1. Introduction

Levels of management result from the skills, which most of managers can master. Different approaches to the definition, characteristics, profiling, structuring, description of Polish language and foreign sources, give the managing concept different meaning. The bibliography (Xu, Sirmon, Gao 2010, pp. 10-13) often emphasizes the important role of managers in generating employee’s activity, resources acquisition and including new resources to existing structures. In practice of the management most people define management incorrectly identifying them by the function and society position or organizational position instead of the ability to exert an influence on social environment. Therefore we observe the struggle for position, dignity and titles the achievement of which makes an illusion of managing. In that way there could be (at least) two common problems: units having the formal authority of the directors are frustrated by the lack of followers. And units that have deficiency of formal authority are not able to see themselves as leaders. They are not developing managing
skills so they resign to move to higher levels of management. Despite the lack of unanimity in the field of high amount of definitions, it can be concluded that managing is the ability of initiating a process to exert the influence on someone or more often on the social environment. Every person (without exception) is influenced and makes it on others. This means that in some fields we manage and in other fields we are managed. Often we don’t know if we exert an influence or who we affect with it. Also we do not often know what the range of influence is. Interactions with people consist of other influences which exert human personality. There are influences of short duration which are important to personality or long duration which does not bring an expected effect. Exerting an influence may be intentional or unintentional. The aim of this article is to demonstrate the relations between the hierarchy levels of management in organizations of various forms of ownership.


2. Levels of management

In contrast to the classical interpretation of the term levels of management as the deployment of management power in the organizational hierarchy we assumed that in the present study they arise from the competencies and skills to exert the desired impact on subordinates to guarantee the effective achievement of the purpose of the organization. Higher levels of management require effective personality of superior understood as efficacy deferred over time. Changes on the outside and on the inside of organization need to be adapted to the future management. Therefore effective personality ensures the implementation of tasks in the distant horizon.

Managers of state-owned business on the first level are rarely motivated to move to the next level. Influence that is exerted on subordinates mostly is the result of the possessed power and organizational structure - the powers,

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1 In that way even a new-born baby is able to be some kind of leader, because it exerts an influence on family behaviour (cf.: Austen-Tynda, Kozłowski, Burda-Świerz 2009, p. 16).
rules or laws or regulations of the organization. Of course the management on the first and sometimes second level can be as long effective as the existing powers are not the only basis for exerting influence. Subordinates perform their duties because they are obliged by the contract of employment and sometimes fear.

The second level allows the manager incorporate into his/her practice semblance of a democratic style. A superior sets the goals and methods of implementation of tasks to subordinates however he decided upon earlier. In comparison with North America, Western Europe and the Far East with Japan on the being, functioning of the organization in Poland is characterized by large variability particularly of internal conditions such as management, personnel, property, funds, assets and liabilities, financial resources and on the outside the lability of legal political level (cf. Fisher, Henkel 2010, p. 6). A manager, to be able to deliver the tasks at high lability decision parameters, must demonstrate universality in terms of the applicable style of leadership. One of the costs of these skills is a lack of specialization provided at higher management levels to achieve over average outcome. Because of its universality he is a “safe” manager - coping in varying conditions but the cost of managerial universalism lies in the fact that under no circumstances the outstanding results can be achieved. Subordinates execute the orders because they have a need to be influenced.

The third level of management can be described in class of social exchange theory that was very thoroughly analyzed by B. Bass (1990) who describes the management of interaction. Clearest relationships occur between a form of ownership together with efficiency and management on the third level. The leader of the third level has the skills to deal with people. Leader’s skills depend on: not showing destructive emotions and generating positive emotions, disabling emotions when making decisions, discussing the needs and individual work contribution while treating team overall, distracting subordinates from petty misunderstandings, creating a bank of information about the past, present, and what is provided, collecting information about the behavior of people and their reactions to what happens, strengthen team’s dynamics, the use of individual differences to achieve the goals of the organization. The interactive leader by building ties contributes to: improvement of personal and organizational interactions, correcting the unsatisfactory relations, generation of training needs, a better self-understanding, understanding others, improving communication and negotiation skills, learning lessons from the strengths and weaknesses and identifying the occasion (cf. Krzakiewicz, Cyfert 2013, p. 209, Trzcielińska 2013,
Since the dyad “leader - subordinate” is based on objective and subjective mutual benefits it makes a very permanent system.

The fourth level is available to manager who holds a team that has common goals and realizes that to achieve them the effort of each of its members is needed. A supervisor gives clear well-structured tasks, he can separate the duties of developing subordinates, makes adequate use of available resources, has many variants to solve problems, adapts activities to the strategy of the organization, makes a use of the obtained progress in interpersonal interactions. He is characterized by trust in employees, has a realistic self-esteem and raises self-esteem of subordinates without revealing a lack of certainty when professionalism is expected by subordinates from him. A supervisor is accepted by subordinates as a result of what he did for them and the supervisor approaches the level of the leader. At the fourth level leader is able to: encourage the skillful work, train employees (cf. Lubimow-Burzynska, Góralewska-Słońska 2004) and inspires to a better work. The leader conditions his self-development from the development of knowledge of (cf. Pichlak 2009, p. 33) the greatest possible number of people by using sociotechnical skills to support subordinates, staff development raises the crucial issue of the role (cf. Robbins, Judge 2012; Zaleśkiewicz 2013). The development of every person affected a small number of key people. Their group can include on the fourth level leaders who have a vision of the development of subordinates.

The fifth level is reserved for the leaders that are inspiring subordinates to achieve outstanding results of work due to the development of interdependence between countries around the world due to the increase of quality and quantity of transactions, as well as the rapid spread of technology (cf. Oziewicz, Michałkowski 2013, p. 297). The leader’s primal role is to motivate the constructive and creative activities (cf. Siguaw, Simpson, Enz 2006, p. 565). The leader helps subordinates in their personal development. He puts his team to challenges, inspires with new goals. Inspirer motivates to achieve more favorable results than originally intended. The leader motivates subordinates, arouses a feeling of importance and value of their tasks, which makes that employees at all levels (cf. Detert 2007, pp. 869-884; Oke 2007, pp. 564-587) from its own initiative go beyond self-interest for the team and organization’s sake (cf. Detert 2007, pp. 869-884). Leader’s decisions increasingly depend on sensations, emotions, intuition, and less and less on rational grounds (cf. Peszko 2012; Jędrzejczyk 2013, p. 56). Subordinates become leaders, loyal and innovative.
people². Leaders have vision and are able to convince others of the rightness of the chosen path³.

The sixth level is reached by transformative leaders (cf. Bass 1985), the other concepts known as leaders of reformation (cf. Jachnis 2008, p. 97). An inherent feature of such leaders is charismatic behavior (cf. DA Benton 2004). The increasing interests are possessed by those who have a special impact on their organizations and their subordinates want to emulate them. These people can be described as charismatic managers. In recent years the interest in them stems from the need for significant and pervasive changes in a short time that are sometimes called transformational. The effectiveness of resource management and adaptation by managing on the sixth level could lead to the creation of solutions that enables organization to achieve a sustainable competitive advantage (cf. Eisenhardt 2000, pp. 1105-1121). Situations that trigger the need for charismatic leadership according to B. Bass (1985) are: the economic crisis, chronic structural unemployment, experience of fear and danger, devaluation of the basic values, attrition “old” and “new” values, erosion of approved authorities, company’s climbing to the market or the threat of its demise⁴. Outstandingly charismatic units are very rare in contemporary organizations.

3. Methods and research organization

A general hypothesis that was assumed: the higher the managing level, the higher the economic performance of the organization. Categories - management level and the economic result of organization are determined by many intervening variables (both controlled and uncontrolled). This is due to the differences in the use of performance indicators (e.g. commercial

² The term „innovation” is a commonly used term but its scope is not fully structured. We use this concept as a source of competitive advantage (cf. Knosala, Boratyńska-Saba, Jurczyk-Bunkowska, Mroczala 2014).
³ Of course, the conviction of the rightness of vision in hierarchical organizations is not the same at all levels.
⁴ The names of charismatic leaders such as Winston Churchill, Mahatma Gandhi, Martin Luther King evoke positive emotions. However, be aware that the skills of exciting a great commitment, dedication and energy supporters give no assurance that the issue or vision is this worth. Adolf Hitler and Joseph Stalin were also known for their charisma and the tragedy, to which at the same time their leadership led.
enterprises, service, transportation, tourism, energy and belonging to different industries). To reduce uncertainty inference to a certain extent, we decided to test two partial hypotheses: the first - economic factors of companies are related to a form of property. The second - standards at lower levels of management are correlated with the levels of management at higher levels. In order to aggregate large amounts of dependent and independent variables into a smaller number of uncorrelated parameters the principal-components-method was used (cf. Radosiński 2010, p. 264). To aggregate a large number of dependent and independent variables into a smaller number of uncorrelated parameters a method of major components was used (cf. Radosiński 2010, p. 264). To get better operationalized results, aptly illustrating the condition of enterprises, five components were calculated for each company: $R_1$, $R_2$, $R_3$, $R_4$ and $R_5$. In the questionnaire (E), following indicators connected with business efficiency were accounted: equity value ($R_1$), profitability of trading ($R_2$), supply rotation ($R_3$), cash flow ($R_4$) and productive of assets ($R_5$) (cf. tab. 1). Additionally, the questionnaire included questions about the interaction between different levels of managers (operational, tactical and strategic).

For management skills’ diversity one-class-activity descriptions of characterizing the level ($P_1$, $P_2$, $P_3$, $P_4$, $P_5$) on which there is a manager were used. Standardization of descriptions was performed using ($G$) while complying competent judges at $r = 0.75$. The calculation yields ($R$) were made using a component ($R = \sum R_1 + R_2 + R_3 + R_4 + R_5$) which receives the function $R = \sum R_1 ..., 5 * W_1 ... 5$ highlighted as a percentage ROE (Return on Equity) and ROA (Return on Assets); time intervals, supplies rotation, finances durability index and productivity of assets.

5 The resulting ratios: profitability - ROE (Return of Sales) assets - ROA (Return on Assets) supplies rotation, finances durability index, productivity of assets, allowed us to compare companies of different industries, sectors and forms of ownership. Cf. Bednarski 1997; Sierpińska, Jachna 1997. Comparability of performance indicators (shown in the table. 1) is partly provided by central category research. Presented concept - level management - concerns personal development management skills. Modification of personality can occur at every level of management regardless of the industry sector, forms of ownership, organizational structure, etc.
Table 1. Performance indicators rank criteria

<table>
<thead>
<tr>
<th>Profitability ratios (R1–R5)</th>
<th>Calculating method</th>
<th>Range of efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>low</td>
</tr>
<tr>
<td>return on equity (R1)</td>
<td>$\Pi / K$</td>
<td>unprofitable below 2% and less profitable</td>
</tr>
<tr>
<td>profitability of trading (R2)</td>
<td>$\Pi / Q$</td>
<td>unprofitable 1% and negative profit 1%</td>
</tr>
<tr>
<td>supply rotation (R3)</td>
<td>$Y / K$</td>
<td>Long supply sale, above 50 days</td>
</tr>
<tr>
<td>Cash flow (R4)</td>
<td>$\Pi / (K + Q)$</td>
<td>indicator 0 - 3</td>
</tr>
<tr>
<td>productive of assets (R5)</td>
<td>$Q / C$</td>
<td>Indicator below 2.5</td>
</tr>
</tbody>
</table>

Source: own study

Description:

When making a balance of economic data quantifying the results of the surveyed companies were divided into four quartiles - compartments assigned to specific revenues. The study included companies representing: state ownership of the Treasury, private ownership and foreign ownership. The study excluded municipal property and state ownership - state-owned corporation due to the small number representing a total of approximately 0.8% of the total harvest. The sample was drawn using a sampling frame created from the list of 2000 companies, 2013 edition. And the „list of the top 500 Polish brands,” published by „Rzeczpospolita” 24.IV.2013, pp. 46-58.
companies that reached at least 80 million PLN revenue in 2013. Research Methods (E and P) was sent to 1405 randomly selected Internet addresses (web pages). The mechanism of the draw was a table (no XXX) of random numbers uniformly distributed posted in A. Góralski (1974) at p. 345 and 346. 2619 returns were received of which (N =) 238 adopted for further analyses.

4. Empirical studies on the economic results of the analyzed companies

A preliminary analysis of financial relations adopted for the evaluation of the test group of companies points to a pattern associated with a form of property. The results of the work of managers at the first and sometimes the second level targeting are not very competitive (cf. Tab. 2.)

Table 2. Components of profitability that depends on the form of ownership

<table>
<thead>
<tr>
<th>Form of property</th>
<th>(R_1 \times W_1)</th>
<th>(R_2 \times W_2)</th>
<th>(R_3 \times W_3)</th>
<th>(R_4 \times W_4)</th>
<th>(R_5 \times W_5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>0.5</td>
<td>0.3</td>
<td>28</td>
<td>6.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Private</td>
<td>1.3</td>
<td>0.7</td>
<td>18</td>
<td>9.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Foreign</td>
<td>9.8</td>
<td>0.8</td>
<td>22</td>
<td>9.9</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Source: own study

Description:
- \(R_1\) - return on equity and weight of return equity - \(W_1 = 2\); \(R_2\) - profitability of trading and weight of trading profitability - \(W_2 = 1\); \(R_3\) - supply rotation and supply rotation weight - \(W_3 = 0.5\); \(R_4\) - cash flow and cash flow weight - \(W_4 = 0.4\); \(R_5\) - productivity of assets and weight of assets productivity - \(W_5 = 0.3\).

Profitability ratios \(R_1\) and \(R_2\) in the assessed enterprises have positive values. State-owned enterprises are among the relatively lowest economic effects. Managers’ opinion about financial problems - in terms of lack of capital, lack of own funds (used to start aid funds from the European Union), difficulty in

\[9\] Such a result seems to be representative, as (19%) responds have a similar distribution of participation (in the sample) forms of ownership to the entire community, namely 8% of enterprises owned by the State Treasury, 53% is private property and 39% foreign ownership.
obtaining credit, difficulties associated with the return of loans, the cost of capital - is sufficient to set these problems to three groups. There were singled out 65% with the biggest difficulties, 22% of companies declared medium difficulty and only 13% were free of financial problems.

In turn, the rate of inventory turnover (R3) belongs to private and foreign companies (nearly 2.5 months in state-property companies and 26 to 42 days in the other). On the other hand, the most profitable companies do not have such fast supply rotation as other companies. Polish companies, which mostly are located on the first stage of functioning called survival and the second called the functions modification, are still far away from fluent and efficient supply management, which provides only just-in-time system.

Low level of short-term debt (R4) has been observed in researched group of companies. The reason: relatively high interest rates (overflow). Generally most private domestic and foreign companies avoid financial problems. The studies allowed distinguishing three groups of productive assets (R5): operating assets less than 50% (43 companies), between 51% and 90% (58 companies), over 90% (137 companies). A higher level of production capacity allows achieving better economic results. The result of analysis: over-exploitation of assets in some state-property enterprises where investments are on low level.

As a result of statistical analysis it was found that the economic achievements of the researched organizations estimated on the profitability ratios correlated with the form of property (cf. tab. 3).

**Table 3. The correlation between the form of companies’ property and economic achievements of companies: R**

<table>
<thead>
<tr>
<th>Form of property</th>
<th>Economic achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>0.26</td>
</tr>
<tr>
<td>Private</td>
<td>0.66***</td>
</tr>
<tr>
<td>Foreign</td>
<td>0.58***</td>
</tr>
</tbody>
</table>

*** p<0.001

*Source: own study*

The most important correlation between the form of property and economic achievements of companies characterizes private companies (r = 0.66, P <0.001) and the second place - foreign companies (r = 0.58, P <0.01). Taking into account
the security establishment inference of making a mistake of unjustified rejection of the null hypothesis \((h_0)\) at\(^{10}\) \(\alpha = 0.05\), correlations of the variable (form of property) with state companies economic achievements were below the expected level of significance \((r = 0.26,\) not significant at the 0.05 level), and the rejection of the null hypothesis \((h_0)\) in relation to the state-owned companies is unfounded. These correlations are showed in table 3. It should be noted that the first hypothesis was successfully verified.

Among the 238 responses, there was a group of numbers \((n =)\) 32 organizations in which the method \((E\) and \(P)\) has been filled by managers of different levels of management in the same company. It allowed to verify the second partial hypothesis. Statistical analysis has brought results in the form of a correlation among management standards of leaders at different levels. As shown in table 4, the correlation coefficients are positive from \(r = 0.01\) and \(r = 0.21\). These are irrelevant correlations, but rather of a trend.

Therefore, it is considered that no obtained evidence at the intended level entitling the holder to reject \(H_0\) with respect to predictions that the organizations management levels are convergent.

**Table 4. The correlation coefficients between levels of management used by leaders of the same organization at \(n=32\)**

<table>
<thead>
<tr>
<th>Form of property</th>
<th>I level</th>
<th>II level</th>
<th>III level</th>
<th>IV level</th>
<th>V level</th>
<th>VI level</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>0.1</td>
<td>0.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Private</td>
<td>-</td>
<td>0.11</td>
<td>0.19</td>
<td>0.21</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Foreign</td>
<td>-</td>
<td>-</td>
<td>0.15</td>
<td>0.16</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

- No results

**Source:** own study-

Solving the main problem of the role of management level in economic achievements we determined different strength of the relationship between profitability ratios \((R_1...5)\) and six levels of management. Key

\(^{10}\) For the purposes of this study, two meanings of „level” was used: once to mark level of management and other areas concerns statistical significance.
relationships between the analyzed variables are the third level of management (cf. tab. 5)

Table 5. The correlation ratios between the form of companies’ property and six levels of management

<table>
<thead>
<tr>
<th>Form of property</th>
<th>Levels of management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>State</td>
<td>0.66***</td>
</tr>
<tr>
<td>Private</td>
<td>0.11</td>
</tr>
<tr>
<td>Foreign</td>
<td>0.57***</td>
</tr>
</tbody>
</table>

* P<0,05; ** P<0,01; *** P<0,001

**Source:** own study

Statistical analyses yield the following results: most state-property companies are situated on the I and II level (r = 0.66, P <0.001) and (r = 0.60, P <0.001). Weaker correlation was found on the III level (r = 0.32, P <0.01). The presented variable correlation was found below the desired level – on IV degree r = 0.17, and V degree r=0,18 (not significant at the 0.05 level). Managers of private-state companies often manage their subordinates at level IV (r = 0.67, P <0.001) and level III (r = 0.61, P = 0.001). A significant correlation has been observed between the leaders of these enterprises with the level II. On level I, V and VI we observe certain phenomena which can be barely called a trend. Foreign companies have similar statistics for state-property companies. The strongest correlation occurs on the third level (r = 0.57, P <0.001) and weaker at the fourth level (r = 0.21, P <0.05), on the level of V and VI (r = 0.18 and r=0.09, not significant at 0.05 level, cf. table 4). So the second hypothesis should be considered as reasonable.

5. Conclusion

It is assumed that competitive organizations are characterized by a high level of managerial activities. In the development of the organization and management’s science, a lot of theories and paradigms can be extracted. Those theories focus on different aspects of management (e.g.: Bass 1985, 1990; Samuelson, Marks 1998; Tokarski 2003, 2006; Detert 2007; Jachnis 2008; Austen-Tynd, Kozłowski, Burda-Świerz 2009; Masdaghinia,Atwater, Keller2010; Xu, Sirmon, Gao 2010; Robbins,
Levels of management and economic performance of companies

Judge 2012; Chun, Yamarino, Dionne, Sosik, Moon 2009; Krzakiewicz, Cyfert 2013). Our interest was focused on the integrated model that combines features of the behavior and the process of exerting influence.

When analyzing the literature about managing people, the ambiguous views referring to correlation between managing and economic performance of the organization can be found. Outcome measures that are used for analyzing: return on equity, supplies rotation, finances durability, productivity of assets (cf. Bednarski 1997; Sierpińska, Jachna 1997).

At the current stage of competitive organization functioning the restructuring changes and changes in strategy are insufficient, but most of managers’ actions, who can achieve contradictory goals and use the resources available in their environment. After using “hard” resources the intangible resources such as management style, culture, skills and competence allows to achieve higher performance than the competition.

The plan of research that has been proposed included the use of such variables as the level of management and economic performance of companies receiving the best results. A large number of uncontrolled and interfering variables affect the examined coincidences and dependences. In order to improve the reliability of obtained research results, two of variables have been controlled, precisely the ownership and the management levels. The empirical studies were conducted so that the hypothesis that the level of management is the same or similar at all levels of the organization could be verified.

The private-state and foreign-state companies achieved significant economic results, while state-owned organizations are characterized by the lowest effects. In addition, we predicted that in these companies the management of high levels will have an impact on the management of intermediate and lowest levels of personnel. Such a relationship is described in the literature (cf. e.g. Masdaghinia, Atwater, Keller 2010, p. 5; Chun, Yamarino, Dionne, Sosik, Moon 2009, pp. 689-707) and can run according to two paradigms. First, the cascading is the identification of a subordinate manager with a person at a higher level of management. The second - bypass, in which the managers of intermediate levels are bypassed by leaders. Our study did not provide reliable results to maintain the link because the empirical evidence or the hypotheses that the level of management is the same or similar at all levels of the organization haven’t been obtained.

In very careful relation to the used test methods, with a substantial probability it can be told that the level of control and ownership are associated with the economic effects of the company. Most managers in the studied population are on the second level of management. In contrast, most managers of private
enterprises are located on the fourth level. To a somewhat lesser extent the fourth level of managing is reached among foreign companies’ leaders and rarely occurs among state-owned companies. In order to control research plan’s confounders, efforts were made to arrange things so that the study sample was close to random.

The conclusion of our study allows us to conclude about the relation between the level of management and economic results of the organization. We did not get certainty of direction of discussed dependence. We call for further research to answer, how the chain of cause and effect goes. Whether high economic results imply targeting at a high level or the significant economic results are the effect of a high level of management.

Summary

Levels of management and economic results of enterprises
In order to achieve competitive results, the manager must master the skills necessary for subsequent levels of management. In the present study we have verified three hypotheses regarding the correlation between the level of control and efficiency, a form of ownership and influence on the managing level to direct and indirect subordinates. Two of the hypotheses gained the expected level of significance and the third was statistically insignificant.

Keywords: the level of management, influence, profitability ratios, direct and indirect subordinate.

Streszczenie

Poziomy kierowania a rezultaty ekonomiczne przedsiębiorstw
Aby osiągnąć konkurencyjne rezultaty, menedżer musi opanowywać umiejętności niezbędne na kolejnych poziomach kierowania. W prezentowanych badaniach zweryfikowaliśmy hipotezę dotyczącą korelacji pomiędzy poziomem kierowania, a efektywnością kontrolując zmienne pośredniczące w postaci formy własności oraz wpływu poziomu kierowania na bezpośrednich i pośrednich podwładnych.

Słowa kluczowe: poziom kierowania, wywieranie wpływu, wskaźniki rentowności, bezpośredni i pośredni podwładny.
References


