RETAINING BANDWITH EFFICIANCY AND EFFICACY

MANAGING SYSTEMICALLY RELEVANT INSTITUTIONS IN LIGHT OF THE NEW ROLE OF FINANCE

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Abstract

In this paper we examine how the notion of systemic relevance challenges bandwidth efficiency and efficacy of middle managers of financial service organizations and what managers can do to coop with increasingly complex environments of the firm. As the envisaged merger of The New York Stock Exchange (NYSE Euronext) with Deutsche Börse Group is revitalizing debates concerning institutional configurations of stock markets, we first ask how managers of one of the world's leading stock exchange organizations define the value proposition of their firm. Second, we explore how middle managers balance multiple goals of value creation by focusing on firm-internal and external factors, accounting for industry-, firm-, and personal-level explanations. Our findings suggest, first, that middle managers of stock exchange organizations incorporate aspects beyond shareholder value creation into their definitions of their firm's value proposition. This finding contradicts views according to which processes of demutualization and electronization have transformed stock exchanges into generic IT firms that discard their roles as financial utility providers. Second, we uncover conflict patterns in the goal balancing of middle managers that seem typical for for-profit driven firms, which operate in highly politicized environments. We conclude with a discussion of our findings, and provide suggestions for future research.

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INTRODUCTION: DO MANAGERS ACCOUNT FOR SYSTEMIC RELEVANCE?

Managers of systemically important financial institutions are confronted with an increasing breadth of tasks and issues. As “stock exchanges are a central component of the contemporary economy” (Weber, Davis & Lounsbury, 2009, p.1319), the latter present an ideal environment for discussing the question how managers retain effective and efficient levels of bandwidth within increasingly complex environments. The present paper examines this question.

In his article “The Rise and Fall of Finance and the End of the Society of Organizations”, Davis (2009) documents fundamental shifts in the US economy. Where previously large corporations had been “a dominant force … through their employment practices, expansion choices, and community connections … finance has increasingly taken center stage” (Davis, 2009, p.27).

The new significance of finance has been implicitly reconfirmed on a global level by the fact that in reaction to the recent crisis, the US and European governments transferred funds to the financial sector at unprecedented volumes. At the height of the financial crisis, in the last quarter of 2008, these commitments dwarfed other global crisis spending at ratios of 45:1 (development aid), and 312:1 (climate finance)(Anderson, Cavanagh & Redman, 2008).

Given the growing significance of the financial sector, any major change within the sector also raises questions with regard to societal consequences.

From this perspective, the currenltly envisaged transatlantic merger between NYSE Euronext and Deutsche Börse Group is not just another transaction from the viewpoint of M&A logics. Stock exchanges' pivotal role in the economy grants such institutions specific attention of politicians, regulators, and the media (e.g. Adhikari & Tondkar, 1992).

Hence, stock exchange managers have to be particularly sensitive to what Moore and Khagram (2004) have labeled “highly politicized environments”. Their tasks are thus similar to those of managers of financial institutions that are subject to intensified public attention such as bail out banks during and after the crisis of 2007 – 2010.

Given the representative nature of stock exchanges as poignant examples of organizations that operate under increasingly complex constraints, understanding how stock exchange managers deal with the multidimensional objectives of their firms, also allows for drawing conclusions with regard to the more general question of how managers can retain effective and efficient levels of bandwidth in multipolar environments. We hence address the question “How do managers of a representative (stock exchange) firm account for the firm’s multidimensional constraints and objectives?” in the subsequent paragraphs.

GAP: MANAGERIAL BANDWIDTH AND THE NEW ROLE OF FINANCE

The notion that managers have to be able to legitimize their organizations from a multitude of angles is not new. Traditional management theory offers a variety of concepts that discuss relations between the firm and its environment along the categories of stakeholders (Agle et al., 2008), corporate social responsibility (McWilliams, Siegel & Wright, 2006), and corporate citizenship (Romme, Georges & Barrett, 2010). The crisis has shifted boundaries between the public and the private sectors (Moulton & Wise, 2010). We argue that this shift implies that issues of public accountability have become relevant for strategies of firms that operate within politicized environments. Shared value approaches (Porter 2011), and public value concepts (Moore & Khagram, 2004; Bozeman, 2008;

Meynhardt 2009) offer theoretical connection points in this context. Yet, they do not provide any data to support their insights. We aim at filling this void by discussing the question how the new role of finance (Davis 2009) is being accounted for by managers of financial institutions along the lines proposed by Porter (2011) and Moore & Khagram (2004) as well as Bozeman (2008) that aim at retaining bandwidth efficiency and efficacy.

The principal goal of our research is thus to contribute to existing debates on the management of financial organizations in light of the recent crisis and propose a model that helps explaining how the new role of finance (Davis, 2009) is being accounted for by managers of systemically important organizations. In this context, we will discuss in how far stock exchange managers do not focus exclusively on profits as legitimizing factors of their firm as it has been suggested (Economist 1999). We will aim at understanding in how far they categorize the values created by their firm within a multipolar framework, which allows for identifying organizing principles through which managerial views of value creation can be organized efficiently.

On a secondary level, these findings allow us to form micro-level observations that complement Davis' (2009) macro-level insights on the "rise of finance and the end of the society of organizations" (p.27).

CASE SELECTION

We build our examination on the single case of Deutsche Börse Group.

For the testing of theoretical propositions, single case studies are a viable alternative to experiments if environments cannot be controlled. They hence fit our research goals as empirically driven hypothesis test of assumptions concerning the role of middle managers for attention based views of the firm.

Our case selection of Deutsche Börse Group has been driven by the firm's relevance for the global stock exchange industry as well as the economy. Only a limited number of exchange organizations dominate the industry on a global level. Measured by the market value of its outstanding shares, Deutsche Börse is the second most-valuable stock exchange organization worldwide (cf. Figure 1 below).

Figure 1 further illustrates that - with a few exceptions – structures within the global stock exchange industry are relatively persistence to change since the segments of global market capitalization that stock exchanges allocate on their platforms has been relatively constant over the last years. As a few firms are dominating the global stock-exchange industry we assume that strategic decisions of their management carry weight for the whole industry. This assumption is consistent with observations in the literature. For example, Aggarwal & Dahiya (2006) as well as Serifsoy (2008) characterize recent trends within the stock exchange industry such as the "wave of demutualization", or the "era of consolidation", as processes that are the result of strategic decisions of early movers. As these decisions have increased levels of competition within the stock exchange industry, early moving organizations such as Stockholmbörsen in case of demutualization, or New York Stock Exchange and Euronext in case of consolidation, became role models for other exchanges.

Deutsche Börse was neither the first stock exchange to demutualize, nor did it start international consolidation within the industry. The introduction of new technologies into its business model and German financial liberalization made it possible for Deutsche Börse to assume the competitive position as shown in Figure 1. As such it fulfills criteria of systemic relevance thus allowing us to test how middle managers of a systemic relevant finance organization are balancing interests of their firm and society.

[Insert Figure 1 here]

FIGURE 1: INDUSTRY DOMINANCE OF WORLD'S LARGEST STOCK EXCHANGE ORGANIZATIONS

Although Deutsche Börse is a German company by legal definition, its ownership is truly international. As of 2009-2010, when we conducted our empirical data collection, only 17%-18% of its shareholders came from Germany, while 32%-41% came from the US, 16%-23% from the UK, and 19%-34% from other counties (Deutsche Börse, 2011). As second most valuable stock exchange organization in the world measured in terms of its outstanding shares (Bloomberg as of 04/2011, own calculations), Deutsche Börse is both a representative example of internationally operating financial service providers, as well as a relevant case by itself.

DATA COLLECTION AND METHODOLOGY

Data collection took place on Deutsche Börse's middle management level. Middle managers are "often earliest to recognize strategic problems and opportunities." (Woolridge and Floyd, 1992 in: McMullen, Shepherd, and Patzeld, 2009, p. 158). Their contribution to strategy processes is vital, particularly with regard to a firm's reactions to environmental stimuli (Lawrence and Lorsch, 1967: in: McMullen, Shepherd, and Patzeld, 2009, p. 163). Hence, we argue that it is not possible to discuss bandwidth consequences of the rise of finance (Davis 2009) without taking the position of middle managers into account.

Using insight from Moore & Khagram (2004) that private firms, which operate in highly politicized environments, face similar problems like public institutions, we collected data relying on repertory grid techniques as proposed by Meynhardt & Metelmann (2009) in context of a single case study within the German public sector.

> *"Repertory grid is … both a semi-structured process in which respondents classify and evaluate elements (e.g. events, policies, roles) on a numerical scale according to their own personal constructs, and a matrix of elements by constructs that is the product of these procedures. This matrix provides a … quantitative representation of an individual's mental map of a given set of phenomena, such as organizational units or events" (Ginsberg, 1989, pp. 421-422).*

Repertory grid techniques are based on dense data, so that "a relatively small sample size … of fifteen to twenty five within a population will frequently generate sufficient constructs to approximate the 'universe of meaning' regarding a given domain of discourse" (Tan and Hunter, 2002, p.47). Since different functional groups of middle managers possess distinctive forms of intelligence about a firm's specific strategic issues (McMullen, Shepherd, and Patzeld, 2009), we specify our sample according to functional tasks and competencies of middle managers.

Our sample consisted of sixteen middle managers, which we identified together with Deutsche Börse as being relevant to our research due to their funcions within the firm.

We interviewed the latter between May 2009 and July 2010 in sixteen semi-structured interviews that lasted on average 90 minutes each. All interviews were conducted at the Headquarters of Deutsche Börse.

The composition of questionnaires followed the threefold-structures proposed by Meynhardt & Metelmann (2009). We present the structure of the questionnaires along with the results we obtained in the subsequent section.

FINDINGS

In Part A of the questionnaire we derived grid-elements by asking managers to identify societal value contributions of Deutsche Börse, as well as a hypothetical alternative to each contribution identified.

We obtained 384 elements that formed 192 pairs of observations. Using tools of content analysis (Krippendorf 2004), we identified key topics that emerged from the answers of the managers.

Translating these topics into codes we measured their relevance by counting frequencies of their appearance in the answers of the managers (Sonpar & Golden-Biddle, 2008, pp.802, 804-808).

We found that Deutsche Börse's middle managers devote high levels of attention toward societal contributions that are specific to the business profile of Deutsche Börse. This group of issues includes for example Deutsche Börse's value contributions as utility provider of market infrastructures (80 grid-elements), or Deutsche Börse's role in enhancing market transparencies (18 elements). Non-specific value categories are referred to less frequently. For example, only eleven out of the 384 grid-elements contain references to Deutsche Börse's profitability as value contribution to society.

Our observations allow us to formulate

Proposition 1: The specific characteristics of a firm's business profile dominate managerial awareness toward its societal contributions.

In Part B managers formed relations between grid-elements by weighing the listed pairs from Part A so as to identify societally preferable alternatives. There are multiple reasons for why managers may prefer one option to another.

For example, a new advertisement campaign may be financially reasonable, but politically unacceptable or vice versa.

We asked the managers to elucidate their decisions along five different evaluation categories as proposed by Meynhardt & Metelmann (2009). We summarized the results in a grid matrix of the size 5 X 192.

The matrix allowed us to analyze if managers perceived of Deutsche Börse's societal contributions as being consistent across different evaluation categories, as well as to understand in what contexts Deutsche Börse managers identify evaluative conflicts.

We found that in more than 85 percent of their answers, managers perceived of the five evaluation categories tested in Part B to be mutually inclusive. I.e. managers characterized the majority of Deutsche Börse's value contributions to represent financially viable choices of actions that fulfilled their firm's functions in politically and ethical correct terms, which were hedonically superior to their respective alternatives.

In the absence of conflicts between different categories of evaluation, it is not possible to observe any evaluative priorities. To see how Deutsche Börse's middle managers balance conflicts of competing value categories, it is thus necessary in a first step to identify value contributions of Deutsche Börse, where managers perceive of the five categories tested to be – at least partially - mutually exclusive.

This was only the case in 24 of the 192 pairs within the grid. In 14 of the 24 pairs did either considerations concerning the profitability of Deutsche Börse, or considerations concerning its functional qualities, or combinations of the two, stand out against the remaining evaluation categories.

This allows us for identifying

Proposition 2: Conflicts between different evaluation categories are not consistent but change on a case-by-case basis. Profitability and functionality considerations determine main lines of evaluative conflicts.

Having acknowledged the existence of lines of conflict between different categories of evaluation, we asked managers to rank financial against functional categories in Part C of the questionnaire. We obtained aggregate rankings by averaging the individual results.

We cross-related our observations to managerial self-perceptions regarding the level of financial responsibility by asking interviewees to categorize their responsibility as being either (1) directly relevant, (2) indirectly relevant, or (3) not relevant for Deutsche Börse's revenues.

We found that, when asked to rank the competing evaluative categories of functionality versus profitability as identified in Part B of the questionnaire, Deutsche Börse's middle managers would on aggregate be more likely to prioritize functional over financial considerations (cf. Figure 2 below).

[Insert Figure 2 here]

FIGURE 2: VALUE RANKING BY DEUTSCHE BÖRSE'S MANAGERS

We explain this observation as result of sample composition. A closer look at the data shows that managers, who identified their tasks and responsibilities as being of direct financial relevance to the firm, ranked goals of financial value creation higher than the majority of their colleagues who had described the relevance of their tasks and responsibilities in different terms.

This observation is in line with the results of existing research that holds that middle managers adapt their behavior to specific contexts (Mantere, 2008).

The fact that results of our investigation are in line with findings in the literature supports the validity of our methodology. Our observations from Parts B and C allow us to identify

> *Proposition 3: A clear cut between functional and financial goals of value creation is not possible. Individual perceptions of middle managers due to their specific positions are potential sources that help to explain conflicts within their views of a firm's value creation.*

DISCUSSION

The main lines of conflict in Deutsche Börse's value proposition as identified by its middle managers can be summarized in a 2x2 optimization matrix where the vertical axis is representing the objectives to be maximized, and the horizontal axis is representing the limiting conditions of the maximization problem.

Since managers defined the categories of financial and functional value creation as main conflict lines within the multipolar evaluation frameworks discussed in Parts B, and C of the questionnaire, while identifying the provision of utility services of Deutsche Börse as one of the firms major objectives in Part A of the questionnaire, the matrix is built around the two categories of financial and societal value creation.

Its vertical axis is representing all organizational objectives that either aim at the maximization of shareholder values (lower end), societal values (upper end).

The horizontal axis represents different types of limitations to the optimization problem. Its left hand side represents all limiting conditions that refer to costs accruing solely to Deutsche Börse, while the right hand side summarizes all conditions that refer to costs that are strictly external to Deutsche Börse (cf. Figure 3 below].

[Insert Figure 3 here]

FIGURE 3: BALANCING FIRM'S INTEREST AND SOCIETY

Together with propositions 1-3, the matrix rejects the non-utility-hypothesis (Economist 1999) according to which Deutsche Börse's functional objectives can be separated without frictions from abstract goals of financial value maximization.

It has thus an impact on specific discussions concerning configurations and policies of stock exchanges (Grote, 2007; Aggarwal & Dahiya, 2006; Serifsoy, 2008), as well as on more general questions how managers can account for increasing complexity so as to retain bandwidth efficiency and efficacy.

The matrix also adds to existing theories on the behaviors of middle managers and their organizational environments (Lawrence and Lorsch, 1967; McMullen, Shepherd, and Patzeld, 2009) by supplying a framework that specifies the discourse to contexts of finance organizations that maximize profits as systemically relevant entities. This framework represents micro-level consequences of macro-level phenomena described by Davis (2009).

With regard to bandwidth questions, our observations bear implications for debates on bandwidth discussions in light of Corporate Social Responsibility (CSR) research. CSR Research classically differentiates between exclusive views that deny any social responsibilities of business outside the profit motive such as Friedman (1962; 1970), and integrative views that perceive of social responsibilities as resource that need to be managed (Carroll and Buchholz, 2009; Caroll and Shaban, 2010; Davis 2009).

We observe that the conflict lines within the literature regarding the question whether firms should do good by doing well (Friedman, 1970), or should do well by doing good (Davis, 2009), are not applicable to the value descriptions of Deutsche Börse’s middle managers. Results from our interviews allow for interpreting Figure 4 as depiction of an organizational objective function that is oscillating between financial (the two southern quadrants), and societal (the two northern quadrants) goals.

The matrix thus demonstrates that once managers assume a dynamic perspective by differentiating between different types of costs and benefits that accrue to the firm as well as to society on a case by case basis, static differentiations between exclusive and inclusive CSR views no longer hold.

We hence identify organizing principles of firm’s different objectives that allow us to discuss simultaneously how firms can do well by doing good, and do good by doing well.

In this context, it is open to discuss in how far Figure 4 functions as generic framework that can also be applied in different contexts than questions of shareholder value and social responsibility. Thus, this paper is also a call for further research on the issue of how to retain managerial bandwidth efficiency and efficacy.

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APPENDIX: FIGURES

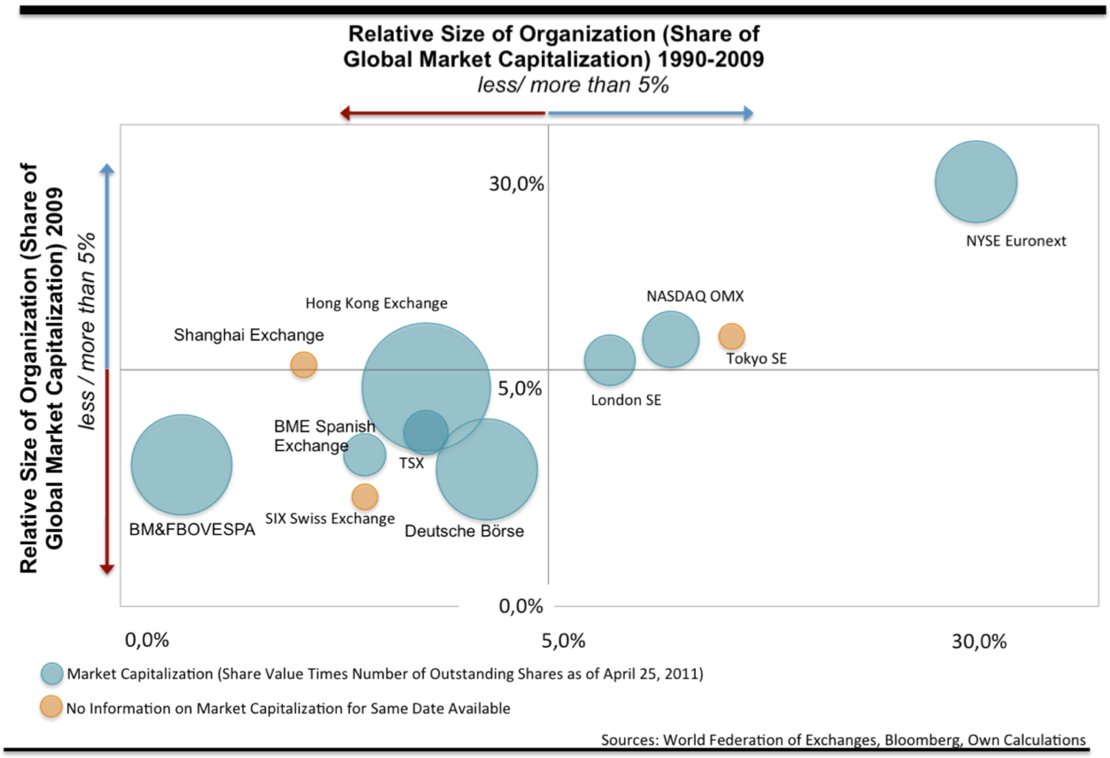

FIGURE 1: INDUSTRY DOMINANCE OF WORLD'S LARGEST STOCK EXCHANGE ORGANIZATIONS

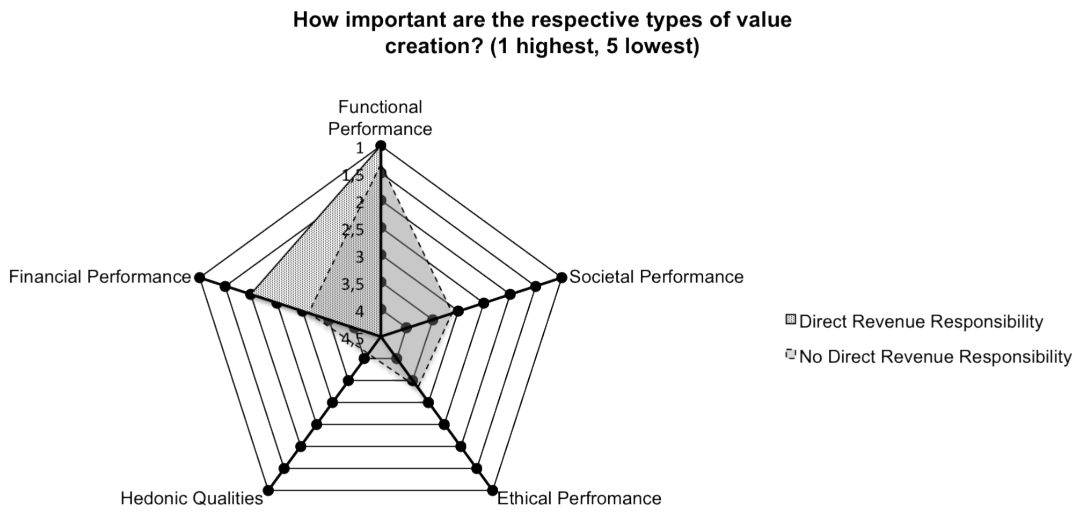

FIGURE 2: VALUE RANKING BY DEUTSCHE BÖRSE'S MANAGERS

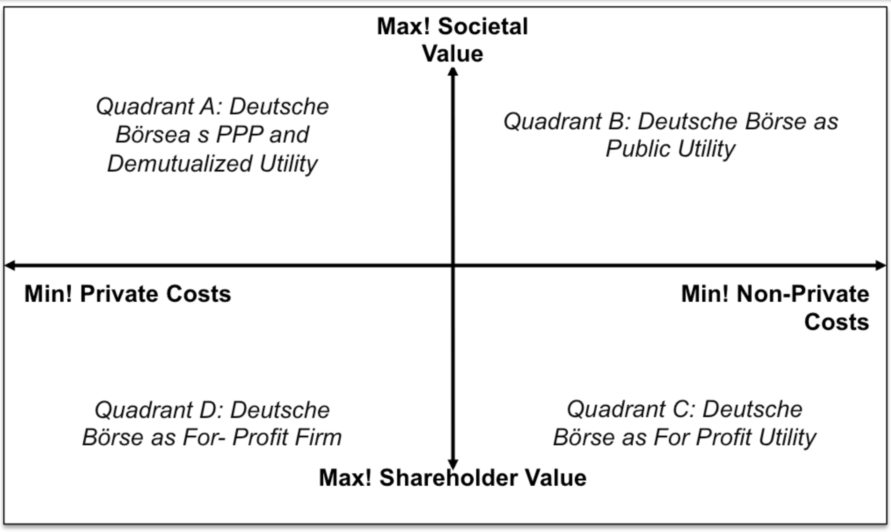

FIGURE 3: BALANCING FIRM'S INTEREST AND SOCIETY