

A Note on Stakeholder Theory and Risk: Implications for Corporate Cash Holdings and Dividend Policy

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Abstract

According to Zingales (1999), corporate governance is defined as the complex set of constraints that shape the ex-post bargaining over the quasi-rents generated by a firm. This paper argues that corporate cash holdings and dividend policy can be used as soft constraints in this regard in order to mitigate the holdup situation of corporate stakeholders and to enhance incentives for firm-specific investments in the face of high total firm risk. Hence stakeholder theory contributes to answering the question why firms choose conservative financial policies.

Key Words: Corporate Cash Holdings, Dividend Policy, Holdup, Risk, Stakeholder Theory.

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1 – Introduction

The determination of the level of a firm's cash holdings is one of the major tasks financial management faces. In contrast to the related decisions on capital structure, dividend policy or corporate risk management, however, this topic received relatively little attention in the financial literature. Recently, a new debate on the determinants of corporate cash holdings has been initiated by the work of Opler et al. (1999) (see also Opler et al. 2001). They investigate the influence of the static tradeoff theory and the financing hierarchy model on corporate cash holdings. The static tradeoff model states that there is an optimal level of liquid assets (defined as corporate cash and marketable securities) which is given at the point where the marginal benefits of holding liquid assets equal the marginal costs of liquid assets holdings. The benefits of cash holdings include transaction cost savings for raising outside funds, particularly in the presence of high fixed costs (transaction cost motive), and the possibility of financing investments if outside funds are not available because of asymmetric information between firms and outside investors (precautionary motive).¹ Major costs associated with corporate cash holdings are both lower yields on these assets caused by liquidity premiums in capital markets and tax disadvantages². The financing hierarchy model or pecking order model developed mainly by Myers (1984) and Myers and Majluf (1984) suggests that there is no optimal amount of cash. In the presence of asymmetric information, firms tend to follow a hierarchy in their financing policy in the sense that they prefer internal funds over informationally sensitive and more expensive external debt and equity financing. If they generate a surplus of internal funds, they stockpile cash and repay debt when it becomes due. Firms with low cash flows will use their cash reserves and raise debt to finance investment but will avoid issuing costly equity. The model, therefore, predicts that changes in corporate cash holdings are mainly determined by changes in internal funds. Though Opler et al. (1999) find supportive evidence for both the tradeoff model and the financing hierarchy model, they concede "that more work has to be done to explain why firms appear to hold excess cash".³

¹ See already Keynes (1936).

² Hartzell et al. (2005), however, find that firms hold high cash reserves in their foreign subsidiaries in order to avoid the tax costs associated with repatriating foreign income.

³ Hartzell et al. (2005) state that also the absolute level of cash holdings of large U.S. Corporations has risen significantly over the last years from 9% of their assets in 1985 to 19% in 2003.

It has often been argued that large corporate cash holdings serve the interests of managers at the expense of shareholders. According to the free cash flow explanation of Jensen (1986), managers rather stockpile cash for their personal well being than distributing excess cash to shareholders in the form of dividends or stock repurchases. Myers and Rajan (1998) show that managers can consume private benefits easier out of their firm's liquid assets than out of its fixed assets. Moreover, Harford (1999) finds that firms with excess cash invest more in value destroying acquisitions. The agency cost motive for cash holdings has also been confirmed by Dittmar et al. (2003) who show that there is strong evidence of management entrenchment in countries with poor shareholder protection: Corporations in countries with poor protection of shareholder rights hold up to twice as much cash as corporations in countries where shareholder rights are well protected. Further related papers by Pinkowitz et al. (2003) and Kalcheva and Lins (2004) support their results. Controlling for economic development, Pinkowitz et al. (2003) show that firms in countries with poor shareholder protection hold higher levels of cash, and a dollar of cash in these countries is valued significantly lower than in countries with good shareholder protection. Likewise, Kalcheva and Lins (2004) find that outside shareholders apply valuation discounts to corporations with a combination of poor protection of shareholder rights and high cash holdings or no dividend payments, especially in countries with weak shareholder rights. Kusnadi (2005) also documents for large corporations listed on the Singapore Stock Exchange that corporations with poor shareholder rights have higher cash balances (with a negative impact on firm value).⁴ Also concentrating on the link between firm-level governance and cash holdings, Harford et al. (2005) unexpectedly find that large U.S. corporations with strong managers (weak shareholder rights) hold less cash than corporations with strong shareholder rights.⁵ Therefore, Harford

⁴ For U.K. companies, Ozkan and Ozkan (2004) find a non-monotonic relation between managerial ownership and the level of cash holdings: as management ownership increases up to 24%, cash holdings decrease; with further increasing managerial ownership cash holdings first increase and, then, fall again with very high levels (greater than 64%) of management ownership.

⁵ Harford et al. (2005) measure the balance of power between shareholders and managers with the governance index developed by Gompers et al. (2003) which is based on the usage of antitakeover governance rules. Further tests by Harford et al. (2005) for firms with high cash balances, however, suggest that firms with weak shareholder rights spend their cash far more quickly, primarily on acquisitions. Another explanation for high cash holdings of corporations with low antitakeover protection (strong shareholder rights) would be that they have higher agency costs of debt (see Klock et al. (2005)) and, therefore, have more difficulties to raise debt

et al. (2005) stress the importance of the interaction of country level shareholder rights with firm level shareholder rights.

On the other hand, Opler et al. (1999) show that there is no empirical evidence in support of an agency cost explanation for large cash holdings in the U.S. (i.e. a country with good shareholder protection). Mikkelsen and Partch (2003), also focusing on the U.S., even find that persistent large corporate cash holdings facilitate growth and investment without hindering corporate performance. Mikkelsen and Partch (2003, p. 293) conclude that more research is needed to “more fully understand the motives for and consequences of conservative financial policies.”⁶

While the agency costs of managerial discretion obviously are a factor which could affect the level of corporate cash holdings, we argue in this paper that stakeholder theory – based on a well-developed theory of the firm – can provide additional important insights on cash holdings and the related decisions on dividend-payout ratios⁷ from a different perspective and may explain why some corporations choose conservative financial policies. In particular, the importance of the risk profile of a company for making these decisions is emphasized.

As Zingales (1998) and Rajan and Zingales (1998), we view a firm as a nexus of mutually specialized assets and people. Since contracts generally are incomplete, corporate stakeholders who undertake firm-specific investments are exposed to ex-post opportunistic behaviour of the firm (i.e. they are in a holdup position) and take the risk of non-fulfillment of their implicit claims.

capital when needed. Colquitt et al. (1999) also interpret their result that stock insurers hold more cash than mutuals as evidence for the relevance of agency costs of debt.

⁶ Graham (2000) and Minton and Wruck (2001) address the fact that many firms use a conservative debt policy.

⁷ For an overview of the factors that drive dividend policy decisions see Allen and Michaely (1995). According to Allen and Michaely (1995), the following market imperfections mainly influence dividend policy decisions: taxes (Barclay (1987)), asymmetric information (signaling models (Bhattacharya (1979), Miller and Rock (1985)); pecking order theory (Myers and Majluf (1984), Deshmukh (2005))), agency costs (Easterbrook (1984), La Porta et al. (2000), Fenn and Liang (2001) or Hu and Kumar (2004)), and transaction costs (Black and Scholes (1974)). In a recent paper, Deshmukh (2005) finds evidence in favor of the pecking order theory and against the signaling theory. According to the pecking order theory of dividend policy, dividends should be lower for firms with higher levels of asymmetric information between the firm and its outside investors (in contrast, the signaling theory assumes that the higher the level of asymmetric information, the higher the dividends). Brav et al. (2005) for the U.S. and Dhanani (2005) for the U.K. survey financial executives to the determinants of dividend and repurchase decisions.

Therefore, they will charge a risk premium which lowers in turn the organizational capital⁸ of the company. As pointed out below, the danger of non-fulfillment of their implicit claims rises with the cash flow and earnings volatility of the firm. In addition, stakeholders often do not have the possibility to diversify. In order to motivate value enhancing firm specific investments by all relevant stakeholder groups, management has to take action to address this problem. Besides taking steps to directly alter the risk profile of the company (hedging, corporate insurance, etc.), high corporate cash holdings and low dividend-payout ratios are additional instruments for mitigating the holdup situation of corporate stakeholders in the face of high firm risk.

From the stakeholders' point of view, high corporate cash holdings allow the fulfillment of their implicit claims even in periods with poor operating cash flows. Furthermore, they are a costly and therefore credible signal that management at this stage really intends to honor stakeholders' implicit claims in the future. Altogether, the probability of the fulfillment of stakeholders' implicit claims rises, and, therefore, the risk premiums charged by corporate stakeholders will fall. From the management's point of view, high corporate cash holdings allow investments in organizational capital even in periods with poor operating cash flows: Information asymmetries tend to be high for investments in organizational capital, because the positive effects of these investments are hard to quantify and they materialize only in the long run. Therefore, it will be difficult for managers to get funding from capital markets, and the danger of underinvestment is high.⁹ But defaulting on implicit claims has a large negative effect on the firm's reputation which is usually hard to rebuild.

The paper is organized as follows. In the next section, a concise review of the theory of the firm is provided in order to analyze the roots of both shareholder value concepts and stakeholder theory. In section 3, the main elements of modern stakeholder theory are summarized, and the importance of total firm risk for corporate stakeholders is discussed, whereas in section 4

⁸ Organizational capital can be defined as the current market value of all implicit claims the firm expects to sell to corporate stakeholders in future periods minus the future costs of honoring the implicit claims the firm plans to fulfill (see Cornell and Shapiro (1987, p. 8)).

⁹ Minton and Schrand (1999) show that high cash flow volatility leads to a reduction of investment spending even after controlling for the costs of accessing external capital. Already Fazzari et al. (1988) find that corporate investment varies with the availability of internal funds, if firms face financial constraints (Almeida et al. (2004) confirm that financially constrained firms have a positive cash flow sensitivity of cash).

possible implications for corporate cash holdings and the dividend-payout ratio are presented. Based on these theoretical considerations, in section 5 we give a new interpretation of the empirical results provided by Opler et al. (1999) and Holder et al. (1998). The final section summarizes our conclusions.

2 – Theory of the firm

Within the framework of neoclassical theory, the firm is merely seen as a technical entity led by its owner maximizing a given objective function (usually profit) under a set of production constraints. This black box characterization of the firm was questioned by Coase (1937). In his seminal article he asked two important questions: 1) Why do firms exist at all if markets are a rather efficient way to organize economic activity? 2) What determines a firm's boundaries? Companies emerge since all economic actors tied to the firm can achieve better results as a team than working separately. According to Coase, the reason why cooperation between the different parties can be organized more profitably in (hierarchical) firms rather than through market transactions is that “there is a cost of using the price mechanism” (Coase (1937, p. 390)). The foundation of a firm leads to a substantial reduction in the number of contracts that have to be signed between the cooperating parties. Transaction costs¹⁰ can be reduced if less detailed and more open contracts are written to ensure flexibility in an uncertain environment while one party (the “entrepreneur”) is given the authority to direct the resources within the boundaries defined by the contract. Coase (1937, p. 392) points out that such hierarchical relationships between the respective resource owners and the “entrepreneur” will emerge especially in situations where long-term contracts are beneficial for both parties.

With respect to the second question Coase argues that the size of the firm is determined by the point where the transaction costs saved by organizing an additional transaction within the firm equal the additional organization costs stemming from the fact that the entrepreneur will be less able to allocate all resources efficiently as firm size increases.

¹⁰ Transaction costs considered by Coase are information or search costs, negotiation and contracting costs (see Coase (1937, p. 390f.)).

Alchian and Demsetz (1972) concentrate on the problem of how team production can be organized and conclude that the task of measuring and controlling the contributions of all team members can be performed more efficiently within a firm. In what they call the “classical” firm, one party – the owner of the firm – specializes on monitoring the performance of the other team members. Ownership is defined as a bundle of rights which enables effective monitoring and provides high-powered incentives for the monitor. Owners have the right “1) to be the residual claimant; 2) to observe input behaviour; 3) to be the central party common to all contracts with inputs; 4) to alter the membership of the team; and 5) to sell these rights” (Alchian and Demsetz (1972, p. 783)).

Within the capitalist system, the equity holders typically are considered to be the owners of the firm in the above sense. However, in contrast to the case of the classical owner-manager of Alchian and Demsetz (1972) corporations are faced with the separation of ownership and control. While the separation of ownership and control gives better possibilities to eliminate firm specific risk through diversification (cf. Fama (1980)), it involves agency costs. In face of observability problems and asymmetry of information, it is impossible to write “simple” binding contracts that urge managers to act on behalf of the shareholders (cf. Manne (1965), Jensen and Meckling (1976)). The conflict between the shareholders and the management of corporations can be seen as the starting point for the evolution of shareholder value concepts which aim at a better alignment of corporate policy with shareholders’ interests (see e.g. Rappaport (1986)).

Investigating the nature of transaction costs more closely, Williamson (e.g. Williamson (1975) or Williamson (1985)) and subsequently Klein et al. (1978) emphasize the importance of transaction costs associated with the possibility of postcontractual opportunistic behaviour of team members once relation-specific investments¹¹ have been made by other input owners. These

¹¹ An investment is called *relation-specific* (firm-specific), if its value inside the coalition (firm) is higher than in its next best use outside (see Klein et al. (1978, p. 298f.) or Milgrom and Roberts (1992, p. 134f.)). Examples for firm-specific investments include locating plants near to important customers or a worker acquiring specific knowledge to operate a certain machine. The difference between the value of the relation-specific investment inside the coalition and its value in the next best use outside the coalition is called *quasi-rent*. Note that before specific investments are made by a coalition member there may be ample market competition. Once irreversible relation-specific investment are sunk, however, the investor is locked-in. If the investor’s claims with respect to quasi-rents are not completely specified by enforceable contracts, she is exposed to ex-post opportunism by other coalition members and trapped in a so-called *holdup* situation.

transaction costs occur as (1) ex-ante costs of underinvestment in valuable firm-specific assets caused by missing incentives to invest in the face of a holdup threat and (2) ex-post costs of inefficient bargaining over the quasi-rents generated. Under a regime of perfect markets, complete long-term contracts are a means to deal with opportunistic behaviour. In reality, however, writing such contracts is prohibitively expensive or even impossible. Klein et al. (1978, p. 298) conclude that “as assets become more specific and more appropriable quasi rents are created (and therefore the possible gains from opportunistic behaviour increase), the costs of contracting will generally increase more than the costs of vertical integration. Hence, *ceteris paribus*, we are more likely to observe vertical integration”.

According to Hart (1989a, p. 1764), these insights still leave the question unanswered why integration mitigates the problems described above and improves investment incentives. Based on the work cited above and aiming at solving the holdup-problem, Grossman and Hart (1986) and Hart and Moore (1990) stress the importance of ownership of the physical assets used. In their view, asset ownership can be defined as the residual rights of control over the asset in all contingencies left unspecified by the initial contract (Hart (1989a, p. 1765)). Consequently, they define a firm as a collection of jointly owned physical assets and conclude that “when contracts are incomplete, the boundaries of firms matter in that these boundaries determine who owns and controls which assets” Hart (1989a, p. 1766)).

While criticizing this definition of Grossman and Hart (1986) and Hart and Moore (1990) for excluding all other stakeholders besides owners of physical assets from being important to the firm, Zingales (1998, p. 498)¹² defines the economic essence of a firm “as a nexus of specific investments: a combination of mutually specialized assets and people”.¹³ As opposed to the definition of Jensen and Meckling (1976, p. 311) who define the firm as “one form of legal fiction which serves as a nexus for contracting relationships”, Zingales stresses that his definition “explicitly recognizes that a firm is a complex structure that cannot be instantaneously replicated” by the market (Zingales (1998, p. 498)). Just as Jensen and Meckling (1976), Zingales does not concentrate on trying to “distinguish those things which are “inside” the firm ... from those things that are “outside” of it” (Jensen and Meckling (1976, p. 311)). More generally, Zingales (1998, p. 498) emphasizes the role of

¹² See also Rajan and Zingales (1998).

¹³ The team production approach developed by Blair and Stout (1999, p. 275) is also based on these insights (see also Blair and Stout (2006)).

corporate governance which he defines as “the complex set of constraints that shape the ex-post bargaining over the quasi-rents generated by a firm”. A key objective of a corporate governance system is the maximization of incentives for value enhancing specific investments in the face of possible holdup situations. Also Holmström and Roberts (1998) point out that integration is only one extreme solution to the holdup problem and that there is a need to explore other mechanisms by which incentives for value enhancing specific investments are provided. In the following, we investigate how both corporate cash holding policy and dividend policy can be used as a “soft” constraint to reach this aim and mitigate the holdup problem.

3 – Stakeholder Theory and Risk

Modern stakeholder theory relies on two basic insights. On the one hand, the importance of value-enhancing firm specific investments of all corporate stakeholders is emphasized. On the other hand, it is realized that the quasi-rents associated with the specific investments cannot be perfectly allocated ex-ante. In an uncertain environment and unforeseen future, contracts have to be incomplete and formulated in rather general terms, since they cannot take into account all possible contingencies (or only with prohibitively high costs of writing the contract). This implies that considerable implicit claims of stakeholders¹⁴ remain after the explicit (contractually guaranteed) claims are fulfilled. The management of such implicit claims is an important task at the corporate level.¹⁵ Examples of such implicit claims of the employees of a firm include e.g. workplace safety, career opportunities, further education or promised salary increases; customers may expect a long time supply of spare parts and availability of the product bought.

As a consequence, not only corporate shareholders bear the risk of uncertain residual earnings, but also the other parties have something at stake: While their explicit claims are at stake only in case of financial distress, there is the permanent risk that implicit claims are not fulfilled. In order to increase profits in the short term or smooth profits in case of poor results, the management may decide not to honor implicit claims. Hence corporate

¹⁴ In the following, the term stakeholder is used for all parties linked to the firm except shareholders.

¹⁵ Cf. Cornell and Shapiro (1987).

stakeholders are exposed to ex-post opportunistic behaviour of the firm, i.e. they are in a holdup position (see footnote 11).

To make matters worse, in contrast to corporate shareholders many stakeholders like e.g. employees do not have the possibility to diversify. The higher their firm-specific investments and implicit claims are and the longer-lasting their intended relationship to the firm is, the higher is the risk they face. Common to all stakeholders with non-diversifiable and high firm-specific investments, therefore, is the quest for long-term stability of the firm, since the danger of ex-post opportunism and non-fulfillment of their implicit claims is much higher in case of unstable and fluctuating corporate earnings.

Summarizing, corporate stakeholders do not know, how management will act ex-post i.e. whether they get a fair share of the generated quasi-rents. Both the reputation of the firm to fulfill implicit claims ex-post and the perceived risk profile of the firm play an important role in their assessment of the possible holdup situation. As pointed out above, a firm may default on implicit claims even in the case of no financial distress in order to increase short run profits or to smooth profits. Therefore, with increasing cash flow and earnings volatility the threat of non-fulfillment of stakeholders' implicit claims is rising. While shareholders are able to diversify their specific investments using capital markets, other stakeholders usually cannot diversify the holdup risk associated with their specific investments. If firms are seen as networks of specific investments (Zingales (1998)), a crucial management task is to ensure that stakeholders make value enhancing specific investments and, therefore, to mitigate the holdup situation in the face of high total firm risk. This is also in line with shareholder value maximization, since the risk premiums charged by corporate stakeholders can be lowered¹⁶ and, hence, organizational capital and shareholder value can be increased.

Firstly, measures to directly reduce total risk could be taken. These include hedging activities¹⁷ with the use of derivatives like futures and forwards, buying corporate insurance and focusing not only on the systematic risk, but also considering the unsystematic risk in the investment decision process,¹⁸ since the value of stakeholders' claims also depends on unsystematic risk. Secondly, management can take steps to further improve its ability to make future payouts on implicit claims, since defaulting on implicit

¹⁶ See also Miller and Chen (2003), Wang et al. (2003) or Chatterjee et al. (2003).

¹⁷ See Aabo (2004).

¹⁸ E.g. through diversification activities and investing in real options or flexibility.

claims only once can have a large negative effect on its reputation. Closely linked are steps to enhance the trust of corporate stakeholders and to signal that it will be able and really plans to make payments on implicit claims.¹⁹ Amongst these are lowering the debt-equity ratio, reducing the dividend-payout ratio and increasing corporate cash holdings which will be discussed in more detail in the next section. It goes without saying that if management decides on applying the measures mentioned above it has to take into account the tradeoff with the associated costs. Therefore, management should use risk-reducing techniques at least in cases where comparatively low costs are involved (see Shapiro and Titman (1985, p. 55)).

Furthermore, some legal actions and public policy changes to optimize the governance system are another way to mitigate the holdup situation of corporate stakeholders in order to enhance economic efficiency (see also Blair (1995)). These might include e.g. the obligation to maintain capital intact which has a legal status in some European countries (see next section).

Naturally, the above considerations are especially important for firms with high specific investments of their (risk-averse) stakeholders or firms with high organizational capital (see definition above). According to Shapiro and Titman (1985, p. 47) and Shapiro (1990, p. 467f.), firms with potentially high organizational capital include firms with important intangible assets (specialized human capital, reputation for quality, brand names) or firms with products that require repairs or where switching costs are high. Therefore, – expressed in the terminology of Cornell and Shapiro (1987) – trying to mitigate the holdup situation of corporate stakeholders is consistent with shareholder wealth maximization, since organizational capital can be increased.

4 – Implications for dividend policy and corporate cash holdings

High corporate cash holdings can be a good means to address the holdup problem described above for two reasons. On the one hand, high corporate cash holdings enable the management to make payments on implicit

¹⁹ Or, as Cornell and Shapiro (1987, p. 13) conclude, “management may choose financial policies in order to signal their intent to make payments on implicit claims or to bond promised payouts on implicit claims”.

claims even in future periods with worse results than anticipated and, therefore, to maintain its good reputation. Since the positive effects of investments in organizational capital are hard to quantify and materialize only in the long run, information asymmetries tend to be high for these investments, and, therefore, it will be difficult for managers to get outside funding. On the other hand, high cash holdings signal corporate stakeholders ex-ante that the firm is capable and willing to fulfill their implicit claims.²⁰ This holds especially true for firms with high total risk or firms which are perceived as being risky, since from the viewpoint of corporate stakeholders the danger of ex-post opportunism and defaulting on implicit claims (and explicit claims in the worst case of financial distress) is higher in these firms as argued above. Therefore, risky firms should have higher cash holdings than low-risk firms. Likewise, firms with difficulties to get external funding (smaller firms or firms without investment grade rating) should hold more cash ceteris paribus.

Another way of signalling its willingness to meet implicit claims in the future is a comparatively low dividend payout-ratio²¹. As argued by e.g. Holder et al. (1998), a low payout ratio is a means to increase liquidity. Furthermore, a low payout-ratio signals the intention to keep the business going, strengthens the capital basis of the firm, can signal high-growth opportunities of the firm and at least reduces the risk of financial distress²². Brav et al. (2005, p. 500) cite executives stating that they would rather lay off employees or bypass positive NPV projects before cutting dividends.²³ A low dividend level, therefore, gives managers more flexibility to make payments on implicit claims if necessary even in case of a temporary decline in earnings. Again, this is even more important for high-risk companies, and therefore risky firms should have lower dividend payout ratios than low-risk firms.

²⁰ Bowen et al. (1995) stress the importance of the firm's financial image for corporate stakeholders and find that the accounting method choice of a firm is influenced by the extent to which its success depends on implicit relations with their stakeholders. Likewise, Matsumoto (2002) investigates the influence of corporate stakeholders on managers incentives to avoid negative earnings surprises.

²¹ The payout ratio is defined as dividend per share divided by earnings per share.

²² See also John (1993).

²³ According to Brav et al. (2005), managers, therefore, value the higher flexibility of share repurchases as their primary advantage over (rigid) dividends (see also Jagannathan et al. (2000) or Guay and Harford (2000)). Analogously, Graham and Harvey (2001) find in their survey of CEOs that maintaining financial flexibility is a main objective in making the related capital structure decision.

The restriction of dividend payout-ratios corresponds to the concept of maintaining capital intact. In Germany, for example, corporations are required by law to preserve the nominal capital i.e. dividends are restricted to the income created in the considered time period.²⁴ The aim of this integral part of the German corporate governance system is to protect the long-term health of the firm and to secure stakeholders' implicit claims. It is argued that in spite of all divergent interests of corporate stakeholders, common to all of them is the quest for the long-term stability of the firm.²⁵

5 – Empirical Evidence

In a recent article in the *Journal of Financial Economics*, Opler et al. (1999) examine the determinants of corporate cash holdings and, in particular, the validity of both the static tradeoff model and the financing hierarchy model. On the basis of data from Compustat annual industrial and full coverage files and the research industrial file for the 1952-1994 period, Opler et al. (1999, p. 18f.) show that there is both support for the static tradeoff model and the financing hierarchy model. Furthermore, univariate and regression tests were performed to investigate the influence of several variables which were identified by the two models as determinants of liquid asset holdings. As predicted by the static tradeoff model, cash holdings increase significantly with firm volatility and industry volatility, R&D-to-sales ratio (proxy for financial distress costs caused by information asymmetries), market-to-book ratio (measure for investment opportunities and possible underinvestment problem), cash flow-to-assets ratio and capital expenditures-to-assets ratio. Cash holdings decrease significantly with firm size (economies of scale), bond rating above BBB (lower costs of raising funds), net working capital (measure for liquid asset substitutes) and whether a firm pays dividends (leads to lower costs of raising funds because of the possibility to reduce dividend payments).²⁶ In accordance with predictions by

²⁴ See §57f. AktG, §30 GmbHG, §120f. HGB and the commentaries by Heyman and Horn (1996).

²⁵ On the objective of long-term stability underlying the German corporate governance system see e.g. Schneider-Lenné (1992) or Roe (1993), and on the principle “maintain capital intact” and its operationalization see e.g. Hellwig (1998) or Hellwig et al. (2000a).

²⁶ The results by Opler et al. (1999) have been widely confirmed: with respect to the influence of cash flow volatility compare e.g. Kim et al. (1998), Harford et al. (2005) or Hartzell et al. (2005), R&D-to-sales ratio (Mikkelson and Partch (2003), Harford et al. (2005) or Hartzell et al. (2005)), market-to-book ratio (Kim et al. (1998), Mikkelson and Partch (2003) or Harford et

the financing hierarchy model, liquid asset holdings decrease significantly with leverage. Also the observed influence of the variables market-to-book ratio, cash flow-to-assets and whether dividends are paid are consistent with this model (for these variables both models predict the same effect on corporate cash holdings). However, the effects of size, R&D-to-sales ratio and capital expenditures-to-assets ratio are not consistent with the financing hierarchy model.

Summing up their results, Opler et al. (1999, p. 44) conclude that there is evidence for a target level of liquid assets consistent with the static tradeoff theory and stress the influence of firm size, growth opportunities, and cash flow riskiness on the amount of corporate cash holdings. Rather surprisingly, firms with excess cash over the target level predicted by the regression analysis spend only little more on capital expenditures, acquisitions, and payments to shareholders than other firms. In accordance with the financing hierarchy model, firms that accumulate excess cash are firms that do well i.e. “management accumulates excess cash if it has the opportunity to do so” (Opler et al. (1999, p. 44)). This management behaviour is attributed to the precautionary motive, but at the same time Opler et al. (1999) acknowledge that there is no evidence of agency costs of managerial discretion. Mikkelson and Partch (2003, p. 293) reach a similar result and call for more research on the motivation for conservative financial policies.

We argue that stakeholder theory gives an explanation or at least additional insight for this coincidence of precautionary management behaviour and no agency costs of managerial discretion. As predicted by stakeholder theory (see section 4), Opler et al. (1999, p. 3 and 44) emphasize that the level of corporate cash holdings increases with cash flow risk. Therefore, management may act in the observed manner in order to mitigate the holdup problem and set investment incentives for corporate stakeholders by enhancing its ability and signalling its willingness to make payments on implicit claims even if the situation of the firm will temporarily deteriorate in the future. This view is supported if one interprets the market-to-book ratio, which also has a strong positive impact on corporate cash holdings, not only as a measure for growth opportunities, but also as a proxy for net organizational capital, since it measures at the same time the size of intangible

al. (2005)) or size (Colquitt et al. (1999), Mikkelson and Partch (2003) or Harford et al. (2005)).

assets. The effects of other variables like R&D-to-asset ratio and firm size are in accordance with stakeholder theory as well.

Holder et al. (1998) investigated the influence of stakeholder theory on corporate dividend policy. Holder et al. (1998, p. 75) argue that firms with high organizational capital should have lower dividend payout ratios in order to increase liquidity to allow for payments on potential implicit claims. They measure the level of net organizational capital by corporate focus and show that – while controlling for several other variables – more focused firms indeed have lower payout ratios. Furthermore, the dividend-payout ratio increases as hypothesized by Holder et al. (1998) with firm size (measured by natural log of sales) and free cash flow. It decreases with the standard deviation of firm returns, sales growth, insider ownership, and ownership concentration. The regression analysis of Holder et al. (1998) is based on a sample consisting of 477 firms with data for the years 1983-1990.

Although the results of Holder et al. (1998) give deep insights into the determinants of corporate dividend policy, we do not agree with their interpretation concerning corporate focus, since its use as a proxy for net organizational capital seems to be rather problematic. Holder et al. (1998, p. 74f.) argue that a more-focused firm which is differentiated into less business lines will have more spillover effects if it defaults on implicit claims. Stakeholders would realize that more-focused firms, therefore, have more to lose if they default on implicit claims and, consequently, are willing to pay more for implicit claims of these firms which leads to higher net organizational capital.

This is questionable for several reasons. Firstly, spillover effects are the same inside a business line no matter if the business line is a division of a conglomerate or constitutes a firm on its own. Only if the divisions of a conglomerate are comparatively smaller than the single-business firm, the above reasoning holds. Secondly, there might also be spillover effects across divisions of a conglomerate if stakeholders are aware of the fact that management defaulted on implicit claims of another division. However, corporate focus may increase net organizational capital in cases where corporate stakeholders fear the sale of non-core divisions as part of a restructuring program and that, subsequently, the new management does not feel committed to fulfill implicit claims promised by the old management. Furthermore, the management of a more-focused firm may be perceived as more competent and reliable than division managers and more committed to the business line than the management of a conglomerate. Nevertheless and

thirdly, we would rather stress the point that a firm with more business lines is not as risky as a focused firm because different business cycles will lead to more stable income streams and earnings smoothing.²⁷ Since management and stakeholders are aware of this and in view of the holdup problem described above, we argue that managers who want to concentrate on core competencies for good reasons have to mitigate this problem of higher (perceived) risk and, therefore, choose a lower dividend-payout ratio.

Summing up, we conclude that the results of Holder et al. (1998) are in accordance with stakeholder theory predictions as described in section 4. Concerning the variable corporate focus, however, this means that the dividend-payout ratio decreases with corporate focus, since focus is mainly seen as another possible risk factor and not, as argued by Holder et al. (1998), because more-focused firms have higher net organizational capital. Several factors support our view. Firstly, the results for the regression model of Holder et al. (1998) show that the riskiness of a firm – measured by the standard deviation of monthly firm returns and used there as a proxy for the transaction costs associated with external financing – is highly significant in predicting the dividend payout ratio (with an almost ten times higher t-statistic than corporate focus). Secondly, Holder et al. (1998, p. 80) point out that their results had less explanatory power if they used beta as a measure of risk. This is consistent with our prediction that not only the systematic risk has to be considered by management, but also the unsystematic risk. Thirdly, Comment and Jarrell (1995, p. 85) show that firm-specific risk increases significantly with focus (whereas, not surprisingly as argued by Comment and Jarrell (1995, p. 85), there seems to be no relation between beta and focus). However, Opler et al. (1999, p. 9) use the number of segments as a measure for the ability to raise funds through asset sales, since diversified firms could sell non-core segments. In two regressions, the number of segments was not statistically significant in explaining corporate cash holdings, and in another two regressions only at the 10% level. The explanatory content of corporate focus, therefore, seems to be rather low for predicting corporate cash holdings.

²⁷ In the worst case scenario of financial distress, the division of a conglomerate could be temporarily subsidized in contrast to the single-business firm.

6 – Conclusion

Despite recent work on corporate cash holdings it remains an open question why corporations hold excess cash and choose conservative financial policies without negative effects on their performance. We argued that stakeholder theory can add a new perspective to answer this question.

The modern theory of the firm stresses the importance of value enhancing specific investments of all corporate stakeholders. In a world of incomplete contracting, however, the quasi-rents generated in the course of the relationship are not perfectly allocated ex-ante which leaves room for ex-post bargaining. Therefore, once their investments are sunk stakeholders are exposed to ex-post opportunistic behaviour of the firm i.e. they are in a holdup position. It was argued that – besides the reputation of the firm to fulfill implicit claims ex-post – the perceived riskiness of a firm plays an important role in stakeholders' assessment whether they expect to get a fair share of the quasi-rents generated, since even if the firm is not in financial distress, management may choose to default on implicit claims in order to smooth profits. This is of special concern to corporate stakeholders, because they often do not have the possibility to diversify.

Besides taking measures to directly reduce total risk, management can take steps to further improve its ability to make future payouts on implicit claims in order to maintain its good reputation even in “bad” periods. At the same time, such steps signal corporate stakeholders ex-ante that the firm is capable and willing to fulfill their implicit claims and, therefore, enhance their trust and willingness to make firm-specific investments. As pointed out above, high corporate cash holdings and a low dividend-payout ratio are two means in this regard to mitigate the holdup situation of corporate stakeholders in face of high total firm risk (and can be interpreted as two “soft” constraints of the corporate governance system). The empirical results of Holder et al. (1998) and Opler et al. (1999) support our conclusions. Firm risk proves to have important influence both on corporate cash holdings and the payout ratio. In contrast to Holder et al. (1998), we argue that also corporate focus can be seen as another possible risk factor and, therefore, the dividend-payout ratio decreases with focus. Summing up, stakeholder theory as described above can give an explanation for the observation of Opler et al. (1999) and also Mikkelson and Partch (2003) that on the one hand there seems to be a strong precautionary motive for excess cash holding, but on the other hand agency costs of managerial discretion do not have an important impact on corporate

cash holdings. Consistent with shareholder value maximization, high levels of cash reserves and a low dividend-payout ratio increase the probability of future fulfillment of stakeholders' implicit claims, and, therefore, the risk premiums charged by corporate stakeholders will fall, and organizational capital and shareholder value in turn will rise.

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