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* Views expressed are those of the authors and do not necessarily reflect official positions of De Nederlandsche Bank.

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Corporate culture and behaviour: A survey

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Abstract

Drawing on the literature on organizational psychology, this paper discusses the potential of studying corporate culture and organizational behaviour for financial supervision. First, we discuss how corporate culture is often linked to long-term firm performance. From that perspective, factoring in corporate culture seems worthwhile. Second, the literature on organizational psychology suggests many pitfalls regarding leadership and group decision-making, which would be relevant to monitor. The realization that these mechanisms may materialize seems an important starting point for supervision. Finally, behaviour is often driven by deeper norms and values. To understand these mechanisms, interviews and survey questionnaires would be useful instruments.

Keywords: corporate culture, organizational behaviour, leadership, groups, supervision

JEL-codes: D22, G20, G30, L20, M14

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1. Introduction

The financial crisis that started in 2007 has put enormous stress on financial institutions. In many countries, governments provided support to the financial sector, using various instruments, including guarantees and recapitalizations. For financial supervision, the crisis provided a major challenge to the traditional micro-prudential framework aimed at limiting distress of individual institutions. Recent policy discussions have focused on the macro-prudential approach, which incorporates a system-wide view of risks to financial stability (Borio 2003; Galati and Moessner 2010).[1]

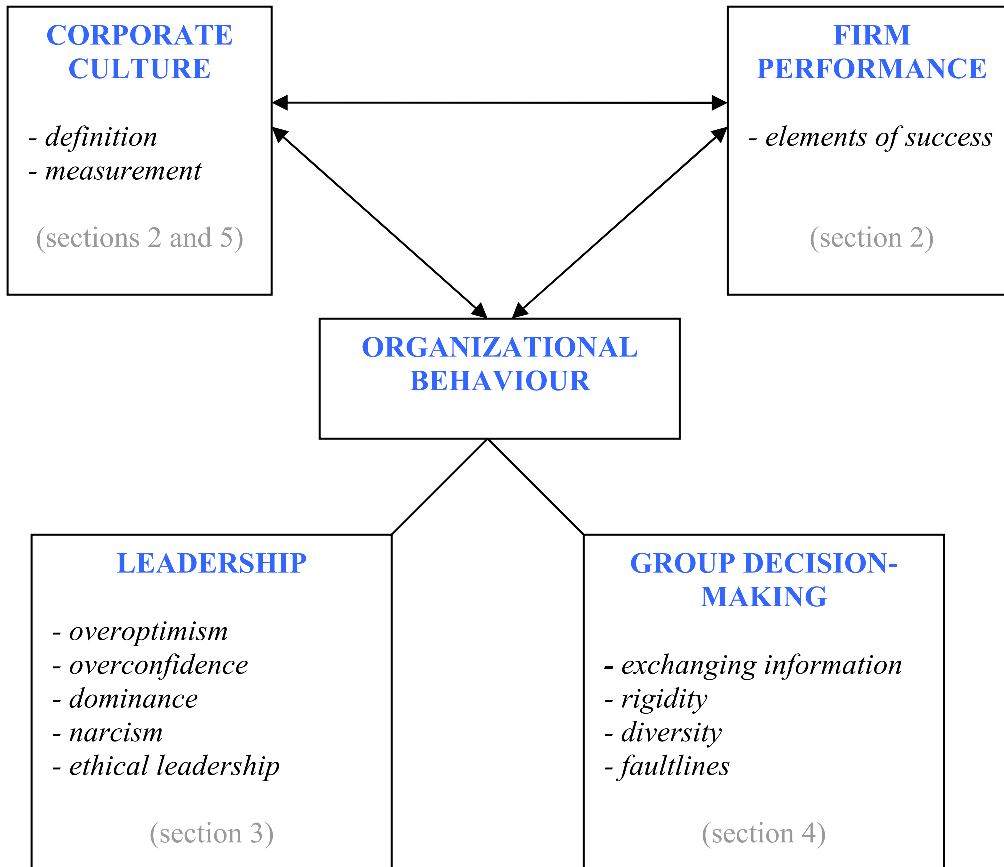
This paper explores a further direction in which financial supervision could be strengthened. We discuss how analyzing corporate culture and organizational behaviour, especially the way in which key decisions are taken, can be useful for financial supervision. Corporate culture is the shared values and norms that define appropriate attitudes and behaviours for organizational members (O'Reilly and Chatman, 1996; Sørensen, 2002). From the outset, we note that focusing on behaviour and culture implies new questions. Both the micro- and macro-prudential frameworks use measures of how financial institutions operate, such as capital and liquidity ratios, which can be quantified. An approach based on culture and behaviour would entail different questions, such as: 'What are the shared values of the employees?', 'How comfortable is the institution with taking risks?', 'What type of leadership is present?' or 'How are mistakes treated?'. On the basis of existing research, we hint at possibilities to analyse these factors.

The ideas in this paper are mainly drawn from a literature survey of the organizational psychology literature. We focus on mechanisms and instruments which can inform financial supervision. Both economists and psychologists have pointed out that human behaviour is often not in line with standard models based on rational, well-informed and optimizing subjects. There are numerous deviations from rationality, or biases, which have been identified. In his survey on behavioural economics, DellaVigna (2009) identifies biases stemming from non-standard preferences, biases due to non-standard beliefs and biases caused by non-standard decision-making. People are, for instance, susceptible to the framing of decisions, use suboptimal heuristics, are overly confident, and have difficulty in formulating time-consistent preferences.

With this view of human behaviour as a starting-point, we discuss several aspects related to organizational behaviour and corporate culture. Our aim is not to provide an exhaustive survey. Figure 1 gives an overview of the concepts discussed in this paper.

[1] This paper does not distinguish between types of financial institutions. The ideas which this paper outlines could apply to supervision of banks, insurance companies as well as pension funds.

Figure 1. Elements of culture and behaviour discussed in this paper



In section 2, we start by outlining the concept of corporate culture. We further motivate the relevance of culture by discussing how this concept is linked to long-run firm performance. In sections 3 and 4, we discuss two key dimensions of organizational decision-making. Section 3 focuses on leadership, as this is one of the most salient elements of culture and behaviour. The literature suggests various pitfalls and fallacies related to leadership that may harm corporate performance, such as over-confidence, dominance and narcissism. Although leadership can be a decisive factor, decisions are generally prepared in a group setting, such as the governing board of financial institutions. Section 4, therefore, turns to group decision-making. Again, we discuss several factors that may impair the quality of decisions. Group members may not always be motivated to share all available information. Also, group diversity does not always improve performance, for instance when faultlines are present. In order to influence an organization's culture and behaviour, it is vital to first understand it thoroughly. Section 5, therefore, discusses how the various concepts related to culture and behaviour discussed in this paper can be measured, for instance, through interviews and structured surveys. Section 6 concludes.

2. Corporate culture

Corporate culture has been studied for many years. In the early 1980s, it was already argued that a company's success was strongly influenced by corporate culture (Deal and Kennedy, 1982). Since then, many authors have studied corporate culture and its relationship to company success (e.g. Gordon and DiTomaso, 1992; Kotter and Heskett, 1992). There are various ways in which corporate or organizational culture have been conceptualised. One succinct description sees organizational culture as '*a system of shared values (that define what is important) and norms that define appropriate attitudes and behaviours for organizational members (how to feel and behave)*' (O'Reilly and Chatman, 1996; see also Sørensen, 2002).

As culture is mainly formed by unobservables (values and norms), the challenge for the outsider is to learn and understand an individual company's culture. To understand cultures, Hofstede (1991) compares them to an onion: a system that can be peeled, layer-by-layer, in order to reveal deeper layers. At the core of culture are values: deep held convictions about how things ought to be. From the outside, it is not straightforward how to penetrate to this level. Still, inference can be made from the stories and language that organization members use. According to Hofstede (1991), values are manifested through three layers: symbols, icons and rituals. Symbols are words, pictures, objects, acts or events that have a special meaning. Icons are persons like sports persons or pop-stars which admired by a specific group. Rituals are ways of showing respect, trends and behaviour, like wearing expensive watches or having lavish office lay-outs.

The usefulness of understanding corporate culture is suggested by the body of work that links culture to performance. For instance, in a recent survey, Sackmann (2011) identifies 55 papers published since 2000 that study culture and performance. Most of these papers find support for a direct link between corporate culture and firm performance. Weinzimmer, Franczak and Michel (2008, 2009), meanwhile, are critical of the way in which culture and performance have been analyzed in both the organizational behaviour and the strategy literature. For instance, they criticize inconsistencies in the operationalisation of culture and the selection of performance indicators. Weinzimmer et al. (2008) list various propositions on the relationship between culture and performance. First, risk tolerance or acceptance of mistakes is important. In this context, Van Dyck, Frese, Baer and Sonnentag (2010) discuss the concept of error management culture. Firms with sound error management make sure that errors are noted and effectively handled. Analyzing the experience of 65 Dutch and 47 German organizations, Van Dyk et al. (2010) conclude that this positively contributes to firm survival. Second, market-orientation seems important as well. Narver and Slater (1990) describe this as having an understanding of customers; creating value based on needs and wants of customers; and a focus on strengths and weaknesses and long-term capabilities of current and potential competitors. Market-orientation has been shown to increase

the performance of small companies (Pelham and Wilson, 1996). High-performers do well in terms of market-orientation, reflecting an awareness of external conditions (Ogbonna and Harris, 2000).

Third, acceptance of change, which relates to the willingness to undertake action on various dimensions, such as technology, matters (Stanley, Meyer, and Topolnytsky, 2005; Rashid, Sambasivan and Rahman, 2004). Due to increased competition, business organizations are forced to maintain comparative advantages continuously. It has become important to develop capabilities for improving core processes and to foster continuous learning (Sørensen, 2002; Hung, Yang, Lien, McLean and Kuo, 2010). This is often referred to as dynamic capability: the firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments. Using data on over 1100 Taiwanese companies, Hung et al. (2010) find that an organization's learning culture significantly contributes to organizational dynamic capability and, in the end, performance.

Finally, employee development is important. According to Jacobs and Washington (2003), this refers to programs that provide company staff with the necessary know-how to contribute successfully to the organization. It also refers to activities that are relevant to understanding values, goals and beliefs of a company (Maurer, Pierce, and Shore, 2002). When an organization supports the learning of corporate culture, employees are more likely to show commitment, and have high performance levels (Ripley, 2003).

It is important to note that context is highly relevant in assessing the link between culture and performance. A nuanced approach seems advised in which combinations of internal and external company factors are evaluated at the same time. For instance, the interaction between a firm’s climate and strategy may exert a negative impact on firm performance (Burton, Lauridsen and Obel, 2004). This seems intuitive: strategic implementation relies on the attitudes of individual employees (Becker, Huselid and Ulrich, 2001). The environment is also a conditioning variable for the impact of culture on firm performance. For instance, Sørensen (2002) investigates the variability of firm’s performance in relation to strong cultures and the existence of a relatively stable versus instable external business environment. In stable environments, strong culture firms generate better and less volatile performances. In volatile industry environments, however, the benefits from strong culture disappear.

Currently, the reputations of many financial institutions are being scrutinized. In that light, it is noteworthy that corporate culture is often seen as a potential predictor of reputation (Dukerich and Carter, 1998; Alsop, 2004). Core cultural values, such as credibility, reliability, trustworthiness and responsibility, are at the core of a company’s reputation (Fombrun, 1996). Reputation itself can be a sustainable competitive advantage over other firms and may affect financial performance (Jones, Jones and Little, 2000; Roberts and Dowling, 2002).

3. Leadership

We now turn to leadership, being one of the more salient elements of organizational behaviour. The literature has discussed many mechanisms which may hamper effective leadership, such as over-optimism and overconfidence (section 4.1) or dominance and narcissism (section 4.2). In a recent strand of literature the importance of ethical leadership has been stressed (section 4.3).

3.1 Over-optimism and overconfidence

Having reached a prominent position in a corporation does not immunize from behavioural biases. According to Sternberg (2003, 2007), effective leadership synthesizes wisdom, creativity and intelligence. Sternberg (2007) argues that unsuccessful leaders often show common fallacies related to a lack of wisdom. For instance, there is an *egocentrism fallacy*, when a manager believes only her interests are important or an *omniscience fallacy* when the manager believes to know everything. Related is the *invulnerability fallacy,* when managers think to be able to get away with everything. Finally, there is the *unrealistic optimism fallacy*, when managers believe it pointless to worry about the outcomes of their behaviour or decisions, in particular the long-term ones, as everything will work out fine.

Related to optimism, Lovallo and Kahneman (2003) argue that executives can be subject to the *planning fallacy*, when they have a tendency to overestimate benefits and underestimate costs of investments. This is related to an optimism bias, which leads people to judge future events too positively, which can result in inaccurate forecasts, inflated benefit-cost ratios and, potentially, in failing projects. There is evidence that optimism is related to performance. Gombola and Marciukaityte (2007) use managerial over-optimism to explain poor long-term stock performance following stock and bond issuance. If managers are subject to extremely optimistic predictions for their asset acquisitions, they are more likely to finance asset growth by debt rather than by equity. They find evidence for the managerial over-optimism hypothesis, implying 'worse long-term performance for debt-financed asset acquisitions than equity-financed asset acquisitions' (Gombola and Marciukaityte, 2007, p. 225).

One explanation for over-optimism is the tendency of individuals to exaggerate their own talents. Especially charismatic leaders tend to be sensitive to the over-optimism bias due to high self-confidence. Behaviour associated with charismatic leaders include articulating an appealing vision, taking personal risks and making self-sacrifices, communicating high expectations, expressing confidence in followers, building in identification with the organization, and empowering followers. Charismatic leaders also tend to have a strong need for power and a strong conviction in their own ideals and beliefs. Leader optimism and self-confidence are essential to influence others to support the leader's vision, but excessive optimism makes it more difficult for the leader to recognize flaws in the vision (Yukl, 2009).

A concept related to over-optimism is miscalibration. Ben-David, Graham, and Harvey (2010) find evidence that financial executives are severely miscalibrated: realized market returns are within the executives' 80% confidence intervals only 33% of the time. This implies a severe underestimation of the variance of risky processes. This conclusion is based on a sample of over 11,600 S&P 500 forecasts made by top U.S. financial executives. In a quarterly survey, CFOs provided expected stock market returns and an 80% confidence interval for their prediction. Even during the least volatile quarters, only 59% of realized returns fall within the 80% confidence intervals provided. Miscalibration and optimism are also found to be time-persistent personal characteristics; executives with these characteristics adapt very little in response to new data realizations.

Related to overconfidence is the idea of hubris (overconfidence). In principle, confidence can help leaders to achieve corporate goals (Hiller and Hambrick, 2005) and carry out their vision (Li and Tang, 2010). However, there are potential risks. Hayward and Hambrick (1997) report that the greater the CEO's hubris, the higher are the premiums paid for acquisitions. The absence of board vigilance further strengthens the relationship between CEO hubris and premiums. Malmendier and Tate (2005) also argue that managerial overconfidence can distort corporate investments. They classify CEOs as overconfident when 'they persistently fail to reduce their personal exposure to company-specific risk' (p. 2661). They report that overconfident managers overrate the returns to their investment projects and judge external funds as costly. Therefore, CEOs rely on internal rather than external financing. This means CEO overconfidence leads to investments that are responsive to cash flow, especially in equity-dependent firms. Malmendier and Tate (2008) also find that overconfident CEOs tend to aim for low-quality acquisitions when their firm has abundant internal resources. Brown and Sarma (2007) confirm this conclusion, while Hribar and Yang (2010) provide evidence that overconfidence of CEOs leads to excessive optimism about future earnings. Likewise, Li and Tang (2010) report that CEO hubris leads to more firm risk taking, and that this relationship is stronger with high CEO managerial discretion.

3.2 Dominance and narcissism

In itself, the fact that leaders can suffer from individual biases or fallacies need not be worrisome. However, once leaders take up a dominant position, there can be little room to correct biases, which can affect an institution's stability and viability. There is a long literature that suggests unsuccessful firms are often led by dominant CEOs (Argenti, 1976; Ross and Kami 1973; Miller and Friesen 1977). Dominant leaders tend to be wedded to their own wisdom, greatly discount the potential contributions of subordinates, which can lead able employees to move on in frustration (Hambrick and D'Aveni 1992). By doing so, dominance restricts the information flow within the

organization. This is strengthened by the fear of subordinates to raise issues that run counter to what the executive prefers (Haleblian and Finkelstein, 1993).

When the need for information processing is low, dominant leaders provide for minimum process loss by limiting unnecessary communication and conflict. However, because problems in a turbulent environment require substantial information processing, information restrictions can lead to poor performance (Haleblian and Finkelstein, 1993). In line with this reasoning, Haleblian and Finkelstein (1993) find that dominant CEOs performed worse in a turbulent environment than in a stable environment. In addition, this effect is significant when top managers have much discretion in strategic decision-making, but is not significant in a low-discretion environment. In related work, Brown and Sarma (2007) report that both CEO overconfidence and CEO dominance are of importance in explaining the decision to acquire another firm. The results suggest that CEO dominance is especially important in case of diversifying acquisitions, with the probability of a diversifying acquisition almost doubling with a 10% increase in CEO dominance. Finally, they find that the presence of more independent directors on the board reduces the effect of CEO overconfidence and CEO dominance on acquisition decisions.

Dominance may be strengthened by narcissism. In itself, narcissism is a complex concept. Emmons (1987) identifies authority as one of the elements of narcissism, while also pointing to arrogance and self-absorption. Raskin and Hall (1979) used a detailed questionnaire to measure differences in narcissism. Campbell, Goodie, and Foster (2004) identify two key elements of narcissism: "a positive, inflated, and agentic view of the self; and a self-regulatory strategy to maintain and enhance this positive self-view" (p. 298). Furthermore, they argue that narcissism can express itself in various ways. For instance, narcissists may believe they are special, entitled to more positive outcomes in life than others, more intelligent than they actually are, and better in the exertion of power and dominance than others. Narcissism can be positively related to self-esteem, high levels of anger and aggression after negative feedback, and high levels of overconfidence in own abilities (Emmons 1987; Campbell et al., 2004). The results of Foster, Reidy, Misra and Goff (2011) suggest that narcissistic personality is linked to risky stock market investing.

3.3 Ethical leadership

In the end, leaders are responsible for ethical standards and moral values that provide guidance for the behaviour of employees (Grojean, Resick, Dickson, and Smith, 2004). Brown and Treviño (2006) suggest that important situational factors include the presence of an ethical role model, an ethical context, and moral intensity of issues faced. The authors also suggest that personal characteristics like neuroticism and Machiavellianism can damage ethical behaviour. In contrast, agreeableness, conscientiousness and moral reasoning enhance ethical leadership. Mayer, Kuenzi,

Greenbaum, Bardes, and Salvador (2009) investigate whether ethical behaviour can trickle down from top management to employees. They find that ethical leadership is negatively related to group-level deviance, meaning that fewer members violate the norms of the work group and threatening the well-being of the work group. Also, ethical behaviour at the top positively affects group-level organizational citizenship behaviour.

Indeed, the need for ethical leadership has been underscored by various corporate scandals, which emphasize the impact of a leader on their organization, firstly through their direct actions, but also by creating a climate in which unethical behaviour can sustain. In reviewing the literature on 'bad' leadership, Higgs (2009) identifies four recurring themes: abuse of power, inflicting damage on others, over-exercise of control to satisfy personal needs, and rule-breaking to serve own purposes. Benson and Hogan (2008) note that 'bad' leadership can result in short-term performance successes, but will ultimately result in problems and dysfunctional performance. This can be explained by the impact of leaders on the morale and motivation of followers and the organizational culture and climate (Higgs, 2009).

Simms and Brinkmann (2002) argue that leaders can shape and reinforce both an ethical and an unethical organization by their decisions. This creates responsibilities for corporate leaders. In their analysis of the ENRON case, Seeger and Ulmer (2003) explicitly discuss the responsibility of top management to communicate appropriate values to create a moral climate. Scandals like at ENRON have led many to argue for a stronger role of ethics in organizations. Fombrun and Foss (2004) discuss how companies have introduced Chief Ethical Officers and have adopted stronger ethical guidelines.

4. Group decision-making

Often, decisions are prepared in a group setting, such as the governing board of financial institutions. Group-decision making can be also plagued by various pitfalls. Group members may not always be motivated to share all available information (section 4.1). Groups may also be driven to either rigidity (section 4.2). Within groups, diversity does not always improve performance, for instance, when so-called faultlines are present (4.3).

4.1 Motives for exchanging information

Ideally, groups are efficient in pooling the information of individual group members to reach good decisions. However, researchers in social psychology have documented how this is not always the case. For instance, Stasser and Titus (1985), using a political caucus simulation, argue that group discussion can perpetuate, rather than resolve individual biases. Stasser (1991) and Wittenbaum and Stasser (1996) find that groups often do not discuss all the information that their members possess, but concentrate instead on information that members initially share. When the

group has to use information that is initially not shared to make a correct decision, the bias towards discussing shared information can lead to an incorrect decision. When group members do exchange information, the available information is often not incorporated into the decision (van Ginkel and van Knippenberg, 2009).

What determines the extent to which groups exchange and integrate information? De Dreu, Nijstad, and van Knippenberg (2008) develop a model for the motivation of individuals in group-decision making. In their set-up, they distinguish between epistemic motivation and social motivation. Epistemic motivation, which can be high or low, is the willingness to achieve a deep understanding of the group task or decision problem at hand.[2] Social motivation, which can be pro-self or pro-social, is the preference for outcome distributions between the individual and the other members of the group. People with a strong pro-self motivation aim to maximize their own results, while they show little interest in what others achieve. The decision-making process is perceived as a competitive game. Individuals with a pro-social motive try to establish a decision that values and incorporates their own, but also others' interests. These persons tend to see the process as a collaborative game in which fairness and harmony are important. De Dreu et al. (2008) also argue that that epistemic motivation interacts with social motivation in predicting the quality of group judgment and decision-making. This interaction, in turn, is conditioned by decision urgency and member input indispensability.[3]

4.2 Rigidity

Motivation of individuals can be highly important for group dynamics. De Dreu et al. (2008) argue that groups with high epistemic motivation suffer less from rigidity of thought and pressure themselves less to ensure uniformity and stability. A related way to describe a tendency towards uniformity is groupthink (Janis, 1972; Janis 1982). According to Janis (1982) factors like cohesion and homogeneity in social background generate a concurrence-seeking tendency. It also leads to over-confidence and pressures toward uniformity. In turn, this can lead an incomplete consideration of options, a failure to properly assess risks of the preferred option, and a selective evaluation of the available information.

The possible occurrence of groupthink has been discussed in various settings, such as jury deliberations (Neck, 1992), trustees at university boards (Hensley, 1986), the space shuttle Challenger accident (Esser and Lindoerfer, 1989), and foreign policy (Schafer and Crichlow,

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2 Interestingly, research suggests that epistemic motivation increases under process accountability, i.e., when individuals expect to be observed and evaluated by others with unknown views about the process of judgment and decision-making (Tetlock, 1992).

3 Related work on motivation and group decision-making includes Scholten, Van Knippenberg, Nijstad and De Dreu (2007) and De Dreu (2007).

2002).[4] Building on Janis (1982), Neck and Moorhead (1995) point to closed leadership style (when the leader discourages participation, states opinions first, does not encourage divergent opinions, and does not emphasize the importance of reaching a good decision) and methodical decision-making procedures as moderator variables.[5] These two variables explain why within the same group, groupthink may occur in one situation and not in another. Empirically, Schulz-Hardt, Frey, Luthgens and Moscovici (2000) provide evidence that groups prefer supporting instead of conflicting information when making decisions. As more group members chose the same alternative prior to the group discussion, the more strongly the group prefers information supporting the alternative.

4.3 Diversity and faultlines

In the organizational psychology literature, diversity has been widely debated. One definition of diversity is 'differences between individuals on any attribute that may lead to the perception that another person is different from self' (Van Knippenberg, De Dreu and Homan, 2004, p. 1008). There can be many dimensions along which diversity may be present. It is possible to distinguish between task-related or job-related diversity, such as education or functional background, and non task-related diversity. This latter group are often observable characteristics, such as gender, age, race, or nationality (Kearney, Gebert and Voelpel, 2009; Van Knippenberg et al., 2004).

There have been many studies on the relationship between (various types of) diversity and performance. If anything, the effect of diversity is complex and depends on context. On the basis of a meta-analysis, Webber and Donahue (2001) find no support for a relationship between various types of diversity and group cohesion or performance. Likewise, Williams and O'Reilly (1998) are pessimistic. According to Mathieu, Maynard, Rapp, and Gilson (2008), most studies suggest that diversity – along various dimensions – is not positively related to performance. Also functional diversity has not always been associated with higher performance. However, Pelled, Eisenhardt and Xin (1999) argue that diversity influences performance through an effect on conflict. Diversity in race and tenure are positively associated with emotional conflict, but the relationship, in turn, depends on the routineness of tasks and group longevity. Jehn, Northcraft and Neale (1999) find that informational diversity improves performance, again through an effect on task conflict. In this case, there were several moderating variables, such as task complexity and task interdependence. Richard (2000) also argues that cultural diversity adds value, and, in the right context, improves competitive advantage. Kearney et al. (2009) report that positive

4 See Esser (1998) for a literature survey of the first 25 years of research on groupthink. Recently, Bénabou (2009) analyzed groupthink in a model of collectively reality denial in groups and organization.

5 A moderator variable affects the direction and/or strength of the relationship between an independent variable and a dependent variable (Baron and Kenny, 1986, p. 1174).

effects of diversity only occur when the team need for cognition is high. Finally, Tuggle, Schnatterly and Johnson (2010) argue that meeting informality moderates the influence of group diversity. The degree of formality influences attention by either enhancing or constraining the group discussion.

A recent line of literature has tried to rationalize potential negative effects of demographic diversity. Lau and Murnighan (1998) introduce the notion of 'faultlines'. Faultines divide a group on the basis of one or more characteristics, such as gender, age or race. Lau and Murnighan compare these faultlines to faults in the earth's crust, which can go unnoticed for many years, but can lead to sudden physical cracks. Faultlines increase the likelihood of subgroup formation and conflict. Subgroups are most likely to form in the early stage of group formation.

Many papers have built on the idea of faultlines. In a quasi-field study using 79 groups, Thatcher, Jehn and Zanutto (1999) find that measures of faultlines are related to conflict and performance. Rico, Molleman, Sanchez-Manzanares and Van der Vegt (2007) find that teams with weak faultlines performed better and showed more social integration than team with strong faultlines. The degree of team task autonomy was an important factor in these findings, as differences were most noticeable when autonomy was high. Lau and Murnighan (2005) find that cross-subgroup communications were effective when faultlines were weak, but not when faultlines were strong.

Veltrop, Hermes, Postma and De Haan (2011) argue that board members may not be independent actors, but representatives of stakeholder factions (like representatives of employers and employees in pension fund boards in the Netherlands). Accordingly, when diversity aligns with such representative affiliations, diversity is likely to lead to social categorization processes, rather than informational differences in perspectives, making boards more susceptible to disruptive influences. Using data on 313 Dutch pension fund boards, they find that demographic factional faultlines are positively related to competitive conflict management and negatively related to cooperative conflict management.

5. Measurement: interviews, surveys and minutes

In understanding an organization's culture and behaviour, there is a difference with the micro- and macro-prudential frameworks of financial supervision. These latter two approaches use quantifiable measures of how financial institutions operate, such as capital and liquidity ratios. As noted, culture is mainly denoted by unobservables (values and norms), so for the outsider it is challenging to understand an individual company's culture. In trying to understand corporate culture and organizational behaviour, two methods are used in the organizational psychology literature: interviews and surveys.

The main purpose of an interview is to collect objective information from statements made by one or several interviewees, in order to answer pre-formulated questions (Emans, 2004). An interview is a qualitative research technique. In the context of measuring culture, it can be of use in gaining insight in beliefs, traits, or attitudes of individual or groups of employees. A distinction can be made between *structured* and *unstructured* interviews. Structuring means that each interviewee is presented with exactly the same questions in the same order. This ensures that answers can be reliably aggregated and systematically compared and analyzed. Unstructured interviews proceed more flexible, but may be less easy to use in further analytical steps.

Interviews can be used for various purposes. Hofstede, Neuijen, Ohayv, and Sanders (1990), for instance, use in-depth interviews to study organizational cultures in ten different organizations in Denmark and the Netherlands. For this study, an interview team of 18 individuals conducted a total of 180 interviews of two to three hours each. All interviewers received prior training and were also given the same checklist of open-ended questions.

In that same study, Hofstede et al. (1990) also used standardized survey questionnaires as an additional research method. Good interviewing is not easy, and a productive interaction between interviewer and interviewee is not easy to create. Surveys provide a more impersonal approach to understanding corporate culture and culture. An often used approach is the Organizational Culture Profile (OCP), proposed by O'Reilly, Chatman and Caldwell (1991). According to OCP, a culture can be scored based on a set of cultural factors (the original OCP consists of 54 value statements). OCP uses the perspectives of managers and senior executives through surveys as the primary data source. Using exploratory factor analysis the results of the value statements are transferred into scores on a few main dimensions of organizational culture, such as competitiveness, stability and innovation.

Some authors are critical of using only one of the two instruments. According to Schein (1988), survey instruments or questionnaires are, when used in isolation, too simple to monitor the content and different layers of corporate culture. Yauch and Steudel (2003) also argue that it is advisable to combine qualitative and quantitative approaches. After starting with a qualitative assessment, the insights from that exercise can be used to select the most appropriate quantitative instrument. Homberg and Pflesser (2000) illustrate how qualitative and quantitative approaches can interact. They conducted two stages of qualitative research, a content analysis and field interviews. The content analysis identified the most relevant shared basic values, while the interviews were used to validate the structure of the developed model. Hofstede et al. (1990) also illustrates how interviews and questionnaires can be productively combined. In fact, in the third stage of their research, they used questionnaires, followed by personal interviews.

In addition to eliciting information on culture and organizational behaviour through questionnaires or interviews, there may be information more readily available which could be

analyzed. Minutes of board meetings, for instance, can be used to quantify various aspects of meetings, such as the role of the chairman. Research based on minutes is still scarce, due to confidentiality considerations. A recent paper that does use minutes is Schwartz-Ziv and Weisbach (2011). Based on minutes of board and board-committee meetings from eleven Israeli firms between 2007 and 2009, they find that boards spend most time in monitoring management. Boards only disagreed with the CEO 3.3% of the time. Also Tuggle et al. (2010) use minutes of board meetings in their research. Some 210 firms consented to have their auditing firms code board minutes, allowing the authors to analyze how much board meeting time was spent discussing new product or market issues.

Another related strand of research covers deliberations in monetary policy committees. Chappell, McGregor and Vermilyea (2007) use textual records of the Federal Open Market Committee (FOMC). When the chairman spoke early in the meetings, differences between FOMC members and the chairman regarding stated funds rate targets were smaller. Transcripts of meetings may also be informative from a historical perspective. Meade and Thornton's (2010) analysis of FOMC transcripts, for instance, suggests the Phillips curve was much less central to US monetary policy than commonly assumed in models. However, it also should be noted that focusing on minutes creates new incentives for those under scrutiny. Meade and Stasavage (2008) find that publishing FOMC meeting transcripts seems to have led policymakers to voice less dissent with Greenspan's policy proposals for the short-term interest rate. Also, Swank, Swank and Visser (2008) suggest that greater transparency forced on a committee of experts may lead them to shift the real decision-making process to pre-meetings.

6. Conclusions

This paper has surveyed the literature on corporate culture and organizational behaviour. The main purpose was to discuss how understanding corporate culture and organizational behaviour can help financial supervision in identifying and mitigating risks to an institution's stability and viability. The organizational psychology literature suggests that corporate culture and organizational behaviour are key factors in explaining firm performance. It is therefore worthwhile to pay attention to those issues in micro-prudential supervision.

It could be tempting to propose standard checklists for corporate culture that financial supervisors would use in addition to traditional measures, such as capital ratios. However, understanding culture requires a balanced approach, as various aspects are not readily observable. One definition of culture stresses shared values and norms (O'Reilly and Chatman, 1996). From the outside, these deeper motives can remain hidden. To understand them, the literature suggests various useful instruments, such as in-depth interviews or survey questionnaires. Another caveat

is that the effects of culture are often found to depend on the specific context. Therefore, using a standard checklist could lead to oversimplification of the situation at hand.

In the end, the shared values and norms are crucial in forming attitudes and behaviour of members of the organization (O'Reilly and Chatman, 1996). There are many ways in which behaviour in organizations can be monitored. We have discussed two salient elements: leadership and group decision-making. On the basis of existing research, we have discussed various biases and pitfalls which may negatively affect a company's long-term stability and viability. Corporate leaders can be over-confident, or be prone to hubris. Once leaders take up a dominant position, there can be little room left to correct some of these biases. In principle, decision-making by groups can be a way to mitigate the influence of individuals. However, also within a group-setting, decision-making is not immune to various biases and pitfalls. Group members may not always efficiently pool their information. Groups can also be prone to rigidity. Diversity does not automatically improve performance, for instance when faultlines lead to the formation of subgroups. The realization that these mechanisms may materialize, seems be an important starting point for supervision.

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