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Group dynamics as a determinant of Top Management Teams' effectiveness and the method of its diagnosis

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Abstract

The effectiveness of Top Management Teams (TMT) is one of the most important determinants of performance of a company. At the same time ability to control and shape TMT effectiveness seems to be crucial for investors and shareholders. In traditional concepts, TMT effectiveness is related to the structure of the managing group, however the inconsistency of empirical studies implies further search for other explanations. One of them is a concept of group dynamics, which emphasises indirectness of the relation between group characteristics and group effectiveness, as well as the importance of group processes, such as effort norms, cognitive conflict or group cohesiveness. As the model of group dynamics gains significance, there appears a need to diagnose group processes occurring in TMT. Given the lack of methods adjusted to the specific features of TMT, the aim of this article is to present and to popularize own questionnaire diagnosing group dynamics in case of supervisory boards. Moreover, theoretical basis for the questionnaire and its practical applications are to be described.

Keywords: Top Management Team, supervisory board, effectiveness, group dynamics, group processes, questionnaire

1. Introduction

In traditional approach, Top Management Teams (TMT) effectiveness is related to team characteristics. As there is no clear explanation of such a direct relation and the results of various studies are not consistent (ex. Bermig & Frick, 2010; Van der Walt et al., 2006, Jackson, 1992), models based on group dynamics gain more and more significance. Their main assumption is that group effectiveness depends on group processes, partially determined by group demography.

The rise of importance of TMT group dynamics implies the need for developing methods diagnosing group processes. The aim of this paper is to present the background of diagnosing TMT group dynamics, and self-created questionnaire that may be used in the exploration of the functioning of a supervisory board (in two-tier corporate governance system).

1. TMT group dynamics: Forbes and Milliken model

Given the "upper echelons theory" (Hambrick & Mason, 1984), the focus on Top Management Teams (TMT) replaces studies on individuals as key decision makers in organizations (Jackson, 1992). Initially, TMT characteristics were considered to have crucial significance for group

effectiveness and organization performance. However, no consensus could be reached as to what extend and which TMT demographic features lead to which outcomes (Forbes & Milliken, 1999), what suggests that the relation between company performance, TMT effectiveness and TMT characteristics is indirect and more complex. According to Nadler, these ambiguity may be overcome by including social dynamics, i.e. social relations and processes inside and outside TMT (Nadler, 2004; LeBlanc & Gillies, 2003). Dynamic models based on group processes relate indirectly group characteristics with group effectiveness (Edmondson et al., 2003; Forbes & Milliken, 1999; Murphy & McIntyre, 2007), as presented in a sample model below.

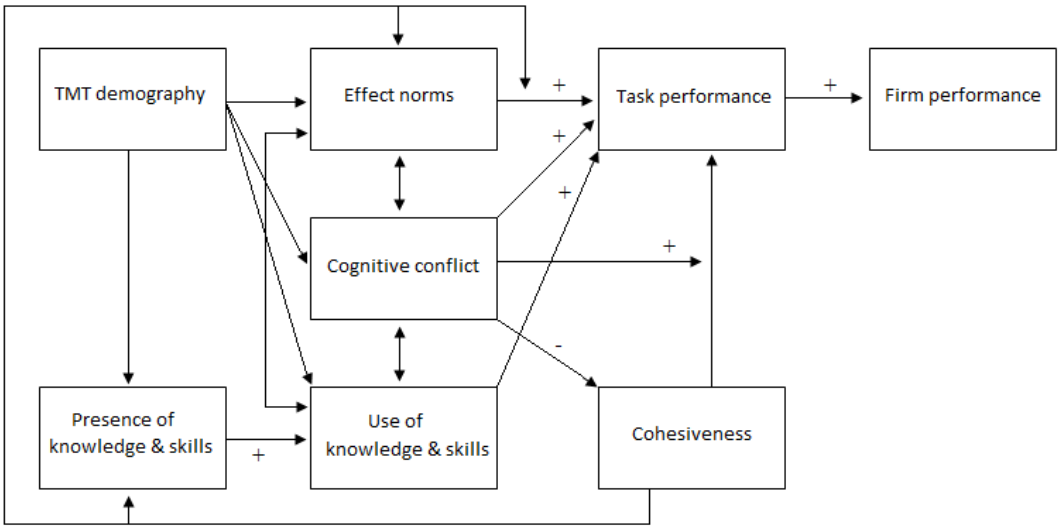

Figure 1 The model of TMT dynamics by Forbes and Milliken

Source: Forbes, D. P. & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, 24(3), p. 498.

The model (Figure 1) described by Forbes and Milliken (1999), consists of static and dynamic elements. TMT demography determines the presence of knowledge and skills as well as distinguished group processes, which according to Forbes and Milliken include effect norms, cognitive conflict, use of knowledge and skills, and cohesiveness. These processes do not occur separately, but they influence each other. Further on, group processes affect task performance defined as TMT ability to provide control and service. Effective control and service determine organization performance. As presented, group processes are essential elements to understand indirect relation between group demography and its outcomes.

In practice, better understanding of the impact of TMT structure and dynamics on company performance will enable the development of guidelines for the selection of TMT members. Additionally, the conclusions derived from the studies of TMT group dynamics may be applied in trainings resulting in the improvement of boards effectiveness, or in order to moderate TMT meetings.

2. Methods of exploring TMT group dynamics

Social reality is a dynamic process created by people and their behaviors. In order to understand a group it is not enough to describe its characteristics, but its functioning must be captured. Therefore, diagnosing group dynamics is a complex process which must be relevant to group situation and organizational context (Pye & Pettigrew, 2005).

Especially, in case of supervisory board, some exceptional characteristics of a group must be emphasized. One of the features enumerated by Levrau & Van den Berhe (2007) is the affiliation of board members. Usually all group members belong to one organization, which in two-tier corporate governance system is true for management board, but not for supervisory board where at least one or two memebers must be independant. Moreover, unlike in a regular team, interactions between members are not constant, as supervisory board meetings take place once a month, or even once a quarter. The difference also regards the access to the information, which is usually limited to the materials prepared by management board. Finally, supervisory board often consists of individuals who have strong personalites and broad experience. All these characteristics mentioned above have significant impact on group processes as well as on requirements for the methods of their diagnosis.

2.1. Observation

Given the whole complexity of group processes, methods of studying TMT group dynamics should comprehensively reflect all the relations. In diagnosing common group dynamics, unstructured observation appears to be the most useful method as researcher is able to cover both, the group and the context. This kind of observation is widely used in Development Center sessions, where specially trained assessors first assist the group while solving certain problems, and then describe observed processes. Although diagnosis is detailed and precise, intergroup comparisons and concluding on general tendencies would be difficult.

In order to overcome this inconvenience, an observation sheet may be used. One of such forms is based on Bales Interaction Process Analysis (IPA) system. Bales (1950) observed that behavior in each small group working on a given task may be classified into two main types, which are instrumental behavior (related to the task) and expressive behavior (referring to socio-emotional aspect of the relations). On this basis he distinguished four categories of interactions (positive reactions, answering, questioning, and negative reactions) and six kinds of relations between them (problems in communication, problems of evaluation, problem of control, problems of decisions, problems of reducing tension, and problems of reintegration). Knowing the typology of interactions, observer is able to sort interactions depending on the context (Brown, 2006). Final description of group processes is based on the amount of time the group spends on each category of interactions, what permits further comparisons.

2.2. Questionnaire

Although observation provides detailed data, it is complicated to conduct such a study among TMT members as they are usually difficult people to gain access to (Pey & Pettigrew, 2005). What is more, they may be resistant to revealing too much information, fearing that gathered data may be used against them. That is why, the most popular method of collecting information about TMT group dynamics are questionnaires, where TMT members are asked to answer questions regarding their perception of team processes. Frequently, in order to structure responds, Likert-type scales are used, in which particular items refer to group processes chosen by the researchers (Forbes & Milliken, 1999; Simons et al., 1999).

The greatest advantage of surveys is that they are simple to conduct and that the quantitative results are easily comparable. On the other hand, structured questionnaire are static and prevent from discovering dynamic characteristics other than predicted by a researcher. Data collected on group dynamics is entirely based on TMT members' perceptions and relations. However, in case of supervisory board studies, when the access to the respondents is very limited, the questionnaire appears to be the most appropriate method of gathering data.

3. Questionnaire diagnosing supervisory board group dynamics

The questionnaire was developed on the basis of literature review and introductory interviews with TMT members conducted in Poland. In the reference to the presented model and other studies, the most important processes that are explored are cognitive and affective conflicts, cohesiveness, group norms, and leadership. Each scale contains from 3 up to 6 issues evaluated on the five-point Likert-scale (where 1 stands for "never" and 5 for "always").

As according to the concept of group dynamic the structure of board must also be analyzed, the questionnaire cannot be used separately from the analysis of TMT size, rotation in TMT, members' gender, citizenship, and education, as well as the diversity of knowledge and experience (Murphy & McIntyre, 2007). In order to posses such data, it is not required to ask direct questions in a survey, which would extend the questionnaire, but instead it is possible to study the information about board structure and its members available on companies official websites. Moreover, especially in case of supervisory board, the image of its functioning will not be complete, unless the data about shareholders is included.

3.1. The analysis of selected group processes

3.1.1. Conflicts

On the basis of observation of teams cooperation, it is possible to distinguish two main group of conflicts: cognitive/task conflicts, related to the problems of a company, and relation/affective conflicts reffering to emotional aspects of interpersonal relations.

Cognitive conflict, which apears to have more importance, is defined by Forbes and Milliken as "task-oriented differences in judgment among group members (and) is concerned with the presence of issue-related disagreement between members" (Forbes & Milliken, 1999, p. 494). It is a sign of investigative process of decision making, due to which more options are discussed more thoroughly. Some authors refer to cognitive conflict as to debate, emphasizing specific behavior rather than specific perception of a conflict (Simons et al., 1999). In general, cognitive conflict appears to have positive impact on problem solving, but it may result in emotional tensions and descent of interpersonal attraction among TMT members.

In the questionaire the following items serve to examine cognitive conflicts:

1. The difference of opinions leads to discussion and search for common solution.
2. Before making the final decision, the board discusses many options.
3. The opinion of board members specializing in the domain related to the problem, has strong influence on the final decision.
4. During the conflicts board members are focused on issue-related problems.
5. If a conflict regarding main issues related to the company occurs, further cooperation is difficult.

And the following items serve to examine affective conflicts :

1. During the discusion board memebrs reveal their emotions.
2. During the meetings conflicts about unimportant issues occur.
3. Conflicts about issues not related to the problems of the company are occurring during the meetings.
4. During the conflicts board members are focused on issues not related directly to the problems of the company.
5. If a conflict regarding issues not related to the company occurs, further cooperation is difficult.

3.1.2. Cohesiveness

Group cohesiveness refers to the strength of social bonds between group members, i.e. interpersonal attraction and mutual liking among group members (Jackson, 1992). It is also understood as a sense of connectedness between TMT members. Cohesion influences TMT cognitive process as well as TMT members' affective states. Cohesiveness may encourage teams to participate in discussions and to express views, but it may also reduce differences in opinions and negatively impact TMT effectiveness.

One of the methods of assessing cohesiveness is to ask TMT members to indicate personal feelings toward other group members or toward the whole group (Levrau & Van Den Berghe, 2007, p. 69). According to Seashore, whose work was developed by O'Reilly et al. (1989), cohessiveness may be also assessed on the basis of readiness of group members to protect group decisions from external criticism.

In the questionaire, the following issues are used to evaluate the level of cohesiveness:

1. Board members have strong feeling of belonging to the group.
2. The cooperation between board members is smooth.
3. Common work in the supervisory board gives me satisfaction.
4. Board members are eager to protect board decisions from external criticism.
5. Board members identify themselves with decisions made by the board.
6. Supervisory board is a group of strong personalities which makes cooperation difficult.

3.1.3. Group norms

Group norms concern the manner of assessing and evaluating behaviors and attitudes which are accepted by a particular group. They may refer to different aspects of TMT functioning, such as solving conflicts or risk-taking. For example, effect norms are defined as "shared beliefs regarding the level of effort each individual is expected to put toward a task" (Forbes & Milliken, 1999, p. 493). In the questionnaire they are assessed on the basis of following statements:

1. It happens that in case of running out of time, the board is forced to make a decision that is not accepted by all members.
2. Board members spend a lot of time on preparation for the meetings.
3. Insufficient preparation of a board member for the meeting is accepted by the others.

3.1.4. Leadership

Another process related to TMT effectiveness is power centralization and leadership. In the questionnaire the following issues are related to this process:

1. The opinion of the chairman of the board has strong influence on the final decision.
2. The chairman enforces their opinion on other board members.
3. The chairman encourages other board members to present their opinions.

In case of leadership it is essential to include the data about the shareholders, which is usually important in terms of power centralization.

3.1.5. TMT effectiveness

Finally, effectiveness of TMT must be assessed. In the questionnaire, respondents are asked to evaluate the importance of given tasks and the level of their performance by TMT. In case of supervisory boards, the tasks include the analysis of business environment, the creation of the strategy, advising to management board, control over management board, concern for stakeholders, and observance of the regulations of Corporate Governance.

Additionally, given "the upper echelons theory", company performance may be regarded as an indicator of TMT effectiveness.

3.6. Methodological verification of the questionnaire

In order to verify the accuracy and reliability of the questionnaire, pilot study was conducted in Poland among 81 repondents who have experience in working in teams. The reliability was evaluated upon the value of Cronbach alpha, and the results are presented below (Table 1).

Table 1 The results of verification of scales of the questionnaire

Scale	Final number of questions	Cronbach alpha
Cognitive conflict	5	0,737
Affective conflict	5	0,802
Cohessiveness	6	0,842
Effort norms	3	0,565
Leadership	3	0,715

Source: own study.

Initially the questionnaire included 28 questions ordered into five scales - 5 issues regarding effort norms, 7 cognitive conflict, 5 affective conflict, 6 cohesiveness, and 3 leadership. After the analysis of the reliability of scales, the number of issues was reduced to 22. Cronbach alpha is good and acceptable for almost all scales (Cronbah alpha higher than 0,7), apart from "effort norms", which reliability is only satisfactory.

Moreover, all issues were analyzed in terms of their ability to differentiate answers. In all cases the distribution of answers is normal, which means the questions well reflect variability.

4. Conclusions

With the growing significance of dynamic models of TMT effectiveness, there appears a need for developing methods diagnosing TMT group processes. Since the access to TMT members is limited, the observation, which provides the greatest richness of descriptive data on group processes, is difficult to conduct and it is complicated to compare descriptive data, questionnaires, often based on Likert-scales, seem to be a significantly more convenient method.

In the article own method of diagnosis of TMT, especially supervisory boards, group dynamics has been presented. The questionnaire contains 22 issues related to cognitive and affective conflicts, cohesiveness, effort norms, and leadership, which are assessed on the five-point Likert scale. The questionnaire was methodologicaly verified during the pilot study among 81 participants in Poland and its reliability is acceptable. At the same time, the questionnaire exploring TMT group dynamics must be accompained by the analysis of TMT structure, shareholders, and company performance.

The questionnaire may be usefull in developing the requirements of TMT members recruitment, as well as in moderating TMT meetings in order to raise the effectivenes of boards. On the other hand, the limitations of the method that must be taken into account and which may require further research, are related to difficulties in accessing TMT members.

References

Bales, R. 1950. *Interaction process analysis; a method for the study of small groups*. Cambridge, Mass.: Addison-Wesley Press.

Bermig, A. & Frick, B. (2010). Board size, board composition and firm performance: Empirical evidence from Germany. Working Papers. http://ssrn.com/abstract=1623103, 15.01.2011, 1 - 43.

Brown, R. (2006). [*Group processes: Dynamics within and between groups*]. Gdańsk: GWP.

Edmondson, A., C., Roberto, M., A., Watkins, M., D. (2003). A dynamic model of top management team effectiveness: managing unstructured task streams. *The Leadership Quarterly*, 14, 297 - 325.

Forbes, D. P. & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, 24(3), 489 - 505.

Hambrick, D., & Mason, P., A. (1984). Upper Echelons: The organization as a reflection of its Top Managers. *Academy of Management Review*, 9(2), 193 - 206.

Jackson, S., E. (1992). Consequences of Group Composition for the Interpersonal Dynamics of Strategic Issue Processing. W: P. Shrivastava, A. Huff, J. Dutton (Eds.), *Advances in strategic management*. Volume 8 (pp. 345-382). A Research Annual.

Leblanc, R. & Gillies, J. (2003). The coming revolution in Corporate Governance. I*vey Business Journal*, 68(1), 1 - 11.

Levrau, A. & Van den Berghe, L. A. (2007). Corporate Governance and Board effectiveness: Beyond formalism. *ICFAI Journal of Corporate Governance*, 6(4), 58 - 85.

Murphy, S., A. & McIntyre, M., L. (2007). Board of directors performance: a group dynamics perspective. *Corporate Governance*, 7(2), 209 - 224.

Nadler, D., A. (2004). Building better boards. *Harvard Business Review*, 82(5), 102 - 111.

O'Reilly, C., Caledwell, D., Barnett, W. (1989). Workgroup demography, social integration and turnover. *Administrative Science Quarterly*, 34, 21 - 37.

Pye, A., & Pettigrew, A. (2005). Studying Board context. process and dynamics: Some challenges for the future. *British Journal of Management*, 16, 27 – 38.

Simons, T., Pelled, L., Smith, K., A. (1999). Making use of difference: Diversity, debate, and decision comprehensiveness in Top Management Teams. *Academy of Management Journal*, 42(6), 662 - 673.

Van der Walt, N., Ingley, C., Shergill, G., S., Townsend, A. (2006). Board configuration: are diverse boards better boards? *Corporate Governance*, 6, 129 - 147.

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