

Cash holding and Firm's Value: Evidence from Tunisian Market

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ABSTRACT

This paper mainly aims to explore the relationship between cash holdings, firm value and corporate governance of Tunisian firms. We empirically show the existence of an optimal level of cash that maximizes firm's value. To test the validity of the identified theoretical assumptions, an empirical study based on a sample of listed Tunisian firms over the period 2003-2013 is done. Our results show a concave relationship between cash holding and firm's value which states the existence of an optimal level of cash holding. In addition, we prove that deviations from this optimal level of cash holding decrease firm's value.

Keywords: *Ownership structure, financial constraints, Firm's value, corporate governance*

1. INTRODUCTION

Cash resources are critical for any company. The financing decisions about allocation of cash resources are one of the main tasks of the company. It is imperative to determine the best way to use cash balances. The purpose of managers about these tasks should be increasing the value of the company. For example, stockholders would like to receive dividends if a company cannot use the excess cash to take profitable investment. However, considering agency problem, managers would consider their own interests ([17]). Paying more cash dividends would reduce their ability to hold excess cash. Thus, determining how to spend a company's cash balances is essential in reducing the conflicts between investors and managers. Corporate Cash holding has benefits and costs may, therefore have an optimal level at which the company's value will be maximized. The company holds cash when external financing is costly. It improves firms' capabilities to take the opportunity with a net positive present value (NPV) to invest when they are not able to generate sufficient internal funds to finance these investments. However, as suggested by [19], [18] and [26]), the cash balances could provide funds for managers to invest in low-income projects to generate private benefits rather than to increase the company's value. Two positions are, then, defined with respect to the impact of the cash holding in the company's value which leads us to conclude that the cash holding is not uniformly beneficial to the company's value.

Several studies have applied to find what are the values that the shareholders will place on the corporate cash holding? And how is this value different through companies? In this context, the work of [29], [30], [3], [20], [10], [11], [8], [5] and [32]) exanimate the marginal value of cash by taking into account the specific characteristics of the firms and the level of information asymmetry. They also check corporate governance as a key factor in corporate cash holding policy. In this article, we try actually to analyze the effects of cash holding on values of Tunisian companies by taking into account the corporate governance framework. We empirically show that companies have an optimal level of cash in which they maximize their value. We exhibit a non-linear relationship (concave) between the cash holding and the

value of the firm. We found a quadratic relationship (concave) which reveals that the deviation from the inflection point (the maximum) reduces the value of the firm. In the second section, we propose to explain the effects of cash holding on the value of the firm. At the third section, we will look at the presentation of the literature review and our assumptions. The empirical analysis of the value of liquidity will be discussed at the fourth section. We will present the empirical methodology to be followed and the presentation and interpretation of results.

2. THEORETICAL BACKGROUND

The existence of imperfections in the financial markets identified in forms of agency and information asymmetry problems can cripple companies to systematically finance from the external financing market.

Faced with asymmetric information, firms are risking underinvestment if they are financially constrained. These companies, unable to raise the necessary funds from the external market to realize their investments are going to be motivated to hold cash as a precaution. Besides, this precautionary motif for the use of cash as a means of financing investment, extensive studies have tried to analyze the cash holding in an optical managerial opportunism. Managers with empire building preferences will use all the available resources for investment projects beyond a level that would maximize shareholder value ([17]). Averse to risks, these managers may over-invest avoiding risky choices (projects with a positive NPV) for project that may be in some cases associated with a negative NPV. Overinvestment and underinvestment are both a value-destroying means. They have a negative impact on business performance.

2.1 Cash Holding: Tool to Promote Investment and Growth

The theoretical framework established by [19], [24] and [25] distinguishes the effect of asymmetric information on the cost of corporate financing. They mentioned that the information asymmetry can generate underinvestment problems. Information asymmetries can lead to state that investment projects with positive NPV should not be undertaken ([23]). The existence of

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informational problem creates conflicts of interests between shareholders and creditors and between existing shareholders and potential ones. These conflicts result in asset substitution problems of moral hazard and adverse selection that result in underinvestment ([23]). The asymmetric information would create costs for the company, because creditors will discount the possible replacement of assets. They would raise the interest rates, ration credit or impose stringent conditions in terms of investment fundings which may limit the ability of shareholders to develop their investment projects. [36] converts that if creditors and shareholders were in conflict, creditors will demand a higher premium because they do not have enough information to distinguish the quality of the various investment projects of the company.

This additional premium drives companies to possibly forego positive NPV investments, if the capital expenditure is higher than the internal funds available.

The company is forced to give up these investment projects rather than issuing risky debt. On the other hand, in case of adverse selection problems the company could forego positive NPV projects because of the asymmetry of information on investment projects and assets in place ([25]). A large body of literature like the work of [6] and [1] demonstrated that the extent of the financial constraints increase the gap between the costs of internal and external resources and that cash holding policy is important in financing investments and value creation.

2.2 Hypothesis of Free Cash Flow and Risk Aversion

The theory of Jensen's free cash flow (1986) stipulates that managers are motivated to overspend available funds on unprofitable investment projects. This theory argues that conflicts of interest between investors and managers are particularly serious when managers accumulate cash to expand their company beyond the optimal size while pursuing their private benefits. The arguments of this theory of free cash flow have seen further developed and revisited by [38], [13], [14] and [40]. These studies further refine the approach of [17], incorporating the concept of preference for the Empire Building, supposed to characterize the opportunistic behavior of the leaders of the firm. In fact, managers seek to grow their wealth mainly composed of human capital and their share in the capital. Their aversion to risk is a function of their wealth invested in the company. This risk aversion is even higher than the proportion of shares held in the company is larger ([37] [35]). To this extent, the managers, trying to maximize their income will attempt to minimize the volatility of their profits. Thus, they will be encouraged to reduce some of the specific risk to which they are exposed. In this case, and according to their own discretion, managers are reluctant to pay the funds and motivated to retain cash to use it as sources of financing investment, even when there is no available positive NPV projects. [18] argues that the construction of Empire Building will lead managers to spend essentially all the available funds for investment of projects. It specifies that

these managers will also have to distort the reported financial information to increase their compensation, obtain benefits and secure their jobs. More the degree of information asymmetry increases, more it becomes difficult for outsiders to distinguish between the investments that destroy value and those that create value.

Shareholders may be unable to determine whether the high cash reserves are close to the amount required to run the company or if they are the result of risk aversion ([7]). The agency problems reduce the value of corporate cash holding as shareholders can anticipate the inefficient use of cash holding ([31]) by the leaders.

2.3 Cash Holding and Firm Value

In the context of the existence of information asymmetry, holding cash for precautionary reasons allows companies to deal with unexpected contingencies and do not risk the under-investment. [25] shows that these financial slack have value because, on the one hand, they allow companies to take positive NPV opportunities to which they might give up because of external financing costs. On the other hand the hypothesis of free cash flow recommends that the cash holding can be seen as a source of funding available for the manager who for his own interest over-invests in projects that are not beneficial to shareholders. Both investment issues associated with conflict between the major stakeholders have a non-linear impact on the company's value. As a result, each time when a problem of under-investment (positive NPV projects will not be considered) or overinvestment (negative NPV projects will not be rejected) arises, the company's value will be affected. In the light of these assumptions, the cash holding has been identified not to be uniformly beneficial to the company's value. The optimal level of cash holding of a company can be seen as a compromise between all of these costs and various benefits. If financial markets are perfect, the cash held by the company would have a value of a unit for unit. In this context, the cash holding is irrelevant. In case of need for cash to finance projects with positive NPV, investors can procure without constraints. However, if financial markets are imperfect; where there are information asymmetries and agency conflicts; a held unit of liquidity by the company can't be assessed as a unit by shareholders. [29], in their analysis of corporate cash holding, argue that investors implicitly attach a value to the cash holding, taking into account the probable manner of its management by the managers. These authors mention that there may be valuation effects of cash holding because of their impact on the investment policy. The advantage that cash holding provided suggests that liquidity unit owned by a company can be assessed more than one unit by its shareholders. The value that shareholders place on a company's cash will be based on certain characteristics of the company. More specifically, according to [29], the value of cash holding should be linked to investment opportunities of the firm, the predictability of these opportunities, the scale of the conflict between creditors and shareholders and the access of the company to the capital markets. [8] report that for companies facing

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higher financial constraints, particularly those with significant investment opportunities, the marginal value of cash held should be higher than for companies that can easily mobilize additional capital. They argue the advances that financial constraints are often associated with existing asymmetric information between company and capital providers, which can be considered as equivalent to higher transaction costs to access external capital. From another perspective, given the vulnerability of cash that is easily exploitable for private profits, [29] argue that they should be valued at a discount because external investors own a portion of the cash of the company and the rest is held by the controlling shareholders in the form of future private benefits. They argue that in the presence of agency problems, where the interests of the controlling shareholder and external investors are not perfectly aligned, the controlling shareholders will increase their welfare at the expense of outside investors. Furthermore, as the controlling shareholders extract more private benefits, estimation of external investors for the company value will fall. This value is based on the system of governance in place and the level of protection for shareholders ([29]).

3. LITERATURE REVIEW AND FORMULATION OF HYPOTHESES

Recent empirical studies have presented analysis of the use of excess liquidity on the value of the company taking into account simultaneously the underinvestment resulting from funding constraints and overinvestment resulting from the managerial entrenchment. For example, [5] examine the market value of cash according to the variation of the asymmetric information in time and the variables specific to the firm. They use an international sample with more than 8,500 companies from 45 countries over the period from 1995 to 2005. They present results while supporting the assumption that cash held by companies admit a lower value in countries with a higher degree of information asymmetry. They show that in states with a higher degree of information asymmetry, cash held by the company is less valued than in countries with a low degree of information asymmetry. [34], in turn, presented a study that examines the relationship between surplus liquidity holdings and investment behavior based on financial constraints and managerial entrenchment.

Their empirical evidence suggests that both dimensions have potential effects on total investment and capital spending when companies hold excess cash. They found that excess cash is clearly sensitive to both capital and total asset, especially for firms with both financial constraints and problem management entrenchment. Their results confirm the hypothesis of the Empire Building.

They show that the sensitivity of investment to excess cash admits a positive sign in the case of firms with higher levels of entrenchment, indicating a tendency of overinvestment. Recently, [27] sought to understand how the director-shareholder conflicts distort corporate cash holding decisions and determine whether those distortions in turn affect shareholder value. They argue

that a manager with a taste for empire building, falsify optimal investment decisions which are closely related to cash holding decisions. The authors suggest that depending on the motivation of empire building, the manager will also tend to increase the size of the companies to use external funds rather than cash to finance its growth. They conclude that in contrast to other advances, cash holding decisions are more affected by the private benefits that manager acquire from diversion of resources (consumption of perquisites) for empire building.

Focusing on managerial opportunistic behavior, [4], [20], [3], [11], [33] and [16] examined how corporate governance affects the value of the firm by analyzing the value and the use of cash holding across the companies with good and bad governance. They found that companies with good corporate governance often hold less cash and therefore have a higher value. Harford et al (2007), for example, find that US companies with the strongest corporate governance structures have the smaller cash holding reserves. [33] find that the value of the excess liquidity is positively related to the score of the protection of the OPA only. They find that the value of 1 euro surplus liquidity in a poorly governed company is valued at only 0.89 euros while the value is 1.45 euro for a well-governed company. The same result was presented by [3], who also shows that holding liquid assets in US companies are evaluated in companies with a low index value Gompers, Ishii and Metrick (2003). Furthermore, the analysis of specific measures for the protection of shareholders as one of the important determinants of detention liquidity and its evaluation worldwide by [4], [6], [29], [8], [22] and [15] among others show that differences between countries in the legal effectiveness have an impact on the value of the cash reserves.

In the same framework, literature of [2] presents an analysis of the role of governance of several major shareholders. They focus on the impact of the presence of several major shareholders (PGA) on the evaluation of liquidity. [2] found that the presence of PGA improves the valuation of corporate cash holding. [10] also show that the market value of a (unit) dollar of cash is higher for companies whose debt has a shorter maturity. They determine that the market value of an additional (unit) dollar of cash is consistent with the proposition that cash is particularly useful for companies who face a greater risk of refinancing. [21] tested empirically a nonlinear relationship (concave) between cash holding and the company's value. They mentioned that the inflection point (target level of cash holding) will represent the level that maximize the value of the firm. In addition, deviations from this optimal level reduce the value of companies.

Companies can increase their market value by simple return to the optimal level of liquidity. They report that companies have an optimal level of liquidity that maximizes their values. The authors show that to a lower levels of cash; the reasons for transactions and precautionary will predominate, and therefore an increase

in cash levels results in an increases in firm value. They stated also that to higher levels of liquidity, the opportunity cost and free cash flow will predominate.

Then, an increased cash level is followed by a company's value reductions. [28] find that both excess and insufficient liquidity are significantly associated with future negative returns. Their results are more significant for companies with insufficient liquidity. The authors postpone that deviate from an optimal level of liquidity may reduce shareholders' value.

4. DATA AND METHODOLOGY

4.1 Data

To test the association cash holding and value we use a sample of Tunisian companies listed. We select of 30 companies over the period of 10 years from 2003 to 2013. We excluded the financial firms and the observations missing for any variable from the sample.

4.2 Methodology

We will try to analyze the impact of cash holding on company value. We examine the existence of an optimal level of cash holding that maximizes firm value.

First, we test the existence of a nonlinear relationship (concave) between firm value and cash holding. We expect a positive relationship between the liquid assets held and value; when we stand below the optimal level of cash. Similarly, we expect a negative association between the detained liquidity and value, when we are over the optimal level of cash holding.

Secondly, we study the relationship between the gaps on both sides of the optimal level of liquidity and value of the company, following the methodology developed by [39] and subsequently adopted by [21] to study the effect of deviations from the optimal level and the company's value. By analogy with these authors we presume that the difference of optimum liquidity detention can occur in two situations: (1) the situation above optimal when effective cash holding is higher than the optimal level of cash holding, (2) the situation below the optimal when the detained liquidity is below the optimal level of optimal liquidity. We will test the relationship between the gaps on both sides of optimal detained liquidity and firm's value.

Model 1

$$VALU_{it} = c + \beta_1 LIQI_{it} + \beta_2 LIQI_{it}^2 + \beta_3 LEVI + \beta_4 CROI_{it} + \beta_5 TAIL_{it} + \eta_i + \lambda_t + \xi_{it}$$

LIQI variables represent the cash ratio $LIQI^2$: the square value of cash holding to test the curvilinear relationship between cash and the company's value. CFLO represents Cash flow, ALIQ extents other liquid assets, LEVI is the company leverage, TAIL represent size of the company, CROI is the company's growth

opportunities, η_i is the unobservable heterogeneity. λ_t is a binary variable that changes over time but is equal for all companies in each of the periods and ξ_{it} is the error term. We use the reference specification for the determinants of liquidity on the basis of previous studies ([21]) to collect the residuals. This residuals are included in model 2. As stated by [21], we define DEV as the absolute value of the residuals. To do this, we consider the following model:

Model 2

$$VALU_{it} = c + \beta_1 DEV_{it} + \beta_2 CROI_{it} + \beta_3 LEVI + \beta_4 TAIL_{it} + \eta_i + \lambda_t + \xi_{it}$$

β_1 is expected to be negative in model 2, which implies a negative relationship between the gap from the optimal level of cash ratio and the company's value. Then, to analyze the effect of gaps from the optimum on firm value; we include INT (interaction term) in model 4 which is defined as a binary variable which takes 1 if residuals are positive and 0 for negative residuals. Model 3 is as follows:

Model 3

$$VALU_{it} = c + \beta_1 DEV_{it} + \beta_2 INT + \beta_3 CROI_{it} + \beta_4 LEVI + \beta_5 TAIL_{it} + \eta_i + \lambda_t + \xi_{it}$$

5. DESCRIPTIVE AND REGRESSION RESULTS

The various descriptive statistics averages related to all the variables of our model are presented in Table 2.

Table 1 : Descriptive statistics

	Obs	Mean	Std. Dev.	Min	Max
LIQI	330	0.1065948	0.1204387	0.0002486	0.683511
LEVI	330	0.536832	0.3329487	0.0070132	2.41353
CFLO	330	0.0762734	0.0836256	(0.4063967)	0.414220
CROI	330	1.43801	0.788 497	0.0 937619	6.762115
TAIL	330	11.08641	0.9 390 694	9.589029	14.29894
VALU	330	1.848791	1.929777	-1.774457	7.59405

Table 1 reports the average, maximum and minimum values and standard deviations of variables of the study in time for the entire sample. It reveals that the average liquid ratio is 10.6%. Tunisian companies show a motivation to accumulate cash. We note that the value of Tunisian companies has an average of 1.84. The minimum and maximum values show a significant difference between companies. The average leverage of 53% indicates a Tunisian company preference to debt. Growth opportunities and size has an average of a respective value of 1.43 and 11.08.

Table 2 shows the results of the regression of model 1. In the first column, we present the regression results of the first model for the whole sample. Columns 2 and 3 postpone regressions for sub samples companies with or without controlling shareholders.

Table 2: Analysis of quadratic regression: cash holding and value of the firm

Variable	(1)	(2)	(3)
VALU			
LIQI	5.592886 (1.49)	7.395206 (1.72)**	16.53538 (0.73)
LIQI ²	-5.079265 (-2.44)***	-3.855744 (-1.72)**	-12.05239 (-1.43)
CROI	1.470073 (9.20)***	1.851991 (38.45)***	4.075964 (5.58)***
TAIL	0.9756043 (3.81)***	0.0746202 (0.78)	1.413573 (1.90)**
LEVI	-1.292138 (-2.22)**	2.328377 (5.95)***	-6.223823 (-4.15)***
C	-8.810919 (-3.20)***	-2.373807 (-2.05)**	-16.25492 (-1.94)**
	R-sq = 0.3718	R-sq = 0.3346	R-sq = 0.3326

With VALU represents value of companies= we use the ratio market value of equity divided by book value. LIQI: cash holding Ratio= cash and marketable securities to assets. LEVI: leverage= total debt to total assets. TAIL: size of firm = the natural log of total assets. CROI: measuring growth opportunities= the Market-to-book ratio. Significance levels: 1% ***, 5%** and 10% *.

As expected, the coefficient of LIQI is positive, while that of LIQI² is negative. We can state that cash maintaining increases the value of the company until a breakpoint after its maximum, the increase in cash holding reduced the company's value. The threshold for our quadratic function is obtained by the fraction $\beta_1 / -2\beta_2$. Thus, the optimal point that maximizes the value of companies is 0.55. We conclude that the Tunisian companies could increase their value by holding more cash. To finance their activities, these firms hold cash reserves. The results found are consistent with our assumptions. The cash holding allows the company to take advantage of investment opportunities that arise without having to bear the cost of running out of cash flow or the costs of access to external capital markets.

This result is in line with the argument advanced by [25] stating that the financial slack are valuable because they allow companies to seize opportunities with positive NPV that they might, otherwise, be missed because of financing external costs. Thus, cash unit owned by Tunisian companies is valued at more than one unit by the shareholders. In an imperfect market, cash is held by Tunisian firms for transaction purposes and for precautionary reasons. Beyond the optimal point the costs

generated by cash holding (such as agency costs or opportunity costs) dominate their benefits. The company has no incentive to hold excess cash beyond the maximum threshold. We observe a negative and significant relationship to the order of 1%. Increasing the cash holding led to a decline in the company's value. This result is part of the advanced [17], which argues that shareholders may want the company to distribute its cash because the free cash flow will be wasted by the manager. Our result is consistent too with the finding established by [12] which provides support to the argument of [17], showing that cash rich firm tend to make acquisitions decreasing value which leads the shareholders to value the cash holding less than a dollar for a dollar. The quadratic relationship (concave) between cash holding and the observed value leads us to conclude that cash holding creates value to the point where the cost of holding cash may outweigh the benefits and it results in assessing a unit of cash in less than one unit. We believe that the Tunisian companies hold cash as a precaution more than to take advantage of economies of scale. On the one hand, Tunisian companies avoid underinvestment problems through cash holding which mean that any increase in cash balances is followed by increases in company's value. On the other hand, for higher levels of cash, the risk aversion assumption and free cash flow will prevail. Companies may face overinvestment problems. The bottom line is that growth options, agency costs, and market frictions could affect the value that shareholders place on cash holding of a company.

In line with previous empirical studies, control variables in our model are consistent with other studies that analyze the value of companies. LEVI is negatively and significantly correlated with the company's value. The debt increase results in a decreasing company value. High indebtedness is associated with a financial risk of distress and bankruptcy. Tunisian companies recorded mostly a fairly high level of debt. The coefficient of the variable size is positive and significant. Large companies with greater investment capacities have a higher value than small firms. Growth opportunities have a positive and highly significant impact on the company's value. Firms with strong growth opportunities are more valuable than those without or with low growth opportunities.

The second and third column of the table represent the regression model for the sub samples with several companies with controlling shareholders and companies without several major shareholders. We find that the optimal level of cash holding maximizing the value of companies with several major shareholders is about 0.95 compared to companies without several major shareholders amounting to 0.68. Companies with several major shareholders have higher cash threshold than no major shareholders. This is consistent with theoretical advances and different empirical results that confirm the role of control exercised by the majority of shareholders in the company. Our results highlight that the presence of majority shareholders is positively associated with the value of cash holding, indicating that the majority

shareholders are associated with beneficial internal monitoring. The majority shareholders are likely to improve the quality of governance and, thus, increase the value of corporate cash holding. We mention that many Tunisian companies are dominated by families. The concentration of ownership in the hands of families made the subject of several studies that confirm that control of the family leads to the firms' value, reduce the external financing costs and increase the quality of financial information. [2] have shown that the impact of the presence of several major shareholders on the assessment of the detained liquidity is more pronounced for companies controlled by a family. Overall, our findings contribute to the literature of corporate governance by showing that the presence of controlling shareholders improves internal monitoring and moderates the agency costs of holding cash by companies.

Our results lead us to believe that any deviation from the optimum affects the value of the company. So, in what follows we will try to show that any deviation above or below the optimum level reduces the value. Table 3 and 4 report the effects of the deviation on the company's value. Table 3 shows the regression of DEV variable constructed from the residuals of the regression of the reference specification for the determinants of cash holding. The deviation has a positive effect on the value of the company but not a significant one.

Table 3: Deviation analysis of cash holding from the optimal level

Variables VALU	(1)
DEV	0.1471955 (0.10)
CROI	1.579248 (9.75)
TAIL	0.9630297 (3.76)
LEVI	-0.4910867 (-1.08)
C	-9.948385 (-3.64)
	R-sq= 0,3265

With VALU represents value of companies= we use the ratio market value of equity divided by book value. LEVI: leverage= total debt to total assets. TAIL: size of firm = natural log of total assets. CROI: measuring growth opportunities= the Market-to-book ratio. DEVit : The absolute value of residuals. Significance levels are respectively 1%***, 5%** and 10%*.

Table 4: Deviation analysis of cash holding from the optimal level

Variable VALU	(1)
DEV	0.5017776 (1.56)
INT	-0.6447036 (-1.88)*
CROI	1.332721

	(52.93)*
TAIL	0.3903595
	(9.78)*
LEVI	-0.4960337
	(-7.04)*
C	-3.373129
	(-7.92)*
	R-sq = 0.3570

With VALU represents value of companies= we use the ratio market value of equity divided by book value. LEVI: leverage= total debt divided by total assets. TAIL: size of firm = the natural log of total assets. CROI: measuring growth opportunities= the Market-to-book ratio. DEVit : The absolute value of residuals. INT: represent a dummy variable which takes 1 for positive residuals and 0 otherwise. Significance levels are 1%***, 5%** and 10%*.

Thereafter, we integrate the interaction variable in the regression of Table 4. This variable controls whether the deviation from the optimum affects the value of the firm or not. We see that the coefficient of DEV presents a positive sign. The variable INT admits a negative and significant coefficient $b_1 + b_2 = (-0.14) < 0$. The model's results confirm that any deviation from the optimal level is reducing the value of the firm. We can conclude that the company may have an optimum level at which it maximizes its value. But, any deviation from this optimum is destructive to the value. The presence of agency costs, the opportunity cost of cash holding, the level of growth opportunity, managerial opportunism and corporate governance are the factors behind the change in the value of the company relative to the level of cash holding.

6. CONCLUSION

Previous literature argues both sides of the debate on the need for cash holding. Our results are in line with the theory that says that companies should hold cash but not too much because it could be costly for shareholders. This finding is consistent with the different results developed throughout this document to highlight the advantages and disadvantages related to cash holding.

It seems reasonable to find differences in the market value for cash holding. Shareholders are placing value on a company's cash while taking into account certain characteristics of the company. Specifically, the value of cash is determined by magnitude of agency conflicts, levels of growth opportunity and the company's access to capital markets. Tunisian companies have an optimum level of cash enabling it to maximize its value. Any deviation from this optimum level leads to a poor allocation of cash by insiders, and will be penalized by investors who value an additional unit of cash owned by the company at a value less than one.

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