

GOODWILL DISCLOSURES AND GOVERNANCE: EVIDENCE FROM BELGIAN COMPANIES

Redempteur Ntawiratsa
Université du Burundi, Burundi
ntawiratsa@yahoo.fr

Karin Comble
University of Mons, Belgium
karin.comble@umons.ac.be

Abstract:

The general purpose of this paper is to examine how corporate governance mechanisms affect a firm's disclosure behaviour. Through content analysis of annual reports published by Belgian firms listed on Euronext Brussels, we determine a relative disclosure score as a measure of the quality of information delivered on goodwill impairment test in accordance with the IAS 36 (Revised 2004, §§ 134-135). The obtained score is then related to three corporate governance variables (independent directors, audit committee and external auditor) and two control variables (size of the reporting firm and goodwill amount). Both year-by-year regression and fixed-effects regression are used to evidence the determinants of firms' disclosure scores. We observed that the quality of disclosure on goodwill impairment test is positively and significantly influenced by the size of the audit firm, the relative size of audit committee and the proportion of goodwill amount to total assets. We present recommendations to enhance corporate governance mechanisms and match them with the complexity of conducting and reporting on the goodwill impairment test.

Keywords: IAS 36, reliability, goodwill, impairment test, corporate governance, finance

1. INTRODUCTION

To be useful the information has to be both relevant and reliable (IASB, 1989). However, some situations and transactions oblige the financial statements preparers to trade the relevance off against the reliability because those qualities cannot be completely met at the same time. IASB formulated a number of disclosure requirements intended to enhance the transparency and the reliability of accounting goodwill numbers prepared under IFRS 3 and IAS 36. Like other accounting or legal provisions in general, the compliance to those detailed disclosures requirements might depend to some extent on the management disposition to transparency and on the corporate governance mechanisms implemented within the company.

2. DISCLOSURE REQUIREMENTS

The IASB distinguished the disclosures for significant amount of goodwill from those for immaterial amount. The paragraphs 134 and 135 are respectively related to the former and the latter. Here are the most important elements of those requirements.

2.1. Disclosure requirements for cash-generating unit with significant carrying amount of goodwill

Paragraph 134 of IAS 36-Revised 2004 (IASB, 2004a) specifies that the following elements are to be disclosed:

- “the basis on which the unit’s (group of units) recoverable amount has been determined (i.e., value in use or fair value less cost to sell).”
- “if the unit’s (group of units’) recoverable amount is based on value in use:
 - a description of each key assumption on which management has based its cash flow projections for the period covered by the most recent budgets/forecasts. Key assumptions are those to which the unit’s (group of units’) recoverable amount is most sensitive.
 - a description of management’s approach to determine the value (s) assigned to each key assumption, whether those value (s) reflect past experience or, if, appropriate, are consistent with external sources of information, and, if not, how and why they differ from the past experience or external sources of information.”
 - “the period over which management has projected cash flows based on financial budgets/forecasts approved by the management and, when a period greater than five years is used for cash-generating unit (group of units), an explanation of why that longer period is justified.”
 - “the growth rate used to extrapolate cash flow projections beyond the period covered by the most recent budgets/forecasts, and the justification for using any growth rate that exceeds the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market to which the unit (group of units) is dedicated.”
- “the discount rate (s) applied to the cash flow projections”.
- “If the unit’s (group of units’) recoverable amount is based on fair value less cost to sell, the methodology used to determine fair value less costs to sell. If fair value less costs to sell is not determined using an observable market price for the unit (group of units), the following information shall also be disclosed:
 - a description of each key assumption on which management has based its determination of fair value less cost to sell. Key assumptions are those to which the unit’s (group of units’) recoverable amount is most sensitive.
 - a description of management’s approach to determining the value (s) assigned to each key assumption, whether those value (s) reflect past experience or, if, appropriate, are consistent with external sources of information, and, if not, how and why they differ from the past experience or external sources of information.”
- “if a reasonably possible change in a key assumption on which management has based its determination of the unit’s (group of units’) recoverable amount would cause the unit’s (group of units’) carrying amount to exceed its recoverable amount:

- the amount by which the unit's (group of units') recoverable amount exceeds its carrying amount.
- the value assigned to the key assumption.
- the amount by which the value assigned to the key assumption must change, after incorporating any consequential effects of that change on the other variables used to measure recoverable amount, in order for the unit's (group of units') recoverable amount to be equal to its carrying amount."

2.2. Disclosure requirement for cash-generating unit with immaterial carrying amount of goodwill

Paragraph 135 of IAS 36-Revised 2004 (IASB, 2004a) specifies that:

- If some or all of the carrying amount of goodwill or intangible assets with indefinite useful lives is allocated across multiple cash-generating units (groups of units), and the amount so allocated to each unit (group of units) is not significant in comparison with the entity's total carrying amount of goodwill or intangible assets with indefinite useful lives, that fact shall be disclosed, together with the aggregate carrying amount of goodwill or intangible assets with indefinite useful lives allocated to those units (groups of units).
- In addition, if the recoverable amounts of any of those units (groups of units) are based on the same key assumption (s) and the aggregate carrying amount of goodwill or intangible assets with indefinite useful lives allocated to them is significant in comparison with the entity's total carrying amount of goodwill or intangible assets with indefinite useful lives, an entity shall disclose that fact, together with:
 - the aggregate carrying amount of goodwill allocated to those units (groups of units)
 - the aggregate carrying amount of intangible assets with indefinite useful lives allocated to those units (groups of units)
 - a description of the key assumptions
 - a description of management's approach to determining the value(s) assigned to the key assumption (s), whether those value (s) reflect past experience or, if, appropriate, are consistent with external sources of information, and, if not, how and why they differ from the past experience or external sources of information.
- if a reasonably possible change in the key assumption(s) would cause the aggregate of the units' (group of units') carrying amounts to exceed the aggregate of their recoverable amounts:
 - the amount by which the aggregate of the units' (group of units') recoverable amounts exceeds the aggregate of their carrying amounts.
 - the values assigned to the key assumption(s).
 - the amount by which the value(s) assigned to the key assumption(s) must change, after incorporating any consequential effects of the change on the other variables used to measure recoverable amount, in order for the aggregate of the units' (group of units') recoverable amounts to be equal to the aggregate of their carrying amounts."

Alternatively stated, if the amount of goodwill allocated to cash-generating units is immaterial, i.e., its omission or misstatement could not influence the economic decisions of users taken on the basis of the financial statements (IASB, 1989, § 29), the reporting entity should only disclose the aggregate goodwill amount of the individual cash-generating units. Such an aggregation permits undeniably to save some disclosures costs and to realize a balance between benefit and cost as required by the Framework (IASB, 1989, § 44).

To summarize, it could be expected that the mandatory disclosures of the factors used to test goodwill for its impairment would enhance transparency and thus, the reliability of goodwill accounting numbers.

In particular, the requirement that firms adopting a value in use approach disclose data as specific as forecast growth rates, discount rates and forecast horizons, ought theoretically allow financial statement users to independently consider the validity of values ascribed to goodwill.

3. HYPOTHESES AND VARIABLES MEASUREMENT

As stated above disclosures about the estimates used to measure recoverable amounts of cash-generating units containing goodwill or intangible assets with indefinite useful lives are intended to “assist users in evaluating the reliability of the estimates used by management to support the carrying amounts of goodwill...” (IASB, 2004a, BC 201).

Despite the relevance of that objective, the firms’ management might not meet those requirements because either they are technically unable to do so or they deliberately want to hide some “strategic” or “private” information. Large and known literature following the Agency Theory and the Governance Mechanisms can be used in this context¹. We extracted from this theoretical corpus a set of 5 main hypotheses to be tested as explaining the disclosure fairness of companies.

H1: “The proportion of independent directors in the board is positively associated to the quality of financial reporting”

H2: “The size of the audit committee is positively associated to the quality of financial reporting”

H3: “The size of the external audit firm is positively associated to the quality of financial reporting”.

H4: “The size of the reporting firm is positively associated to the quality of financial reporting”.

H5: “The relative size of goodwill is positively associated to the quality of financial reporting”.

To test these on disclosure quality of goodwill impairment test, we developed the following multivariate model:

$$GITDS_{it} = \alpha_0 + \alpha_1 INDEP_{it} + \alpha_2 AUDICOM_{it} + \alpha_3 AUDIFS_{it} + \alpha_4 RESIZE_{it} + \alpha_5 GWSIZE_{it} + \varepsilon_{it}$$

Where:

- $GITDS_{it}$: Score of required disclosures on goodwill impairment test by firm i at the end of the year t
- $INDEP_{it}$: Number of independent directors divided by the size of the board of the firm i at the end of the year t . The proportion is expressed under the percentage form.
- $AUDICOM_{it}$: Number of audit committee members divided by the size of the board of the firm i at the end of the year t . The proportion is expressed under the percentage form.
- $AUDIFS_{it}$: Dummy variable that takes the value 1 if the audit firm for firms i at the end of the year t pertains to the Big Four audit firms and 0 otherwise.
- $RESIZE_{it}$: The size of the reporting firm i at the end of the year t measured as the logarithm of its total assets.
- $GWSIZE_{it}$: The size of the goodwill amount of the reporting firm i at the end of the year t measured by its logarithm.

4. DISCLOSURE QUALITY MEASUREMENT

The quality of disclosures has been measured following the content analysis methodology. We analysed the annual reports published during a 4 years period. From the disclosures required by the paragraphs 134 and 135 of IAS 36-Revised 2004, we observed six different situations the financial statements preparers might face when reporting information on the recoverability test of CGU containing goodwill. The goodwill could be allocated to:

- one cash-generating unit whose recoverable amount is calculated following fair value method.
- one cash-generating unit whose recoverable amount is calculated following value in use method.
- several non aggregated cash-generating units whose recoverable amounts are calculated following fair value method.
- several non aggregated cash-generating units whose recoverable amounts are calculated following value in use method .
- several aggregated cash-generating units whose recoverable amounts are calculated following fair value method.
- several aggregated cash-generating units whose recoverable amounts are calculated following value in use method.

¹ We will not remind those concepts here due to the publishing instructions and the scope of 8 pages

Within each situation, we identified different cases corresponding to specific scenarios, corresponding to the possible combinations of items listed by §134 and 135 of IASB 36, as stated at point 2. We subsequently calculated, for each case, an index corresponding to the maximum score²(absolute value) of disclosure a firm could realize. The latter was then related to the score obtained by rating the information disclosed in the material analysed, that is the annual report. From the two values, we calculated the Goodwill Impairment Test Disclosure Score (GITDS) as the fraction (%) of the firm's score divided by the maximum score of its corresponding case.

For firms combining different situations (for instance, the firm whose goodwill amount was both allocated to individual CGUs and aggregated CGUs), we first determined the score corresponding to each specific case and then calculated the average percentage.

5. SAMPLE SELECTION

Our sample is made of firms listed on Euronext-Brussels, which disclosed consolidated financial statements and with a goodwill balance at the beginning of at least one fiscal year within the period of interest (2005-2008). Then, we retained for each year the firms disclosing clear information on goodwill: 63, 69, 72 and 76 respectively for each fiscal year in the period.

The information required by the measurement of the variables stated above is extracted from either OSIRIS Database or the firm's annual reports disclosed on their respective websites.

6. RESULTS

6.1. Descriptive statistics

We find that firms are progressively improving their disclosures on goodwill impairment test: the disclosure score on goodwill impairment test (GITDS) is increasing from 35.54% to 56,98% during the period. That evolution might be explained by the fact that financial statements preparers are progressively accustomed to and understanding the IFRS 3 and IAS 36 (Revised 2004) disclosures requirements.

As far as corporate governance is concerned, the average proportion of independent directors within the board increased in year 2 and stabilized at about 44% over the remaining period. In addition, the average stake of the audit committee³ within the board of directors slightly accrued. That evolution highlights the importance provided to the monitoring activities dedicated to the audit committee, this in order to prevent the firms from frauds and accounting manipulations that continue to impair the corporate image versus all stakeholders in general, and the shareholders in particular. The latter need to be ensured that at least the information they receive from the management portrays as fairly as possible the true economic situation of the firms they have invested their wealth in.

² By manual coding, we used the three-way numerical coding system: 0 = The required² information did not appear in the annual report; 1 = The required information appeared under the narrative form; 1 = The required information appeared under numerical and range form; 1 = The information appeared under numerical form but was obviously inconsistent with other information disclosed; 2 = The information is delivered under numerical form and is both accurate and consistent with other disclosed information.

³ According to the Code Lippens, the board has to set up specialized committees to tackle specific issues and advise the board on those issues. Three committees are required by that code: audit committee, nomination committee and remuneration committee.

Year for GITDS _{it}	Variables	Expected sign	Coefficient	P-value	R ² -Adj.	N
Year 1	CONST	+	-0.627350	0.1658	33.45%	57
	INDEP05	+	-0.206801	0.2078		
	AUDICOM05	+	0.640647	0.0047		
	AUDIFS05	+	0.291416	0.0053		
	RESIZE05	+	0.028657	0.2772		
	GWSIZE05	+	0.764402	0.0028		
Year 2	CONST	+	-0.570502	0.3155	24.36%	57
	INDEP06	+	-0.152463	0.3989		
	AUDICOM06	+	0.741884	0.0012		
	AUDIFS06	+	0.240613	0.0635		
	RESIZE06	+	0.028868	0.3650		
	GWSIZE06	+	0.584352	0.0368		
Year 3	CONST	+	-0.076791	0.8918	30.14%	64
	INDEP07	+	-0.156362	0.3968		
	AUDICOM07	+	0.470916	0.0703		
	AUDIFS07	+	0.383714	0.0018		
	RESIZE06	+	0.005188	0.8654		
	GWSIZE06	+	0.758007	0.0012		
Year 4	CONST	+	-0.570542	0.2310	34.83%	64
	INDEP08	+	-0.204805	0.3355		
	AUDICOM08	+	0.573685	0.0238		
	AUDIFS08	+	0.435908	0.0007		
	RESIZE06	+	0.033671	0.2220		
	GWSIZE06	+	0.233538	0.3166		

6.2. Determinants of disclosure on goodwill impairment test

According with H2, we find that for each year, the quality of disclosures on goodwill impairment test as required by the IAS 36 (Revised 2004, §§ 134 and 135) increased with the size of audit committee as indicated by significantly positive sign on AUDICOM_{it}. Such an association was expected because the task of ensuring the quality of the financial accounting is devoted to the audit committee. To play effectively its role, the audit must comprise a sufficient number of members. Thus, all things remaining equal⁴, the bigger is its size, the more efficient it is and the higher the quality of disclosed information on goodwill impairment test.

According to H3, the presence of big audit firms is positively associated to the quality of disclosure on goodwill impairment test as shown by the significantly positive sign on AUDIFS_{it}. In addition, except for year 2 where a little decrease of the association coefficient is observed, the weight of the big auditing firms is increasing year by year.

Such a relation and evolution confirm our expectation about the impact of the large human and technological resources available among large auditing firms on the quality of the information and disclosures delivered.

Moreover, despite numerous financial scandals in which the complicity of the big four auditing firms is evidenced (Deloitte and Touche, Ernst and Young, PricewaterhouseCoopers and KPMG respectively implied in Parmalat, AOL, AIG and Xerox scandals), those firms remain expected to be more independent from their client. And their independence enhances their efficiency in financial reporting monitoring.

⁴ The size is a necessary but not a sufficient condition for audit committee efficiency. Indeed, the audit committee members need to have adequate level in financial expertise and to be have the willingness to accomplish their monitoring task (Sparr, 2002).

The table 1 also shows- except for fiscal year 4 a significantly positive association between the relative size of goodwill amount and the quality of disclosure on goodwill impairment test. This is in line with our expectation (H5) that the firm is more likely to report more information on goodwill impairment test when the goodwill amount is proportionately important. The financial statements preparers are certainly guided by the materiality principle. Alternatively stated, the management withholds information on small amount of goodwill because it thinks that its omission cannot “influence the economic decisions of users taken on the basis of the financial statements” (IASC, 1989, § 30).

Contrastingly, the independence of board directors (H1) is completely unrelated to the quality of disclosure on goodwill impairment test: this finding is surprising given that the financial literature generally reports the positive association between the two variables (Gendron, Bedard and Gosselin, 2004, among others). That might be due to the fact that the variable measurement is unfitted to the variable nature it is intended to proxy for. Indeed, we followed the definition stated in Code Lippens, considering exclusively the independence in appearance while ignoring the independence in fact that could be more related to the financial reporting improvement. Unfortunately, the independence in fact cannot be measured and used in regression estimate because it is embedded in each director’s nature and is reflected in its behaviour. Its existence and importance can neither be identified nor valued a priori; they are rather evidenced through judgements made and decisions taken by the independent individual. Thus, only a thorough investigation of the board members activities can allow researchers to determine how many “real” independent directors the board comprises.

The lack of association is also evidenced between the GITDS and the size of the reporting firm (H4). This indicates that even for large firms having resources for reporting purposes, the amount of disclosure on goodwill impairment test depends, among others, on the proportion of its goodwill to total assets.

The table 2 presents the results of the random-effect regression, measuring the association between the variables reported above on the entire four-year period. That panel regression⁵ support the results arrived at through the year-by-year multiple regression. Indeed, it is confirmed that audit committee size (coefficient: 0.4399322; p value: 0.010), big audit firms (coefficient: 0.3973995; p value: 0.000) and the proportion of goodwill amount to the total assets (coefficient: 0.4614104; p value: 0.032) are positively and significantly associated to the quality of disclosure on goodwill impairment test.

Table 2: Determinants of disclosure score - random effects regression

		N	238
		R ² - Overall	33.12%
Variables	Expected sign	Coefficient	P-value
CONSTANT	+	-0.4555241	0.252
INDEP _{it}	+	-0.0987823	0.487
AUDICOM _{it}	+	0.4399322	0.010
AUDIFS _{it}	+	0.3973995	0.000
RESIZE _{it}	+	0.0232435	0.260
GWSIZE _{it}	+	0.4614104	0.032

Overall, our research leads to the conclusion that the quality of the disclosure on goodwill impairment test as required by the IAS 36 (Revised 2004, §§ 134-135) is positively influenced by the size of auditing firm, audit committee and of the proportion of goodwill amount to total assets while statistically unrelated to the size of the reporting firm and the proportion of independent directors to total board directors.

⁵ According to Mátyás and Sevestre (1992, p22), three main advantages over pure cross section: “Number of observations is typically much larger in panel data [238 observations for panel against less than 65 individuals from cross section]. This situation is likely to produce more reliable parameter estimates and, most importantly, enables the researcher to specify and test more sophisticated models that incorporate less restrictive behavioural assumptions. A related advantage is that panel data sets may alleviate the problem of multicollinearity. When the explanatory variables vary in two dimensions [cross section and time series] they are less likely to be highly correlated.”

7. CONCLUSIONS

The IAS 36 (Revised 2004) prescribes to use financial methods to test goodwill for impairment. While the fair value less cost to sell approach is easier to implement because frequently based on the assets market value, the value in use method is mainly based on management estimates. To avoid or mitigate the opportunistic management behaviour through those estimates, the IASB prescribed several disclosures requirements. The latter are expected to entertain and strengthen the reliability of the impairment test outcomes.

However, despite those detailed mandatory disclosures, the management keeps an important discretion in making the assumptions those estimates are built on. Furthermore, the compliance to disclosures requirements depends in some extent on the management willingness. The latter differs from company to company. Therefore, it is worthwhile to investigate corporate governance mechanisms that might influence the quality of disclosure on goodwill impairment test.

Through this research, we provided an empirical evidence that the size of the audit committee (measured by the proportion of audit committee members by the size of the whole board of directors), the size of audit firm (big four versus other smaller audit firms) and the proportion of goodwill amount to total assets are positively associated to the quality of disclosure (score of disclosure on goodwill impairment test) made by Belgian firms listed on Euronext Brussels through their 2005-2008 annual reports.

Contrastingly, the independence of board of directors (proportion of independent directors seating on the board of directors) and the size of the reporting firm (measured by the logarithm of its total assets) are completely unrelated to the quality of financial reporting.

The results of our research suggest that the inherent complexity of the goodwill impairment test should bring the firms stakeholders to strengthen corporate mechanisms in order to mitigate the potential opportunistic management behaviour and strengthen the reliability of the goodwill impairment test outcomes.

In addition, this paper using second hand information appeals further researches to thoroughly analyse how the goodwill impairment test is actually conducted. The evolution of disclosed information should be analysed on a recent basis and, for companies with real improvements, case studies could investigate the evolution of assumptions and valuation methods as well as of the audit and governance mechanisms.

REFERENCE LIST

1. Al-Ajmi, J. (2009). Audit firm, corporate governance, and audit quality: Evidence from Bahrain, *Advances in Accounting, incorporating Advances in International Accounting*, 25, pp. 64–74
2. American Institute of Certified Public Accountants (AICPA) (1991) Code of Professional Conduct, as amended May 20, 1991, New York AICPA
3. Anderson, R. C., Mansi, S. A. & Reeb, D. M. (2004), 'Board characteristics, accounting report integrity, and the cost of debt', *Journal of Accounting and Economics*, 37, pp. 315–42
4. Arrêté Royal en exécution de l'article 133, alinea 10, du Code des sociétés visant la creation du comité d'avis et de contrôle de l'indépendance du commissaire, *Moniteur Belge*, 19 Mai 2003
5. Bartlett, R.W.(1993). A Scale of Perceived Independence: New Evidence on an Old Concept. *Accounting, Auditing and Accountability Journal.*, 6, pp. 52-67
6. Bédard, J., Chtourou, S. M. & Courteau, L. (2004), 'The effect of audit committee expertise, independence, and activity on aggressive earnings management', *Auditing: A Journal of Practice & Theory*, 23, pp. 13–35.
7. Bédard, J. and Gendron, Y. (2010) Strengthening the Financial Reporting System: Can Audit Committees Deliver? *International Journal of Auditing*.
8. Belgian Corporate Governance Committee (2004), Belgian Code on Corporate Governance (Code Lippens). Retrieved from http://www.corporategovernancecommittee.be/en/corporate_governance_code
9. Benston, G. J. & Hartgraves, A. L. (2002), 'Enron:What happened and what we can learn from it', *Journal of Accounting and Public Policy*, 21, pp. 105–27.

10. Byrd, J., Hickman, K., (1992). Do outside directors monitor managers? Evidence from tender offer bids. *Journal of Financial Economics*, 32, pp 195–222.
11. DaDalt, P.J., Davidson, W. and Xie, B. (2003), Earnings management and corporate governance: the role of the board and the audit committee, *Journal of Corporate Finance*, 9, pp 295– 316.
12. DeAngelo, L. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3, pp. 297–322.
13. Dechow, P., Sloan, R., & Sweeney, S. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 1, pp. 1–36
14. European Community (2006), Directive 2006/43/EC of the European Parliament and the Council of May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC, *Official Journal of the European Union*, L 157/87-107.
15. Forker, J. J. (1992). Corporate governance and disclosure quality. *Accounting and Business Research*, 22, pp 111–124.
16. Frantz, P. (1999). Auditor's skill, auditing standards, litigation, and audit quality. *British Accounting Review*, 31, pp. 151–183.
17. Gendron, Y., Bédard, J. & Gosselin, M. (2004), 'Getting inside the black box: A field study of practices in "effective" audit committees', *Auditing: A Journal of Practice & Theory*, 23, pp. 153–171
18. Ho, S.S.M and Wong, K.S. (2001), A study of the relationship between corporate governance structures and the extent of voluntary disclosure, *Journal of International Accounting, Auditing & Taxation*, 10, pp 139- 156.
19. IASB (2004a.), International Accounting Standard (IAS) No. 36 (Revised 2004): Impairment of Assets (Revised 2004), London: International Accounting Standards Board.
20. IASB (2004b), International Accounting Standard (IAS) No 37 (Revised 2004), Provisions, Contingent Liabilities and Contingent Assets, London: International Accounting Standards Board.
21. IASC (1989), Framework for the preparation and the presentation of financial statements, London: International Accounting Standards Committee.
22. Institut des Réviseurs d'Entreprises (IRE) (2007a), Normes de l'Institut des Réviseurs d'Entreprises relatives à certains aspects liés à l'indépendance du commissaire
23. Jensen, M. C., and Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3, pp. 305–360.
24. Jeong, S. W., and Rho, J. (2004). Big Six auditors and audit quality: The Korean evidence. *International Journal of Accounting*, 39, pp. 175–196.
25. Kalbers, L. and Fogarty T. (1993). Audit Committee Effectiveness: an Empirical Investigation of the Contribution of Power. *Auditing: a Journal of Practice and Theory*, 12 (1), 24-49
26. Klein, A. (2002). Audit committees, board of director characteristics and earnings management. *Journal of Accounting and Economics*, 33, pp. 375–400.
27. Leftwich, R., Watts, R., & Zimmerman, J. (1981). Voluntary corporate disclosure: the case of interim reporting. *Journal of Accounting Research*, Supplement to Vol.19, pp 50–77.
28. Mátyás, L. and Sevestre, P (1992), *The Econometrics of Panel Data*, Dordrecht, Kluwer Academic Publishers.
29. McMullen, D. A. (1996), Audit committee performance: An investigation of the consequences associated with audit committees, *Auditing: A Journal of Practice & Theory*, 15, pp. 87–103.
30. Pincus, K., Rusbarsky, M., Wong, J., 1989. Voluntary formation of corporate audit committees among NASDAQ firms. *Journal of Accounting and Public Policy*, 8, pp 239–265.
31. Spira (2002), *The Audit Committee: Performing Corporate Governance*, London, Kluwer Academic Publishers.
32. Stern, S., (2001). Stern Stewart roundtable on capital structure and stock repurchase. *Journal of Applied Corporate Finance*, 14, 8–41.
33. Turley, S. & Zaman, M. (2004), 'The corporate governance effects of audit committees', *Journal of Management and Governance*, 8, pp. 305–332.
34. Vafeas, N. (2005), 'Audit committees, boards, and the quality of reported earnings', *Contemporary Accounting*