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Corporate Diversification and Boards' Line of Reasoning – The Swedish Case 1994 – 2009

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Abstract

In this paper, we investigate board of directors' line of reasoning and its relationship to product diversification. Line of reasoning is here understood as "a common thread" in discourses in boards' decision making processes, and hence a systematic use of vocabulary mirroring certain values. We separate between two broad categories of reasoning – a financial or an industrial view. Our empirical analysis is based on 83 large Swedish PLCs during the period 1994 – 2009. In contrast to what would be expected based on theory (in particular agency theory), we found that firms with boards with a financial orientation were slightly more diversified than those with boards more oriented towards an industrial line of reasoning.

Key words: Corporate Governance, Diversification, Line of reasoning, Agency theory

Introduction

There is an increasing interest in how board of directors contribute to corporate strategy (Hendry et al., 2010; McNulty & Pettigrew, 1999; Pugliese et al., 2009). In this paper we will explore one important aspect of corporate strategy – the degree of diversification – and its relationship to board of directors’ “line of reasoning” (Dzialo et al., 1998). Diversification is an all but novel topic in research related to corporate strategy, and especially two – three decades ago, several seminal and still well cited texts were published (e.g. Datta et al., 1991; Hill et al., 1992; Lubatkin & Rogers, 1989; Montgomery, 1994; Nayyar, 1992; Ramanujam & Varadarajan, 1989; Rumelt, 1974; 1982). More recent studies on diversification and corporate strategy include Neffke and Henning’s (2013) work on diversification and skill relatedness.

Also in the context of corporate governance, the issue of diversification has been explored. Lane et al. (1998; 1999), Denis et al. (1999) and Amihud and Lev (1999) have analysed and debated the role that ownership structure has on corporate diversification strategies. In addition to ownership structure, Hill and Snell (1988; 1989) also investigated the relationship between diversification and stock-based compensation. Collin and Bengtsson (2000) added the important perspective of financiers of debt (in addition to stockholders) into the governance/diversification equation. The link between the board and diversification has rather recently been investigated by Chen et al. (2009). Based on an empirical study of Australian publicly listed companies, they found a positive link between diversification and directors who also have ties to boards in other industries.

In this paper, our aim is to add to the literature on boards and diversification by empirically investigating the link between board of directors, their orientations and diversification strategies. As previously mentioned, we focus on *board of directors’ line of reasoning* and its effects on diversification (in this paper referring to *product* diversification, not geographical diversification). Line of reasoning is here understood as “a common thread” in discourse and communication, and hence a systematic use of vocabulary mirroring certain values. We separate between two broad categories of reasoning – a *financial* or an *industrial* view (Dzialo et al., 1998; Walsh & Seward, 1990). When it comes to diversification, we will use Rumelt’s (1982) rather classical and often used conceptualization. Our empirical analysis is based on Swedish public firms during the period 1994 – 2011, which in itself is an empirical contribution given the longitudinal perspective (twenty years) and the general dominance of Anglo-Saxon empirical data in corporate governance/diversification-studies (Collin & Bengtsson, 2000). Are boards with a financial line of reasoning less likely to diversify than boards with an industrial line of reasoning? Do boards and their line of reasoning matter at all when it comes to diversification decisions?

The reminder of the paper is structured in five sections. The first section discusses the relationship between agency theory and diversification. The following section presents the concept of lines of reasoning and the hypothesis to be tested. The next section explains the data and method used in our empirical analysis. The fourth section presents the results and the final section discusses its implication and concludes the paper.

Agency theory and diversification

From an agency theory perspective (Fama, 1980; Fama & Jensen, 1983; Jensen & Meckling, 1976), there are reasons to believe that there are potential tensions between the principals (shareholders) and their agents (directors and management) when it comes to corporate diversification. Shareholders’ preferences for diversification in a particular company are assumed to be based on a total view on their investment portfolio and associated exposure to and preferences in terms of risk. There is a risk that directors/managers in their turn want to hedge their risks associated with profit volatility by decreasing their exposure to a single product market, and hence indulge in – from a shareholder perspective – excess (more or less

related) diversification (Amihud & Lev, 1981; 1999; Jensen, 1986). The foundation behind this assumption is that from a financial principal's perspective, it is preferred to have more focused, narrow objects of investments in order to be able to monitor and manage risks instead of having the agents *also* trying to mitigate and spread risks within each firm. This is further justified by "the prediction of conventional finance theory that risk is traded with a profit discount", leading strategy researchers to hypothesize that "unrelated diversification reduces the volatility of profit at the expense of the control capacity of management, causing profit to be lowered" (Collin & Bengtsson, 2000: 156; see also Lubatkin & Rogers, 1989). To put it a bit bluntly and simplified: Shareholders tend to want less diversification than their directors/managers do. Alignment of interest regarding diversification strategy will therefore generate agency costs (Jensen & Meckling, 1976). Based on the fundamental assumption in finance theory that risk is highly correlated with profit opportunity in combination with the fact that a diversified business is harder for a principal to monitor (reducing the control capacity of management) it is often assumed that there is negative relationship between (at least unrelated) diversification and firm profitability (for critique and a more nuanced view, see e.g. Bettis, 1981; Hill & Pickering, 1986; Lubatkin & Rogers, 1989).

Diversification can be described by "the extent of participation in different businesses and the underlying pattern of relationships among various businesses of firms" (Nayyar, 1992: 219). In this paper, we will depart from Rumelt's (1982) rather established conceptualization of diversification (even if it also have been criticised by e.g. Nayyar, 1992 for measuring potential rather than actual relatedness of businesses). This means that we assume a business unit to be a product, product line, or a set of product lines with strong market interdependencies. A firm's specialization ratio – R_s – is therefore the part of the revenues that can be derived from the largest business unit. The related-core ratio – R_c – is the share of revenues from businesses that draw on the same common core skill, strength, or resource, while the related ration – R_r – is the part of a firm's revenues attributable to its largest group of somehow related businesses, defined as "a group of businesses such that each is related to at least one other in the group but which need not exhibit any single common skill or resource" (Rumelt, 1982: 360). Finally – R_v – stands for a firm's vertical ratio and measures the part of its revenues from its largest group of "product, join-products, and by-products associated with the processing of a raw material through a set of stages" (Rumelt, 1982: 360). The categories and ratios are summarized in Table 1 below.

Table 1
Rumelt's diversification categories

<i>Symbol</i>	<i>Categories</i>	<i>Ratio specification</i>
SB	Single business	$R_s \geq 0.95$
DV	Dominant vertical	$R_v \geq 0.70$
DC	Dominant constrained	$0.95 < R_s < 0.7; R_c > (R_r + R_s)/2$
DLU	Dominant linked-unrelated	$0.95 < R_s < 0.7; R_c < (R_r + R_s)/2$
RC	Related constrained	$R_s < 0.70; R_r > 0.70; R_c > (R_r + R_s)/2$
RL	Related linked	$R_s < 0.70; R_r > 0.70; R_c < (R_r + R_s)/2$
UB	Unrelated business	$R_r < 0.70$

In this paper, we will simplify the framework presented above somewhat by only measuring R_s as a ratio between 0.0 and 1.0 (more on this in the section called "Data and method" below). This specialization ratio will then be used for potential correlation with each board's line of reasoning, a concept that will be further elaborated in the next section.

Boards' orientation and line of reasoning

Directors reason when they prepare, make, and follow up decisions. In this article we suggest that one purposeful way to understand the differences in board processes is to investigate the discursive pattern, the lines of reasoning, in the processes of the board. Accordingly, we presuppose that it is possible to detect categories of "reasoning" or "argumentation" which characterize the decision making of the board, rather than the argumentation of individual directors.

The idea that the development of society is supported by and supports the development of certain "world views" or "spirits" is not new. Tönnies (1887/1957), for example, distinguished between the approach to the world of "Gemeinschaft" and the one of "Gesellschaft" and concluded that "Gesellschaft" supported the modern industrialized society and the logic of capitalism. Weber (1930) used the concept "spirit of capitalism" in a similar way to describe the development of industrialized society in "The Theory of Social and Economic Organization" (Weber, 1947), developing behavioural categories of economic action. The common thread in these classic works, as well as in later research, is the existence of a logic of capitalism in the Western world, which develops and is developed through business activities.

With the above discussion as a background, it is plausible to expect that lines of reasoning among boards of directors when performing their work lie within the capitalist logic. Fligstein's (1990) research suggests that this logic is not homogeneous or static, but constructed and re-constructed. Consequently, one may conceptualize different simultaneous lines of reasoning within the capitalist logic and examine what lines of reasoning are used in the work of different boards.

One way of conceptualizing different possible lines of reasoning used in boards is to use earlier research in the area to deduce the contents of the lines of reasoning which are likely to cover the lines of reasoning applied by corporate boards. Our assumption is that this research reflects different lines of reasoning within the capitalist logic present in society and in the processes of boards. In research about boards of directors, both the financial economics perspective (e.g., agency theory) and the organization-theory perspective (e.g. resource dependency theory) have gained empirical support (Zahra & Pearce, 1989; Donaldson & Davies, 1994). This implies that the assumptions (even if they can be inconsistent) of both financial economics and organization theory are embedded in boards' lines of reasoning. To extract different lines of reasoning, we apply the distinctions utilized by Walsh and Seward (1990: 422-423) when they discuss the differences between financial economics and organization theory: a) the identification and rank ordering of a firm's claimants or stakeholders; b) the implication of the theory of the firm for management activity; and c) the appropriate measure of firm performance.

Analysing the literature representing financial economics and organization theory, and applying Walsh and Seward's dimensions, we distinguished two different lines of reasoning: The first is a line of reasoning where financial markets and the interests of shareholders are in focus. In the context of corporate boards, the object of the board is primarily to protect shareholders' interests. Accordingly, the board evaluates company performance as financial performance. The focus is on financial measures and devices when preparing, making and evaluating decisions. Boards working in this manner are labelled as having a financial line of reasoning. Another line of reasoning is the orientation towards the product markets of the firm, and a ranking of other stakeholders of the firm as being equal to the shareholders. This implies that the board more actively applies a wider range of criteria, such as customer satisfaction, time to market and market share, rather than financial criteria, when making decisions. Accordingly, boards working in this manner are labelled as having an industrial line of reasoning. In Table 2, some characteristics of the two lines of reasoning and relevant literature references are described.

Table 2
Characteristics of financial and industrial lines of reasoning

Line of reasoning/ Dimensions of characteristics	Financial line of reasoning	Industrial line of reasoning	References
Main stakeholder	Owners	Owners and other stakeholders	Mizruchi, 1983; Fama, 1980; Freeman, 1984.
Relationship with main stakeholder	Agency or stewardship perspective	Stakeholder perspective	Fama & Jensen, 1983; Donaldson, 1990; Jones, 1995; Freeman, 2010.
Performance focus	Financial markets	Product markets	Donaldson & Lorsch, 1983.
Attitude toward control	Primarily market control	Primarily internal governance system	Fama, 1980, Walsh & Seward, 1990.

The two lines of reasoning, which have been discussed above, are pure types rather than empirical categories. It is likely that empirical studies of boards will reveal that the boards' reasoning, when making decisions consists of a mix of aspects with different emphasis, related to either an industrial or a financial line of reasoning, or to both. For example, an investment in fixed assets may be argued for by referring to possible stock market reactions (related to a financial line of reasoning) or by referring to technological development (related to an industrial line of reasoning). In a board, both lines of reasoning may be used and each board may use and mix aspects in the discussion in a unique way. We use the label "board orientation" for the mix of aspects which may be related to both, or either, an industrial and/or a financial line of reasoning which a specific board uses in its reasoning when making decisions. The label "board orientation" is established to distinguish the empirically measured contents of the reasoning from the pure types of line of reasoning. The board's orientation is assumed to mirror/influence the board's behaviour and thereby determining the impact that the board has on the company.

The measurement of board orientation presupposes that it is possible to detect a common framework among directors regarding how issues are discussed and argued about in the specific board. A number of researchers have studied how interest groups, coalitions, and sub-units in organizations develop mutually shared fields (Weick & Roberts, 1993) or mental models (Reger et al., 1994). Through, for example, socialization processes and daily interaction, the members of the organization come to identify with a common set of means and ends (e.g. Bacharach et al., 1996; Weick, 1995). Given the character of the processes of the board, we assume that it becomes possible to discern a board orientation. However, even though interactions in a board setting may be less frequent than daily interactions, the importance and intensity of the interactions among directors when they meet may nurture the emergence of a common thread of reasoning when they work together. A common thread does not presume more fully developed interpretive maps, such as those implicit in such concepts as collective mind (Weick & Roberts, 1993). A collective mind presupposes a closer and more intimate interaction among actors than the nature of the board process usually admits. The presence of outside directors on the board, for example, implies that interpretive maps that were shaped in other contexts are brought into the board work. The board orientation is restricted to the way the board approaches its decision-making. In this respect, board orientation has kinship with the concept of "style of accountability" (Ahrens, 1996). Style of accountability is defined as "a distinguishable way of giving and demanding reasons for conduct" (p. 141). The style of accountability "...could be thought of as a mode of engagement between rhetoric and practice, concept and action,

without, however, determining any particular engagement's effects on action"(p. 141). In the same way, a board's orientation in the board process may be thought of as a board's "reasons for conduct" and a "mode of engagement between rhetoric and practice" in the context where boards prepare, make and evaluate decisions.

To summarize our framework so far, we have begun with the idea that the board process is constituted by, among other things, reasoning when making decisions. Our assumption is that a common feature of boards is that they base their decisions on different lines of reasoning, emphasizing different aspects of capitalist business logic. Within the capitalistic logic, two different lines of reasoning are distinguished in the setting of corporate boards: a financial line of reasoning and an industrial line of reasoning. The argumentation of the board when preparing, making and evaluating decisions could contain aspects related to both an industrial and a financial line of reasoning. The pattern of aspects applied by a board in the specific case is labelled "board orientation" in this article. The board orientation is assumed to permeate the board's process and thereby affect the conduct of the board of directors in its decision-making.

Agency theory and its underlying assumptions are largely mirrored/enacted in what we refer to as a board orientation characterized by a financial line of reasoning (Dzialo et al., 1998; Walsh & Seward, 1990), and given the presented relationship between agency theory and diversification (as described in the previous section), it seems reasonable to hypothesize that boards characterized by a significant degree of financial line of reasoning are less inclined to engage in diversification than boards with a more industrial line of reasoning. In the following hypothesis we examine this relationship.

Hypothesis 1: Firms with a board orientation characterized by a strong financial line of reasoning are less likely to diversify than those with a weak financial line of reasoning.

Board orientation/line of reasoning will here be regarded as an independent variable with possible effects on the degree of diversification as a dependent variable.

Data and method

The study is based on data about boards of directors of companies listed on the Swedish Stock Exchange in the years 1994, 1999, 2004 and 2009. The procedure regarding data collection was the same for all four surveys. Questionnaires were sent personally to directors and CEOs of the companies in all firms listed at the main list (In 1994 and 1999 this list was labelled the "A-list", in 2004 and 2009 it was labelled "Large Cap"). Many interlocking directorates existed. Several of the CEOs and the directors therefore could have received more than one questionnaire, had we sent questionnaires to each directorate position. Consequently, arrangements were made so that each director and CEO would receive only one questionnaire. We made sure that persons in different categories of directors (owner-elected, union-elected etc.) were included for each board surveyed. Since the directors of the boards of banks and pure investment companies usually occupy positions in one or more companies' boards, banks and pure investment companies were excluded from our population.

Data regarding diversification was collected from annual reports for all years between 1992 and 2011 for the firms that were included in the 2009 survey. This means that data regarding diversification for firms that were listed in 1994, 1999 and 2004 were only collected if they were still listed in 2009. The total number of firms for which data was collected was 83.

Operationalizations of board orientation and boards' lines of reasoning

Board orientation was measured using an instrument in which the directors and CEOs of each company were asked to assess a number of different types of decisions likely to appear on the agenda of boards. The types of decisions were: 1) investments in fixed assets, 2) mergers and acquisitions, 3) decisions about product development, 4) strategic planning, and 5) introduction of the company's stocks on a foreign stock exchange. In the surveys 1999, 2004 and 2009 the 5th type of decision was exchanged from "introduction of the company's stocks on a foreign stock exchange" to "internationalization of business". The reason for this was that very few firms in the late 1990s introduced company stock on foreign stock markets, while internationalization of business were topical in boards' decision making. For each type of decision the eight aspects in Figure 1 were listed, indicating industrial or financial arguments when communicating about the decision. The decisions were chosen to cover situations where the capitalist business logic would be applicable and likely to be argued for using aspects mentioned in Figure 1. A Likert scale ranging from one (a value of non-influence) to seven (a value of decisive importance) was used in order to assess the perceived importance of the aspects. An example of a question used in the survey is given in Figure 2.

Figure 1
Line of reasoning - aspects

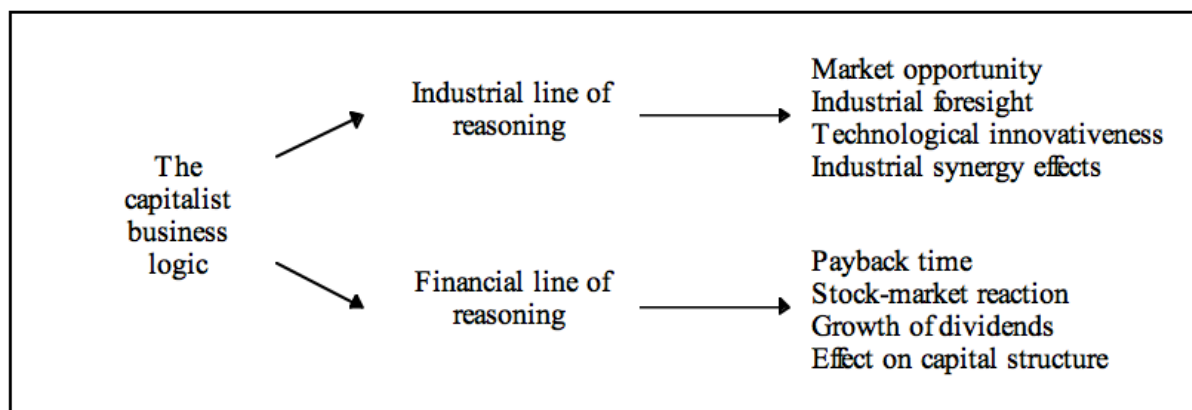


Figure 2
Example of survey question

Question 5a: Please indicate (with a circle) on the scale below the degree to which the board of **Stora Företaget AB** emphasises the following in dealing with decisions about larger investments in the production process.

A. Market opportunities	No							Decisive
	importance=	1	2	3	4	5	6	7 =importance
B. Fast pay-back	No							Decisive
	importance=	1	2	3	4	5	6	7 =importance
C. Industrial foresight	No							Decisive
	importance=	1	2	3	4	5	6	7 =importance
D. Stock market reaction	No							Decisive
	importance=	1	2	3	4	5	6	7 =importance
E. Growth of dividends	No							Decisive
	importance=	1	2	3	4	5	6	7 =importance
F. Technological innovativeness	No							Decisive
	importance=	1	2	3	4	5	6	7 =importance
G. Industrial synergy effects	No							Decisive
	importance=	1	2	3	4	5	6	7 =importance
H. Effects on the firm's capital structure	No							Decisive
	importance=	1	2	3	4	5	6	7 =importance

Both the types of decisions and the aspects used when measuring board orientation were deducted from the literature on strategy and corporate governance, and their validity has also been tested in a pilot study including directors on corporate boards and researchers in the corporate governance field. Case studies of Swedish boards of directors (Lundgren, 1986) also helped us to ensure that the types of decisions and aspects were both theoretically and empirically relevant for studying boards of large listed companies.

Operationalization of diversification

To measure diversification, we have in this paper used the Industry Classification Benchmark (ICB), which is an established Global Industry Classification system for dividing a company's net sales in specific codified classes. The advantage of using ICB is that all income that is attributable to the same code can be collected from all the company's activities and divisions. This leads to a more accurate reflection of the company's degree of diversification than just look to separate business areas' size. A disadvantage of the ICB system is that a tight division can obscure that a company has a higher degree of diversification in reality than what the system allows.

Rumelt introduced a further development of a classification system, originally developed by Wrigley in 1970, when considered that the Industry Classification system had inherent weaknesses (Rumelt, 1974; Montgomery, 1994). Rumelt's classification measures, like Wrigley, a company's degree of diversification. Rumelt coined the notion of relatedness that is used to examine how much of a company's net revenue that is related to shared technology, product characteristics and distribution channels. According to Rumelt's rating system measures the company's degree of diversification by dividing the largest business segment with total sales (Rumelt, 1974). The advantage of this system is that you can connect a company's overall degree of diversification to how it is related to the company's original business. The system is considered to provide a valid assessment of the level of diversification. The reliability of the system has been questioned as there may be a risk of that the choice of category may be a matter of judgment when it comes to classification according to relatedness, thus make measurement difficult to reproduce (Montgomery, 1994).

In this paper, we have to some extent, as mentioned above, departed from Rumelt's (1982) rather established conceptualization of diversification. We assume a business unit to be a product, product line, or a set of product lines with strong market interdependencies. A firm's specialization ratio – R_s – is therefore the part of the revenues that can be derived from the largest business unit. In our survey, after having coded the 83 companies' revenues according to ICB, we used R_s to measure firms' degree of diversification.

Result

In order to test the relationship between the independent factors – board orientation – and the dependent – diversification – the operationalized measures were computed. In step one, we aggregated the score for all 40 variables from surveyed individual board members to a score for the specific board for 1994, 1999, 2004 and 2009. The mean score for each board was decided to be the aggregated score for respective year of survey. In step two, a score for each of the types of decisions was computed by aggregating the scores measuring industrially-oriented aspects and from this aggregated score subtract the aggregated score measuring the financially-oriented aspects. This resulted in five variables for each board in the sample measuring line of reasoning. The theoretical range for each variable was (-) 24 to (+) 24, i.e. $((7*4) - (1*4))$. A positive score indicates industrially-oriented line of reasoning and a negative score indicates a financially-oriented line of reasoning. A bivariate correlation test shows a statistically significant relationship (0,01-level) between line of reasoning for all types of decisions among the surveyed boards of directors (see table 3). Considering the ordinal scale for independent variables

Spearman's rho was chosen. Note that the measure 5a was only applied for the 1994 survey, and 5b was used for 1999, 2004 and 2009.

Table 3
Correlations – Line of reasoning

		Line of reasoning 2	Line of reasoning 3	Line of reasoning 4	Line of reasoning 5a	Line of reasoning 5b
Line of reasoning 1 - investments in fixed assets	Correlation Coefficient	,820**	,713**	,740**	,450**	,704**
	Sig. (2-tailed)	,000	,000	,000	,000	,000
	N	363	361	363	94	265
Line of reasoning 2 – mergers and acquisitions	Correlation Coefficient	-	,722**	,829**	,488**	,771**
	Sig. (2-tailed)	.	,000	,000	,000	,000
	N	-	361	365	93	268
Line of reasoning 3 – decisions about product development	Correlation Coefficient	-	-	,712**	,390**	,726**
	Sig. (2-tailed)	.	.	,000	,000	,000
	N	-	-	360	93	264
Line of reasoning 4 - strategic planning	Correlation Coefficient	-	-	-	,405**	,729**
	Sig. (2-tailed)	.	.	.	,000	,000
	N	-	-	-	93	268
Line of reasoning 5a - introduction of the stocks on a foreign stock exchange	Correlation Coefficient	-	-	-	-	.
	Sig. (2-tailed)	.	.	.	.	.
	N	-	-	-	-	-

Data considering the dependent variable – R_s -was collected for the year of every survey and the consecutive four years. This resulted in five variables: R_sT_0 ; R_sT_1 ; R_sT_2 ; R_sT_3 ; R_sT_4 . For each of these variables a theoretical value continuum between 0 and 1 were inserted reflecting the percentage of revenue coming from the dominant industry for each firm. The value 1 represents that a firm had all revenue from one industry. When testing the relationship between board orientation and diversification we did not discriminate among years of survey. Regardless of year for survey of board orientation the criteria for inclusion was that we had a measurement. This means that some firms included in the study are measured up to four times (1994, 1999, 2004 and 2009), while others might just be measured once (any of the years 1994, 1999, 2004 and 2009). The year of survey represents T_0 .

In order to test the relationship a bivariate correlation test was utilized. Again, considering the ordinal scale for independent variables Spearman's rho was chosen. A one-tailed probability was selected for test of significance considering the hypothesized relationship. The result from the correlation test is presented in table 4.

Table 4
Correlations – line of reasoning and diversification (R_s)

		R_sT_0	R_sT_1	R_sT_2	R_sT_3	R_sT_4
Line of reasoning - investments in fixed assets	Correlation Coefficient	,033	,016	,010	,045	,014
	Sig. (1-tailed)	,339	,422	,451	,325	,442
	N	160	157	157	104	104
Line of reasoning – mergers and acquisitions	Correlation Coefficient	,177*	,157*	,166*	,166*	,147
	Sig. (1-tailed)	,012	,024	,019	,046	,067
	N	161	158	158	105	105
Line of reasoning - decisions about product development	Correlation Coefficient	,044	,042	,047	,066	,039
	Sig. (1-tailed)	,290	,299	,280	,253	,346
	N	160	157	157	104	104
Line of reasoning - strategic planning	Correlation Coefficient	,207**	,177*	,167*	,248**	,221*
	Sig. (1-tailed)	,004	,013	,018	,005	,012
	N	161	158	158	105	105
Line of reasoning - introduction of the stocks on a foreign stock exchange	Correlation Coefficient	,025	,021	,119	,095	,172
	Sig. (1-tailed)	,456	,463	,299	,337	,222
	N	22	22	22	22	22
Line of reasoning - internationalization of business	Correlation Coefficient	,016	,022	,019	,068	,024
	Sig. (1-tailed)	,424	,399	,416	,272	,416
	N	138	134	134	82	82
R_sT_0	Correlation Coefficient	-	,974**	,930**	,921**	,941**
	Sig. (1-tailed)	.	,000	,000	,000	,000
	N	-	158	158	105	105
R_sT_1	Correlation Coefficient	-	-	,958**	,933**	,937**
	Sig. (1-tailed)	.	.	,000	,000	,000
	N	-	-	159	106	106
R_sT_2	Correlation Coefficient	-	-	-	,979**	,962**
	Sig. (1-tailed)	.	.	.	,000	,000
	N	-	-	-	106	106
R_sT_3	Correlation Coefficient	-	-	-	-	,977**
	Sig. (1-tailed)	.	.	.	.	,000
	N	-	-	-	-	106

** . Correlation is significant at the 0.01 level (1-tailed).

* . Correlation is significant at the 0.05 level (1-tailed).

The test reveals that a statistically significant relationship between line of reasoning and diversification can be observed for two measured types of decisions – decisions regarding 1) mergers and acquisitions, and 2) strategic planning. However, the relationship between line of reasoning in strategic planning is stronger. The correlation is positive, which means that among the studied firms there was a positive relationship between an industrial orientation in decision making and concentration of business for the studied period. It can also be noted that the pattern does not change significantly between the years of observed degree of diversification, which indicates stability over measured years among surveyed firms. As shown in table X, the relationship among R_sT_0 , R_sT_1 , R_sT_2 , R_sT_3 , and R_sT_4 are significantly correlated.

Discussion and conclusion

As indicated above, our analysis lends no support for the hypothesis that firms with a board orientation characterized by a strong financial line of reasoning are less likely to diversify than those with a weak financial line of reasoning. There is no significant correlation between the

degree of financial orientation and the concentration of businesses within the firms we have studied. On the contrary, there is a limited but still significant correlation between an *industrial* board orientation and the tendency of focused firms in terms of dominant single businesses.

Given our assumption (and intention with the research design) that a financial- and agency theoretical perspective is mirrored in what we have operationalized as a financial line of reasoning, this result goes against what other scholars (e.g. Amihud & Lev, 1999; Jensen, 1986) describe as shareholder oriented and predicted behaviour by firms with a strong financial/principal orientation.

One explanation is that boards and especially their line of reasoning really do not matter that much when it comes to diversification decisions. We were surprised by the strong dominance of single businesses in Sweden (45-49% of the 83 firms over the years studied), and how stable these corporate structures have been over the time period we have studied (1994-2011). The fact that the degree of single business for a given company is stable over time does however not necessarily imply that the company rely on the same dominant business unit 2011 as it did 17 years earlier. The radical development of e.g. IT and digitalization during the period might have forced companies to shift focus from one (obsolete) dominant business unit to another (but still keep its focused profile with one dominant type of business).

During the same period of time, we see a tendency of increased financially informed lines of reasoning in the boards we have studied (relative to the historically dominating industrial logic, see also Blom, 2007; Brodin et al., 2000; Tengblad, 2004). This has however not made a significant mark on how the firms strategize in terms of diversification, since industrially oriented boards are still as likely or even more likely to favour single businesses than financially oriented boards. Perhaps the discursive level (reflected in our surveys) is decoupled from the managerial practice on an everyday basis? What board of directors *say* is not necessarily reflected in how they *act*.

Other aspects than the board and their line of reason might of course be more important in order to understand the drivers behind diversification decisions (an analysis that falls out of scope in this paper). Industry, management fashion, etcetera, might be much more important when trying to understand what determines if a firm will be based on a single business or more or less related business units. But from a corporate governance perspective it is still interesting to explore the role of boards when it comes to firm strategy and crucial decisions such as the degree of diversification. After all, the board is supposed to have the overall responsibility for the firm. Chen and colleagues (2009) showed that external directors with connections to boards in other industries tend to drive diversification. Our study adds to the growing body of knowledge on how boards impact diversification decisions by – surprisingly – indicating that an orientation characterized by an industrial logic is more likely to favour focused, single businesses, than boards more clearly coloured by financial/agency theoretical arguments.

The study reported here has limitations. Among them is that we limit diversification to product/industry and neglect international diversification. This means that any trade-off effect between product or geographical diversification is neglected. Prior empirical research has found that firms do appear to face a trade-off when seeking to expand via product or geographic diversification (Wiersema & Bowen, 2008), but our operationalization does not admit this to be tested. Furthermore, our choice to limit data to assess whether the boards of directors influence the strategic directions of the firm to product diversification limits the scope of influence. An extension of scope including other aspects of a firms' strategy; for example, the level or scope of outsourcing of production, or investment in R&D. These clearly represent areas for further research.

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