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REVISTA DE CONTABILIDADE E CONTROLADORIA

RELEVANCE OF CORPORATE GOVERNANCE TO CREDIT RISK ANALYSIS IN FINANCIAL INSTITUTIONS

A RELEVÂNCIA DA GOVERNANÇA CORPORATIVA NA ANÁLISE DE CRÉDITO DE INSTITUIÇÕES FINANCEIRAS

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ABSTRACT

The purpose of this study was to analyze whether the adoption of corporate governance (CG) by firms applying for loans is relevant to the process of credit analysis in financial institutions. The investigation consisted of an exploratory, qualitative multiple-case study of three of the five Brazil's largest financial institutions: Banco Itaú, Banco do Brasil e BNDES, with in-depth semi-structured interviews. The study used as analysis categories the CG practices recommended by International Finance Corporation - IFC (CG tools for listed and unlisted firms), Brazilian Institute of Corporate Governance – IBGC, Brazilian Securities and Exchange Commission – CVM, Brazilian Stock Exchange - BM&FBovespa (GC rules for Level 1, Level 2 and New Market listing segments). In the point of view of the interviewed, from a list of the 21 CG practices, organized into five groups, 10 practices were considered extremely relevant, 8 very relevant, and 3 few relevant. Among the five subcategories of analysis, the one assigned the highest average rank of relevance was "transparency and disclosure", followed in decreasing order by "control environment and process", "treatment of minority shareholders", "commitment to corporate governance", and "structure and functioning of the board of directors". The sampled banks did not have special lines of credit for firms practicing CG, but the adoption of such practices was considered very or extremely relevant in the process of credit risk analysis and favored access to differentiated levels of financing and/or reduced rates. The study contributes to the literature on the association between CG practices, access to financing and financing costs, by testing whether CG practices are deemed relevant to the process of credit risk analysis and whether the adoption of such practices provides access to differentiated levels of credit and/or reduced lending rates in three major Brazilian banks.

Key-words: Corporate Governance. Financial Institutions. Credit Analysis. Credit Risk Analysis.

RESUMO

O propósito do estudo foi analisar se a adoção de práticas de Governança Corporativa (GC) por empresas que buscam recursos é relevante no processo de análise de crédito de Instituições Financeiras. A pesquisa caracteriza-se como exploratória, qualitativa, com estudo de caso múltiplo em três das cinco maiores Instituições Financeiras do Brasil: Banco Itaú, Banco do Brasil e Banco Nacional de Desenvolvimento Econômico e Social (BNDES); com entrevista em profundidade por meio de roteiro semi-estruturado, tendo como categorias de análise as práticas de GC da *International Finance Corporation*, do Instituto Brasileiro de Governança Corporativa, da Comissão de Valores Mobiliários e da BM&FBovespa. Com base nas respostas dos entrevistados, das 21 práticas elencadas, 10 são consideradas de "extrema relevância"; 8 "muito relevante" e 3 "pouco relevante". Foi identificada a ordem de relevância dos cinco grupos de práticas: 1) Transparência e Divulgação de Informações; 2) Processos e Ambiente de Controle; 3) Tratamento de Acionistas Minoritários; 4) Compromisso com a Governança Corporativa e 5) Estrutura e

Funcionamento do Conselho de Administração. Verificou-se que os bancos estudados não possuem linhas de crédito especiais para empresas que adotam práticas de GC. Porém, essas práticas são consideradas relevantes na análise de crédito, corroborando para o acesso a faixas diferenciadas de financiamento ou a redução de taxas de financiamento. Neste trabalho, a GC é abordada na ótica dos financiadores de capital oneroso e seus achados contribuem para a literatura que a associa ao maior acesso às fontes de financiamento e à redução dos custos de captação, mostrando sua relevância no processo de análise de concessão de crédito.

Palavras-chave: Governança Corporativa. Instituições Financeiras. Análise de Crédito. Análise de Risco de Crédito.

1. INTRODUCTION

One of the most critical challenges posed by the modern, globalized economy is securing access to sources of financing without which firms are unable to preserve and increase their ability to produce goods and services and, thus, to survive (JESUS, 2004, p. 6).

Since not all firms are publicly traded, or even disposed and prepared to open their capital, resources often have to be obtained in the form of loans from financial institutions. The prospects of obtaining loans depends on the firm's credibility on the market, as determined through careful credit risk assessments.

Consequently, the functioning and operationality of the credit system depends on the amount and quality of the information made available to the financial agents. Information asymmetry (when one party has access to more or better information than the other) is an obstacle in the loan granting process and can obstruct the flow between lenders and borrowers (HILLBRECHT, 1999).

According to Shleifer and Vishny (1997), corporate governance (CG) is an effective means of assuring that suppliers of finance get a return on their investment. Shareholders and investors are willing to employ their resources in firms as long as protective mechanisms are in place preventing financial losses due to mismanagement by executives or controlling shareholders.

International studies indicate a relation between the adoption of CG practices and eased restrictions on financing (GUGLER, 2003; GINGLINGER; SADDOUR, 2008; WEI; ZHANG, 2008), reduced credit risks (BHOJRAJ; SENGUPTA, 2003; ASHBAUGH; COLLINS; LAFOND; 2006), reduced funding costs (PIOT; PIERA, 2007; SCHAUTEN; BLOM, 2006), reduced cost of issuance of securities and better credit classification (LITOV, 2005), reduced agency cost of debt and greater access to financing (CHAN-LAU, 2001).

Likewise, some Brazilian studies have reported a relation between the adoption of CG practices and access to loans on the financial market, extension of debt maturity (CICOGNA; TONETO JÚNIOR; VALLE, 2007) and reduced financing costs (VIEIRA; MENDES, 2004; CAROPREZO, 2011).

In contrast, Lima *et al.* (2004) found no difference between Brazilian firms inside and outside the "New Market" segment of BM&FBovespa with regard to the cost of funds raised through debentures, while Salmasi and Martelanc (2009) detected no significant association, or a slightly positive association, between CG and the cost of equity capital.

Other sources indicate that firms are adopting CG practices in order to increase access to funding. This includes small and mid-size privately held Brazilian firms (MCKINSEY COMPANY; KORN/FERRY, 2001; DELOITTE; EXAME PME, 2008).

In the perspective of the International Finance Corporation (IFC), quoted by KPMG (2008), the role of CG in credit risk assessment centers around two primary questions: which CG practices are most relevant to lenders and how to incorporate CG into the assessment. The basic credit risk assessment includes an evaluation of the business strength, financial statements and management practices of the borrower. In this context, CG may be considered an important element in the analysis of management quality.

To the IFC, questions related to stakeholders (separation of powers, control environment, transparency and openness) are CG aspects of relevance in credit risk assessment. In fact, in many countries lines of credit are available in the form of long-term bank loans for mid-size firms which agree to adopt additional CG practices (KPMG, 2008).

In other words, financial institutions naturally tend to make a favorable credit risk assessment of firms with good CG practices, offering them financial products compatible with their management quality. Specifically with regard to credit, the largest Brazilian banks adhere to the "Green Protocol" (a charter of principles for sustainable development) which ties the granting of mid- and long-term loans to the fulfilling of requirements of environmental and social responsibility (FEBRABAN, 2011), both of which are important elements of corporate governance.

Banking institutions work with large spreads as a form of protection against the risk of default, which is in large measure attributed to the lack of transparency and consistency in the management of firms (BCB, 1999). However, this practice would no longer be necessary if borrowers adopted good CG practices.

The purpose of this study was to evaluate whether and to what extent the adoption of corporate governance (CG) by firms applying for loans is relevant to the process of credit risk assessment in major Brazilian financial institutions and determine whether it gives borrowers access to differentiated levels of credit.

To do so, the following specific objectives were established: a) determine whether the adoption of CG practices is among the criteria used by financial institutions in their credit risk assessment; if so, b) determine the CG practices financial institutions deem most relevant to credit risk assessment; and c) determine whether financial institutions offer differentiated levels of credit in accordance with the level of corporate governance practiced by the borrower.

A multiple-case study design was adopted for this exploratory and qualitative investigation, involving three of the five largest Brazilian banks: Banco do Brasil, Banco Itaú and BNDES. Information was collected through semistructured interviews with key representatives of the three banks responding to in-depth open-ended and closed-ended questions. In addition, in-house credit risk assessment guidelines and rules were reviewed.

The technical and academic literature tends to focus on the relation between CG practices and the capital market. In this study, the focus was on the relation between CG practices and the procurement of third-party financing.

The study innovates by looking at the relation between CG and the process of credit risk assessment from the perspective of the lender and by identifying the CG practices borrowers are advised to adopt in order to increase their credibility in the eyes of Brazilian banks and other institutions, including the IBGC (Brazilian Institute of Corporate Governance), the CVM (Brazilian equivalent of the Securities and Exchange Commission) and BM&FBovespa (Brazilian stock exchange in São Paulo), and international institutions such as the IFC.

The study contributes to the literature on the association between CG practices, access to financing and financing costs, by testing whether CG practices are deemed relevant to the process of credit risk assessment and whether the adoption of such practices provides access to differentiated levels of credit and/or reduced lending rates in three major Brazilian banks.

2. THEORETICAL FRAMEWORK

2.1. CORPORATE GOVERNANCE, AGENCY PROBLEM AND INFORMATION ASYMMETRY

To understand the concept of corporate governance, one must understand the nature of the agency problem and the mechanisms used to mitigate it (SLOAN, 2001; SILVEIRA, 2004).

According to Jensen and Meckling (1976), the agency problem is a consequence of the conflict of interest between agent (manager) and principal (owner). Thus, agents are easily tempted to act in their own interest, to the detriment of the owners. Monitoring the conduct of managers and aligning it with the interests of the owners involves a range of agency costs.

By way of a set of internal and external mechanisms, corporate governance helps align the interests of agents and principals thereby increasing chances of investors obtaining return on their investment (SHLEIFER; VISHNY, 1997; CARVALHO, 2002; SILVEIRA, 2004).

Harris and Townsend (1981) and Gillan (2006) believe the objective of corporate governance is essentially to reduce agency conflicts. Corporate governance helps ensure all legal and contractual obligations are met and that resources are adequately conserved, employed and invested so as to generate results in accordance with the owners' expectations and perception of business risk (HARRIS; TOWNSEND, 1981).

In addition to conflicts between managers and owners, other agency conflicts may exist, such as between shareholders and lenders (WESTON; BRIGHAM, 2004) and between majority and minority shareholders. The former type of conflict may determine the capital structure of the firm (HARRIS; RAVIV, 1991) reducing potentially divergent interests and ensuring resources are properly employed, avoiding investments in unattractive or wasteful projects (SHLEIFER; VISHNY, 1997).

Agency problems often arise between suppliers of finance (shareholders and lenders) and company managers, as shown by several authors (DENIS; MCCONNELL, 2003; DOIDGE; KAROLYI; STULZ, 2007; GILLAN, 2006). According to these, decisions regarding financing sources create agency problems between managers and suppliers of finance; according to Williamson (1988), such conflicts act as a CG mechanism since different types of financing sources require different contractual arrangements.

Accounting information reduces the information asymmetry between suppliers of finance and managers and as such is one of the most important CG mechanisms (SLOAN, 2001). However, due to the potential conflict of interest described above, a number of additional CG mechanisms may be required to reduce the risk of manipulation of accounting figures (SLOAN, 2001).

De Paula (2003, p.7-8) highlights two major CG mechanisms which contribute significantly to a country's development: (1) the ability to attract new shareholders and financial leverage (strongly associated with CG structure and practices), and (2) the ability to discipline managers and ensure resources are efficiently allocated.

Over the past two decades, CG concepts and practices have been used to create mechanisms capable of solving agency conflicts. These concepts and practices are based on the principles of good governance.

2.2. PRINCIPLES AND BEST PRACTICES OF CORPORATE GOVERNANCE

According to Andrade and Rossetti (2011, p.145), the four main CG principles are fairness, disclosure, accountability and compliance. These principles should be adopted by all company managers, regardless of the type of business.

In publications issued by the Organization for Economic Cooperation and Development (OECD, 1999) it has been pointed out that the adoption of CG practices is indispensable for firms intent on having loyal and stable investors in their capital structure, reducing capital costs and sustaining the virtuous cycle of growth.

Several Brazilian and international publications have provided lists of good CG practices. Despite difference in origin, these documents have many items in common. For the purpose of this study, we focused on the CG practices recommended in documents issued by three Brazilian institutions (IBGC, BM&FBovespa e CVM) and one international institution (IFC).

The IBGC code of best CG practices has played a significant role in the development and diffusion of CG in Brazil. The code was launched in May 1999 and revised three times (April 2001, March 2004 and September 2009). The latest edition incorporates the most important international changes, adapting them to the Brazilian context. The document contains six sections: ownership, board of directors, management, independent auditors, board of supervisors and ethical conduct/conflicts of interest (IBGC, 2009).

In December 2000, BM&FBOVESPA implemented CG-specific segments. In 2006 and 2010, the listing criteria were updated in order to adapt the rules to the evolution of the listed firms, meet the growing demands of investors, and align the definitions of the market with those used by regulatory bodies (ANDRADE; ROSSETTI, 2011).

Guidelines for good CG practices are also provided in a booklet issued by the CVM. To stimulate the development of the Brazilian capital market, many of the recommendations in the CVM guide reflect a level of adherence to CG above the standards required by law or by CVM regulations (CVM, 2002). The guide contains sections on general meetings, ownership structure, minority shareholder protection, the composition and functions of the board of directors and the supervisory board, and independent auditors.

In order to evaluate the CG policies and practices adopted by different firms, the IFC created progression matrices for five types of businesses: listed firms, family/founder-owned firms, financial institutions, privatized firms in transition economies and state-owned enterprises. In the present study, we adopted as benchmark the CG practices recommended by the IFC for credit risk assessment of firms in the first two groups (listed firms and family/founder-owned firms), covering the topics “commitment to corporate governance”, “structure and functioning of the board of directors”, “control environment and process”, “transparency and disclosure” and “treatment of minority shareholders”.

The categories of analysis used in this study to determine the relevance of corporate governance in credit risk assessment by financial institutions were based on the guidelines and codes issued by the IFC, the IBGC, the CVM and BM&FBovespa (Table 1).

2.3. BANKS, CORPORATE GOVERNANCE AND FINANCING DECISIONS

The Brazilian financial system consists of institutions responsible for raising funds, for distributing and circulating values and for regulating and monitoring businesses (BM&FBovespa, 2011). Financial institutions may function as commercial banks, development banks, investment banks, or any combination of these (LIMA; ANDREZO, 2007; FORTUNA, 2003)

Financial institutions generally focus on either wholesale or retail banking (ASSAF NETO, 2006; SECURATO, 2002). Wholesale banks have a small number of large clients and tend to be more selective in the granting of loans. Retail banks tend to have more flexible policies and a credit portfolio with predominantly small and mid-sized traditional operations.

According to Pinheiro and Moura (2001, p. 19), the segmentation of credit causes banks to use different amounts of information to support financing decisions and to establish different interest rates. The authors considered three segments: retail (loans to consumers and small firms), mid-size, and corporate.

Banks use credit risk assessment to evaluate the creditworthiness and financial strength of potential borrowers (SANTOS, 2006, p. 43), identify possible risks of default and determine the ideal credit type and structure (SCHRICKEL, 2000).

As explained by Godbillon-Camus and Godlewski (2005), banks can reduce the problem of information asymmetry by gathering two types of information: hard information, that is, external, publicly acessible information, and soft information, that is, knowledge of the borrowing company obtained through its relationship with the bank.

The information sources most often used by banks to subsidize credit risk assessment include financial statements, credit reports, summaries issued by independent auditors, information provided by other organizations and the borrowing company's payment history (ROSS; WESTERFIELD; JORDAN, 2008; ROSS; WESTERFIELD; JAFFE, 2007). Pinheiro and Moura (2001) add that accounting information is used extensively only in the corporate segment.

Holder-Webb and Sharma (2010) believe financing decisions are influenced by the creditor's perception of the borrower's adherence to corporate governance and information disclosure. Likewise, Barcelos and Carvalho (2002) found that the level of transparency and the percentage of property, plant and equipment in total assets were determining factors for the granting of credit to Brazilian firms. To La Rocque and Lowenkron (2011), risk management is one of the most effective CG practices in the alignment of information on risk exposure for managers, shareholders and creditors.

According to Culp (2002), CG makes it possible for managers to estimate the likelihood of occurrence of different risks and their potential impact on company assets or performance. Likewise, Chapman (2006) believes an effective CG system is essential to the reduction of operational risks and, consequently, the total risk of the firm.

In addition, Silveira, Perobelli and Barros (2008) found that the quality of CG may influence financing decisions as it gives firms with high levels of adherence to CG practices a competitive advantage in the procurement of external funds.

Several authors believe that the adoption of CG practices plays a substantial role in the financing of Brazilian firms (LEAL; SAITO, 2003, p.5) in that it empowers firms to attract resources (FONTES FILHO, 2004, p.21) creating a transparent and trustworthy environment, reducing uncertainty and the perception of business risk, and providing access to a wider array of resources and potential investors (RAMOS, 2005, p.6; SILVEIRA, 2004, p.25).

The classification and segregation of the sampled banks, as well as the types of information used in credit risk assessment, were used to construct the categories of analysis presented in the Methodology section (Table 1).

3. METHODOLOGY

Case studies rely on six types of information sources: documents, archival records, interviews, direct observation, participant observation and physical artifacts (YIN, 2005). Three of these were used in the present study: documents, semi-structured interviews and direct observation.

Three of Brazil's five largest banks were chosen for this multiple-case study. The sampled banks are very active on the Brazilian credit market and grant loans predominantly to businesses, making them an appropriate choice for an in-depth exploration of the subject.

Banco do Brasil (BB) and Banco Itaú (BI) are commercial and multiple banks offering short-, middle- and long-term lines of credit. BNDES is Brazil's most important development bank, providing middle- and long-term financing.

To be eligible for the study, interviewees should exercise key operational functions related to credit risk assessment in the sampled banks and have extensive knowledge of credit operations involving legal persons. All the interviewees were formally authorized by their employers to participate in the study.

An analysis of the banks' credit assessment policies, as stated in in-house manuals and documents, was also conducted, supported by a review of the literature and complemented with information obtained through interviews.

Initially, a review was undertaken of CG practices recommended by Brazilian institutions – IBGC, CVM and BM&FBovespa (CG rules for Level 1, Level 2 and New Market listing segments) – and internationally by the IFC (CG tools for listed and unlisted firms).

The practices recommended by these four institutions were cross-referenced to build a list of the 21 CG practices most likely to be taken into account by lenders during credit risk assessment. Following the example of the IFC progression matrices, the practices were organized into five groups (commitment to corporate governance, structure and functioning of the board of directors, control environment and process, transparency and disclosure and treatment of minority shareholders).

The first part of the interview included open-ended questions about the professional identity of the interviewees and the credit risk assessment process, with emphasis on the CG practices adopted by potential borrowers. The second part of the interview consisted of closed-ended questions in the form of a list of 21 CG practices scored according to their relevance in the credit risk assessment process using a 5-point Likert scale similar to that described by Osgood *et al.* (1957 *apud* MATTAR, 1996, p. 990). Using numbers and verbal descriptions, the scale offered the following options: "1–not relevant", "2–little relevant", "3–relevant", "4–very relevant" and "5–extremely relevant".

The results of the study were organized into two main categories of analysis (the credit risk assessment process, and CG practices relevant to credit risk assessment) and each category was divided into subcategories. Table 1 shows the complete framework used to organize, interpret and analyze the information obtained through the interviews.

Table 1: Categories and subcategories of information, and questions according to type.

CATEGORY 1: THE CREDIT RISK ANALYSIS PROCESS		
SUBCATEGORY	**OPEN-ENDED QUESTIONS**	**REFERENCES**
1.1 Segmentation of credit market	Credit segmentation and its impact on the process of credit risk assessment	Securato (2002); Crouhy, Galai and Mark (2004)
1.2 Information collected during assessment	Hard and soft information most relevant to the process of credit risk assessment	Godbillon- Comus and Godlewski (2005); Ross, Westerfield and Jordan (2008); Ross, Westerfield and Jaffe (2007);
1.3 Lines of credit according to level of CG	Use of information on CG practices by potential borrowers and existence of lines of credit for firms adopting CG	Securato (2002); Assaf Neto (2006); Schrickel (2000); Santos (2006).
CATEGORY 2: CG PRACTICES RELEVANT TO CREDIT RISK ANALYSIS		
SUBCATEGORY	**CLOSED-ENDED QUESTIONS**	**REFERENCES**
2.1 Commitment to corporate governance	P1“One share=One vote”	CVM (2002); BM&FBOVESPA (2011); IBGC (2009) and IFC (2011)
	P2 Shareholder agreement	CVM (2002); IBGC (2009) and IFC (2011)
	P3 Internal rules	IBGC (2009) and IFC (2011)
	P4 Succession planning	CVM (2002); IBGC (2009) and IFC (2011)
	P5 Annual general meeting	CVM (2002); BM&FBOVESPA (2011); IBGC (2009) and IFC (2011)
	P6 Code of conduct	IBGC (2009) and IFC (2011)
2.2 Structure and functioning of the board	P7 Chairman and CEO	CVM (2002); IBGC (2009) and IFC (2011)
	P8 Independent board members	BM&FBOVESPA (2011); IBGC (2009) and IFC (2011)
	P9 Term	BM&FBOVESPA (2011); IBGC (2009) and IFC (2011)
	P10 Committees	IBGC (2009) and IFC (2011)
	P11 Conflicts of interest	IBGC (2009) and IFC (2011)
	P12 Evaluation of the board and its members	IBGC (2009) and IFC (2011)
	P13 Evaluation of directors	CVM (2002);
2.3 Control environment and process	P14 Internal controls	IBGC (2009) and IFC (2011)
	P15 Audit committee	CVM (2002); IBGC (2009) and IFC (2011)
	P16 Other supervisory bodies	CVM (2002); IBGC (2009) and IFC (2011)
	P17 Risk management	CVM (2002); IBGC (2009) and IFC (2011)
2.4 Transparency and disclosure	P18 Information disclosure	CVM (2002); BM&FBOVESPA (2011); IBGC (2009) and IFC (2011)
	P19 Use of privileged information	IBGC (2009) and IFC (2011)
2.5 Treatment of minority shareholders	P20 Acquisition of control	CVM (2002); BM&FBOVESPA (2011); IBGC (2009) and IFC (2011)
	P21 Family ownership-related issues	IBGC (2009) and IFC (2011)

Source: The authors.

The CG practices in each subcategory of analysis were numbered using the Bardin method (1977). Finally, using the method described by Malhotra (2001) for analyzing the results of Likert scales, the weighted average of the scores assigned to each subcategory was calculated for each financial institution and for the entire sample and expressed as “average rank” (AR) by multiplying the number of responders by the value of each item and dividing the result by the total number of responders.

4. Results and Analysis

The collected information was analyzed in separate categories and discussed below.

4.1. The Credit Risk Assessment Process

4.1.1. Segmentation Of The Credit Market

As shown by the collected responses, credit market segmentation differed considerably in each institution according to specificities. This is consistent with Pinheiro and Moura (2001), including their claim that credit risk assessment processes vary according to segmentation.

4.1.2. Information Collected During Assessment

Both hard and soft information is collected during credit risk assessment, but the interviewees rated the former much more important than the latter. Accounting produces information for the financial market in the form of accounting reports and information on sales, production and market participation disclosed through management reports. However, the interviewees explained that managers collect additional information on potential borrowers through personal contact and use this information in the assessment process. The sources of information consulted by the banks in our sample match those described by Ross, Westerfield and Jordan (2008).

Information on CG practices is collected by the banks regardless of the size of the firm requesting financing. One interviewee (BI) stated that information on CG practices is deemed relevant for firms with revenues above USD 3 million, while another (BB) explained that the level of transparency and reliability of the information supplied has an influence on the limit of the credit granted. The interviewees added that audited firms with boards of directors, transparent management and reliable information reduce the financing risk (BI), that higher levels of CG mean greater credibility, lower financing costs and better guarantee structure (BB), and that the time required for credit risk assessment depends on the level of CG practiced by the borrower (BNDES), thus matching findings by Shleifer and Vishny (1997) and by Silveira, Perobelli and Barros (2008).

4.1.3. Lines Of Credit According To Level Of CG

Our results show that the CG practices adopted by potential borrowers are taken into account by banks in financing decisions. This is borne out by our review of in-house rules for credit risk assessment.

It should be pointed out that for ethical and strategic reasons the sampled banks do not allow the disclosure of all the procedures employed in credit risk assessment, but the interviewees nevertheless highlighted a number of practices relevant to the assessment.

Our findings coincide with those of De Paula (2003), Leal and Saito (2003) and Ramos (2005) who stated that CG practices adopted by loan applicants play an important role in the granting of credit.

None of the sampled banks have lines of credit specifically for firms practicing corporate governance despite its relevance to credit risk assessment. The interviewees informed that the higher the level of CG, the higher the credit limit tends to be (BB), and that, despite the lack of a special line of credit for such firms, the cost of ordinary loans tends to decrease as the level of CG increases (BNDES).

4.2. CG Practices Relevant To Credit Risk Assessment

The scores assigned to each CG practice in the second part of the interview were consistent with the answers given to the open-ended questions in the first part of the interview and to the results of the review of documents.

- Ten of the 21 CG practices in the questionnaire were assigned the highest score (5) as "extremely relevant": P2 (shareholder agreement), P3 (internal rules), P5 (annual general meeting), P7 (chairman and CEO), P14 (internal controls), P17 (risk management), P18 (information disclosure), P19 (use of privileged information), P20 (acquisition of control) and P21 (family ownership-related issues).
- Eight of the 21 CG practices in the questionnaire were assigned the next-highest score (4) as "very relevant": P4 (succession planning), P6 (code of conduct), P8 (independent board members), P10 (committees), P11 (conflicts of interest), P13 (evaluation of directors), P15 (audit committee) and P16 (other supervisory bodies).
- Three of the 21 CG practices in the questionnaire were assigned the intermediate score (3–relevant): P1 (one share=one vote), P9 (term) and P12 (evaluation of the board and its members).
- None of the selected CG practices was assigned scores in the lower end of the spectrum of relevance ("1–not relevant" and "2–little relevant").

Table 2 shows the average rank (AR) of relevance attributed by each bank in the sample to the adoption of CG practices according to subcategory, as well as the overall AR according to subcategory and for all subcategories taken together. The composition of each subcategory is shown in Table 1, in the Methodology section.

Table 2: Average rank (AR) of relevance of adoption of CG practices according to subcategory.

SUBCATEGORY	AR PER BANK			OVERALL AR
	BANCO ITAÚ	BANCO DO BRASIL	BNDES	
Commitment to corporate governance	4.33	3.55	4.67	4.18
Structure and functioning of the board of directors	4.29	3.71	3.29	3.76
Control environment and process	4.5	4.5	4.75	4.58
Transparency and disclosure	5	4	5	4.67
Treatment of minority shareholders	5	3.5	5	4.50
All subcategories				4.34

Source: The authors.

The overall AR for all subcategories was 4.34, which is rather close to the highest score on the scale from 1 to 5 ("extremely relevant"), suggesting that the adoption of CG practices is very important in the process of credit risk assessment in Brazilian banks.

4.2.1. Commitment To Corporate Governance

All the practices in this subcategory, with the exception of P1, were considered very or extremely relevant.

Among the three banks, BNDES presented the highest AR for the subcategory (4.67). This is likely the result of an incentive program implemented by this institution towards the adoption of CG practices as one of the main requisites for financing. The result is further confirmed by the analysis of the frequency distribution of the responses given by the BNDES representative.

4.2.2. Structure And Functioning Of The Board Of Directors

All the practices in this subcategory, with the exception of P9 and P12, were considered very or extremely relevant.

In this subcategory, the AR of Banco Itaú (4.29) was well above the overall average (3.76). This is borne out by the analysis of the frequency distribution of the responses given by the BI representative who, when describing the institution's procedures for granting credit, informed that audited firms with boards of directors, transparent management and reliable information reduce the financing risk.

According to the interviewees, P9 (term) and P12 (evaluation of the board and the directors) are primarily internal corporate issues, with little relevance to the process of credit risk assessment.

Based on the interviews, it may be inferred that the overall low AR assigned to this subcategory (3.76) is due to the fact that most Brazilian firms applying for bank loans are small or mid-size businesses for which the maintenance of a board of directors would imply prohibitive costs.

4.2.3. Control Environment And Process

All the practices in this subcategory were considered very or extremely relevant, a finding supported by the interviews and the review of documents.

In the first part of the interview (the credit risk assessment process), the interviewees confirmed the concern of the sampled banks with regard to risk management in credit operations. The banks demand increasingly efficient control environments and processes to ensure return on the invested capital.

The relevance attributed by the interviewees to the practices in this subcategory matches the conclusions reached by La Rocque and Lowenkron (2011), Culp (2002), Chapman (2006) and Silveira (2004).

4.2.4. Transparency And Disclosure

P18 and P19, which indicate the existence of corporate policies of information disclosure, were considered extremely relevant (BI and BNDES) or very relevant (BB).

If the scores obtained in this subcategory are analyzed along with the answers given by the interviewees in the first part of the interview (the credit risk assessment process), it becomes clear that transparency and disclosure are crucial to the granting of credit to firms, as expounded by Barcelos and Carvalho (2002), Ramos (2005), Andrade and Rossetti (2011), OECD (1999) and IBGC (2009).

The relevance attributed to this subcategory may be explained by the need to minimize potential agency conflicts inherent in credit operations. The interests of the agent and the principal often need to be harmonized and aligned through the adoption of measures and mechanisms, as proposed by Shleifer and Vishny (1997), Carvalho (2002), Denis and Mcconnell (2003), Doidge, Karolyi and Stulz (2007) and Gillan (2006).

4.2.5. Treatment Of Minority Shareholders

The practices in this subcategory were deemed extremely relevant by the representatives from BI and BNDES, but were assigned a lower AR (3.5) by the BB representative.

The AR values found for this category were borne out by the analysis of frequency distribution. In the first part of the interview (the credit risk assessment process), the interviewees stated that family/founder ownership is a predominant phenomenon in the Brazilian corporate environment, causing banks to adopt special measures to deal with this issue in their credit operations.

Our results for this subcategory are supported by Silveira, Barros and Famá (2005), Andrade and Rossetti (2011) and IBGC (2009). The opinions expressed by the interviewees are also reflected in studies on corporate governance by Carvalho (2002), Leal and Saito (2003), who found highly concentrated ownership in Brazilian firms to be associated with high risks of expropriation of minority shareholders.

5. CONCLUSION

In answer to the central question of the study, it may be concluded that information on CG practices adopted by firms applying for loans is collected and considered relevant by Brazilian banks (Banco Itaú, Banco do Brasil and BNDES) as a subsidy for credit risk assessment. The practice of corporate governance generates a greater amount of reliable information on potential borrowers. As a result, the process of credit risk assessment is conducted with better quality and guarantee requirements may be lowered.

The risk of credit operations is often attributed to lack of transparency and inefficient management. Based on the information provided by the interviewees and in the reviewed documents, the adoption of CG practices by potential borrowers tends to minimize this risk and therefore reduce loan rates, expand credit limits and extend debt maturity. In other words, banks are more likely to provide credit to firms adopting good CG practices.

The sampled banks did not have special lines of credit for firms practicing CG, but the adoption of such practices was considered very or extremely relevant in the process of credit risk assessment and favored access to differentiated levels of financing and/or reduced rates.

Among the 21 CG practices selected for the study, 10 were considered extremely relevant, 8 very relevant, and 3 relevant.

Among the five subcategories of analysis, the one assigned the highest average rank of relevance was “transparency and disclosure”, followed in decreasing order by “control environment and process”, “treatment of minority shareholders”, “commitment to corporate governance”, and “structure and functioning of the board of directors”.

Despite the robustness provided by the multiple-case study design adopted in this study, our conclusions may not be extrapolated to Brazilian financial institutions in general. However, more generalizable results might be obtained by widening the scope of the investigation to include more institutions, both Brazilian and foreign, segregated according to type, size, segment and operations.

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