The purpose of our empirical study is to assess the relationship between board of directors' features and the level of disclosure in case of European Union banking environment, basing on the general statement that disclosure and quality of corporate governance system are two closely related concepts - the higher the level of transparency, the better the quality corporate governance practices. The main features considered for assessing board of directors quality were: independence, size, education, experience and gender of its membership, as well as the frequency of their meetings. The results of the performed analysis, based on correlations and linear regressions using SPSS software, reveal that those banking institutions which have a board mainly made of non-executive directors, with higher-level educational degrees, business knowledge and experience, ensuring regular meetings are more transparent.

Keywords: corporate governance; transparency; efficiency; financial environment; European Union
JEL Classification: M10, G30
Introduction
The lack of transparency and disclosure was often considered as one of the major cause of the latest corporate scandals and governance failures, adversely affecting public confidence in the reliability of corporate and financial reporting, too. Thus, while we assisted at a “wake-up” for better corporate governance and transparency all over the world, this concept also became one of the most attractive, dynamic and challenging research subject. According to most findings, disclosure and the quality of corporate governance system are appreciated as closely related concepts - the higher the level of transparency, the better the quality corporate governance practices.
Unlike prior research studies which were focused on similar goals - to test possible influences of corporate governance features like board of directors size and independence, CEO duality or various ownership’ features over the level of corporate governance disclosure at companies level, our paper provides a particular approach on a specific business field, the banking one that was little explored on this topic before. Moreover, our research provides a more comprehensive approach of the most important “key-player” of corporate governance mechanism – the board of directors, considering a wide range of features (e.g. independence, size, education, experience, gender, frequency of meetings) for performing the analysis, ensuring by thus originality, which adds a plus value to our study.
Basing on this background, our paper proceeds as it follows. Firstly, we briefly reviewed prior literature concerning possible relationships between board of directors characteristics and banks’ level of disclosure. We continued our study by developing particular hypotheses related to possible influences of board features over the level of transparency about corporate governance. After explaining the research methodology used, consisting of correlation and regression analysis performed using SPSS software, we tested our hypotheses using information from sampled banks’ websites. Finally, we provided
our research findings and discussed their implications, closely related to previous studies focused on the same goal.

**Literature Review And Hypotheses Development**

The prior international literature provides various surveys on corporate governance disclosure, by testing the influences of various features of the board of directors, executive management, shareholders or board committees, such as size, independence, gender diversity, experience, education and so on, but their findings often appeared to be opposite and, consequently, we can not talk yet about a “unique” model of good corporate governance. Thus, we agree that its “size, composition and structure can be good or bad, depending on what you are looking for” (Gup, 2007) and, moreover, we also believe that there is an optimal corporate governance structure “which varies across firms and over time” (Dahya and Travlos, 2000).

Focusing on the board of directors, which is the subject of our paper, we appreciate that, from the perspective of a good corporate governance structure, its main role within an entity is to enhance the overall value of it while serving the needs of all the relevant stakeholders. Starting from this various opinions about its characteristics aroused along time, being often the subject of controversial debates, the most important of these being presented as follows:

*Board independence*

Board independence has been considered a key feature of good corporate governance since the first signs of agency theory’s development, non-executive directors being able to monitor and control opportunistic behaviors of the executive ones (Jensen and Meckling, 1976). This is in fact a way to address problems of control between agents and principals in those situations where ownership is separated from control, and which arise because of information asymmetry. Thus, having a higher proportion of outside non-executive
directors on the board would result in better monitoring of the activities by the board and limit managerial opportunism. Outside directors who are less aligned to management may be more inclined to encourage firms to disclose more information to outside investors, because they are not affiliated with the company as officers or employees, and thus are “independent representatives of the shareholders’ interests”. Then, it is expected that having more outside directors on the board will also result in more voluntary disclosure to signal to the financial market that they are effectively fulfilling their duties, thus defending their reputation as “expert monitors” (Patelli and Prencipe, 2007).

According to the resource dependence theory, board independence is perceived as a tool of providing “additional windows on the world” through non-executive directors’ expertise, prestige and contacts (Haniffa and Cooke, 2002). Even if non-executive directors are often appreciating themselves as advisors, rather than decision-makers, their independence gives them power of influence and standing to be listened.

Even though intuitively most researchers expected greater board independence to be linked to more transparency, better monitoring and increased voluntary disclosure their empirical findings are mixed. Thus, there are findings revealing a positive association between board independence and disclosure level (Holm and Scholer, 2010; Akhtaruddin and Haron, 2010; Huafang and Jianguo, 2007; Chau and Gray, 2010; Akhtaruddin, et al., 2009; Chen and Jaggi, 2000), while other researchers proved otherwise (Eng and Mak, 2003; Gul and Leung, 2004; Barako et al., 2006) or did not lead to any association (Hassan, et al., 2008; Bokpin and Isshaq, 2009; Ho and Wong, 2001; Cheung, et al., 2010; Al-Shammari and Al-Sultan, 2010; Mohamad and Sulong, 2010; Pajuha and Bhatia, 2010; Haniffa and Cooke, 2002; Hossain, 2007).
Previous empirical research tested the relevance of independent boards, represented by majority of non-executive directors as a governance mechanism that enhances their capacity to ameliorate agency conflict between owners and managers, which may occur in the decision to voluntarily disclose information in the annual reports. According to most prior findings, it is expected that companies with a higher proportion of independents on the board to show a greater concern for disclosure. Based on these earlier evidences the following hypothesis is examined: 

\textit{H1: There is a positive association between the representation of non-executive directors on the board and the extent of disclosure.}

\textit{Board size}

Even if there is not mandated a fix board membership number by any corporate governance frameworks, but in the best case there are just recommendations upon a “reasonable” minimum and maximum number, this board feature was highly considered as a proxy of corporate governance. Prior studies, when referring to board size only appreciate it a “large” or a “small” one. But what does “large” or “small” mean? There are papers in the international literature that tried to answer this question. Thus, according to Jensen (1993) a board made of maximum seven or eight people is considered a small one and can help improve performance, while a board that exceeds seven or eight people is less likely to function effectively. Consequently, \textit{large boards are less effective than the smaller once} in mitigating agency conflicts, because they are slower to react to decisions that require an immediate course of action. It is also believed that the exchange of ideas between board members will be enhanced, as well as flexibility in the decision-making process. Thus, small boards are considered faster in information processing, more effective in monitoring the CEO and are tougher for the CEO or the chairman to manipulate (Jensen, 1993). Earnings information provided by these is perceived as more valuable by investors (Vafeas, 2000).
Anyway, empirical findings are mixed, while some authors provide evidence of a strong positive relationship (Akhtaruddin, et al., 2009; Cheung, et al., 2007; Cormier, et al., 2010; Lim et al., 2007), there are also many studies that could not reach to a significant association (Arcay and Vazquez, 2005; Cheng and Courtenay, 2006; Donnelly and Mulcahy, 2008) or whose results lead to a negative correlation (Chiang and He, 2010; Parsa, et al., 2007). In conclusion, there is no preponderance of theory or empirical evidence to suggest a unique relation between board size and levels of voluntary disclosure. However, basing on the agency theory stipulation that small boards are more effective in monitoring, and considering the fact that most codes of good governance usually recommend limitations to the size of a board, we formulate the following hypothesis:

**H2: There is a negative association between boards' size and the extent of disclosure**

**Board education and experience**

Board’s capability is another feature that was included in prior studies, too, basing on the premise that knowledge and skills ensure better monitoring, thus leading to higher disclosure. Prior studies suggest that board capability might be assessed through the following characteristics: knowledge and skills to adequately monitor an organization (Nicholson and Kiel, 2004), legitimacy and abilities to link the firm to key stakeholders or other important parties (Ong and Wan, 2008), professional accounting and financial expertise to report in a more straightforward manner, experience measured in terms of diverse backgrounds (mainly in other firms and industries) and directorships in other “unconnected” companies (Westphal and Milton, 2000), hoping that it should improve board monitoring and decision making.

Thus, according to earlier findings (Haniffa and Cooke, 2002; Chiang and He, 2010), board members with higher-level educational degrees are expected to have better general knowledge, while those who hold
dual positions are assumed to have better business knowledge and experience, and consequently, they should be able to ensure more disclosure of company information. Since professional expertise proved to ensure both better supervision, and fair and proper disclosure of company information, we hypothesize that:

H3: There is a positive association between the educational degrees of board membership and the extent of disclosure

H4: There is a positive association between the professional expertise of board membership and the extent of disclosure

Board gender

This feature of the board stood as a proxy in various prior studies, but not related to corporate governance disclosure, their results revealing a growing concern about the lack of heterogeneity in the composition of boards (Williams, 2003; Burgess and Fallon, 2003; Singh, 2007; Werhane, 2007). Most of such studies were aimed to identify possible correlations between gender diversity in management and performances reached by firms (Krishnan and Parsons, 2008; Shawver, et. al., 2006), reaching to the conclusion that male directors perform better and companies’ financial results are higher.

Basing on these results and on the premise that good governance leads not only to better disclosures but also to higher performances, we hypothesize that

H5: There is a positive association between board gender and the extent of disclosure

Board meetings

Another feature of an effective board proved to be the frequency of its meetings that was positively associated with the level of disclosure, through a more intensive monitoring activity (Allegrini and Greco, 2011; O’Sullivan et al., 2008). Basing on these prior research findings, we formulated the following hypothesis:
H6: There is a positive association between the frequency of board meetings and the extent of disclosure.

Empirical design and results

Sample selection and variable measurement

In this survey we aimed to identify possible associations between board of directors’ features and the level of disclosure through annual reports in case of banking institutions. The main reason of focusing our research on the board of directors was their major role in the corporate governance mechanism. Thus, the aim of our study is to provide an answer to the research question “Do corporate governance features affect transparency?” by assessing the relationship between board features and the level of corporate governance disclosure.

For achieving our goal, we need a representative sample for data collection. In this respect, we decided to consider all 27 European Union countries and all the financial institutions listed on their main stock exchanges, according to the information provided on their website for September 2011. Thus, initially, our sample consisted of 261 financial institutions, coming from various regions of the world. After excluding those financial institutions that are conducting only financial consultancy, without any banking activity (13), that did not have an English version of their website (46) or did not provide an English version of their annual report (13), our final sample consisted of 189 banking institutions. Data collection was based on information provided by banks’ websites throughout their annual reports.

Because the main purpose of our study is to identify possible associations between corporate governance dimensions and the level of transparency, two sets of dependent and independent variables for performing the correlation analysis are needed:

The dependent variable consisted of the disclosure index (DI) developed, based on the most recently Corporate Governance Disclosure Checklist (Delloite, 2011), OECD recommendations and Standard &
Poor’s list of transparency and disclosure questions used for its study developed for Europe in 2003. In this respect a comprehensive checklist list of 32 items to be disclosed was compiled. It was structured into 3 main parts according to the content of information, as follows:

- **Ownership structure and investor rights**, consisted of information related to transparency and concentration of ownership, related party structure and transactions, voting and shareholder meeting procedures, relation with employees and other stakeholders;
- **Financial transparency and information disclosure**, consisted of information related to business focus (general and strategic information), accounting policy details, information on auditors, internal control and risk management, business reporting;
- **Board structure and management processes**, consisted of information related to board structure and composition, role of the board and its committees, CEO and executive management structure, directors’ training, compensation and evaluation, internal audit.

For developing the disclosure index each item of the checklist was scored using *binary classification*, each issue from the list being treated a dummy variable, where “1” indicates that the annual report discloses the information and ‘0’ indicates that there is not disclosed any information about that issue. The disclosure index was computed using an *un-weighted scoring approach* of the disclosure items, basing on the assumption that each item of information disclosure is of equal importance in the corporate information users’ decision-making process. The main reason to do so is related to the subjectivity that might occur when different weights are assigned to reflect the importance of certain types of information. Our approach is supported by most prior studies aimed to develop such an index of disclosure, unlike weighted scores, which were rarely used before (Barako, et al., 2006; Cheng and Courtenay, 2006; Patelli and Prencipe, 2007).
The independent variables consisted of various features of the board of directors’ dimension of corporate governance that prior studies found to have significant influences over the level of disclosure, measured through:

<table>
<thead>
<tr>
<th>Independent variable description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variables</td>
</tr>
<tr>
<td>Board independence</td>
</tr>
<tr>
<td>Board size</td>
</tr>
<tr>
<td>Board education</td>
</tr>
<tr>
<td>Board experience</td>
</tr>
<tr>
<td>Board gender</td>
</tr>
<tr>
<td>Board meetings</td>
</tr>
</tbody>
</table>

Source: own projection

The analysis performed followed two steps: the first one based on a correlation test between the board attributes and the level of disclosure using Pearson coefficient, followed by a regression analysis comprising only those attributes that proved to be significantly correlated to the level of disclosure.
Data analysis and hypotheses test results

For performing the correlation analysis, the first step of our analysis, we calculated Pearson coefficient that is usually used for measuring the strength of linear dependence between two variables, giving a value between “1”, that describes the perfect direct relationship and “-1”, that reveals an indirect one, “0” value meaning that there is no linear correlation between variables.

By analyzing the values of Pearson’s coefficients presented in Table 2, we reached to the following conclusions:

independence and education of board members had the strongest positive influence (0.717, respectively 0.668) over the level of disclosure, being significant with a high probability of 99% (Sig. <0.01), while experience of board members and the frequency of board meetings had a lower positive influence (0.429, respectively 0.568), being significant with a probability of 95% (Sig. <0.05);

neither size of board nor the gender of its membership could be associated with the level of mandatory disclosures.

<table>
<thead>
<tr>
<th>The correlation matrix between variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Size</td>
</tr>
<tr>
<td>Indep</td>
</tr>
<tr>
<td>Edu</td>
</tr>
<tr>
<td>Exp</td>
</tr>
<tr>
<td>Gen</td>
</tr>
<tr>
<td>Met</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

Source: calculations made by authors using SPSS software
Basing on Pearson correlation coefficient values and their analysis presented above, we can reject from the very beginning two of our hypotheses (H2 and H5).

The rest of our analysis will be focused on board of directors’ features that are correlated to the level of disclosure, being thus aimed to test their significance by using the linear regression analysis, whose results are presented in Table 3.

### Table 3

**Linear regression analysis results**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-17.277</td>
<td>4.575</td>
<td>-3.777</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>B_{Indep}</td>
<td>.884</td>
<td>.063</td>
<td>14.083</td>
</tr>
<tr>
<td>R Square:  .515</td>
<td>F value: 12.061</td>
<td>F significance: .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R Square:  .512</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>30.998</td>
<td>1.536</td>
<td>20.178</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>B_{Edu}</td>
<td>1.132</td>
<td>.092</td>
<td>12.283</td>
</tr>
<tr>
<td>R Square:  .447</td>
<td>F value: 12.880</td>
<td>F significance: .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R Square:  .444</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 (Constant)</td>
<td>15.867</td>
<td>4.767</td>
<td>3.329</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>B_{Exp}</td>
<td>.504</td>
<td>.077</td>
<td>6.500</td>
</tr>
<tr>
<td>R Square:  .184</td>
<td>F value: 15.637</td>
<td>F significance: .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R Square:  .180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 (Constant)</td>
<td>25.459</td>
<td>2.405</td>
<td>10.586</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>B_{Met}</td>
<td>2.121</td>
<td>.225</td>
<td>9.443</td>
</tr>
<tr>
<td>R Square:  .323</td>
<td>F value: 14.247</td>
<td>F significance: .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R Square:  .319</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: calculations made by authors using SPSS software*
By analyzing the results of the linear regression analysis performed, we can conclude that independence and education of board members have the strongest positive influence over the level of disclosure, being highly significant and explained in 51.2%, respectively 44.4% of cases, thus allowing us to accept two of our hypotheses (H1 and H3), stating that there is a positive association between the extent of disclosure and the representation of non-executive directors on the board, respectively the educational degrees of board membership. As regards the other two hypotheses (H4 and H6), the results of the regression analysis show less well results, the correlations being explained in less that 25% of cases but, the significance of their probability, which is higher that 95% allows us accepting these, too. Consequently, we can assert that there is a positive association between the professional expertise of board membership and the extent of disclosure, as well as between the frequency of board meetings and the level of transparency.

Findings and conclusions
The prior international literature provides various surveys on corporate governance disclosure, but their findings often appeared to be opposite and, consequently, we can not talk yet about a “good” and a “bad” model of corporate governance. Many empirical analysis performed at international level so far were focused on possible relationships between corporate governance mechanism and the level of transparency, presuming that the higher the level of transparency, the better the quality corporate governance practices. Irrespective of prior studies, which were focused on various corporate governance features our study comes to add value to corporate governance literature by testing a single corporate governance attribute, highly explored before - board of directors, from various perspectives. Moreover, we had the chance to enrich the research literature with this empirical study, through the disclosure index
developed ensuring it as well with originality. On the other hand, banking system was little explored on this topic before, providing us the chance to enrich the research literature with an empirical study aimed to reveal how one of the most important corporate governance actor’s features affected financial institutions’ transparency in case of E.U. banking system.

By reviewing the prior evidences regarding the relationship between various attributes of corporate governance and the level of disclosure we discovered that it was a highly debated topic of worldwide research, whose outcomes are mixed. Thus for example, when talking about the board of directors – the major “key-player” of corporate governance process, even if it was expected that a higher proportion of independent members on the board to show a greater concern for disclosure, empirical findings are contradictory, revealing both positive associations (e.g. Holm and Scholer, 2010; Akhtaruddin and Haron, 2010; Chau and Gray, 2010;) and negative ones (e.g. Gul and Leung, 2004; Barako et al., 2006). Mixed empirical findings were provided in case of board size, too, some researchers proving that small boards are more reserved when talking about disclosure (e.g. Chiang and He, 2010; Parsa, et al., 2007), while others showing the opposite (e.g. Akhtaruddin, et al., 2009; Cormier, et al., 2010).

There are also board characteristics, where all prior literature results are consistent, revealing just one way of influence, such as: board education and experience (e.g. Haniffa and Cooke, 2002; Chiang and He, 2010) or the frequency of board meetings (e.g. Allegrini and Greco, 2011; O’Sullivan et al., 2008), all of these showing a positive influence over the level of transparency.

The results of the analysis performed in this study reveal either positive relationships between board features tested (e.g. independence, education and experience) or negative association (e.g. size and gender) and the level of disclosure, according to the Pearson
correlation test, but only some of them proved to be statistically significant as the linear regression analysis results revealed. Consequently, we can conclude that those banks which have a board mainly made of non-executive directors, with higher-level educational degrees, business knowledge and experience are more transparent. Moreover, our results reveal that a higher level of transparency can be also related to a higher frequency of board meetings.

Finally, being aware of our study’s limitations, coming from the sample of banks, the limited number of factors and the fact that only one year data were considered for analysis, we are appreciating these as a challenge that give us outlooks for future research. Moreover, many studies focused on corporate governance mechanism analyzed its components, closely related to successes reached or unavoidable failures, concluding that weak corporate governance system negatively affect firm value, while strong governance mechanism improves efficiency. Consequently, the key players of corporate governance might have possible influences on financial institutions’ “road” to success, too, which opens up new avenues of research upon the relationship “corporate governance - banking performances”.

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