BOARD PERFORMANCE IN STRATEGIC MONITORING: EVIDENCE FROM PORTUGAL

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ABSTRACT

Despite the growing interest in the performance of boards of directors, most studies in the field concentrate on board structure instead of the ways they actually work. Few studies have shed light on how the work practices of boards may influence their performance on strategic tasks. In particular, no studies have analysed the Portuguese context in this regard. This paper analyses the influence of non-structural factors that may affect the effectiveness of Portuguese boards in the task of strategic monitoring. To do so, a replication study was conducted with basis on the model developed by Amaral-Baptista (2013) in the context of Brazilian firms. To test the model in the Portuguese empirical setting, a survey with 105 non-executive directors of Portuguese companies was conducted in 2014. The results showed that 67% of the variance observed in Board Effectiveness in Strategic Monitoring was explained by the antecedents Chairperson Leadership, Attention to Strategic Monitoring and Work Dynamics. Although Access to Information had a significant and positive influence on Business Knowledge, the effects of these factors on Board Effectiveness in Strategic Monitoring were not confirmed. These findings were generally consistent with the results of Amaral-Baptista (2013). The study is concluded with implications for management practice and future studies.

Keywords: corporate governance, board of directors, strategy implementation, strategic monitoring, Portugal.

INTRODUCTION

The ways to good corporate governance are an emerging yet under-researched topic, since most of the studies conducted in the area are based on incomplete or inadequate models and the question of why boards fail to behave accountably has not been fully answered (Huse, 2009). A growing consensus about the importance of boards of directors (BoD) in monitoring the course of strategy implementation (SI) is rising among academics and practitioners (Schmidt & Brauer, 2006). As BoD are generally distant from the SI activities, they must

display sound work processes and dynamics to effectively monitor the achievement of corporate strategic objectives (Amaral-Baptista, Macedo-Soares, & Melo, 2011). Many authors emphasised the importance of the mediating role of behavioural factors on company level outcomes (Daily, Dalton, Albert, & Cannella, 2003; Gabrielsson & Huse, 2004; Huse, 2005) as several studies on the direct relationships between board structure and corporate financial performance were inconclusive.

In order to systematically analyze the antecedents of board performance in monitoring strategy implementation, Amaral-Baptista (2013) proposed and tested a conceptual framework with survey data on Brazilian boards. In this study, the model was replicated and tested in the empirical context of Portuguese boards in order to analyse whether, and in which ways, non-structural factors affect their performance in the task of monitoring strategic implementation.

In doing so, this study aims to contribute to the ongoing debate on board performance in several ways. It intends to generate a deeper discussion about the actual roles of the non-executive directors within a boardroom by analysing the practices followed in monitoring SI. It also seeks to provide additional validity to the model of Amaral-Baptista (2013) in explaining the non-structural antecedents of board performance in different contexts. Finally, it aims to contribute to the development of corporate governance practices in Portugal by suggesting recommendations for the improvement of the boards' monitoring capabilities.

THEORETICAL BACKGROUND

Board effectiveness

The logic of measuring a board's effectiveness is to bridge the gap between what boards should do and what they do in reality (Forbes & Milliken, 1999; Huse, Minichilli, & Schoning, 2005; Huse, 2005; Mace, 1972; Schmidt & Brauer, 2006). A board's effectiveness may be defined as its ability to perform its tasks (Forbes & Milliken, 1999; Johnson, Daily, & Ellstrand, 1996; Zahra & Pearce, 1989). Zahra & Pearce (1989) propose three board task categories: service, control and strategic tasks. The service task, which derives from the resource dependence theory (Pfeffer & Salancik, 1978), can be associated to the management support activities of the board. The control task, grounded on agency theory, sets emphasis on the decision control and monitoring activities of the board in order to reduce managerial opportunism (Huse, 2005). The strategic task relates to the involvement of boards in strategy formulation and implementation (Zahra & Pearce, 1989). Some aspects of a board's involvement in strategy are related to control, such as gatekeeping and control of strategic decisions (Fama & Jensen, 1983).

While Pettigrew (2009) refers to the BoD as an instrument of both control and strategic leadership and calls for a discussion of the purpose and improvement of actual board effectiveness, Roberts et al. (2005) stress on the point that understanding what goes on in boards is crucial to increase the confidence of distant investors and other stakeholders. In this logic, considering that CG plays an important role to coerce the excess of short-termism and risk-taking, research is pointing to the importance of board behaviour on the quality of decision-making, and claiming the need for studies that are able to observe boards in action.

The importance of the strategic involvement of boards to the contribution of long-term value creation (Andrews, 1981) and the suggestion that non-executive directors should participate in the decision-making process (Demb & Neubauer, 1992), is in line with the definition of boards' effectiveness of Roberts et al. (2005:S6) where "the key to board effectiveness lies in the degree to which non-executives acting individually and collectively are able to create accountability within the board in relation to both strategy and performance". Roberts et al. (2005:S6) go further by explaining that accountability can be achieved by "a wide variety of behaviours – challenging, questioning, probing, discussing, testing, informing, debating, exploring, encouraging – that are at the very heart of how non-executives seek to be effective". The contribution of the behavioural dimension to effectiveness of boards is also highlighted by Forbes & Milliken (1999:495), when they state that effective boards are those which are able to perform distinctive service and control activities successfully and yet continue to work as a team. Thus, a wider range of theoretical perspectives are required to understand the antecedents of the effectiveness of boards (Daily et al., 2003; Gabrielsson & Huse, 2004).

Some recent studies (Gabrielsson, Huse, & Minichilli, 2007; Huse, Hoskisson, Zattoni, & Viganò, 2011) used the Team Production Theory (TPT) (Blair & Stout, 1999) as a theoretical explanation of a board's effectiveness. The TPT underlies a function model where boards simultaneously coordinate and control team members, going beyond the usual assumption of conceiving boards uniquely as monitoring agents for shareholders. Kaufman & Englander (2005) stressed the importance of achieving a constructive team production

culture in the boardroom, conducent to the involvement and contribution of each team member. Hence, effective boards should be endowed with the necessary know-how, skills and information brought by each board member. It is, thus, reasonable to assert that team production quality within a boardroom is influenced by behavioural perspectives and work processes.

Antecedents of board effectiveness in monitoring strategy implementation: Conceptual model and hypotheses

The most influential general board performance models found in literature (Forbes & Milliken, 1999; Huse, 2005; Zahra & Pearce, 1989) focus on non-structural antecedents of a board's effectiveness. However, although they suggest the existence of mediated relations among the non-structural factors of effectiveness, they are not task-specific. Amaral-Baptista (2013) developed and tested a board effectiveness model specific to the SI monitoring task. It draws on the general models mentioned above and on the team production perspective. A preliminary set of qualitative data from in-depth interviews with non-executive directors was analysed and used to refine the conceptual model, which was subsequently tested with a survey study with 217 board directors of Brazilian companies in 2012. The empirical results showed that the five constructs that influence a Board's Performance in Strategic Monitoring are Access to Information, Business Knowledge, Work Dynamics, Chairperson Leadership and Attention to Strategic Monitoring. The relationships among the constructs are depicted in Figure I and their operational definition is presented in Table I.





Source: Amaral-Baptista (2013)

Construct	Abbreviation	Operational Definition
Access to Information	AI	The extent to which the board has access to the information required to monitor strategy implementation.
Business Knowledge	ВК	The extent to which the business-specific knowledge required to monitor strategy implementation is collectively present at the board.
Work Dynamics	WD	The extent to which the board has interactions and work practices that are conducive to team production and decision making.
Chairperson Leadership	CL	The extent to which the chairperson has attributes that favour the board's team production and decision making.

Table I – Operational definition of constructs

Attention to Strategic Monitoring	AT	The extent to which the board dedicates attention to the task of monitoring strategy implementation.			
Board Performance in Strategic Monitoring	SM	The extent to which boards can perform their SI management tasks effectively.			

Source: Amaral-Baptista (2013)

In order to replicate the model in the Portuguese context, the development of its hypotheses is summarized next.

Board Performance in Strategic Monitoring (SM)

Board Performance in Strategic Monitoring is the explained construct interest of this study. Literature suggests that in order to manage SI, a board is expected to systematically control the key strategic decisions (Sellevoll, Huse, & Hansen, 2007). To do so, a board's involvement in this task should be constant rather than sporadic (Zahra, 1990). Boards are expected to assume a questioning posture regarding the strategy that is being followed and should be able to identify when deviations from the intended strategy are occurring (Brauer & Schmidt, 2008). In line with the indicators of strategic consistency of Brauer & Schmidt (2008), it is suggested that the quality of monitoring SI can be measured by: (i) an early identification of SI deviations; (ii) the ability to veto emergent strategic proposals that lack consistency and deviate the company from the intended strategy; and (iii) the ability to promote the necessary decisions to return to the intended strategy (Amaral-Baptista, 2013).

Access to Information (AI)

The quality of the access to relevant information inside and outside the boardroom, necessary for monitoring strategy implementation, is important to promote effective participation of non-executive directors in strategic issues and to enhance specific and strategic knowledge (Nadler, 2004; Siciliano, 2002; Zahra, 1990). Boards should proactively define their needs in terms of information and match it to the strategic objectives of the company, considering additional dimensions of information to complement the financial dimension (Drew & Kaye, 2007). The capabilities and learning perspectives suggest that business knowledge can be influenced by access to information. As non-executive directors are not present on a daily basis in the company, one of the few interaction instances they have is in the board meetings. Consequently, accessing effective channels of information inside and outside the boardroom can contribute to the deepening of their knowledge on the performance and strategic initiatives of the company. Following this logic, it is hypothesized that:

H1: Access to Information is positively related to Business Knowledge.

Business Knowledge (BK)

In line with the general model of Zahra & Pearce (1989), boards with greater levels of knowledge can be more successful and effective in performing their tasks. Forbes & Milliken (1999) add the fact that in order to perform their tasks, non-executive directors should have expertise and competences in different areas. Also, the explicit and tacit knowledge was highlighted by some authors as a condition for non-executive directors to take consistent strategic decisions (Drew & Kaye, 2007; Huse, 2005). According to Brauer & Schmidt (2008), boards with high levels of knowledge are better prepared to offer a complementary vision to CEO when discussing deviations in strategic implementation. Those who do not understand the strategy of the company have no conditions to accurately question the management in order to ensure its correct execution. Hence, their contribution to work dynamics is limited. Based on these assumptions, the following hypothesis is formulated:

H2: Business Knowledge is positively related to Work Dynamics.

Work Dynamics (WD)

A direct and positive relationship between board's work dynamics and its task performance was suggested by Zahra & Pearce (1989), Forbes & Milliken (1999) and Huse (2005). As the knowledge available within a boardroom is not necessarily activated and used (Forbes & Milliken, 1999) it is necessary that BoD cultivate team production orientation, improve decision-making and invest in the quality of analysis procedures

(Huse, 2007). In order to prevent deviations in SI, BoD should be able to contribute to an atmosphere of creative teamwork characterized by openness, commitment, cohesiveness and cognitive conflict (Forbes & Milliken, 1999), so that decision-making about complex strategic issues is not taken based on superficial analysis. In line with this logic, boards should engage on comprehensive discussions in order to be able to get a considerable understanding of the implications of alternative courses of action (Sellevoll et al., 2007). Thus, contrasting points of view among members of the boards, including differences of opinion, perspectives or ideas favours the quality of work dynamics by deepening and enriching the discussion about strategic concerns (Forbes & Milliken, 1999). According to the TPT, it is proposed that there is a direct and positive relationship between Work Dynamics and Board Performance in Strategic Monitoring:

H3: Work Dynamics is positively related to Board Performance in Strategic Monitoring.

Chairperson Leadership (CL)

TPT assumptions assert that behavioural characteristics of the chairperson increase their potential influence when interacting with BoD. According to Gabrielsson, Huse, & Minichilli (2007), it is expected that the chairperson influence boards' performance through the coordination of work processes and the incrementation of collaborative attributes among non-executive directors. The chairperson should be able to optimize the interaction among BoD members as they can face some difficulties in interacting and cooperating due to the occasional nature of board meetings (Forbes & Milliken, 1999). By stimulating work dynamics and team production culture within the boardroom, it is expected that the chairperson ask for the directors' input, engaging them at every step of the strategic process. In line with this logic, it is hypothesized that:

H4: Chairperson Leadership is positively related to Work Dynamics.

Another important attribute of the chairperson is their ability to organize and prioritize BoD's work so that monitoring is effective. Assuming that different subjects are susceptible to require more time for discussion, the chairperson should be able to direct the boards' agenda to highly important strategic questions to the detriment of others and act as a facilitator of relevant information (Gabrielsson et al., 2007; Roberts et al., 2005). Thus, the following hypothesis is formulated:

H4a: Chairperson Leadership is positively related to Attention to Strategic Monitoring.

It is also expected that chairperson are able to motivate non-executive directors to access useful and appropriate information where constructive questioning, regarding the information provided by the executive management or other non-executive directors, is freely allowed (Roberts et al., 2005). Hence, it is hypothesized that:

H4b: Chairperson Leadership is positively related to Access to Information.

Attention to Strategic Monitoring (AT)

The board's involvement in the task of monitoring strategy implementation can be conditioned by internal and external events and the level of attention they allocate to it can be affected. Tuggle, Sirmon, Reutzel, & Bierman (2010) suggest that board members prioritize their attention to some questions to the detriment of others. Huse & Rindova (2001) reinforce this idea advocating that board's involvement in this specific task is not constant as many other tasks and roles struggle for their attention. Hence, attention to monitoring SI can influence board effectiveness in monitoring SI. Potential indicators of the degree of attention dedicated to monitoring strategy implementation are: (i) the time BoD dedicate to monitoring SI; (ii) the time non-executive directors need to prepare their interventions, through access of relevant information, to effectively contribute to the task of monitoring SI; (iii) the inclusion of SI questions in a board's agenda and the regularity within which they evaluate its direction (Sellevoll et al., 2007). Therefore, a direct and positive relationship between Attention to Strategic Monitoring and Board Performance in Strategic Monitoring is hypothesized:

H5: Attention to Strategic Monitoring is positively related to board performance in Strategic Monitoring.

THE CONTEXT OF THE PORTUGUESE BOARDS OF DIRECTORS

According to Esperança, Sousa, Soares, & Pereira (2011), there is positive development regarding the governance practices adopted by Portuguese companies. However, there are weaknesses that must be overcome, such as the lack of independence of boards. Despite its small size, Portugal has a developed legal and regulatory structure (OECD, 2011). The main legal framework for listed companies in Portugal is the Corporate Law with regard to corporate governance matters and the Securities Law when transparency matters are concerned. The Portuguese Securities Commission (CMVM) and the Portuguese Corporate Governance Institute (IPCG) issued codes of best corporate governance practices.

Three types of corporate governance structures coexist in Portugal: (i) the "Latin Model", characterized by a board of directors and a separate audit board composed by members who do not sit with the board during board meetings, except when matters related to the Audit Board's functions must be discussed; (ii) the "Anglo-Saxon Model", comprised of a conventional single tier board of directors, where an Audit Committee is mandatory. Under this structure, the Audit Committee should be formed only by non-executive directors and independence must be assured by a majority. Both models follow a monist structure (which is the most predominant in Portugal), where BoD can be composed by executive and non-executive members (union between management and monitoring functions); and (iii) the "Germanic Model", which is characterized by a conventional two tier structure, formed by an executive board and a supervisory board, where all members are non-executive and the majority of them must be independent (separation of management and monitoring functions). Dualist structures tend to be adopted in companies with dispersed ownership, i.e., where the power to vote is more distributed and where shareholders have less capacity of monitoring and influencing management.

The ownership structure of Portuguese firms is predominantly concentrated and private, being dominated by block shareholders. According to the OECD report (2011:81): "share ownership in Portugal is highly concentrated, and in a large number of listed companies there is at least one dominant shareholder. In most cases this is a family shareholder, but can also be a foreign/partner or in a limited number of cases the Government is a qualified shareholder. In some cases there is more than one dominant shareholder, with for instance, both the state and a private shareholder, or two family groups, having substantial influence on the one company". The OECD report (2014:11) adds that "in 25 out of 45 listed companies, a single shareholder owns a majority stake". The largest companies tend to present a larger number of BoD's members. On average, Portuguese boards have ten members (four executive members, three non-executive and non-independent members and three non-executive and independent members (Esperança et al., 2011). The separation of the roles of chairperson and CEO is predominant, as recommended by the OECD code of best practice. CEO duality is frequent in smaller firms.

The annual report of Heidrick & Struggles (2009) identified the following areas that need improvement within the Portuguese corporate governance framework: the lack of clear enough separation between the roles of CEO and chairman of the board, the shortage of independent members and the insufficient attention dedicated to internal controls and risk management as well as corporate responsibility in general.

RESEARCH METHOD

The research method was designed to replicate the study of Amaral-Baptista (2013) in the Portuguese empirical context. Replication and extension research can play, according to Hubbard & Vetter (1996), a key role in ensuring the reliability of empirical findings as well as evaluating their robustness. Similarly, Singh, Ang, & Leong (2003), assert that in order to ensure the consistency and validity of the research, replication is essential, particularly, for rigorous theory development in social sciences. According to Morrison, Matuszek, & Self (2010), replication studies are useful (i) to confirm findings and to establish repeatability; and (ii) to strengthen the reliability and validity of findings.

According to Stiles (2001), it is crucial to collect the perceptions of board directors themselves in order to understand their role and influence in relation to the real functioning of boardrooms, especially when the strategic process is at stake. The sample of Portuguese board directors was delimited by two constraints: (i) respondents should perform or have performed the role of non-executive board directors, ensuring that their experience enabled them to answer the survey questions (substitute non-executive directors or fiscal board members were excluded) (Amaral-Baptista, 2013); and (ii) companies should be based in Portugal, in order to minimize the possible differences in CG systems across the countries (Shleifer & Vishny, 1997). Since it was not possible to reach the entire population of non-executive directors of companies based in Portugal, a nonprobabilistic, convenience sample was used, a fact that limits the generalization of the results. The initial sample was composed of 117 observations, of which 11 were excluded (seven related to companies based outside Portugal and five had respondents who did not have experience as non-executive directors). Thus, the final sample consisted of 105 valid observations.

Data were collected through an anonymous survey sent in the first semester of 2014 to board directors of companies based in Portugal. Despite the steps that were taken to ensure respondents that their responses were strictly anonymous and the data would be only used in an aggregate form, the risk of receiving positively biased responses cannot be ignored. The questionnaire consisted of 42 items divided into the six constructs of interest for this study, plus 20 items to measure demographic variables. Measurement scales were the same used in Amaral-Baptista (2013), where they were developed and pre-tested. The observed variables measured through a Likert scale, varying from 1 (strongly disagree) to 7 (strongly agree).

Motivating board directors to take 10 minutes of their time to answer the questionnaire proved to be a challenge. To overcome this, a multimethod strategy was used, consisting of an introductory, personalized e-mail explaining the motivation of the research, follow-up e-mails, use of social networks (LinkedIn), research promotion at the Portuguese Corporate Governance Association's website and follow-up phone calls to respondents and personal assistants. Overall, the data collection effort took twelve weeks.

The dataset was treated for missing and extreme observations (Hair, Black, Babin, & Anderson, 2010). Multivariate and univariate normality testing procedures were conducted, indicating that the distribution of data was non-normal. As observed by Hair et al. (2010), the impact of the non-normality of data can have influence in sample sizes under 200 cases using maximum likelihood estimation methods. Thus, results should be interpreted with limitations.

Data were analysed by exploratory factor analysis, confirmatory factor analysis and structural equations modelling procedures.

EMPIRICAL FINDINGS

Sample characterization

Tables II and III depict the descriptive statistics that characterize the final sample of 105 observations.

Characteristic	Frequency	Percent	min	max	mean	Std. deviation
Main sector of operations						
Industry	21	20.0%				
Commerce	8	7.6%				
Bank/Insurance	14	13.3%				
Services	50	47.6%				
Other	12	11.4%				
Is it considered a high techno	logy					
company?						
No	65	61.9%				
Yes	40	38.1%				
Years since foundation						
0-10	46	43.8%				
10-20	24	22.9%				
20-30	11	10.5%				
30-40	3	2.9%				
>40	21	20.0%				
Annual revenues (EUR million/year)						
0-30	49	46.7%				
30-300	30	28.6%				
300-3.000	12	11.4%				
> 3.000	14	13.3 %				
Number of employees						
1 2						

Table II - Sample characterization - Companies

0-50	40	38.1%				
51-250	31	29.5%				
251-500	10	9.5%				
501-1000	7	6.7%				
> 1000	17	16.2%				
Level of diversification of operation	ons					
Low	61	58.1%				
Medium	32	30.5%				
High	12	11.4%				
Level of internationalization of op	erations					
Low	42	40.0%				
Medium	23	21.9%				
High	40	38.1%				
Ownership (control of voting capit	tal)					
Family	28	26.7%				
Government	6	5.7%				
Investment firm/fund	59	56.2%				
Diluted control	12	11.4%				
Is the company listed in any	y stock					
exchange?						
No	91	86.7%				
Yes	14	13.3%				
Participation of private equity/inv	restment					
funds in voting capital?						
No	66	62.9%				
Yes	39	37.1%				
Percentage voting capital held	by the					
largest shareholder						
			0.0%	100.0%	54.5%	26.7%
Note: N=105						

Table III - Sample characterization - Boards of Directors

Frequency	Percent	Min.	Max.	Mean	Std.
					Deviation
58	55.2%				
47	44.8%				
tee					
75	71.4%				
30	28.6%				
		2	21	6.55	3.72
		1	12	3.73	2.37
		0	6	.91	1.16
year		1	26	9.00	4.60
		1	20	7.92	4.83
r of		1	32	7.27	7.66
	58 47 tee 75	47 44.8% tee 75 71.4% 30 28.6%	$ \begin{array}{r} 58 & 55.2\% \\ 47 & 44.8\% \\ tee \\ 75 & 71.4\% \\ 30 & 28.6\% \\ $		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

Note: N=105

Regarding companies, Table II shows that the main sectors of operations represented in the sample were Services (47.6%) and Industry (20%). The majority of the companies are not considered of high technology (61.9%). Concerning the age of the company, almost half of them (43.8%) were founded less than ten years ago while only 20% were founded more than 40 years ago, emphasizing the weight of the new companies. In relation to annual revenues, the majority of the companies represented in the sample (46.7%) presented an annual revenue of less than 30 million euros/year whereas 13.3% presented an annual revenue higher than 3'000 million euros/year, highlighting the predominance of small companies. 38.1% of the companies have less than 50 employees while only 16.2% of the companies have more than 1'000 employees. The majority of the companies

(58.1%) have a low level of diversification of operations whereas, with respect to internationalization, the companies show two opposing positions: 40% of the companies have a low level of internationalization and 38.1% have a high level of internationalization. In relation to a company's voting capital, it was observed that there is a predominance of investment company control (56.2%) followed by family control (26.7%). With respect to ownership concentration, measured by the percent of the company's voting capital held by its largest shareholder, 54.5% indicates an elevated concentration. The majority of the companies represented in the sample (86.7%) are not listed in any stock exchange and approximately 37.1% of the companies have participation of private equity or investment funds in their voting capital.

Concerning BoDs, Table III demonstrates that the functions of Chairman and CEO occupied by the same person have a high incidence (44.8%) and the majority of the BoD (71.4%) do not have a Strategy Committee. The BoD represented in the sample have on average 6.55 members, from which 3.73 are non-executive members and less than 1 (0.91) are women. The frequency of the meetings is inferior to one per month (9 meetings held annually).

The respondents have an overall experience of 7.92 years serving as non-executive board directors and have participated, on average, in 7.27 boards.

Exploratory and confirmatory factor analysis

The structure that emerged from the exploratory factor analysis identified the same six latent constructs and the same 22 variables identified in Amaral-Baptista (2013). This provided evidence of stability of the original factor structure. The theoretical measurement model was then tested for validity through confirmatory factor analysis (Table IV). The chi-square of 406.510 is significant at 1% (p = 0.000), suggesting good model fit. In addition, the chi-square index divided by the number of degrees of freedom is 2.095, which is also acceptable as it lies in the interval that ranges between 2 and 5, thus proposing also an acceptable fit (Hair et al., 2010). The confidence interval of the root mean square error of approximation [0.089 – 0.117] is somewhat higher than the maximum reference value of 0.08 for a model of 22 variables and 105 observations. The comparative fit index (CFI= 0.875) is lower than the reference value of 0.95, although it is close to 0.9 (the minimum value associated with good fit) and to 1 (the maximum value obtainable). Altogether, the goodness-of-fit indicators analysed suggest that the measurement model provided a reasonable, but not excellent, fit. While the main indicators were above the minimum theoretical threshold for goodness-of-fit, i.e., chi-square indexes, the results for the additional indexes used suggest that a misspecification problem may not be discarded. Therefore, results study must be interpreted with limitations.

Chi-square	406.510
Degrees of freedom	194
Chi-square/degrees of freedom	2.095
Р	0
Absolute Fit Indices	
Root Mean Square Error of Approximation (RMSEA)	0.103
Confidence interval	0.089 0.117
Incremental Fit Indices	
Comparative Fit Index (CFI)	0.875
Parcimony Fit Indices	
Akaike's Information Criterion (AIC)	524.510

Table IV - Goodness-of-fit results of the measurement model

Structural equations modeling (SEM)

Figure II depicts the relationships between the latent constructs (represented in circles) and the observed variables (represented in rectangles). As displayed in Table V, the goodness-of-fit results of the structural model was higher than those of the measurement model. The chi-square statistics of the structural model (=429.134)

and respective degrees of freedom (=202) presented higher results and were significant at 1% (p = 0.000), suggesting a better model fit. The absolute fit index of the structural model (root mean square error of approximation – RMSEA=0.104) is also higher than the measurement model's. Despite the incremental fit index (comparative fit index – CFI=0.867) presented lower results, it is comparable to the result for measurement model. The increase of the value of the parsimony fit index (Akaike's information criterion – AIC=531.134) also indicates a better fit of the structural model compared to the measurement model. Overall, the goodness-of-fit of the structural model can be considered reasonable, similarly to what was observed in the measurement model. Thus, the results must be interpreted with limitations

Figure II – Structural Model



Table V- Comparison of the quality results of the goodness-of-fit between the measurement model and the structural model

	Measurement Model	Structural Model
Chi-square	406.510	429.134
Degrees of freedom	194	202
Chi-square/degrees of freedom	2.095	2.124
Р	0	0
Absolute Fit Indices		
Root Mean Square Error of Approximation (RMSEA)	0.103	0.104
Confidence interval	0.089 0.117	0.090 0.118
Incremental Fit Indices		
Comparative Fit Index (CFI)	0.875	0.867
Parcimony Fit Indices		
Akaike's Information Criterion (AIC)	524.510	531.134

Tests of hypothesized relationships

The same hypothesis developed by Amaral-Baptista (2013) were tested in the Portuguese context (Table VI). The SEM results are graphically illustrated in Figure III and are depicted in Table VII.

Strategic Wollitoring	
H_l : AI + \rightarrow BK	Access to Information is positively related to Business Knowledge.
$H_2: \mathrm{BK} + \rightarrow \mathrm{WD}$	Business Knowledge is positively related to Work Dynamics.
$H_4: \mathrm{CL} + \rightarrow \mathrm{WD}$	Chairperson Leadership is positively related to Work Dynamics.
H_{4a} : CL + \rightarrow AT	Chairperson Leadership is positively related to Attention to Strategic Monitoring.
H_{4b} : CL + \rightarrow AI	Chairperson Leadership is positively related to Access to Information.
$H_3: WD + \rightarrow SM$	Work dynamics is positively related to board performance in Strategic Monitoring.
$H_5: AT + \rightarrow SM$	Attention to Strategic Monitoring is positively related to board performance in Strategic Monitoring.

Table VI – Model of hypothesis of relationships between non-structural factors of Board Performance in Strategic Monitoring

Source: Amaral-Baptista (2013)

Figure III – Structural standardized parameters of the conceptual model of Board Performance in Strategic Monitoring



Structural Relationship	Non-estimated standardized parameters	Standard error	t-value	Significance	Estimated standardized parameters
H_I : AI + \rightarrow BK	0.44	0.114	3.866	***	0.49
$H_2: BK + \rightarrow WD$	0.11	0.095	1.197	0.231	0.11
$H_4: \operatorname{CL} + \rightarrow \operatorname{WD}$	0.41	0.078	5.276	***	0.63
H_{4a} : CL + \rightarrow AT	0.68	0.098	6.972	***	0.66
H_{4b} : CL + \rightarrow AI	0.42	0.088	4.762	***	0.57
$H_3: WD + \rightarrow SM$	0.51	0.132	3.877	***	0.41
$H_5: AT + \rightarrow SM$	0.43	0.080	5.358	***	0.55

Table VII - Significance of Parameters of the Conceptual Model of Board Performance in Strategic Monitoring

Note: *** Significance at 0.1%

DISCUSSION

Through the analysis of the estimated results of the conceptual model, it was possible to verify that with the exception of the lack of support of the hypothesized relationship among the constructs of Business Knowledge and Work Dynamics, the model confirmed the existence of positive relationships among the other constructs (Table VIII) and explained 67% of the variance observed in Board Effectiveness in Strategic Monitoring. It is, therefore, possible to confirm the influence of non-structural factors in board's effectiveness in monitoring SI, in the Portuguese context.

Table VIII – Results of the hypothesis tests

Research Hypothesis	Hypothesis Supported
H_l : Access to Information is positively related to Business Knowledge.	YES
H_2 : Business Knowledge is positively related to Work Dynamics.	NO
H_4 : Chairperson Leadership is positively related to Work Dynamics.	YES
H_{4a} : Chairperson Leadership is positively related to Attention to Strategic Monitoring.	YES
H_{4b} : Chairperson Leadership is positively related to Access to Information	YES
H_3 : Work dynamics is positively related to board performance in Strategic Monitoring.	YES
H_5 : Attention to Strategic Monitoring is positively related to board performance in Strategic Monitoring.	YES

Influence of Access to Information

The results illustrated that Access to Information has a direct and positive effect on Business Knowledge (H1). Thus, as suggested by the extant literature, it is possible to infer that the implementation of structured processes of access to information increases the levels of business knowledge that non-executive board directors possess. However, nothing can be inferred about the indirect effect of Access to Information on Board Performance, as the expected path between Business Knowledge and Board Performance in Strategic

Monitoring (H2) was not confirmed empirically. One possible explanation is that although access to information improves the level of knowledge in the boards, it may not be enough to trigger more active behaviour of non-executive directors in the discussion of business problems.

Influence of Business Knowledge

The influence of Business Knowledge was neither confirmed as a direct and positive influence in Work Dynamics, nor as an indirect influence in board effectiveness in monitoring SI (H2). This result is not consistent with the prediction that boards with higher levels of knowledge can be more effective in performing their strategic monitoring tasks. Hence, the lack of confirmation of this hypothesis suggests that the mere presence of knowledge in BoD does not mean that it will be effectively used for the benefit of the board's work dynamics (Forbes & Milliken, 1999). According to Huse (2005), the competences of non-executive board directors can be related to the internal culture of BoD's decision-making. In line with this logic, this internal culture, along with the level of impact of the interactions between board members, is influenced by the chairperson, who, according to Roberts, McNulty, & Stiles (2005), plays a pivotal role. In this regard, if the chairperson promotes "minimalist board cultures" (Roberts, McNulty, & Stiles, 2005:S9), non-executive directors are severely limited regarding their involvement in the affairs of the company, where it is not possible to apply their knowledge to the benefit of the company. Hence, this can be probably the context that some respondents face every time they meet in the boardroom. However, this relationship must be the object of further study.

Influence of Work Dynamics

The results showed that there is a direct and positive relationship between Work Dynamics and Board Performance in Strategic Monitoring (H3). Thus, the way boards effectively work in team and interact with team management influence their performance in monitoring SI. In fact, it can be inferred that a team production orientation in boards, where a positive questioning attitude is freely allowed, where cognitive conflict is possible and where openness regarding opinions and the company's issues are discussed with the required depth, elevates the quality of participation of non-executive directors in the process of monitoring SI.

Influence of Chairperson Leadership

The results confirmed Chairperson Leadership as an important antecedent in board effectiveness in monitoring SI. In line with the hypothesis formulated, the influence of this antecedent is multiple: it is positive, direct and significant regarding Access to Information (H4b), Work Dynamics (H4) and Attention to Strategic Monitoring (H4a). Concerning Access to Information (=0.57), the positive effect of Chairperson Leadership supports the notion that it is expected that the chairperson enables the flow of relevant information so that boards can intervene in the strategic process of the company. However, the indirect chairperson's influence on the performance of boards in strategic monitoring was not confirmed. The performance of Chairperson Leadership as a catalyst of boards' contributions is confirmed by their effect in Work Dynamics (=0.63).

The results indicated that more effective chairpersons: (i) coordinate board's work and encourage the interactions between board members; (ii) stimulate the effective use of knowledge and a questioning posture within the boardroom; (iii) stimulate the team production in boards, based on TPT. From this perspective, if the chairperson stimulates the board's questioning attitude, ensures the contribution of all non-executive directors and promotes conclusive board discussions, it is possible to infer that these internal dynamics will contribute to an effective strategic monitoring.

As illustrated in Figure 4, Chairperson Leadership has a major impact in Attention to Monitoring SI (=0.66), confirming that the chairperson has an important role in: (i) directing and prioritizing the work of BoD; and (ii) ensure the regular inclusion of monitoring strategic initiatives in the board's agenda.

It is, thus, possible to confirm the critical role of a chairperson as an enabler of the potential of value creation of boards through their influence in several factors that impact board's performance in strategic monitoring.

Influence of Attention to Strategic Monitoring

Confirming prior indications on the extant literature, the results showed that boards' performance in monitoring SI depends directly on the degree of attention devoted to it (H5). As different tasks compete for

board's attention, it is often the case that the task of strategic monitoring is overlooked. It is, therefore, suggested by the empirical results that it is necessary to adopt norms and internal policies that include this task in the board's agenda in order to enhance its performance. Besides the time allocated during board meetings, nonexecutive directors should dedicate enough time to prepare themselves with the relevant information to effectively contribute to discussions related to monitoring SI.

Concerning the antecedent factors, the influence of Chairperson Leadership, mediated by the Attention to Strategic Monitoring, emerged as an important antecedent to conduct the boards' agenda so that regular attention to monitoring SI is ensured.

Comparing the standardized parameters of the two direct antecedent factors of effectiveness in monitoring SI, shown in Figure III, it is noted that the standardized parameter that relates Attention to Monitoring SI to Board Effectiveness in Monitoring SI ($AT \rightarrow SM=0.55$) is higher than the relationship between Work Dynamics and Board Effectiveness in Monitoring SI ($WD \rightarrow SM=0.41$). This result suggests that attention to monitoring SI can be more relevant than work dynamics in improving a board's effectiveness in monitoring SI.

CONCLUSION AND IMPLICATIONS

This study analyzed how non-structural factors affect the performance of Portuguese boards of directors in the task of monitoring strategic implementation, based on the conceptual model developed by Amaral-Baptista (2013), which proposed that board's effectiveness is influenced by non-structural factors. A survey with a final sample of 105 valid questionnaires, answered exclusively by non-executive directors of Portuguese companies, was conducted in order to gather data on the Portuguese board's context. Using the same hypothesis of relationships of the study of Amaral-Baptista (2013), the conceptual model was applied in Portugal in order to ascertain the mediation logic between the antecedent constructs researched: (i) Access to information; (ii) Business Knowledge; (iii) Work Dynamics; (iv) Chairperson Leadership; and (v) Attention to Strategic Monitoring. It was possible to verify that Board Effectiveness in Strategic Monitoring is positively explained by Chairperson Leadership, Attention to Strategic Monitoring and Work Dynamics. Although Access to Information had a significant and positive influence on Business Knowledge, the effects of these factors on Board Effectiveness in Strategic Monitoring were not confirmed. Chairperson Leadership emerged as a key antecedent factor of a board's performance in strategic monitoring, as it simultaneously influenced Work Dynamics, Attention to Strategic Monitoring and Access to Information.

The findings contribute to the literature on corporate governance, boards of directors and strategy in several ways. From a theoretical standpoint, they enrich the still scarce but growing non-mainstream literature on boards, specifically the role of non-executive members in monitoring SI. This aspect is particularly important as it can contribute to a better understanding on how the potential of value creation of boards can be activated in the specific context of monitoring SI. Secondly, it shed light on the influence of board dynamics and the quality of interactions inside the boardroom. This is relevant because very few studies focus on nature of the relationships between these "soft" factors and the performance of boards. In third place, the study replicated and provided confirmatory empirical evidence for Amaral-Baptista's (2013) non-structural explanation of board performance.

From a management practice perspective, the study provides concrete guidance and tools to Portuguese board directors and practitioners who aim to improve their performance at board level. It also supports a number of actionable recommendations to improve the the quality of a board's intervention in the strategic monitoring process, as follows:

- Regarding access to information, it is important that non-executive directors allocate more time to the company. It is, therefore, suggested that companies analyse the costs and benefits of engaging non-executive directors that seat in several BoD, as "busy boards" can compromise effective monitoring (Fich & Shivdasani, 2006:689).Regarding work dynamics, this study highlights the importance of non-structural aspects to the contribution of interactions and work processes within a boardroom. For instance, these non-measurable aspects should be evaluated in every board meeting in order to determine specifically, which are most effective to the detriment of others to the discussion of company's issues.
- Concerning chairperson leadership, the results of this study helped to understand the importance of the chairperson as a facilitator regarding Access to Information, Work Dynamics and Attention to Strategic Monitoring. The ability to provide the flow of the necessary information, to potentiate rich dynamics in the boardroom and to allocate specific time to attention to strategic monitoring is crucial for the effectiveness of monitoring SI. Thus, it is recommended that processes of recruitment and evaluation of

the chairperson take these traits into account. In addition, it is recommended that non-executive members provide a regular evaluation of the chairperson regarding issues of access to information, work dynamics and attention to strategic monitoring.

• As for attention to strategic monitoring, the results highlighted the need to prioritize tasks of strategic control in comparison to other tasks that compete for a board's attention. Therefore, it is recommended that boards dedicate specific time to monitor the progress of the company's strategic progress and key strategic initiatives.

LIMITATIONS AND FUTURE RESEARCH

A combination of structural and non-structural factors may provide an even more robust explanation of the antecedents of board performance in strategic monitoring. For example, CEO duality is common in Portuguese companies (44.8% of the research sample). Thus, it may be interesting to investigate CEO duality implications in board effectiveness in monitoring SI.

From a work dynamics perspective, boards with socially-related members can neglect the discussion of crucial points concerning strategic execution. Thus, it may be promising to explore the potential impact of the independence of non-executive directors in monitoring SI.

The effectiveness of "busy boards" in strategic monitoring also deserves further study. As indicated in section 5.2., according to Fich & Shivdasani (2006:689), busy boards are defined as "those in which outside directors hold three or more directorships". Should the companies limit the number of boards non-executive directors can seat in order to prevent their possible ineffective monitoring capacity because of serving on several boards?

Finally, as Esperança et al. (2011) suggested, ownership concentration may limit the ability of minority shareholders to influence the strategic decision process. Thus, a highly concentrated ownership structure may diminish the strategic monitoring ability of boards. Future studies may investigate this proposition further.

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