the volume of loan funds flowing into the economy. The net economic effect of transaction costs in credit markets is to reduce the volume of loans available for entrepreneurs leading to reduced investment, and reduced production and consumption of goods and services (Nalukenge, 2003).

Thorough understanding of the effects of transaction costs in the economy can be aided by an examination of the behaviors of agents in credit markets regarding the supply and demand functions of loan funds (illustrated Lack of sufficient information regarding activities of agents in credit markets is the inherent source of transaction costs). Information about borrowers' business and borrowing behavior is necessary for financial institutions to assess the credit worthiness and profitability of enterprises before loans can be approved. If information is fragmented and/or missing, lenders' interests in undertaking loan activities fail to match borrowers' interests in investing funds, resulting in shortage of loan funds and credit constraints. The mismatch of economic interests also generates conflicts among agents in the lending process. Further, the existence of transaction costs in loan markets implies that financial institutions must become more actively involved in monitoring activities and strategic behavior of firms because financial institutions invest substantial amounts of funds in business firms. Additionally, the lending process is associated with an increased need to design loan contracts and external institutional arrangements (such as courts and the legal system) must be made to ensure that agents stick to loan contract terms and agreements. To meet the effective monitoring and enforcement needs, additional loan officers and managers must be employed to undertake monitoring and enforcement of loan contracts. The key concern associated with over employment of labor is that a serious difficulty exists in measuring team-work productivity because loan transactions are often undertaken by a team of staff, working with a group of borrowers. Consequently, a financial institution is liable to overpay for services rendered in the monitoring process. Associated with labor employment is the

need to institute incentive packages and mechanisms, including training, to encourage effective work performance of loan officers. Specialized equipment is also necessary to undertake monitoring activities. The loan disbursement system becomes very expensive because of the high probability that the loan transaction process consumes more resources to transfer and recover loan funds than is technically required to obtain the same level of loan transactions (Williamson, 1998).

To compensate for the large costs of the lending process, financial intermediaries must charge an interest rate commensurate with the magnitude of the cost thus making loans very expensive. The lending process becomes even more expensive if financial institutions must undertake monitoring and enforcement activities with a large number of borrowers who borrow small amounts of loan funds whereby the costs of monitoring outweigh the expected benefits. As a result, a financial institution that incurs significant transaction costs becomes more vulnerable to opportunistic behavior of agents. In addition, transaction costs may prevent a firm or a nation from achieving the advantages arising from increasingly advanced technology. This is because as loan transactions decrease, access to finance to support the complete acquisition of technology decreases. Finally, economies with significant transaction costs experience a high proportion of borrowers receiving costly small-size loans coupled with a high level of mismanagement due to credit misappropriation.

Ultimately growth and expansion in the business sector is negatively affected by insufficient availability of funds for investment, and reduced production potential. (Nalukenge, 2003)

Existence of transaction costs in credit markets also implies that agents are unable to exploit economies of scale associated with greater diversification of financial products, and a limited choice of loan products is available to particular borrowers. In addition, agents must deal with bureaucratic procedures to verify financial and other documents, collateral requirements and verification, and decision rights of different positions within financial administration are decreased leading to delays. In summary, if transaction costs are significant due to lack of the necessary information to process loans, a financial institution must pay additional funds to cover the expenses associated with increased agency costs that are heavily influenced by loan monitoring and opportunistic behavior of agents. In conclusion, it can be deduced that economic growth is preceded by the ability of a financial system to increase efficiency through resolving the agency problem, and thus enable firms to borrow at cheaper rates and invest more (Nalukenge, 2003).

BANK OWNERSHIP AND TRANSACTION COST

The economic importance of transaction costs is widely recognized. Transaction costs reflect the costs of economic organization both outside the firm and inside the firm and are one means by which one can measure the efficiency of different institutional designs in achieving economic outcomes in particular environments (Polski & Kearney, 2001). Transaction costs and development the transaction cost rubric is not perfect. Some critics have argued that transaction costs definitions are so broad as to encompass nearly any economic activity (Williamson, 1975). Some argue that transaction costs cannot be measured (Dyer, 2005), while others see a solution in case-study research. Williamson (1996) has suggested that problems of measurement may be overcome with comparative study. Some studies of sector-wide approaches (SWAs) have identified several categories of transaction costs (see Dyer, 2005; Watt, 2005). The primary categories are negotiation, coordination and implementation costs, which may encompass the costs of aid associated with creating country strategies, sector strategies, fact-finding missions, technical assistance, loan contract costs and transfer costs of banking. Transaction cost the cost that is imposed on persons during the economic transaction process

to define and warrant their owning rights, in the other words if we know the owner's right transferring assumption, in transaction affair, costs such as obtaining information about seller, purchaser, service and goods quality, contract assignment costs, costs for supervising, control and contract legal imposing and the most important costs related to the owner rights definition and warranting these rights imposing on transaction will be shed and make the bed for transaction costs. Transaction costs include the coordination costs, information searching costs, filtering, teaching and consultant, supervising costs, for controlling the customers' opportunistic behaviors (Williamson, 2003).

Empirical analytics such as Cool (1998), Peterson and Rojhan (1995) and Berger and Udell (2002), discovered that the most important factor in relationship in loan granting which is the trust indicator, have positive effect on transaction costs. Long time relations are important for dealing with the data asymmetry. However, the trust bank ownership affects bank. It may be more useful to shift transaction cost analyses away from internal efficiency to external systems efficiency and program effectiveness. As Platteau (2004) notes, in this way transaction costs can be used to better understand the production efficiency differences as they relate to the "quality" of the good or service.

That is, low production/transaction costs may be efficient internally, but not as they relate to another production chain which may produce a higher quality product. Thus it is not only internal efficiency that drives choices over production governance structures but outcome preferences. A simple cost reduction in that context has no meaning except in relation to the actual outcomes, despite the common presumption that aid effectiveness is closely tied to cost effectiveness. Thus it appears that a concern with transaction costs has not been followed by adequate in-depth examination and application of transaction cost principles to the development industry. In four studies that have focused specifically on transaction costs, there continue to be problems in developing measures for these costs, almost no mention of potential benefits that accrue from these costs, little mention of opportunity costs and little application of actual comparative analyses (Cavalcanti, 2007; Dyer, 2005).

We expect large state-owned banks focus to rely more on private information production than small privately owned banks. In other words, the objectives of state-owned banks require a particular lending technology (relationship lending) and regulation that these banks do not grow beyond their state focus to make their business model self sustaining.

Evidence implies that a heterogeneous financial system that comprises banks with different business models exhibits lower cyclicity because aggregate lending and liquidity creation is higher in recessionary periods and lower in expansive periods.

Type of ownership through relationship lending could affect the transaction cost. Trust has a key role in relationships and especially between entrepreneurs and banks (Haworth and Moro, 2006). The establishment of relationships not only increases the level of trust of royal customers of a lending institution, but also creates a basis for lenders to establish the knowledge about the behaviour of their borrowers so that they can more accurately predict the repayment capabilities of their clients. A financial relationship that promotes long lasting continuity and trust between the transistors adds value to those economic relationships and exchanges where heavy investment is made in transaction-specific assets. In addition high degrees of trust complement loan contracts that are designed in the presence of information imperfections. This is because a loan transaction involves a promise to repay in the future where opportunism and other problems may prevent the fulfillment of the obligation. Thus it can be argued that trust can reduce transaction costs by eliminating both ex ante and ex post opportunism (Nalukenge, 2003). While on the other hand, high levels of monitoring and control suggest a low level of trust and could lead to less effort to exhibit trustworthy behaviour. Consequently trust

mitigates adverse selection and moral hazard, reduces screening and monitoring costs and this leads to increased profits (Haworth & Moro, 2006).

Currall and Judge (1995) and Zak and Knack (2001) similarly noted that trust is advantageous because it strengthens ties, speeds contract negotiations and generally reduces transaction costs.

They further noted that trust between persons is a “relationship specific asset” that facilitates communication and reduces the necessity for organizations to use costly surveillance and control mechanisms. Therefore trust can reduce uncertainty about the future and is a necessity for a continuing relationship with participants who have opportunities to behave opportunistically.

Even though trust is an expectation held by an agent and this expectation reduces the uncertainty surrounding the borrower’s actions, some conditions may prevent opportunism but not necessarily foster trust, while other factors which enhance trust may not necessarily constitute a safeguard against opportunism. Further still, uncertainty in business environments makes opportunism (behavioral uncertainty) difficult to control because a financial institution would find it difficult to write fully contingent contracts. Additionally, the greater the degree of environmental uncertainty, the greater the benefit from being able to trust a borrower, because trust facilitates decision-making in unanticipated circumstances. Therefore environmental uncertainty creates a scope for opportunism when there are relation-specific investments and behavioral uncertainty is reduced when opportunism is contained (Sako & Helper, 1996). According to Gariga (2004), benefits outweigh the costs, that is, relationships generate value. Such value created is passed on to or shared with the borrower, through lower cost of borrowing and more flexible contract terms. Through close and continued interaction, a firm may provide a lender with sufficient information about the firm’s affairs so as to lower the cost and increase the availability of credit (Petersen & Rajan, 1994). Jimenez and Saurina (2004) re-affirm this by noting that a close bank-borrower relationship might be associated with a lower level of screening on each individual loan. While the shorter the duration of loans the higher the administration costs and actually careful loan appraisal and supervision also contribute to the high administrative costs (Saito & Villanueva, 1981).

Further still, the effect of a pre-existing relationship is more likely to be negative when the size of the pre-existing loan is large and the screening costs of firms are low (Sohn & Choi, 2004).

Additionally an established bank lending relationship allows the lender to renegotiate contract terms at low cost, thereby creating financial flexibility and reducing credit rationing (Ziane, 2001).

Apart from a few papers, to our knowledge, there are no empirical studies focusing on the possible heterogeneous effects of bank ownership structure on the strength of the lending channel.

Ashcraft (2006) examines the affiliation of US banks and finds that banks affiliated with a multibank holding company are less sensitive to monetary policy contractions because they have access to larger internal capital markets. De Bondt (1999) and Schmitz (2004) consider foreign ownership as an explanatory variable, the former using US data and the latter data from ten EU accession countries in 2004. De Bondt (1999) finds stronger evidence for a lending channel when foreign-owned banks are omitted from the sample, concluding that international banks have greater opportunities to borrow elsewhere than even large domestic banks. Schmitz (2004) finds that foreign-owned banks react to Euro area interest rate changes to a greater extent than their domestic owned counterparts. Bertay et al. (2012) considers state-owned banks in 111 countries during the period 1999–2010 and finds that lending by state-owned banks is less procyclical than that of private

banks. Furthermore, lending by state-owned banks located in high-income countries is even countercyclical. In private banks, profit distribution and tradable ownership rights are absent altogether. Moreover, management compensation in stakeholder banks is typically not tied to profitability. For these reasons, there is no party in these banks who would benefit from profit maximization. Instead, state banks are intended to maximize consumer surplus: the assumption is that state are able to do so because they are governed by their customers, and private banks are operated for the benefit of local customers.

They estimate separate regressions for each country and for each bank type and find, inter alia, that the interest rate channel in Spain is rather weak, commercial banks only react to interest rate changes remotely irrespective of the country, and loan supply decisions are most affected by monetary policy actions, especially among relatively illiquid and less capitalized cooperative and savings banks in Germany and smaller savings banks in Italy. Our empirical strategy is different: we simultaneously estimate the entire panel and allow for transaction costs bank ownership types while controlling for differences in banks balance sheets and demand conditions across countries.

DATA AND DESCRIPTIVE STATISTICS

We employ micro-level data based on financial statements derived from Bank scope, provided by central banks. These data include annual observations from 18 banks over the period 2000–2015 covering individual banks.

RESEARCH MODEL

In the present study we used from field study and experts' comments were taken. For this purpose the present study is looking for analyzing the effective factors on loan transaction costs and is paid to determination of their relation quantity. So transaction costs will be minimized. Presented model in the study is as the following:

$$G = \alpha X + e$$

Which G is the Bank system branches cost and X is one vector for features of topic which are effective in organizational costs, α is the vector coefficient and e is one random variable with normal distribution called disruption sentence. Model includes the traditional dealing transaction cost, include the variables: invest features, collateral features, and uncertainly from business environment, problem in determination of operators' performance, business features and borrower behavior and branch size and Bank ownership type.

STUDY MODEL ANALYSIS

In the present study we used from sequential logit model. Sequential algorithm is based on one continues hidden variable which is used for determination of descriptive variables effect on coordinator costs. This model is known as the following:

$$Y_i^* = B'X_i + \varepsilon_i$$

Which y is the continues variable coordinator costs values, B' is the parameters vectors which should be determined and X is the $K \times 1$ vector for descriptive variables which include the variables such as investment features and collateral feature (VD), environmental uncertainly (EM), performance determination problem (AA), Bank ownership type (BO) and facilities economic features (VT). E is also one random variable and indicates the random errors which have logit distribution, y is one unobvious variable. Utilized sequential empirical pattern in this study is as the following:

$$CC_i = \alpha + \beta_1 AA_i + \beta_2 EM_i + \beta_3 VD_i + \beta_4 VT_i + \beta_5 BO_i + \beta_6 BO_i AA_i + \beta_7 BO_i EM_i + \beta_8 BO_i VD_i + \beta_9 BO_i VT_i$$

MODEL DETERMINATION AND CONCLUSIONS

- For analysis after entering the questionnaire raw data in excel software, data were entered by using from EVIEWS software for analysis. According to the models results we have:
- When the investment in special capitals by Bank system is increased, transaction costs will be increased .
- Collateral increasing for Bank system loans will increase the transaction costs.
- Increasing in uncertainly level in Bank system, will increase the transaction costs .
- Increasing in measuring the operators performance in Bank system, will increase the transaction costs .
- Bank ownership in Bank system has effect on the transaction costs. State ownership has a positive effect on transaction costs and negative effects on the cost of the transaction are private property.

SUGGESTION BASED ON THE STUDY

- According to the results of the study, following suggestion are suggested for decreasing the transaction costs and increasing the facilities efficiency:
- We suggest that for decreasing the transaction costs, minimum possible collateral from customers by heeding the collateral qualification fundament will be received.
- For decreasing the transaction costs, business and economic conditions should be prepared in order of increase the certain π in business conditions.

SUGGESTION FOR FUTURE RESEARCH

- We suggest that this research will be performed by using from AHP method for more accurate identification of effective factors on transaction costs.
- For more accurate identification of effective factors on Bank system performance, also use the AHP method.
- One research with the title of transaction or contract assignment costs analysis in civil project in the country to be performed.

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