Cuadernos de Economía (2018) 41, 19–30

Asociación Cuadernos de economía

Cuadernos de economía

www.elsevier.es/cesjef

ARTICLE

The influence of the financial slack on the economical performance of Brazilian and Chilean companies

Jaime Dagostim Picolo[a], **Cristian Baú Dal Magro**[b,*], **Tarcísio Pedro da Silva**[b], **Luciano Bernardo**[c]

[a] *Universidade Regional de Blumenau – FURB, Rua Arthur Eugênio da Silveira, n. 280, Pinheirinho, CEP – 88804-655, Criciúma, SC, Brazil*
[b] *Universidade Regional de Blumenau – FURB, Rua São Paulo, n. 3250 – Itoupava Seca, CEP 89.030-080, Blumenau, SC, Brazil*
[c] *Universidade Regional de Blumenau – FURB, Rua Dr. Antônio Haffner, n. 455 – Água Verde, CEP 89.036-640, Blumenau, SC, Brazil*

Received 8 April 2016; accepted 29 December 2016
Available online 20 February 2017

JEL CLASSIFICATION
G31

KEYWORDS
Financial slack;
Transitory slack;
Discretionary slack;
Economic performance

Abstract Although financial slack is a resource used to generate opportunities, a high level of this may lead to a more relaxed or complacent management. Taking into account this divergence, the present study examines the influence of financial slack on economic performance. The study involved 190 companies in Brazil and 104 in Chile. The results indicate that in Brazil and Chile, the gross profit showed better explanatory power to the financial slack resources. However, the high discretionary financial slack showed negative magnitude and a positive link with the financial resources demand, suggesting that companies become proactive in new investments and in strategic choices when there is a demand for financial resources.

CÓDIGOS JEL
G31

PALABRAS CLAVE
Holgura financiera;
Holgura transitoria;
Holgura discrecional;
Resultado económico

La holgura financiera en el resultado económico de las empresas brasileñas y chilenas

Resumen La holgura financiera es un recurso utilizado para generar oportunidades. Sin embargo, un nivel elevado de esta puede generar una gestión más relajada (o «acomodaticia»). Teniendo presente esta divergencia, este trabajo comprueba la influencia de la holgura financiera en el resultado económico de 190 empresas de Brasil y 140 de Chile. Los resultados indican que en los 2 países la holgura financiera presenta un mayor poder explicativo del beneficio bruto. En concreto, dicho beneficio bruto tiene una relación negativa con una elevada

* Corresponding author.
E-mail address: cristianbaumagro@gmail.com (C.B. Dal Magro).

http://dx.doi.org/10.1016/j.cesjef.2016.12.002

holgura financiera discrecional y un vínculo positivo con la demanda de recursos financieros. Esto indica que las empresas son proactivas a nuevas inversiones y elecciones estratégicas cuando demandan recursos financieros.

1. Introduction

Managing the financial slack is an alternative for fundraising, and an attractive way to leverage the business due to opportunities (Kim et al., 2008). Representing an excess of resources, the financial slack favors the overcoming of crises arising from the turmoil in the market, and allows investments in riskier projects and innovations, increasing the chances of favorable returns to organizations (Bradley et al., 2011a; Deephouse and Wiseman, 2000; Zona, 2012).

The excess of financial slack may cause the implementation and testing of new organizational projects (Bradley et al., 2011b; Zona, 2012), on the other hand, the shortage of funds forces managers to seek solutions to organizational problems that may be causing resource restrictions (Deephouse and Wiseman, 2000; Patzelt et al., 2008).

The financial slack can be a useful resource to the organization to assist in the achievement of organizational goals (Vanacker et al., 2013) and for the discretionary use of management. The discretionary financial slack is a continuum, ranging from high and low financial slack. The high discretionary financial slack, represents the net working capital, and the low discretionary financial slack, representing the degree of debt, becoming organizational investment options for managers. However, the higher the debt level, the lower the degree of management freedom, due to commitments (Bradley et al., 2011b; George, 2005). The funding restriction by organizations, can be combated by the liquidity management of cash flow, which becomes an issue for the corporate policy, and also affects organizational performance (Almeida et al., 2004).

In this context, it is assumed that the effective management of financial slack positively influences organizational performance (Bradley et al., 2011b; Simsek et al., 2007). However, if on the one hand, the slack increases the ability to take risks that influences innovation and consequently the performance of companies, on the other hand, high levels may favor the management accommodation or irrational optimism resulting in inadequate strategies for good organizational performance.

The cash balance policies are associated empirically to the value of the organization, growth opportunity, business risk and organizational performance (Acharya et al., 2007), and therefore, understanding the financial slack as an organizational resource, presents the following research issue: What is the influence of the financial slack in the economic performance of Brazilian and Chilean companies? Thus, this article aims at verifying the influence of the financial slack on economic performance of Brazilian and Chilean companies. Almeida et al. (2004) state that there are two important areas in corporate finance, which are the effects of the financial constraints on firm behavior and the way companies conduct financial management. With this approach, the present study addresses the financial management by companies and their impact on economic performance.

The companies selected for the study belong to Brazilian and Chilean capital market. The research is justified by the proposal of knowledge expansion regarding financial slack and its possible influence on organizational economic performance and whether there are significant differences between Brazilian and Chilean open market companies.

The choice of Chile is mainly given because it has greater global competitiveness index compared to countries in Latin America, and worldwide reaches the 33rd position, while Brazil ranks only 57th according to the World Economic Forum report (Schwab, 2015), making the country important in Latin America's economic scenario and relevant to be compared to the Brazilian scene.

Moreover, Benachenhou (2013) highlights similarity features between Brazil and Chile, indicating that in reference to economic performance, organizations of both countries (Brazil/Chile) showed the best indicators. Specifically in Brazil in recent years, appeared in the world market as an agricultural power, and in the export of products in various industries. Chile is world known for the exportation of blueberries, grapes, plums, apples, pacific salmon, among others.

Brazil and Chile have gone through relevant economic, political and social transformations in recent decades, and became the most solidified Latin American economies (Bastos and Nakamura, 2009). Terra (2007) confirms that there is relevance to studies that include comparisons between Brazil and Chile, as they are emerging economies that have undergone major macroeconomic changes.

Finally, Brazil has achieved its goals of economic growth, strengthening the institution and improvement in income distribution in growing and democratic environment (Sicsú and Castelar, 2009). Similarly, Chile has been considered a reference in Latin America, as one of the few countries that coexists, with long periods with low inflation and economic growth (Rondinel et al., 2005). In addition, the Chilean economy is driven and open (Martínez et al., 2007), similar characteristic to the Brazilian market, plausible justification for comparison of listed companies on various aspects involving economic performance.

Based on Almeida et al. (2004), developing empirical propositions that cash flow policies determine investment

problems and, consequently, affects the performance of organizations, become relevant. The contribution of the study is to infer propositions that guide organizations to optimize their cash flow policies for achieving higher economic performance.

The structure of the study is built around the scope of the proposed objective. Thus, it approached the introductory aspects outlining the problematic about the object studied. Following the theoretical bases exposes the discussions, and for that, it approaches on the clearance of funds, entering also the concepts of discretionary and temporary financial slack. In addition, aspects related to discretionary financial slack and transient as determinants of organizational economic performance are addressed. Later, it was structured the methodology of the survey, describing the methods, collection, population, sample, variables and statistical techniques used to analyze the results. Finally, we present the analysis and discussion of the results and final considerations, which contemplates the limitations and suggestions for future research.

2. Slack of financial resources

The success in generating organizational opportunities depends on the ability of domestic resource combinations. Thus, one of the resources that is relevant to increase the capacity of organizations to generate new opportunities is the availability of financial slack (Bradley et al., 2011a).

The financial slack is used to seek economic stability during possible financial instability generated by internal or market crises. The existence of slacks provides reservation of real or potential resources, which enables the execution of organizational adaptations due to internal pressures and also assists in changing strategies. With this assumption, the slack provides a structure that is able to influence the organizational performance (Bourgeois, 1981; Bradley et al., 2011b; Cyert and March, 1963; Deephouse and Wiseman, 2000; George, 2005; Zhong, 2011).

In a context of economic crisis or shortage of resources, executives can be risk averse, especially when faced with major losses or global crises. In these cases, managers are willing to take actions to reduce risks, change in the focus of attention on risky decisions, increase on control of shareholders and caution in decision-making (Holmes et al., 2011; Zona, 2012). Almeida et al. (2004) report that the highest financial slack and the lowest debt levels increase future funding capacity of a company subject to restrictions and thus its ability to take on new investment opportunities.

The environmental dynamics refers to the rate of change and instability in the domestic environment. The instability creates deficits in relation to the cause and effect information between the various factors and environmental outcomes (Bradley et al., 2011a; Sirmon et al., 2007), and these incomplete information lead to many uncertainties in strategic decisions. However, dynamic environments are highly associated with greater uncertainty and potential opportunities, besides macro-environmental pressures such as technological advances, globalization, and regulatory changes, among others (McMullen and Shepherd, 2006).

Such environments can create shortage of resources, but for companies that are seeking new opportunities through business strategies, can be a timely improvement in performance (Bradley et al., 2011a; Wiklund et al., 2010). In this context, it appears that the financial slack is critical to the opportunities presented by environmental change (Bradley et al., 2011a; Sharfman et al., 1988) and therefore the performance can be expected with the increasing of the financial slack, by promoting entrepreneurial behavior (Natividad, 2013).

The slack facilitates the approval for the use of funds by managers, as it provides protection against the potential loss of risky projects, increases organizational security and encourages experimentation, leading it to organizational change and the search for projects that have high potential (Bradley et al., 2011a; Nohria and Gulati, 1996; Zona, 2012). Almeida et al. (2004) suggest that financially restricted firms (with cash flow sensitivity) tend to save more in times of recession, while unrestricted firms tend not to show changes in their cash flow sensitivities in response to macroeconomic shocks. Therefore, it is possible to infer that unconstrained firms have easier access to third-party capital, and therefore more prone to greater financial slack, but may have worse economic performance during recessionary times, seen they do not tend to adapt their cash flow balance to the new economic climate.

Therefore, the financial slack has often been theoretically conceptualized as a driver of innovation. It offers businesses autonomy and resources to explore new solutions and opportunities, facilitating decision-making. Investments in Research and Development - R & D imply searching unknown markets, and its results are uncertain and long-term. Thus, to the extent that the slack is found, there is higher possibility that there may be investments related to R & D (Bradley et al., 2011b; Kim et al., 2008; Natividad, 2013).

Therefore, the gap is a surplus of resources that can mitigate the contingencies, and at the same time is a safety stock for underperforming (Natividad, 2013). However, the slack may have negative consequences, namely excessive amount of resources may lead to relaxation of executives and consequent inefficiency. It can even narrow the search for risky projects, lead to irrational optimism or be used to ease political coalitions, instead of promoting changes (Kim et al., 2008; Zona, 2012).

On the context, high levels of slack have been associated with inefficiency related to investment projects that do not generate value for shareholders. In this same approach, there is even a tendency to decrease the value to shareholders and generate a possible company's strategic misalignment with their environment (Bradley et al., 2011a; Jensen, 1986; Zona, 2012). Bromiley (1991) returns to the previous perspective and says that high financial slack, have a positive relationship with the performance and the absence of this feature implies possible reduction of investments.

However, if companies with excess slack may become complacent, overly optimistic and feel less obliged to make investments in R&D, the form of allocation of financial slack for investments depends on the culture and interests of the owners, which may even be divergent. In this line of thought, the direction of investments depends on the culture and the interests of the owners, it can be said that the lack of resources is not an obstacle for entrepreneurs. In projects

in which the main objective is the development of new products and markets, but with limited financial slack, managers end up acquiring resources through strategic partnerships and alliances (Deephouse and Wiseman, 2000; Patzelt et al., 2008) implying, often, on the increase of the degree of debt.

With this point of view, Damodaran (1996) related the financial slack to liquidity or debt to meet future needs and take advantage of opportunities, or even to use it in unexpected events. It inferred that this concern is more common in emerging organizations, because they have higher offers from investments than mature organizations. On the other hand, Khurana et al. (2006) observe that firms with deficit financial indicators tend to neglect present investments to ensure financial slack, and avoid the search for third-party funds, usually expensive and uncertain, while financially sustainable organizations maintain its strength due to the competence of ensuring financial slack, able to absorb unpredictable times and or crises (Davidson, 1991).

With the prospect of positive or negative aspects of the slack, one possible approach is to consider that there is a great level of slack (Bradley et al., 2011a; Tan and Peng, 2003; Zhong, 2011), or verify that their use depends on management discretion where the slack, being available, allows reassignment that may comply or divert the organization from its goal (George, 2005).

In organizations, the slack can take a number of forms, however, the fundamental difference is the degree of management discretion available in its implementation (Sharfman et al., 1988) and in this study, as in Bradley et al. (2011b) will focus on available slack, more specifically the financial slack. Companies often begin their operations mainly with financial resources by allocating them to other forms of resources over time. The financial slack is available for alternative use due to its strategy and processes or being directed to amortization of environmental changes.

Su et al. (2009) comment that the conflicting views on the impact of financial slack in firm performance can be a powerful theoretical lens to be explored. Adding the theoretical lens of institutional theory we may understand profoundly the relationship between organizational slack and firm performance during the institutional transactions. The authors performed a replication with the unfolding the research of Tan and Peng (2003), and using a sample of Chinese companies, found that unabsorbed slack (low financial slack) is essential for companies to sustain their competitive advantage.

Against the discussions on the implications of the effects of financial slack on organizational performance, there are studies under various theoretical perspectives. One of the first contributions was suggested by Cyert and March (1963), which addressed this relationship in the behavioral perspective and assigned to the slack the role of stabilizing and adapting the organization to environmental variability. Later, Bourgeois (1981) addressed the slack as a discretionary resource, useful both to face turbulence, and to seize opportunities. He added that the slack is determined by the company's ability to maintain a resource surplus, beyond the necessary to maintain its basic operations. In this context, the slack has several organizational functions.

2.1. Discretionary financial slack

Scholars began to examine the relationship between the financial resource slacks and the economic performance of companies by examining when, where and how it influences performance. Special attention has been given to the role of managers (Bradley et al., 2011a; Simsek et al., 2007), indicating that managers of companies with greater resource constraints learn to use them more effectively over time. An implicit assumption in these studies is that managers have significant discretion over the use of resources.

Bourgeois and Singh (1983), George (2005) and Sharfman et al. (1988) suggest that the high and low financial slack are anchored on a discretionary continuum of management decision-making, between high and low financial slack, and the low financial slack offers less flexibility for managers to adopt strategic options.

Although the size of financial slack is a continuum, the high and low discretionary financial slack can coexist and often are used in conjunction, indicating a non-exclusive use. While the high discretionary financial slack is represented by cash flow and accounts receivable, the low discretionary financial slack represents its indebtedness.

The high discretionary financial slack facilitates the capacity of development and business growth by developing new products, allowing greater flexibility in the enterprise and improving adaptation in complex environments. The financial slack, by moderating the risk in the search for new alliances, is an important ingredient in management decisions regarding the development of capabilities and opportunities. On the other hand, low discretionary financial slack offers less flexibility in their strategic decisions, and its limiting slack can encourage alliances that could serve as a source of funding (Coombs et al., 2006; Patzelt et al., 2008).

It is expected that both high and low discretionary financial slacks can be positively related to the economic performance of companies. As discussed, the slack increases the ability to take risks that influence innovation and consequently the performance of companies (George, 2005; Kim et al., 2008; Zona, 2012). However, higher levels of slack can provide a performance reduction by protecting the company from external shocks, favoring the managerial accommodation or irrational optimism, leading to inadequate implementation of strategies (Zona, 2012).

2.2. Transitory financial slack

George (2005) introduced the concept of another categorization for financial slack, called transitory, which refers to excess of available resources after the resource demands were met. Therefore, the temporary financial slack represents the difference between the availability and demand of financial resources. The availability of financial resources is understood as shareholders' equity less the non-current assets of company, and the demand for resources is an estimate of resources required for the operation of the company, composed of cash, banks, accounts receivable less accounts payable.

Such indicators have the advantage of reflecting the real needs of the company's resources, which may not occur

with the discretionary financial slack indicators. It can also differentiate the availability and demand for resources, to test possible behavior patterns of these indicators in relation to performance and also check if the resource demand exceeds availability. The availability and demand for financial resources are related because they reflect not only the available values of the companies, but also their internal needs (George, 2005; Gral, 2013).

Companies with fewer resources in relation to their operational demands tend to be more efficient as they find ways to leverage and expand their available resources. When the transitory slack is negative, the resource demand exceeds availability, the companies can find more efficient and effective uses for slack. However, when the transitory slack is positive, with availability exceeding demand, companies can become more proactive in their strategic choices (George, 2005).

3. Financial discretionary slack and determining transitories of the economic performance of an organization

Daniel et al. (2004) attempted to relate the slack resource and financial performance from a meta-analysis based on 80 samples of 66 studies. They showed a positive relationship between the slack and financial performance, indicating that the clearance improves performance, contrary to the idea that this feature leads to organizational inefficiency. Latham and Braun (2008) studied the role financial slack has in the performance of companies with limited resources and in environments with economic recession.

Through econometric data, 450 companies during the period of 2001–2003, found that higher levels of financial slack detracted early in the recession, but can accelerate the recovery of the company. The financial slack is understood as a tool for discretionary use of managers can both speed up the response to environmental changes, as encouraging economic recovery.

Ju and Zhao (2009) examined the relationship between organizational slack and the performance in companies from China, based on data from 60,945 companies. They found that the impact of slack on performance is higher in private companies than in public companies or in foreign capital. Furthermore, the intensity of competition in the industry positively adjusts effect of slack on organizational performance. Zhong (2011) sought to study about slack and performance through an empirical study of 47 Chinese companies of pharmaceutical and chemical products.

The findings indicate that the relationship between slack and performance varies depending on industry circumstances and slack resources. However, in certain circumstances, situations where companies are small and the resources available in excess, proved it was bad for performance. Elbanna (2012) used data from 174 public and private organizations of the United Arab Emirates to check if the slack and strategic planning contributes or inhibits organizational performance. The results indicated that both the slack and the planning are important predictors of performance and the impact of slack on performance varies according to the age of the organizations.

Thus, the term financial slack is usually used to refer to the amount of net resources that the company has to use the discretionary management. Therefore, financial slack is a resource that can potentially be used as achievement of organizational goals (George, 2005; Natividad, 2013; Vanacker et al., 2013).

Regarding the organizational objectives, an organization is seen as a combination of human, physical and capital resources, in order to achieve a common goal, and largely, the collective goal is what determines the desired result. However, the financial results of an organization are the result of decisions and actions of managers, although not in the literature nor in practice, there is agreement on the best measures for performance. The definition of performance may be divided into multiple dimensions, such as profitability, growth, efficiency, liquidity, etc. And when a company has a good performance in an indicator, this may adversely affect the other, as for example, the company can reduce the short-term profitability to obtain growth or survival in the long term (Carton, 2006; Gral, 2013).

Acharya et al. (2007) suggest that money can't be treated as debt by companies restricted to foreign capital (financing), especially those with large coverage needs. In contrast, companies constrained with low coverage needs, prefer to use excess cash flow to reduce debt, saving the capacity of future borrowing. Opler et al. (1999) show that most of the variables that are related to high levels of cash flow are also known to be associated with low leverage.

Graham and Harvey (2001) argue that most managers, report on the high additional costs to firms that capture capital market resources. Almeida et al. (2004) states that such costs for fundraising may affect the way they conduct their financial and investment policies.

The resource-based view suggests that organizational slack can be used to support innovation, facilitate strategic behavior, and as a result improve organizational performance (Cheng and Kesner, 1997). On the other hand, the perspective of organizational inertia outlines that the organizational slack will lead to inertia of the organization that may affect performance (Leonard-Baton, 1992; Davis and Stout, 1992).

It is essential to define that economic performance is a measure of change in the financial situation of a company, and is very useful for investors, lenders and managers. In this sense, understanding the impact of cash flow on financial performance is important to the decision making of managers, as the excess cash flow can create organizational inertia, but opposing that it may support in actions that generate organizational success.

Moreover, it is justified that the market performance variables (market return) were not considered in this study, since the constant financial and political crisis that has affected macroeconomic factors, especially in Brazil, can disturb the market value of organizations, affecting the relationships that may exist between the financial slack and market performance. Finally, the financial slack is an intrinsically economic attribute presented in the balance sheet of organizations and its performance assigns the viewing through technically constructed and regulated financial statements.

Table 1 Layout variables.

Variables	Description	Metrics	Authors
Dependent variables – economic performance	Gross profit (GP)	LOG revenue t – cost of products of sold t	George (2005), Bradley et al. (2011a), and Tan and Peng (2003)
	Return on assets (ROA)	LOG $\left(\frac{\text{Income before taxes t}}{\text{Total assets t}}\right)$	Bradley et al. (2011b) and George (2005)
	Return on equity (ROE)	LOG $\left(\frac{\text{Net profit t}}{\text{Net worth t}}\right)$	Wefald et al. (2010)
Independent variables – discretionary financial slack	High discretionary financial slack (HDFS)	LOG (Current assets t – Current liabilities t)	Bradley et al. (2011a), Bourgeois and Singh (1983), Sharfman et al. (1988), and George (2005)
	Low discretionary financial slack (LDFS)	LOG $\left(\frac{\text{Total liabilities t}}{\text{Net worth t}}\right) \times 100$	
Independent variables – temporary financial slack	Availability for financial resources (AFR)	LOG (Net worth t – Non-current Assets t)	George (2005)
	Demand for financial resources (DFR)	LOG (Available t + Accounts receivable t + Stocks t – Accounts Payable t)	
	Transitory financial slack (TFS)	LOG (Availability for financial resources t – Demands for financial resources t)	

4. Research methods

The research, as to its purpose is descriptive with hypothetical-deductive method, and also inferential, because it seeks to verify the statistical relationships between the financial slack and organizational performance. As for the means of investigation it is documentary by availing themselves of the economic information contained in the financial statements for the calculation of indicators. The data contained in the financial statements were collected by the Thomson® base, being composed of historical data of five years, who understood the periods 2009 to 2013. The period covered by the study is sufficient for analysis considering, for example, the study of George (2005) occurred in four years, and Ju and Zhao's (2009) for five years.

In addition, the analysis period was justified by two factors: first, in 2008 Brazilian companies, of open capital, have to adopt international accounting standards, and this change had an impact on the reported financial information and performance indicators reported, opting to start the research in years 2009–2013 because the accounting standards are in international scope; Second, the year 2008 was marked by the global financial crisis that indirectly may have affected the performance of the Brazilian and Chilean organizations.

Companies that contained no information available for the calculation of the raised variables were discarded being limited those which did not disclose revenues from sales and costs of goods sold, either by industry specificity (characteristic of the firm), by closing capital, or simply no disclosure of the factors observed. There were also disregarded the companies that had negative equity, since the distortion that it could cause on the results. Finally, those in the financial sector were excluded because they presented characteristics of cash flow, which may distort the findings to be generalized in various sectors. The sample of the study had a range of 190 public traded companies in Brazil and 104 public traded companies in Chile.

Since the objective of this study is to investigate the influence of the financial slack on the economic performance of Brazilian and Chilean companies, the data collection plan is divided into dependent variables of the economic performance of companies, listed by Gross Profit, ROA and ROE. And the indicators of financial slack as independent variables, divided between discretionary and transitory slack, as outlined in Table 1.

Among the variables selected for the study, there is gross profit as a dependent variable, used by George (2005). It was only chosen gross profit due to the operating profit, because according to the study by Bradley et al. (2011a), both have a significant relationship with power explanation of 92.90%. The study by Tan and Peng (2003) indicates that net income is also significantly related to gross profit with an explanatory power of 94.20%.

In addition, it was used the return on assets (ROA) as a dependent variable, which measures the company's management efficiency for the generation of profits due to investments in assets (Gral, 2013). Finally, the return on equity (ROE) as the dependent variable, which measures the return on capital investments of shareholders (Wefald et al., 2010).

The independent variables, taken as financial slack indicators have two subdivisions. The first is defined by discretionary financial slack representing the cash reserve levels. Thus, when the slack is positive it represents a liquidity and gives managers greater degree of freedom for new

Table 2 Correlation of variables.

Brazil	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. GP	1	0.214**	0.045	0.395**	−0.025	0.134**	0.871**	−0.126**	0.919**
2. ROA		1	0.085**	0.091**	0.001	0.120**	0.127**	0.060	0.114**
3. ROE			1	−0.037	0.224**	−0.027	0.003	−0.016	0.040
4. HDFS				1	−0.033	0.295**	0.558**	−0.130**	0.414**
5. LDFS					1	−0.025	−0.022	−0.013	−0.020
6. AFR						1	0.170**	0.517**	0.110**
7. DFR							1	−0.227**	0.879**
8. TFS								1	−0.198**
9. Sales									1
Mean	4.235	0.088	0.208	1.407	1.994	0.449	2.469	−1.689	2.808
Standard deviation	0.883	0.146	1.144	1.800	24.096	2.429	0.844	1.972	0.831
Chile	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
10. GP	1	0.268**	0.314**	0.130**	0.136**	−0.244**	0.853**	−0.447**	0.950**
11. ROA		1	0.559**	−0.070	−0.020	−0.010	0.070	−0.109*	0.156**
12. ROE			1	−0.178**	−0.266**	−0.166**	0.142**	−0.193**	0.207**
13. HDFS				1	−0.050	0.275**	0.380**	−0.094*	0.178**
14. LDFS					1	−0.080	0.124**	−0.070	0.153**
15. AFR						1	−0.096*	0.621**	−0.270**
16. DFR							1	−0.441**	0.871**
17. TFS								1	−0.498**
18. Sales									1
Mean	3.973	0.086	0.173	1.154	1.269	−0.052	2.171	−1.607	2.582
Standard deviation	0.857	0.104	0.274	1.622	2.700	2.220	0.777	1.761	0.838

Notes – GP: gross profit; ROA: return on assets; ROE: return on equity; HDFS: high discretionary financial slack; LDFS: low discretionary financial slack; AFR: availability for financial resources; DFR: demand for financial resources; TFS: transitory financial slack.
Font: Research data.
* The correlation is significant at the 0.05 level.
** The correlation is significant at the 0.01 level.

investments. On the other hand, the lower slack is defined by the borrowing rate (Bourgeois and Singh, 1983; Bradley et al., 2011b; Sharfman et al., 1988).

The second is defined by the temporary financial slack proposed by George (2005), being divided into the availability of financial resources (Gral, 2013), and demand for financial resources (George, 2005). Thus, the difference between the availability of financial resources and the demand for financial resources, represents the transitory financial slack.

The approach of the analysis is quantitative and the indicator are absolute ''log-transformed'' in order to avoid distortions in the model by the dispersion of data depending on the size of the companies. About the negative data, to be able to calculate the log, they were multiplied by −1, after the calculation of the log, were again multiplied by −1 to characterize as a negative value in data processing.

As for statistical treatments were calculated the Pearson correlation and multiple linear regression using the SPSS software. Regarding the beta coefficients, the standardized values for comparative importance of the various factors and standardization of the scale were used.

Finally, the linear regression models, mainly in full-time (2009–2013), may have endogeneity problems between the following variables: dependent ROA with independent HDFS; dependent ROE with LDFS independent, AFR and TFS; and dependent GP with independent DFRS and TFS. Therefore, the findings may have inference of relations with endogeneity problems, factors that are not controllable by linear regression studies.

5. Discussion and analysis of results

In the first stage of data analysis as presented in Table 2, the descriptive statistics and correlations of each of the study variables, plus sales to collaborate with the analysis of the results, considering it is a primary indicator for the management of organizations. Among the organizational performance indicators in Brazilian companies, the gross profit was correlated only with the ROA (Brazil: $r = 0.214$, p-value < 0.01), while in Chile, it was presented with the ROA ($r = 0.268$, p-value < 0.01) and ROE ($r = 0.314$, p-value < 0.01).

The correlation of the gross profit to the discretionary financial slack indicators was differentiated between the Brazilian and Chilean companies. While the high discretionary financial slack, correlated with gross profit (Brazil: $r = 0.395$, p-value < 0.01, Chile: $r = 0.130$, p-value < 0.01); low discretionary financial slack, representing the degree of debt, there was no significant correlation with Brazilian companies, but it occurs with Chilean firms ($r = 0.136$, p-value < 0.01), indicating that the financial slack arising of debt to leverage its gross profit.

The gross profit also showed a significant correlation with the temporary financial slack indicators. For availability of correlation resources is positive with operating income in Brazil, but is negative in Chile (Brazil: $r = 0.134$, p-value < 0.01, Chile: $r = -0.244$, p-value < 0.01). Regarding the demand correlation resources is high and significant to operating income in both countries (Brazil: $r = 0.871$, p-value < 0.01, Chile: $r = 0.853$, p-value < 0.01). This is because the higher sales, higher gross profit (Brazil: $r = 0.919$, p-value < 0.01, Chile: $r = 0.950$, p-value < 0.01). As the demand for resources is correlated with the sales of companies from both countries (Brazil: $r = 0.879$, p-value < 0.01, Chile: $r = 0.871$, p-value < 0.01), it is therefore correlated with Gross profit. About temporary financial slack, the correlation is negative with gross profit (Brazil: $r = -0.126$, p-value < 0.01, Chile: $r = -0.447$, p-value < 0.01) in both companies Brazilian and Chilean, corroborating with George (2005) which cites that companies find efficient uses for transitory slack.

In general, the difference found in the relationship between resource availability and gross profit for companies in Brazil and Chile, can be explained by differences in credit market interest rates in both countries. In Brazil the third-party capital funding has burdened the financial expenses of the organizations, as the high rates applied.

This may explain the relationship that the lower availability of impact features in lower gross profit, that is because the companies that have low availability of resources, tend to capitalize through financing and the cost of interest rates borne by the range of an adequate profit. In Chile, the increased availability of resource impacts on lower gross profit, proving the evidence that the slack on cash flow can result in organizational inertia (Leonard-Baton, 1992; Davis and Stout, 1992; Cheng and Kesner, 1997).

Regarding the economic performance expressed by the ROA, the correlation with the financial slack in general is weak, although significant with high discretionary financial slack only in Brazilian companies (Brazil: $r = 0.091$, p-value < 0.01), demonstrating that this kind of slack has not been used as a profitability strategy on assets in Chilean companies. In the same way, it is weak and significant only with Brazilian companies, with the availability of financial indicators (Brazil: $r = 0.120$, p-value < 0.01) and demand for resources (Brazil: $r = 0.127$, p-value < 0.01), but showed a weak and significant negative correlation of the transitory financial slack in Chilean companies (Chile: $r = -0.109$, p-value < 0.01).

Finally, the performance expressed by the ROE, in Brazilian companies the correlation is positive and significant (Brazil: $r = 0.224$, p-value < 0.01) only with low discretionary slack, being used resource in the optimization of return on equity. However, the Chilean companies, all the indicators of slack showed significant correlation with ROE. The correlation is negative with high (Chile: $r = -0.178$, p-value < 0.01) and lower discretionary financial slack (Chile: $r = -0.266$, p-value < 0.01). It is negative to the availability of financial resources (Chile: $r = -0.166$, p-value < 0.01) and positive with demand (Chile: $r = 0.142$, p-value < 0.01) and negative with transitory slack.

In order to observe the interaction and influence of financial slack indicators on business performance and check the stability of the results for each period studied, there was a multiple linear regression adjustment; considering each performance dependent variable called gross profit (GP), ROA and ROE in isolation for Brazilian and Chilean companies as equations 1, equations 2 and equations 3 respectively.

$$GP = \beta_0 + \beta_1 HDFS + \beta_2 LDFS + \beta_3 AFR + \beta_4 DFR + \beta_5 TFS + \varepsilon \quad (1)$$

$$ROA = \beta_0 + \beta_1 HDFS + \beta_2 LDFS + \beta_3 AFR + \beta_4 DFR + \beta_5 TFS + \varepsilon \quad (2)$$

$$ROE = \beta_0 + \beta_1 HDFS + \beta_2 LDFS + \beta_3 AFR + \beta_4 DFR + \beta_5 TFS + \varepsilon \quad (3)$$

The VIF indicator of multicollinearity is less than 10 in all models and considered satisfactory (Hair et al., 2005). In addition, before making regression modeling, tests of waste normality and homoscedasticity were developed, seeing the care of both. Standardized Coefficients were used for comparison purposes between the variables and Table 3 are shown only the significant coefficient with p-value ≤ 0.10 to facilitate analysis of data.

It is observed in Table 3 that the performance of companies, expressed as gross profit had modeling with superior quality, expressed with R^2 minimum between the models of 0.695, corroborating with George (2005) and Vanacker et al. (2013) which established this indicator as a good measure for performance.

As for discretionary financial slacks, low financial slack had no statistically significant relationship to gross profit in any year analyzed, being inferred that the level of debt does not influence the gross profit in the Brazilian and Chilean companies. However, it seems to use the high discretionary slack where the smaller the slack, higher the gross profit in companies, contradicting the findings of Vanacker et al. (2013), Bradley et al. (2011b) and George (2005) and the correlation analysis of this article. This is because the multiple regression analysis provides top quality information to simple correlation analysis. In multiple regression analysis, it takes into account the interaction of several independent variables, reducing correlation effects from other variables, such as partial correlation situations (Hair et al., 2005).

The result in this aspect, corroborates with the statement of Zona (2012), that high slack may favor management accommodation and irrational optimism, damaging organizational performance. Thus, it is necessary that the Brazilian and Chilean companies establish adequate controls for high-slack capabilities. It is needed to recognize the moment that exaggerated financial resources may prevent the generation of innovation and the search for new alternatives for investments that generate growth and competitiveness in organizations (Bradley et al., 2011a; Latham and Braun, 2008). On the other hand, also that organizations consider the time that runs through macroeconomic factors, as the findings show that interest rates can affect organizational performance, and use of low financial slack raising third-party funds may adversely affect the organization.

Table 3 Financial slack and organizational performance.

Variables	Brazil						Chile					
	2009	2010	2011	2012	2013	General	2009	2010	2011	2012	2013	General
GP (Dependent) (Eq. (1))												
HDFS	−0.183*	−0.139*	−0.083***	−0.116*	−0.048	−0.116*	−0.102***	−0.201*	−0.255*	−0.229*	−0.146**	−0.187*
LDFS	−0.021	0.032	0.014	−0.009	−0.009	−0.006	0.051	−0.048	0.068	0.067	0.016	0.003
AFR	−0.045	−0.062	−0.023	−0.044	−0.086***	−0.051**	−0.149**	−0.075	−0.081	0.076	−0.123***	−0.108*
DFR	1.015*	1.013*	0.895*	0.96*	0.957*	0.968*	0.907*	0.917*	0.958*	0.838*	0.869*	0.917*
TFS	0.079***	0.121*	0.103**	0.101**	0.127*	0.105*	0.042	0.025	0.053	−0.051	−0.038	0.008
R^2	0.803	0.811	0.695	0.774	0.792	0.776	0.798	0.782	0.807	0.748	0.758	0.779
VIF max.	1.884	1.632	1.673	1.850	2.104	1.706	2.414	2.044	2.360	2.232	2.472	2.211
ROA (dependent) (Eq. (2))												
HDFS	−0.007	−0.12	0.097	0.097	0.249**	0.01	−0.201	−0.255**	−0.271**	−0.133	−0.068	−0.159*
LDFS	0.077	−0.028	−0.008	−0.074	0.047	0.006	−0.155	−0.189***	0.063	0.125	0.178	−0.034
AFR	−0.031	0.002	0.165***	0.145	0.068	0.069	0.122	0.284**	0.284***	0.147	0.028	0.157**
DFR	0.247**	0.157***	0.118	0.115	−0.127	0.122*	0.119	0.122	0.145	−0.135	0.038	0.066
TFS	0.087	0.022	0.077	0.062	0.129	0.053	−0.116	−0.296**	−0.269***	−0.226	−0.058	−0.195*
R^2	0.023	−0.009	0.064	0.064	0.054	0.023	−0.002	0.079	0.039	−0.001	−0.002	0.027
VIF max.	1.884	1.632	1.673	1.850	2.104	1.706	2.414	2.044	2.360	2.232	2.472	2.211
ROE (dependent) (Eq. (3))												
HDFS	−0.053	−0.075	0.032	−0.048	0.024	−0.046	−0.288**	−0.268*	−0.456*	−0.244**	−0.242**	−0.296*
LDFS	−0.349*	0.478*	0.729*	−0.925*	0.915*	0.223*	0.095	−0.724*	0.093	0.278*	0.328*	−0.321*
AFR	−0.078	−0.063	0.01	−0.002	−0.041	−0.01	0.073	0.031	0.107	−0.033	−0.045	−0.004
DFR	0.122	0.04	0.138**	0.057	−0.024	0.033	0.189	0.239*	0.159	−0.115	−0.021	0.233*
TFS	−0.027	−0.003	0.063	−0.026	0.018	−0.007	−0.183	−0.125	−0.277***	−0.159	−0.179	−0.137**
R^2_a	0.129	0.221	0.518	0.850	0.834	0.047	0.083	0.602	0.180	0.126	0.172	0.190
VIF max.	1.884	1.632	1.673	1.850	2.104	1.706	2.414	2.044	2.360	2.232	2.472	2.211

Notes – GP: gross profit; ROA: return on assets; ROE: return on equity; HDFS: high discretionary financial slack; LDFS: low discretionary financial slack; AFR: availability for financial resources; DFR: demand for financial resources; TFS: transitory financial slack.
Standardized coefficients.
Font: Research data.
* Significant at 0.01.
** Significant at 0.05.
*** Significant at 0.10.

In transitory slack related to availability of resources, even though in general it has been significant, it presented low and negative magnitude, not being relevant to the analysis. However, resource demand showed higher magnitude than the other temporary slack indicators in several years observed. This is because the higher sales, higher gross profit in companies (Brazil: $r = 0.919$, p-value < 0.01, Chile: $r = 0.950$, p-value < 0.01) and so there is growth in sales, there is an increase in the need for resource to sustain operations of companies (Brazil: $r = 0.879$, p-value < 0.01, Chile: $r = 0.871$, p-value < 0.01). This finding indicates that companies with greater demand for resources, do not have high financial surplus, tend to get better results from gross profit (performance). Therefore, when there is no demand for resources, companies do not seek to make efficient use of them, and do not take advantage of opportunities to expand businesses (Bradley et al., 2011a; Latham and Braun, 2008; Zona, 2012).

And the transitory slack expressed by the difference between the availability and demand of financial resources, unlike the correlation analysis between variables was positive with gross profit in Brazilian companies, and zero in Chilean companies. Thus, in Brazilian companies, the higher the temporary financial slack, the greater the organizational gross profit, confirming George (2005) that companies become more proactive in their strategic choices with availability exceeding demand.

The results obtained by Eq. (2) of the regression model shows that the quality expressed by R^2, taken as a variable dependent ROA, presented itself unstable and with a value close to zero for several years of analysis, and companies of both countries (Brazil and Chile). You can indicate that Chilean companies, in general, and specifically in the periods of 2010 and 2011, the high discretionary financial slack had negative influence with the ROA, demonstrating that perhaps companies are investing its cash reserve, maintaining the same reduced to seek return on assets.

In relation to Brazilian companies, in general and specifically in 2009 and 2010, they had the demand positively related resources with the return on assets (ROA). On the other hand, in Chilean companies, the greater the availability of resources, higher the ROA. This result shows that Chilean companies are optimizing their assets to profitability more efficiently than Brazilian companies.

Thus. Brazilian companies are characterized by having a better performance on the return of assets, when there is greater lack of resources, taking advantage of business opportunities and making innovations. However. Chilean companies know how to better cope with the scarcity of resources, not wasting on projects that bring no return and also there is no management optimism and accommodation in relation to times of financial abundance. Finally, the Chilean companies, the greater the difference between the demand and the availability of resources expressed by negative transitory slack, the higher the ROA profitability, confirming George (2005) where Chilean companies find more efficient uses for scarce financial resources.

The results obtained by Eq. (3) of the regression model, compared to the return on equity – ROE in Brazilian companies, had as an important explanatory variable the low discretionary slack by presenting stability in statistically significant relationship (p-value = 0.000) in several years and was negative in 2009 and 2012, and positive in other periods. And in Chilean companies, the low discretionary slack, expect between 2009 and 2011 and also presented statistical relationship with the ROE, however the statistical relationship in 2010 and was negative in 2012 and 2013 were positive. The fact that the magnitude switch in positive or negative, can characterize the discretionary use of the manager (Bourgeois and Singh, 1983; George, 2005; Sharfman et al., 1988) to use the low discretionary financial slack as time profitability strategy sometimes with values high, sometimes with low values, depending on the economic environment (Holmes et al., 2011; Zona, 2012) or business strategy (Natividad, 2013) as cited by (Bradley et al., 2011a; Simsek et al., 2007).

6. Final considerations

This study aims to determine the influence of financial slack in the economic performance of Brazilian and Chilean companies. For this, we conducted a survey of financial indicators of companies listed on THOMSON® basis in the period 2009–2013, a total of 190 Brazilian companies and 104 Chilean open market.

The transitory slack indicator related to demand for resources was the most significant variable and stable influence on gross profit. This result is consistent because the profit is correlated to sales, and the higher the sales, the greater the volume of financial resources needed for the operations of companies. It is concluded that the companies become proactive in new investments and strategic choices with the demand for resources. So when there is no demand for resources, companies tend not to make efficient use of what it has available, not taking advantage of opportunities for growth and innovation.

The high discretionary financial slack, although intermittent, had a negative magnitude in Chilean companies both as an explanatory variable of gross profit as ROE and ROA and Brazilian companies, only in gross profit. Thus, the lower the financial slack, higher the performance, where companies with less financial slack, may be seeking resource optimization for good performance. It is assumed that companies operate with high discretionary financial slack in smaller volumes, investing in the company's operation to maximize profit.

The conclusion from this finding is that high slack of resources favors irrational optimism and organizational accommodation, resulting in the lowest economic performance. Therefore, companies that have less slack resources tend to be and seek competitive advantages and excel as a result of higher economic performance. However, the low discretionary financial slack, the influence of gross profit, alternated in positive and negative magnitudes can characterize the discretionary use of debt levels. The fact that the magnitude switch in positive or negative, can characterize the discretionary use manager (Bourgeois and Singh, 1983; George, 2005; Sharfman et al., 1988).

It is suggested that Brazilian companies, due to the high interest rates on debt capital capitation tend to act in the market with financial slack getting better results reversed in organizational performance. Brazilian companies use the slack funds as competitiveness strategy for investment in

diversification and innovation and suggesting that in this case the high financial slack does not cause waste and management accommodation.

It is concluded that the opposite is also true in the case of companies in Chile, where the preference is for third party capital use in the investment market, as organizations using the low slack of funds tend to get better organizational performance and therefore the justification is that the low slack restricts the ability of management accommodation, keeping the company in constant innovation and competition in the global world competition.

As a suggestion for future researches, it is recommended to study other control variables that could influence the performance and its interaction with the financial slack, as is the case of macroeconomic factors, size of organizations and industrial segment. Not having included in the study such factors also become limitations for the research. You can also check the perception of managers of groups of companies to check other features or possible strategies in the influence of the financial slack on the performance of companies. Moreover, it is necessary to study the behavioral aspects of managers taking organizational decisions about slack, to check in which moments make they decisions about the variability of resource availability.

The study has limitations as the analysis period chosen, which was restricted due to Brazilian companies having changed, in mid-2008, the accounting standards for reporting financial information of open capital companies to the financial market. Moreover, the choice of the short period of analysis for the object relating how financial slack resources on organizational performance can be limited to observing the consequences of investment and research and development on organizational performance, as these factors could be absorbed with a greater longitudinal view.

References

Acharya, V.V., Almeida, H., Campello, M., 2007. Is cash negative debt? A hedging perspective on corporate financial policies. Journal of Financial Intermediation 16, 515–554.

Almeida, H., Campello, M., Weisbach, M., 2004. The cash flow sensitivity of cash. Journal of Finance 59, 1777–1804.

Bastos, D.D., Nakamura, W.T., 2009. Determinantes da estrutura de capital das companhias abertas no Brasil, México e Chile no período 2001–2006. Revista Contabilidade & Finanças-USP 20, 75–94.

Benachenhou, A., 2013. Países Emergentes. Fundação Alexandre de Gusmão, Brasília.

Bourgeois, L.J., 1981. On the measurement of organizational slack. Academy of Management Review 6, 29–39.

Bourgeois, L.J., Singh, J.V., 1983. Organizational slack and political behavior among top management teams. Academy of Management Proceedings, vol. 1983, No. 1. Academy of Management, pp. 43–47.

Bradley, S.W., Aldrich, H., Shepherd, D.A., Wiklund, J., 2011a. Resources, environmental change, and survival: asymmetric paths of young independent and subsidiary organizations. Strategic Management Journal 32, 486–509.

Bradley, S.W., Shepherd, D.A., Wiklund, J., 2011b. The importance of slack for new organizations facing 'tough' environments. Journal of Management Studies 48, 1071–1097.

Bromiley, P., 1991. Testing a causal model of corporate risk taking and performance. Academy of Management Journal 34, 37–59.

Carton, R.B., 2006. Measuring Organizational Performance: Metrics for Entrepreneurship and Strategic Management Research. Edward Elgar Publishing.

Cheng, J., Kesner, I., 1997. Organizational slack and response to environmental shifts: the impact of resource allocation patterns. Journal of Management 23, 1–18.

Coombs, J.E., Mudambi, R., Deeds, D.L., 2006. An examination of the investments in US biotechnology firms by foreign and domestic corporate partners. Journal of Business Venturing 21, 405–428.

Cyert, R.M., March, J.G., 1963. A behavioral theory of the firm, vol. 2, Englewood Cliffs, NJ.

Damodaran, A., 1996. Corporate Finance, 2ª ed. Wiley Series in Finance, EUA.

Daniel, F., Lohrke, F.T., Fornaciari, C.J., Turner, R.A., 2004. Slack resources and firm performance: a meta-analysis. Journal of Business Research 57, 565–574.

Davidson, P., 1991. A technical definition of uncertainty and the long-run non-neutrality of money. In: Inflation, Open Economies and Resources. Palgrave Macmillan, UK, pp. 159–170.

Davis, G., Stout, S., 1992. Organization theory and the market for corporate control: a dynamic analysis of large takeover targets, 1980–1990. Administrative Science Quarterly 37, 605–633.

Deephouse, D.L., Wiseman, R.M., 2000. Comparing alternative explanations for accounting risk-return relations. Journal of Economic Behavior & Organization 42, 463–482.

Elbanna, S., 2012. Slack, planning and organizational performance: evidence from the Arab Middle East. European Management Review 9, 99–115.

George, G., 2005. Slack resources and the performance of privately held firms. Academy of Management Journal 48, 661–676.

Graham, J.R., Harvey, C.R., 2001. The theory and practice of corporate finance: evidence from the field. Journal of Financial Economics 60, 187–243.

Gral, B., 2013. How Financial Slack Affects Corporate Performance: An Examination in an Uncertain and Resource Scarce Environment. Springer Science & Business Media.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L., 2005. Análise multivariada de dados. Bookman.

Holmes, R.M., Bromiley, P., Devers, C.E., Holcomb, T.R., McGuire, J.B., 2011. Management theory applications of prospect theory: accomplishments, challenges, and opportunities. Journal of Management 37, 1069–1107.

Jensen, M.C., 1986. Agency cost of free cash flow, corporate finance, and takeovers. Corporate Finance, and Takeovers. American Economic Review 76.

Ju, M., Zhao, H., 2009. Behind organizational slack and firm performance in China: the moderating roles of ownership and competitive intensity. Asia Pacific Journal of Management 26, 701–717.

Khurana, I.K., Martin, X., Pereira, R., 2006. Financial development and the cash flow sensitivity of cash. Journal of Financial and Quantitative Analysis 41, 787–808.

Kim, H., Kim, H., Lee, P.M., 2008. Ownership structure and the relationship between financial slack and R&D investments: evidence from Korean firms. Organization Science 19, 404–418.

Latham, S.F., Braun, M.R., 2008. The performance implications of financial slack during economic recession and recovery: observations from the software industry (2001–2003). Journal of Managerial Issues, 30–50.

Leonard-Baton, D., 1992. Core competencies and core rigidities: a paradox in new product development. Strategic Management Journal 13, 111–125.

Martínez, J.I., Stöhr, B.S., Quiroga, B.F., 2007. Family ownership and firm performance: evidence from public companies in Chile. Family Business Review 20, 83–94.

McMullen, J.S., Shepherd, D.A., 2006. Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. Academy of Management Review 31, 132–152.

Natividad, G., 2013. Financial slack, strategy, and competition in movie distribution. Organization Science 24, 846–864.

Nohria, N., Gulati, R., 1996. Is slack good or bad for innovation? Academy of Management Journal 39, 1245–1264.

Opler, T., Pinkowitz, L., Stulz, R., Williamson, R., 1999. The determinants and implications of corporate cash holdings. Journal of Financial Economics 52, 3–46.

Patzelt, H., Shepherd, D.A., Deeds, D., Bradley, S.W., 2008. Financial slack and venture managers' decisions to seek a new alliance. Journal of Business Venturing 23, 465–481.

Rondinel, R., Sonaglio, C., Pedroso, L., 2005. Economia chilena: exemplo a ser seguido? Economia e Desenvolvimento 17, 26–48.

Schwab, K. (Ed.), 2015. The global competitiveness report 2014–2015. World Economic Forum, Geneva, Available at: http://reports.weforum.org/global-competitiveness-report-2014-2015/rankings (accessed 02.07.15).

Sharfman, M.P., Wolf, G., Chase, R.B., Tansik, D.A., 1988. Antecedents of organizational slack. Academy of Management Review 13, 601–614.

Sicsú, J., Castelar, A., 2009. Sociedade e economia: estratégias de crescimento e desenvolvimento. Ipea, Brasília.

Simsek, Z., Veiga, J.F., Lubatkin, M.H., 2007. The impact of managerial environmental perceptions on corporate entrepreneurship: towards understanding discretionary slack's pivotal role. Journal of Management Studies 44, 1398–1424.

Sirmon, D.G., Hitt, M.A., Ireland, R.D., 2007. Managing firm resources in dynamic environments to create value: looking inside the black box. Academy of Management Review 32, 273–292.

Su, Z., Xie, E., Li, Y., 2009. Organizational slack and firm performance during institutional transitions. Asia Pacific Journal of Management 26, 75–91.

Tan, J., Peng, M.W., 2003. Organizational slack and firm performance during economic transitions: two studies from an emerging economy. Strategic Management Journal 24, 1249–1263.

Terra, P.R.S., 2007. Estrutura de capital e fatores macroeconômicos na América Latina. Revista de Administração 42, 192–204.

Vanacker, T., Collewaert, V., Paeleman, I., 2013. The relationship between slack resources and the performance of entrepreneurial firms: the role of venture capital and angel investors. Journal of Management Studies 50, 1070–1096.

Wefald, A.J., Katz, J.P., Downey, R.G., Rust, K.G., 2010. Organizational slack, firm performance, and the role of industry. Journal of Managerial Issues, 70–87.

Wiklund, J., Baker, T., Shepherd, D., 2010. The age-effect of financial indicators as buffers against the liability of newness. Journal of Business Venturing 25, 423–437.

Zhong, H., 2011. The relationship between slack resources and performance: an empirical study from China. International Journal of Modern Education and Computer Science (IJMECS) 3.

Zona, F., 2012. Corporate investing as a response to economic downturn: prospect theory, the behavioural agency model and the role of financial slack. British Journal of Management 23 (S1), S42–S57.