

## Cash, liquidity and uncertain scenarios: the perception of financial managers in Brazil

### Abstract

The traditional literature of corporate finance often turns to the decision-making process of long-term public companies, for which secondary data are available. Little is known about the validity of these findings for non-listed companies, although they are many, especially in Latin America. Through a survey applied to managers of 32 unlisted Brazilian companies we analyzed cash management policies under the administrative perspective: what factors support the decision of corporate liquidity? The results suggest that companies maintain minimum cash for operation, but uncertainty is crucial in resource allocation decision about liquid assets.

Key-words: cash, liquidity, uncertainty, working capital.

### 1. INTRODUCTION

The traditional literature of corporate finance often turns to long-term decision-making. Although authors like Lazaridis and Tryfonidis (2006), Anand and Malhotra (2007), Padachi (2006) and Garcia-Teruel and Martinez-Solano (2007), among others, emphasize the important role of working capital management for the performance of companies, studies of financial management does not focus on short-term capital structure.

Another noticeable gap in finance research, especially in Brazil, is the study of non-listed companies. Most researchers turns to public companies, for which data are available. Little is understood about the validity of these findings for non-listed companies, even though they are numerous in the country. According to Howorth and Westhead (2003), specifically in studies related to working capital, there are no consensual models that support the development of hypotheses to be tested. Understanding the working capital routine in small businesses is essential.

In one of the first studies that addressed the issue, Keynes (1936) suggests that companies choose to keep their assets in cash for two purposes: reducing transaction costs - arising from the liquidation of assets when there is need for payments - and prevention against unexpected demands that may occur.

Companies with financial constraints (FAZZARI; HUBBARD; PETERSEN, 1987) or limited access to external financing have a higher propensity to hold liquid assets in its structure. Confirming this hypothesis, Bigelli and Sánchez-Vidal (2012) analyzed a sample of Italian private companies between 1996 and 2005, concluding that smaller companies, probably more risky and restricted to external financing tend to use more other than cash in its operations.

In times of higher uncertainty, we can expect two effects, no consensus among authors: i) increase in working capital, to prevent uncertain scenarios; ii) reduction of working capital, when we suppose possible loss of monetary power.

Turning to small businesses, Filbeck and Krueger (2005) studied how the working capital responds to macroeconomic scenario changes. In an expansion scenario the author found increase in liquidity in these companies, while there was no change in recessionary times. The author indicated that the smaller companies working capital policies may not meet traditional expectations based on literature.

Given this possible divergence, it is relevant to understand in what conditions financial managers choose to increase or decrease the net assets of the company they manage. Through a survey conducted with financial managers from 29 countries, Lins, Servaes and Tufano (2010) attempted to answer this question (and what leads companies to opt for cash instead of credit lines). The results indicated that companies choose credit when they are financing investments, but ensure liquidity through non-operating cash as a way to hedge. Thus, the cash increase was related to protection against uncertainty of future flows - resulted from different sources of uncertainty.

In order to contribute to the working capital literature of small and medium companies and compare them to those who went public, we conducted a survey with directors and financial managers of 32 private companies in Brazil. Respondents were asked about the time directed to working capital management, what supports the decision to hold cash and liquid resources in the operation, how they evaluate the situation of their companies in comparison to the market - in terms of the need for fundraising/ monetary loss - and what they expect about macroeconomic indicators in the next year.

Similar to Lins, Servaes and Tufano (2010), this paper seeks evidence on unlisted company about how managers take decisions on working capital and which external variables have an impact on their decisions.

## 2. WORKING CAPITAL AND UNCERTAINTY

Studies that explain the decision-making process of maintaining resources in cash are usually based on non-operational cash holdings, ie. cash surpluses. The distinction between operating cash and excess of cash, for not being explicit in the financial statements, is rarely addressed (ROWS; Servaes; TUFANO, 2010).

Garcia-Teruel and Martinez-Solano (2007) and Faulkender and Wang (2006) are examples of works that highlight the importance of working capital management on business performance. Garcia-Teruel and Martinez-Solano (2007) empirically tested the effects of working capital policies on the profitability of small and medium-sized Spanish companies. The authors demonstrated that managers are able to create value to businesses reducing their inventory and the number of days to pay bills. Faulkender and Wang (2006) studied the changes in the marginal value of cash holdings that results from different financial policies. According to the authors the marginal value of cash decreases as cash holdings, debt, and access to capital markets increase.

Keynes (1936) suggests that companies choose to keep their cash in assets for two purposes: reducing transaction costs - arising from the liquidation of assets when there is need for payments - and prevention against unexpected demands that may occur.

Following this reasoning, companies with financial constraints (FAZZARI; HUBBARD; PETERSEN, 1987) or limited access to external financing, have a higher propensity to hold liquid assets in its structure.

Kim, Mauer and Sherman (1998) modeled the decision of firms to invest in liquid assets when external funding becomes costly. The model provides a balance between the tradeoff between the low return of net assets and the benefits to minimize external financing costs.

The model predicts that the amount allocated in net assets is an increasing function of external financing costs, the variance of future cash flows and the return of future investment opportunities. On the other hand, it is a decreasing function of the return difference between fixed assets and liquid assets.

For a sample of private Italian companies between the years 1996 and 2005, Bigelli and Sanchez-Vidal (2012) concluded that smaller companies, more risky and possibly more restricted to external financing tend to use more cash than the others in their operations.

Using as a sample not private firms, but those who have resorted to the capital market for financing, Almeida, Campello and Weisbach (2004) concluded that the cash holdings presented by companies suffer variation in economic business cycles. According to the authors, companies that have financial constraints have propensity to cash retention intensified in periods of negative shocks on the economy.

Similar to Lins, Servaes and Tufano (2010), Powell and Baker (2010) conducted interviews with CEOs of the 1,000 largest US companies. The results supported some empirical evidence: the management view seems to support a tradeoff model, in which companies with greater growth opportunities, or facing greater uncertainty choose to maintain higher liquidity resources.

Also studying the influence of macroeconomic uncertainty about the cash holdings of non-financial companies open, Baum et al. (2004) found homogeneity in the conservative behavior that companies show in response to macroeconomic conditions of uncertainty. Chen and Mahajan (2010) point to the GDP growth, inflation, short-term interest rate, credit and interest rate as influential in liquidity from 34 countries companies active from 1994

to 2005. Baum et al. (2004), finding similar results suggest that under conditions of uncertainty managers lose the ability to evaluate specific information to the decision to cash holdings of firms adopting similar practices to competitors. However, in regular market conditions, may adjust the liquidity of assets as particular characteristics of the business, making the most efficient allocation.

### 3. METHODOLOGY

A survey was made available online and directed to financial managers in order to understand how much time they dedicate to issues related to working capital, what supports the decision of holding cash and liquid resources in the operation of companies, and how they see themselves in comparison to other the market, in terms of need for fundraising and monetary loss and how are their expectations of some macroeconomic indicators next year.

A nominal e-mail was sent to 152 financial managers of private companies. The e-mail contained a link that redirected the respondents to our study center website, where they completed the questionnaire. The main findings are as follow.

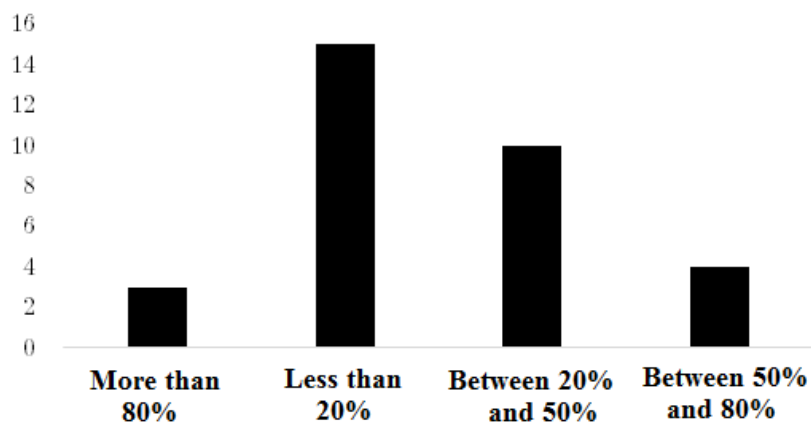
#### 3. 1 *Survey Responses*

##### 3.1.1 Time dedicated to working capital

Closed companies need to constantly monitor their working capital policy, as they usually keep in their operations greater proportion of liquid assets than listed companies (PEEL; WILSON; HOWORTH, 2000). They also tend to be less liquid, have a higher cash volatility and rely more on short-term debt.

Contrary to expectations, the sample managers indicated that they devote small time to working capital management.

**Figure 1- Time dedicate to working capital decisions**



This result may suggest that managers do not continuously adjusts its cash policy, and its level is given as a result of the operation.

##### 3.1.2 Determining factors in the decision to hold cash

We asked the managers about the importance of some listed criteria in deciding of how much of the financial resources of the company will be allocated in liquid assets. Eight criteria were specified, based on the work of Lins, Servaes and Tufano (2010). For each item, respondents assigned a degree of importance which was scored from 0 to 4, where 0 means "not important" and 4 "essential."

**Tabel 1- Important factors in the cash decision**

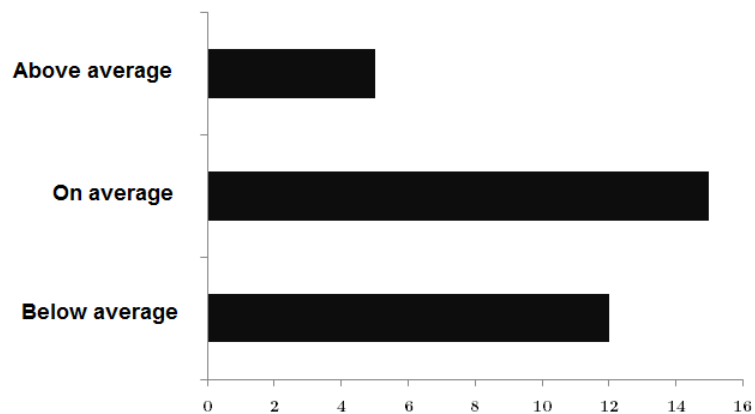
<b>Criteria</b>	<b>Importance</b>
Uncertainty of cash flow	120
Minimum cash for operation	114
Exchange rate	103
Difference between capitation and application rate	102
Inflation rates	92
Investment opportunities	90
Inventory (renewal period)	74
Cash level of competitors	31

Results are similar to Lins, Servaes and Tufano (2010) and Powell and Baker (2010): uncertainty about future cash flows is shown as the most important factor for decision. These findings are similar to the empirical findings of Baum et al. (2004), Chen and Mahajan (2010) and Almeida, Campello and Weisbach (2004). The high importance attached to maintaining "minimum cash for operation" suggests that managers maintain the minimum required in short-term funds, and probably alter this position only in uncertain scenarios.

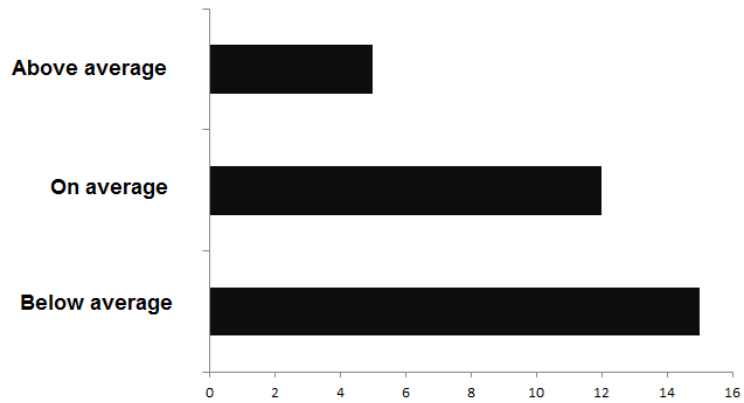
### 3.1.3 Positioning relative to the market

Considering the importance of the need for fund-raising on working capital decisions, especially in times of uncertainty, managers were asked about how they see their need to fund-raising and their risk of monetary loss - comparatively to the market. Demonstrating confidence, most of them consider the need to raise funds lower or equivalent to the average of other companies, and its exposure to monetary loss below average.

**Figure 2- Fund-raising need**



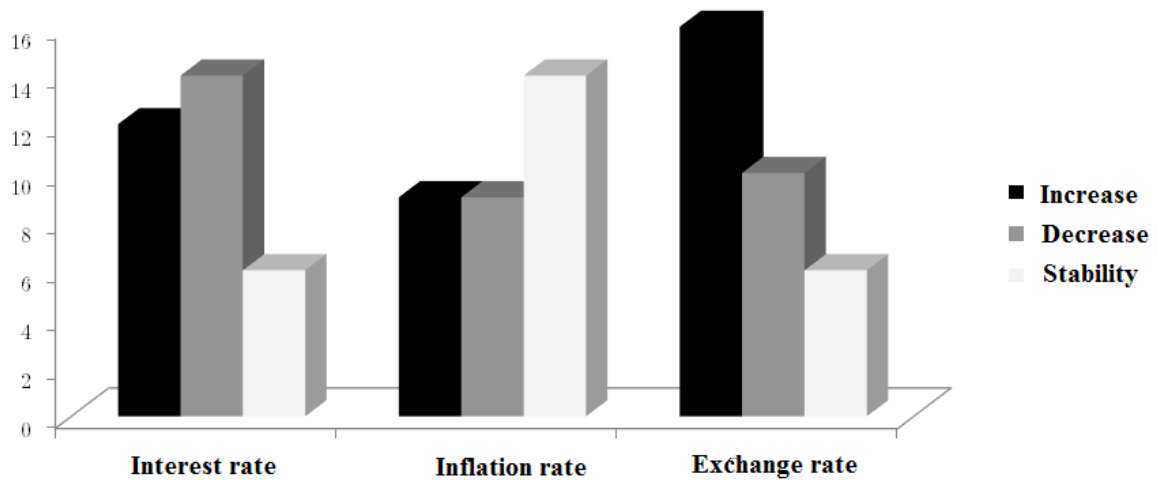
**Figure 3- Risk of monetary loss**



### 3.1.4 Macroeconomic expectations

Most managers indicated expectations of stable interest rates, decrease in inflation rates and increase in the price of the dollar in the next year.

**Figure 4 - Macroeconomic expectations**



For the dollar, previously mentioned as the third most important factor in the cash management decision, managers signaled expectations of high, which apparently does not alter the optimism reported on issues that addressed the need for fundraising and risk of monetary loss.

## 4. DISCUSSION OF RESULTS

The finance literature has much of its theories informed by empirical tests with public companies - mainly due to the ease of access to secondary data. In addition, capital structure theories focus on the study of long term assets and liabilities, leaving aside the working capital management. When we left the universe of companies listed on the stock exchange, we are faced with companies whose assets tend to have higher liquidity and therefore for which the management of working capital is even more relevant.

This work proposes to conduct a survey with financial managers of some Brazilian companies not listed on the stock exchange, to understand which factors are considered for working capital decisions, especially about how much resources will be allocated in highly liquid assets.

The main contribution of this research is also part of its empirical limitations. It contributes bringing to the agenda for discussion firms whose financial data is not open - contrary to the vast majority of listed companies, which in turn are recurrent in scientific papers. When we analyze private companies we suffer from the unavailability of data and small sample sizes. Although carried out with only 32 companies, our research discusses the cash management policies under the administrative perspective: what factors support the decision of corporate liquidity?

The results suggest that managers spend little of their time on working capital decisions and are optimistic about the future funding-raise needs for and risk of income loss. Optimism was identified even in time when managers signaled expectations of a dollar price - jointly to the recognize of the extreme importance of exchange rate changes in the operations of their companies.

While it is prudent to consider carefully the findings reported here due to the relatively small sample, they are contrary to the initially expected. In addition we've found that private companies maintain a minimum cash for operation, but the cash flow uncertainties are the predominant factor in resource allocation decision in highly liquid assets. These results are consistent with the empirical findings of Baum et al. (2004), Almeida, Campello and Weisbach (2004), Chen and Mahajan (2010), Lins, Servaes and Tufano (2010) and Powell and Baker (2010).

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