# Internal and External Supervisory Mechanisms in Corporate Governance

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#### Abstract:

Good corporate governance depends on well balanced relations between supervisory mechanisms in the corporate governance process. Relations between the supervisory board, as the internal supervisory mechanism, and external auditing, as the external supervisory mechanism, are crucial for the development of good corporate governance practice. This paper focuses on analyzing the relationship between the supervisory board and external auditing in order to determine the current state of that relationship in the Republic of Croatia and to determine possible guidelines for improving the relationship between the supervisory board and external auditing in practice. In addition, this study analyzes the relationship between the supervisory board and external auditing, which could lead to the maximum efficiency of both the supervisory board and external auditing and tests that relationship in practice using publicly traded companies in Croatia. This study also analyzes the impact of the audit committee on the efficiency of the supervisory board and external auditing.

Keywords: corporate governance, supervisory board, external auditing, audit committee

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### 1. Introduction

Good corporate governance depends on well balanced relations between the supervisory mechanisms of the corporate governance process. Relations between the supervisory board, as the internal supervisory mechanism, and external auditing, as the external supervisory mechanism, are crucial for the development of good corporate governance practice.

The supervisory board needs credible information in order to perform quality supervision and control over the company's management. Therefore, communication between the supervisory board and external auditing is necessary because of the irreplaceable role of external auditing in validating financial information. A relationship between the supervisory board and external auditing increasingly depends on the audit committee, a subcommittee of the supervisory board in charge of improving the financial reporting process and improving communication with external auditors.

This empirical study focuses on analyzing the relationship between the supervisory board and external

auditing in order to determine the current state of that relationship among businesses in Croatia and to determine possible guidelines for improving the relationship between the supervisory board and external auditing in practice. In addition, this study analyzes the relationship between the supervisory board and external auditing, and attempts to determine which factors could

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lead to maximum efficiency of both the supervisory board and external auditing through a series of tests that relationship in practice. This study also analyses the impact of the audit committee on the work efficiency of the supervisory board and external auditing.

Prior to conducting the empirical segment of this study, which was based on a survey, analytical methods, as well as inductive and deductive speculation, were used to explain the basic characteristics of corporate governance systems, and to examine the role of the supervisory board in corporate governance. Theoretically relevant and methodological aspects of external auditing and relations between the supervisory board and external auditing were also analyzed. This analysis served as the basis of the assumptions that formed the study's defined goals.

### 2. Corporate governance systems

The long term evolution of companies and business led to the separation of the ownership and management functions. This separation resulted in the emergence of corporations, raising many issues related to corporate governance. There is no unique definition for the word corporation, or for the term corporate governance.

From an etymological point of view, the word "corporation" has its origins in the Latin word "corpus," meaning body. The term "corpus" represents a group of people empowered to act as one. Monks and Minow define corporation as a "mechanism created in order to allow participation in capital, knowledge and work all directed to achieve maximum benefit for everyone (Monks and Minow 2001, p. 1)." Professor Nickles, from the University of Maryland, defines corporation as a legal entity with authority to act and have liabilities separate from its owners - the corporation's shareholders are its owners (Nickels and McHugh 2002, p. 140).

The major characteristics of the corporation are its legal personality, the limited liability of corporation's owners, ease of ownership change and perpetual life. When all these characteristics are observed it can be said that, in accordance with Croatian law, the term corporation is appropriate for a publicly traded company.

According to the Croatian Law on Companies, a publicly traded company is a commercial company whose members (shareholders) participate with stakes in the company's equity. A publicly traded company can be also owned by one person and the owners of the publicly

traded company are not responsible for the company's liabilities (Gorenc 2004, p. 171).

Corporate governance can be defined as a system of supervisory mechanisms used by all suppliers of crucial inputs in order to ensure returns on their investments in the corporation without jeopardizing the corporation's prosperity (Tipurić 2006, p. 52). Corporate governance should provide answers on questions regarding who supervises the corporation and why (Kaen 2003, p. 1).

Corporate governance systems are usually classified as either Anglo-Saxon corporate governance systems or Continental or European corporate governance systems. Each system has its own characteristics and ways of functioning. Corporate governance systems differ according to the most important stakeholders, who influence the decision making process in corporations, as well as the instruments and mechanisms used by those stakeholders to affect the corporate governance process.

The Anglo-Saxon system is typical of Anglo-Saxon countries and is also known as the shareholder system. Large and liquid stock markets, low concentration of ownership, a one-tier board of directors, a relatively high level of protection for minority shareholders, and the dominant role of institutional investors are the basic characteristics of the Anglo-Saxon corporate governance system (Thomsen 2003, p. 31-34). Management is neither controlled nor supervised by any of the corporation's stakeholder groups. Control over the management is performed by the stock market and investors.

Low ownership concentration is the main problem of the Anglo-Saxon corporate governance system, and also a reason why the management has the main role in this system. In these conditions, managers make all the important business decisions that matter to the corporation. Otherwise it is difficult to supervise or discipline the management. The management often makes decisions in their own interest, which gives rise to over-investment. Managers prefer to enlarge the corporation because this enhances their power. Investments will thus be made even if their profitability is low or there could possibly result in a loss. Overinvestment will thus give power to management, but leaves shareholders with lower profitability, because managers will invest even though profit prospects are poor (Ooghe and Vuyst 2001, p. 7).

The most effective way of management control in the Anglo-Saxon corporate governance system is the market for corporate control. If the shareholders are not satisfied with the way management governs the corporation they

will sell their shares. When a large amount of shares are sold, the price of single share drops and the corporation becomes a good target for a hostile takeover. In the case of a hostile takeover, the existing management of the corporation is usually replaced with new management (Blair 1995, p. 63).

The board of directors, as an internal mechanism of corporate governance, represents a link between the owners and the management. In the Anglo-Saxon corporate governance system, the board of directors is organized as a one-tier or unitary board. The board is composed of executive and non-executive directors. Supervision of the corporation's business operations is performed by non-executive directors and business operations are managed by executive directors. Members of the board are selected by shareholders in order to monitor the corporation's management, while the unitary board covers managerial and supervisory responsibilities.

The Continental or European corporate governance system is typical of European countries and is also known as the stakeholder and bank-oriented system (Aguilera and Jackson 2003, p. 447). This corporate governance system is opposed to the Anglo-Saxon corporate governance system. In the European system, shareholder groups hold a large percentage of the total number of shares that are publicly traded, which ensures them the right to decide on many issues concerning the corporation. Corporate ownership is concentrated, and a small number of investors, along with banks and employees, have a significant impact on the corporation's governance (Tipurić 2008, p. 91).

Corporate ownership, as opposed to the Anglo-Saxon system, is typically concentrated among a stable network of strategically oriented banks and other industrial companies. Consequently, the market for corporate control has a lower impact on management than in the Anglo-Saxon system. Banks play the central external governance role through relational financing, providing financial services and monitoring in times of financial distress. Banks and industrial companies hold large blocks of shares in European corporations and actively participate in the supervision and governance of corporations. Block holders use their voting power to directly influence the way corporations are governed and rarely trade their shares (Jackson and Moerke 2005, p. 351). This concentrated ownership structure enables owners to maintain control over the corporation and to make decisions that enhance the profitability of the corporation instead of enlarging the corporation's size through large investments.

Unlike the Anglo-Saxon system, the European corporate governance system has two governing bodies: the supervisory and management boards. Therefore, it is sometimes called a two-tier system. Members of the supervisory board do not have executive functions. Their role is to trace business operations and to monitor managers. The supervisory board is where the interests of the owners are represented, as well as the interests of other stakeholders. The supervisory board appoints members of the management board and members of the management board carry out management of the corporation. The role of the supervisory board members is similar to that of non-executive directors in the Anglo-Saxon corporate governance system.

The Republic of Croatia, as a European country, has all the characteristics of the European corporate governance system. A two-tier system and concentrated ownership are the key attributes of the Croatian corporate governance system, even though there are few changes regarding the supervisory and management boards. According to the changes in the Croatian Law on Companies, Croatian companies are allowed to establish a unitary board as a new company's body instead of the supervisory and management boards. The unitary board should appoint one or more executive directors for a period not longer than six years. If the unitary board appoints more than one executive director, one has to be appointed chief executive officer. This Law has been valid since April 1st, 2008 (Narodne novine 2007).

The supervisory board, as an internal mechanism of corporate governance, has an important role in monitoring and controlling the management. The role of the supervisory board in Croatia is explained in the following section.

### 3. The role of the supervisory board in corporate governance

According to Croatian law, the supervisory board is defined as a company's body in charge of controlling, monitoring and tracing business operations. The supervisory board controls the company's business operations and ascertains if the operations are in accordance with the law and the company's statute (Ćesić 2007, p. 145). This body is empowered to represent the company with respect to the management's board members. In addition, the supervisory board monitors the

whole company's business operations. Monitoring business operations not only concerns detecting and remedying possible problems but also preventing them (Čolaković 2007, p. 23).

Because of its specific position between the shareholders assembly and the management board, the supervisory board undertakes a controlling, strategic and connecting role. The controlling role refers to the selection of the management board's members, their supervision and monitoring, as well as to assessment of the management boards' performance. The strategic role refers to the authorization of proposed strategic decisions, assessment of previous strategic decisions, and active involvement when formulating implementing the company's business strategy. The connecting role includes maintaining formal and nonformal relations with all stakeholders. Furthermore, the supervisory board helps the company to connect with all relevant factors and segments of the business environment (Tipurić 2006, p. 112).

In Croatia, the highest and lowest number of supervisory board members is defined with the Croatian Law on Companies. When the Law sets limits on the number of supervisory board members, this applies to the whole supervisory board regardless of whether the members are chosen among candidates or appointed (Barbić 2005, p. 531). According to the Croatian Law on Companies, the lowest number of supervisory board members is three, with the number of members required to be odd.

Members of the supervisory board are appointed for four year terms, and at the end of which they can be appointed again. Members of the supervisory board are appointed by the shareholders assembly, usually by a majority of votes. After the supervisory board is established, members of the supervisory board elect the chairmen of the board and the vice chairmen (Gorenc et. al. 2004, p. 350).

Supervision of the way management runs the company's business operations is the main task of the supervisory board. Supervision can be divided into two categories: ongoing and preventive supervision. Ongoing supervision refers to already completed business operations and current business operations. When performing ongoing supervision, business records along with the documentation and company's assets are examined. Preventive supervision refers to the supervision of the decision making process in the company's business governance. The supervisory board

has to submit written reports to the shareholders' assembly on their supervision of the decision making process (Gorenc et.al. 2004, p. 360-361).

Except for ongoing and preventive supervision of the company's business operations, the supervisory board is responsible for:

- appointing and recalling management board members,
- nominating a new external auditor to the shareholders assembly,
- creating rules for its own procedures and rules for the management board procedures,
- making decisions that restrict the management in running business operations,
- representing the company before the management board members,
- convening the shareholders assemblies when needed,
- approving contracts concluded by the management board members, etc.

The supervisory board is not entitled to run the company's business operations, to interfere with the management board's work or to affect the management board in any manner. It can be determined, by statute or supervisory board decision, that the management board needs approval from the supervisory board when performing certain operations. Approval from the supervisory board is usually needed when it comes to the company's strategic decision making. However, approval for certain management activities does not mean that the supervisory board is entitled to undertake those business activities. The supervisory board members can suggest to the management board what they think is useful for the company; the management board should then consider that suggestion and decide whether it should be accepted or not (Tipurić 2008, p. 394).

The supervisory board is entitled to establish subcommittees in order to perform its activities more easily. Continuous growth of supervisory board subcommittees is a characteristic of current corporate governance throughout Europe. By focusing on certain issues, and by providing solutions for those issues, members of the subcommittee assist the supervisory board in decision making. The supervisory board can establish subcommittees in order to prepare or implement its own decisions (Gorenc et. al. 2004, p. 363). Subcommittees should be composed of at least three members, while companies with a lower number of supervisory board members can have subcommittees consisting of only two members (Croatian Financial

Service Supervisory Agency and Zagreb Stock Exchange d.d. 2007, p. 12).

### 4. Theoretically relevant and methodological aspects of external auditing

From an etymological point of view, the word "auditing" has it origins in the Latin word "revidere", which means review, looking back upon, a retrospective examination of certain facts, etc. Auditing also originates in the Latin word "audire", which means listening or hearing, and describes how auditors used to perform their role by listening to a client's oral report. At the start of its development, auditing accounting statements were presented orally and the auditor preformed the auditing process by listening to a client's oral report (Meigs 1988, p. 8).

External auditing represents the act of examining and verifying financial statements and consolidated financial statements along with the methods and data used in the creation of the financial statements (Narodne novine 2005). A fundamental goal of the auditing process is the protection of the capital owner's interest, and the creation of a set of information for rational decision making and managing. The auditing process should be seen as one that assembles and compiles useful and reliable information. Consequently, auditing becomes one of the key instruments in corporate governance and a base for mutual communication and trust among all stakeholders. An auditor's opinion on the reality and objectivity of financial statements, in every significant respect, is the main goal of the auditing process. However, it should be pointed out that the auditor's opinion does not quarantee a company's business success in the future, as the management board is responsible for the company's success.

Except in the context of the protection of the capital owner's interest, auditing is usually considered an instrumental variable of managerial economy, which generates the need for insight into the theoretical framework of auditing, a set of knowledge about its basic assumptions, categories and definitions. The most significant part of its theoretical framework are auditing principles and auditing standards. Auditing principles are basic rules for behavior which should be respected in the auditing process. Auditing principles represent a starting point for the shaping of auditing standards, while auditing standards represent the core framework of the auditing process. Auditing standards contain a

methodological framework of the auditing process, along with the global auditing approach, which should be elaborated in detail in the form of a specific auditing methodology.

The auditing process is composed of the following phases (Messier 1998, p. 47-58): preliminary engagement activities, planning activities, performing an internal control evaluation and tests of control, obtaining audit evidence tests, completion of the auditing process and the communication of an auditor's opinion. The auditing process starts with preliminary engagement activities which are performed before planning activities. The preliminary engagement activities include procedures regarding the continuance of the client relationship and acceptance of a new client, as well as procedures regarding the acceptance of the audit letter. Afterwards, procedures regarding the evaluation of the client's internal auditor work and the procedures on the selection of quality auditing staff should also be considered. The auditor has to get to know and understand the client's business procedures in order to successfully plan and perform the auditing process.

While the auditor becomes acquainted with the client's business procedures, planning of the auditing process is completed. Auditing planning encompasses the whole auditing process, which includes planning the timing of the audit along with the scope and type of the audit tests that ought to be performed and the number and competencies of the personnel included in the auditing process. Analytical procedures, which are used in all phases of the auditing process, are of particular significance for the entire auditing process. In countries with developed market economies and professional auditors the implementation of analytical procedures is of growing importance. Analytical procedures include a variety of procedures, the most important of which concerns financial statement analysis. Depending on assessments of significance and risk, the auditor makes a decision on the type, scope and timing schedule of auditing procedures, with particular reference to the quantity and quality of the audit evidence as a basis for expressing an opinion on the validity and objectivity of the financial statements.

Insight into and evaluation of the internal control system are an integral part of the financial statements auditing process. A well organized and efficient internal control system increases the possibility that the information on a company's financial position, business success and changes in its business position are

objectively presented in the financial statements. Consequently, this makes the auditing process shorter and easier to perform. After gaining an understanding of the internal control system, tests of control are performed. Tests of control examine the efficiency of the internal control system in preventing and detecting significant mistakes. There are three types of control tests that are usually performed: tests of account balances, analytical procedures, and independent tests of business transactions.

The modeling and completion of the auditors' working papers, which must contain a sufficient amount of auditing evidence in order to express an opinion on the validity and objectivity of the financial statements, is very important in all phases of the auditing process.

The auditing process reaches completion with the composition of the auditor's report on the financial statements. Just before the composition of the auditor's report, in the final phase, the auditor has to consider certain issues that could be significant and affect the financial statements and the intended users of the financial statements. Those issues are potential liabilities, business events after the balance sheet date (post balance sheet events) and the final procedures of the audit evidence assessment. The auditor's report is the main product of the auditing process and expresses an opinion on the validity and objectivity of the financial statements and their compliance with the defined framework of financial reporting (accounting principles, standards, policies and laws). The auditor can express: an unqualified opinion, a qualified opinion, a disclaimer of opinion and an adverse opinion. An unqualified opinion should be expressed if the financial statements present valid and objective information about the company's financial position, while the qualified opinion should be expressed if the auditor cannot be sure that the information contained in the financial statements are valid and objective. A disclaimer of opinion should be expressed when the financial statements are not valid and objective, and an adverse opinion should usually be expressed if there is a lack of audit evidence. If the expressed opinion is different than the unqualified one, the auditor should point out and explain the reasons which led to that opinion.

Regarding the relationship between the supervisory board and external auditing, it is important to point out that the communication between the supervisory board and external auditing takes place at the audit committee if the company has established one. It could be said that the audit committee represents a communicational link between the supervisory board and external auditing (Carmichael and Willingham 2000, p. 507). According to the Croatian Law on Auditing, the main roles and responsibilities of the audit committee should be:

- to monitor the integrity of the financial statements of the company and to oversee financial reporting procedures,
- to review the company's internal control system,
- to monitor and review the effectiveness of the company's internal audit function as well as risk assessment systems,
- to monitor and review the external auditor's independence, objectivity and effectiveness as well as other auditing services provided to the company,
- to monitor the auditing process of annual financial statements and consolidated financial statements,
- to make recommendations to the supervisory board in relation to the appointment of the external auditor and to approve the remuneration and terms of engagement of the external auditor following appointment by the shareholders in the general assembly,
- to review and assess the annual internal auditing work plan.

The main roles and responsibilities of the audit committee, according to the Croatian Law on Auditing, are almost identical to the roles and responsibilities of audit committees all over the world.

### 5. Empirical study of the relationship between the supervisory board and external auditing in Croatia

### 5.1. Goals and methodology of the empirical study

After considering the basic characteristics of corporate governance systems, the role of the supervisory board in corporate governance, as well as the theoretically relevant and methodological aspects of external auditing, the empirical study of the relationship between the supervisory board and external auditing in Croatia was modeled and conducted using a survey. The impact of the audit committee on the work efficiency of the supervisory board and external auditing was also examined. For the purpose of the empirical study, two surveys were conducted. The first survey was based on the perceptions of the supervisory and management board members, and the second on the perceptions of

		Exte	External auditing and efficiency of the supervisory board					
Function	Function		Very low impact	Moderate impact	High impact	Extremely high impact	Total:	
An auditor	Count % within function	1 2.5%	3 7.5%	16 40.0%	12 30.0%	8 20.0%	40 100.0%	
A member of the management board	Count	0	4	12	10	4	30	
	% within function	0%	13.3%	40.0%	33.4%	13.3%	100.0%	
A member of the supervisory board	Count	0	3	9	12	4	28	
	% within function	0%	10.7%	32.1%	42.9%	14.3%	100.0%	
Total:	Count	1	10	37	34	16	98	
	% within function	1.0%	10.2%	37.8%	34.7%	16.3%	100.0%	

Table 1: Opinions of the survey participants about the impact of external auditing on the higher efficiency of the supervisory board)

members of the supervisory board. All certified auditors who participated in the survey work in 23 different auditing companies, including the Big 4 auditing companies. Members of the management and supervisory board who participated in the survey come from companies which do business in the following industries: banking (24%), retail – hypermarkets (14%), construction (14%), shipyards (14%), electricity (10%), clothing (10%), hotels (7%), newspapers (7%).

Ascertaining the intensity and nature of the relationship between the supervisory board and external auditing, as well as ascertaining the impact of the audit committee on the work efficiency of the supervisory board and external auditing in the practices of Croatian publicly traded companies were the main goals of the empirical study. The empirical study is based on the application of the following statistical methods: descriptive statistics (arithmetic mean, standard deviation), t-test for independent samples, Kruskall-Wallis test, and Anova (variance analysis).

### 5.2. Hypothesis regarding an increase in work efficiency for both the supervisory board and external auditing

The empirical study first tested the following hypothesis:

## H1 An optimal relationship between the supervisory board and external auditing could result in a mutual increase in work efficiency.

The hypothesis was tested by processing answers on given questions received from the survey participants. The participant's answers represent a base for analyzing paper.

In order to test the hypothesis, survey participants were asked about the impact of external auditing on the higher efficiency of the supervisory board. Descriptive statistics regarding the opinions of survey participants about the impact of external auditing on the higher efficiency of the supervisory board is shown in table 1.

Out of the 40 certified auditors who answered this question, 2.5% think that external auditing has no impact on increases in the supervisory board's efficiency, 7.5% think that the impact is very low, while 40% think that the impact of external auditing on the higher efficiency of the supervisory board is moderate. Of the remaining auditors, 30% think that there is a high impact and 20% think that the impact of external auditing on the higher efficiency of the supervisory board is extremely high.

Out of the 30 members of the management board, 13.3% think that the external auditing impact on the efficiency of the supervisory board is very low, and 40% think that the impact is moderate, while 33.4% think that the impact is high. The remaining 13.3% think that the impact of external auditing on the higher efficiency of the supervisory board is extremely high.

Out of the 28 members of the supervisory board who answered this question, 10.7% of think that there is a very low impact by external auditing on the efficiency of the supervisory board, 32.1% think that the impact is moderate, while 42.9% think that there is a high impact on supervisory board efficiency. The remaining 14.3% think that there is an extremely high impact.

It could be concluded that, out of the total number of survey participants (98) who answered this question, 1% think that external auditing has no impact on an increase in supervisory board efficiency, while 10.2% think that

there is very little impact and 37.8% think that the impact is moderate. The remaining 34.7% think that there is a high impact and 16.3% think that the external auditing impact on the higher efficiency of the supervisory board is extremely high.

The following table (table 2.) presents the mean scores (scaled form 1 to 5; scale range meaning: 1 – no impact, 2 – low impact, 3 – moderate impact, 4 – high impact, 5 – extremely high impact) of certified auditors, members of the management and supervisory boards on the impact of external auditing on the higher efficiency of the supervisory board.

	ternal auditing and the ervisory board efficiency	N	Mean	Standard deviation
	An auditor	40	3.58	.984
Function	A member of the management board	30	3.47	.900
Fu	A member of the supervisory board	28	3.61	.875

**Table 2:** Mean scores of the survey participants about the impact of external auditing on the higher efficiency of the supervisory board

The mean score of certified auditors is 3.58 with a standard deviation of 0.984, while the mean score of the management board members is 3.47 with a standard deviation of 0.900. The mean score of the supervisory board members is 3.61 with a standard deviation of 0.875.

An analysis of variance (Anova) is usually used in order to test for significant differences among several means. Consequently, the main objective of the variance analysis is to compare the variation ratio among groups with the variation within the group. If that ratio, the so-called Fratio, is significant, it can be concluded that the observed groups do not belong to the same population, which implies that the means are significantly different. The analysis of variance is used in order to examine if there is a significant difference between the mean scores given by auditors and the management and supervisory board members. The analysis of the variance is shown in the following table (table 3.).

External auditing and supervisory board efficiency	Sum of squares	Degrees of freedom	Mean square	ш	Significance
Between groups	.325	2	.162	.188	.829
Within groups	81.920	95	.862		
Total	82.245	97			

**Table 3:** The analysis of variance

As can be seen in table 3, the value of the F-ratio (0.188) is not significant, with a level of significance equaling 0.829, and is higher than 5%, which confirms that there is no significant difference among mean scores given by auditors, and members of the management and supervisory boards. Based on the results of the testing, it can be concluded that there are no significant differences between the groups' opinions with regard to the impact of external auditing on supervisory board efficiency, meaning that external auditing has a high impact on supervisory board work efficiency.

In order to analyze the opinions of the three groups of survey participants about the impact of external auditing on supervisory board efficiency with regard to the communication quality between the two, and to determine whether the survey participants who think that there is better communication quality between the supervisory board and external auditing also have a better opinion about the impact of external auditing impact on supervisory board efficiency, the non-parameter Kruskall-Waliss test was used. The Kruskall-Waliss test is an analysis of the variance test, uses ranks instead of numerical data, **and is an** extended test of the rank count. This test is shown in table 4.

External a efficiency	_	and supervisory board	N	Mean rank
Commun betwee extern auditing the super board	een nal g and rvisory	No communication Weak communication Average communication Very well communication Excellent communication	2 6 26 55 9	15.50 32.00 40.13 53.90 68.89
		TOTAL:	98	-

Table 4: The Kruskall-Wallis test

According to the data presented in table 4, it can be concluded that the survey participants who think that there is no communication between external auditing

and the supervisory board graded the impact of external auditing on the increase of supervisory board efficiency with the lowest grades (mean rank of 15.50). At the same time, the participants who think that there is excellent communication between external auditing and the supervisory board graded the impact of external auditing on the increase of supervisory board efficiency with the highest grades (mean rank of 68.89). The following table (table 5.) presents the results of the Kruskall-Walis test.

External auditing and supervisory board efficiency					
Chi-square 14.956					
Degrees of freedom	4				
Asymptotic significance	.005				

Table 5: The significance of the Kruskall-Wallis test

According to the data presented in table 5, given a significance level equaling 0.005 (lower than 5%), it can be concluded that there is a significant difference in the opinions given by the survey participants about the impact of external auditing on the increase in supervisory board efficiency related to the communication quality of both external auditing and the supervisory board. Thus, the survey participants who think that there is better communication quality between external auditing and the supervisory board also have a better opinion about the impact of external auditing on the increase of supervisory board efficiency, which indicates that a better relationship between external auditors and members of the supervisory board increases the work efficiency of the supervisory board.

Auditors' opinions about the impact of the

supervisory board on the higher efficiency of external auditing are presented in table 6.

Out of the total number of auditors, 4.7% think that there is no impact by the supervisory board on the increase of external auditing efficiency, while 23.8% think that the impact is low and 40.5% think that the impact is moderate. The remaining 28.6% think that the impact of the supervisory board on the increase of external auditing efficiency is high and 2.4% of the auditors think that the impact is extremely high. Therefore, it can be concluded that the majority of certified auditors who participated in the survey think that there is an impact by the supervisory board on external auditing efficiency.

According to the survey and tests presented, it is possible to conclude that the average opinion of auditors and members of the management and supervisory boards is that there is a moderate impact by external auditing on supervisory board efficiency. It can also be concluded that the participants who think that there is better communication quality between external auditing and the supervisory board have a better opinion about external auditing's impact on the increase of supervisory board efficiency. The opinion of the majority of certified auditors is that the supervisory board has an impact on the increase of external auditing efficiency. Based on application of the secondary research methods and opinions of the survey participants, it can be concluded that the supervisory board has an impact on the increase of external auditing efficiency and that external auditing has an impact on the increase of supervisory board efficiency. These results confirm the hypothesis that an optimal relationship between the supervisory board and external auditing could result in the mutual increase of

-	The supervisory board and external auditing			No	Low	Moderate	High	Extremely high	Total:
		efficiency		impact	impact	impact	impact	impact	
	F	An	Count	2	10	17	12	1	42
	Function	auditor	% within function	4.7%	23.8%	40.5%	28.6%	2.4%	100.0%

Table 6: Auditors' opinions about the impact of the supervisory board on the higher efficiency of external auditing

	The existence of an audit o	Yes	No	Total:	
	An auditor	Count % within function	13 31.0%	29 69.0%	42 100.0%
Function	A member of the management board	Count % within function	8 26.7%	22 73.3%	30 100.0%
	A member of the supervisory board	Count % within function	9 32.1%	19 67.9%	28 100.0%
Total:		Count % within function	30 30%	70 70%	100 100.0%

Table 7: The existence of an audit committee in publicly traded companies

The audit committee	Moderate impact	High impact	Extremely high impact	Total:		
Providing auditing services		Count	4	6	3	13
to companies with an	Yes	% within companies with an				
established audit committee		established audit committee	30.8%	46.2%	23.0%	100.0%

Table 8: The audit committee impact on the higher efficiency of external auditing

Impact of es	tablishing a	n audit committee on external auditing	No	Moderate	High	Extremely	Total:
		efficiency	impact	impact	impact	high impact	Total.
		Count	0	3	5	5	13
The audit	Yes	% within the audit committee	0.0%	23.0%	38.5%	38.5%	100.0%
committee		Count	1	12	11	5	29
	No	% within the audit committee	3.4%	41.4%	37.9%	17.3%	100.0%
Total:		Count	1	15	16	10	42
TOtal:		% within the audit committee	2.4%	35.7%	38.1%	23.8%	100.0%

**Table 9:** Opinions of certified auditors about the impact of establishing an audit committee, in companies that do not have one on the higher efficiency of external auditing

work efficiency.

5.3. Hypothesis regarding the impact of the audit committee on the increase in efficiency of the supervisory board and external auditing

The empirical study next tested the second hypothesis:

# H2 The audit committee, as a subcommittee of the supervisory board, has a direct impact on the higher efficiency of the supervisory board and external auditing.

In order to test the second hypothesis, survey participants were asked about the existence of audit committees in publicly traded Croatian companies. Descriptive statistics about the existence of the audit committees in publicly traded companies is shown in table 7.

Of the 42 certified auditors who participated in the survey, 31% provide auditing services to publicly traded companies with an established audit committee. The remaining 69% provide auditing services to publicly traded companies which do not have an audit committee. Out of the 30 members of the management board who participated in the survey, 26.7% work in companies that have an established audit committee. The remaining 73.3% work in companies that do not have an audit committee. Of the 28 members of the supervisory board who participated in the survey, 32.1% are members

of the supervisory board working in companies with an established audit committee. The remaining 67.9% are members of the supervisory board in companies that do not have an audit committee.

The following table (table 8.) presents the opinions of certified auditors about the audit committee's impact on the higher efficiency of external auditing. This question was answered only by auditors who provide auditing services to publicly traded companies with an established audit committee.

Out of the total number of certified auditors, 30.8% think that the audit committee has a moderate impact on the higher efficiency of external auditing, 46.2% think that the audit committee's impact on the higher efficiency of external auditing is high, while 23% of the certified auditors think that the audit committee's impact on the higher efficiency of external auditing is extremely high.

The following table (table 9.) presents the opinions of the certified auditors about the impact of establishing an audit committee on the higher efficiency of external auditing from companies that do not have an audit committee.

Of the 13 certified auditors who provide auditing services in companies with an established audit committee, 23% think that the impact of establishing the audit committee (in the companies which do not have an audit committee) on the higher efficiency of external auditing would be moderate, while 38.5% think that the impact would be very high. The remaining 38.5% think that the impact would be extremely high. Of the 29

Impact of an audit committee on supervisory board and external auditing efficiency			Moderate impact	High impact	Extremely high impact	Total:
	A member of	Count	3	4	0	7
F etia	management board	% within function	42.9%	57.1%	0%	100.0%
Function	A member of	Count	0	6	4	10
	supervisory board	% within function	0%	60%	40%	100.0%
		Count	3	10	4	17
Total:		% within function	17.7%	58.8%	23.5%	100.0%

**Table 10:** Opinions of supervisory and management board members regarding the impact of an audit committee on the higher efficiency of both the supervisory board and external auditing

	stablishing an audit comr oard and external auditin	•	No impact	Moderate impact	High impact	Extremely high impact	Total:
	A member of	Count	0	7	10	4	21
	management board	% within function	0%	33.3%	47.6%	19.1%	100.0%
Function	A member of Count		1	8	6	6	21
	supervisory board	% within function	4.7%	38.1%	28.6%	28.6%	100.0%
-		Count	1	15	16	10	42
Total:		% within function	2.4%	35.7%	38.1%	23.8%	100.0%

**Table 11:** Opinions of supervisory and management board members about the impact of establishing an audit committee in companies that do not have one on the higher efficiency of supervisory board and external auditing

certified auditors who provide auditing services in companies which do not have an audit committee, 3.4% of think that there would be no impact by establishing an audit committee on the higher efficiency of external auditing, while 41.1% think that there would be moderate impact, while 37.9% think that the impact of establishing an audit committee (in companies which do not have an audit committee) on the higher efficiency of external auditing would be high. The remaining 17.3% think that the impact of establishing an audit committee on the higher efficiency of external auditing would be extremely high.

The following table (table 10.) presents the opinions of the supervisory and management board members regarding the audit committee impact on the higher efficiency of both the supervisory board and external auditing.

This question was answered only by members of supervisory and management boards who work in publicly traded companies with an established audit committee. Of the 7 members of the management board, 42.9% think that the audit committee has a moderate impact on the higher efficiency of both external auditing and the supervisory board, while 57.1% think that the audit committee impact on the higher efficiency of the supervisory board and external auditing is high. Of the 10 members on the supervisory board, 60% think that the

audit committee has a high impact on the higher efficiency of the supervisory board and external auditing, while 40% think that the impact of the audit committee on the higher efficiency of both the supervisory board and external auditing is extremely high.

The following table (table 11.) presents the opinions of the supervisory and management board members about the impact of establishing an audit committee in companies without one on the higher efficiency of the supervisory board and external auditing.

Of the 21 members of the management board who answered this question, 33.3% think that the impact of establishing an audit committee (in companies without an audit committee) on the higher efficiency of the supervisory board and external auditing would be moderate, while 47.6% think that the impact would be very high. The remaining 19.1% think that the impact would be extremely high.

Of the 21 members of the supervisory board who answered this question, 4.7% think that there would be no impact from establishing an audit committee on the higher efficiency of the supervisory board and external auditing, while 38.1% think that there would be a moderate impact. Of the remaining 57.2%, 28.6% think that the impact of establishing an audit committee on the higher efficiency of both the supervisory board and

Impact of establishing an audit committee on supervisory board and external auditing efficiency		N	Mean	Standard deviation	Standard error mean
Function:	A member of management board A member of supervisory board	21 19	3.95 3.95	.590 .705	.129 .162

**Table 12:** Mean scores of supervisory and management board members about the impact of establishing an audit committee in companies that do not have one on the higher efficiency of supervisory board and external auditing

Establishment of an audit committee	Levene's test for equality of variances		T-test for equality of means						
	F	Sig.	Т	Df.	Sig. (2- tailed)	Mean difference	Standard error difference	95% confidence interval of the difference	
								Lower	Upper
Equal variances assumed	.065	.799	.024	38	.981	.005	.205	410	.420
Equal variances not assumed			.024	35.275	.981	.005	.207	414	.424

**Table 13:** T-test of the difference between the mean scores of supervisory and management board members regarding the impact of establishing an audit committee in the companies that do not have one on the higher efficiency of the supervisory board and external auditing

external auditing would be high and 28.6% think it would be extremely high.

The t-test for independent samples is used in order to test the difference between the mean scores of the supervisory and management board members about the impact of establishing an audit committee on the higher efficiency of the supervisory board and external auditing. The following table (table 12.) presents mean scores (scaled form 1 to 5) of the supervisory and management board members about the impact of establishing an audit committee (in companies without an audit committee) on the higher efficiency of the supervisory board and external auditing.

The mean score of the management and supervisory board members is 3.95 (there is no difference between means because there are only two decimal places). The following table (table 13.) presents the t-test results for independent samples in order to test the difference between the mean scores (the difference between means equals 0.005).

When equal variances are assumed, a T value of 0.024 and 38 degrees of freedom, the difference is not significant (significance is higher than 5%). Therefore, it can be concluded that the average opinion of the supervisory and management board members is that the impact of establishing an audit committee, in those

companies without one, on the higher efficiency of external auditing and the supervisory board would be high.

According to the survey and tests presented, it is possible to conclude that certified auditors who provide auditing services in companies with an established audit committee think that the audit committee has an impact on the higher efficiency of the external auditing service. The average opinion of all certified auditors who participated in the survey is that the impact of establishing the audit committee, in companies that do not have one, on the higher efficiency of external auditing would be high. Members of the supervisory and management boards who work in publicly traded companies with an established audit committee think that the audit committee has an impact on the higher efficiency of the supervisory board and external auditing, and that the impact of establishing an audit committee in companies that do not have one would result in an increase in the efficiency of both the supervisory board and external auditing. Based on the application of the secondary research methods and on the opinions of the survey participants, it can be concluded that an audit committee has an impact on the higher efficiency of the supervisory board and external auditing. In addition, the hypothesis, which states that an audit committee as a

subcommittee of the supervisory board has a direct impact on the higher efficiency of the supervisory board and external auditing, is confirmed.

#### 6. Conclusion

The fact that there has been no significant research on the relationship between the supervisory board and external auditing in Croatia, and the fact that the supervisory board and external auditing represent very important control mechanisms in the corporate governance system, both prompted the scientifically grounded hypotheses that were developed and tested during the empirical study. Supervisory systems, both internal and external, play a crucial role in increasing the quality of a company's business system and organizational parts. Both of these factors reflect the higher quality of financial statements – which are a key source of financial information and data for all participants in the corporate governance process.

A relationship between the supervisory board and external auditing increasingly depends on the audit committee, a subcommittee of the supervisory board in charge of improving the financial reporting process and improving communication with external auditors. Since the results of the survey confirmed that an optimal relationship between the supervisory board and external auditing could result in a mutual increase in work efficiency, it is necessary to create and maintain conditions which will allow that kind of relationship to prosper in the Croatian corporate governance system. These conditions involve the establishment of audit committees in publicly traded companies.

Although the audit committees in Croatia are mainly established in large publicly traded companies, this practice should be adopted in all publicly traded companies since most of the survey participants think that an auditing committee has a direct impact on the higher efficiency of both the supervisory board and external auditing.

Optimal relations between internal and external supervisory mechanisms in the corporate governance process, as well as the increasing importance of the audit committee, which represents a communication link between the supervisory board and external auditing, are crucial for the development of good corporate governance practice in Croatia.

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