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**United States and European Union
Auditor Independence Regulation**

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Implications for Regulators
and Auditing Practice

With a foreword by Prof. Dr. Christoph Watrin

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Foreword

In recent years, the Sarbanes-Oxley-Act has received international attention unlike few other laws. The rules presented in this act take influence on business practice and dominate the ongoing discussion on business constitution in the USA as well as in Europe. Christiane Strohm's dissertation investigates the effects of the Sarbanes-Oxley-Act and the revised 8th EU-Directive – as a response toward the US-law – on auditing.

This study is innovative for several reasons. Combining an auditor independence risk model (Mock et. al. 2005) with considerations on task complexity (Bonner 1994, 1995), the author develops an experimental approach that can be put to future use in research on regulation. In the following, the American and European regulations are investigated in three separate experiments that are conducted with participants of international background. With this, the author provides – to my knowledge – the first empirical comparative analysis of the Sarbanes Oxley Act and the revised 8th EU-Directive.

As both statutes provide representative examples for rules-based (Sarbanes-Oxley-Act) and for principles-oriented (8th EU-directive) regulation, this work deserves recognition from beyond the limited scientific community of those interested in auditing. The experimental design and the results generated by this study are of high significance for the general discussion on the advantages of either rules-based or principles-oriented regulation that characterizes the current controversial debate on corporate governance.

This study, awarded with *summa cum laude*, was presented at the PhD workshop of the European Audit Research Network in October 2005 in Amsterdam, Netherlands, where it raised considerable attention. The author has furthermore been accepted for the American Accounting Association Auditing Section Doctoral Consortium in January 2006 in Los Angeles, USA. For the future, I wish this work all the attention and academic recognition it deserves.

Christoph Watrin

Preface

This document was accepted as a dissertation by the Wirtschaftswissenschaftliche Fakultät of the Westfälische Wilhelms-Universität Münster in November 2005. The development of such a document is only possible with the support of many individuals who have contributed to this thesis in many different ways. To the many people who have enabled me to bring this project to fruition, my sincere thanks. Especially I want to thank the following persons:

Many thanks to my supervisors, Professor Christoph Watrin (Westfälische Wilhelms-Universität Münster, Germany) and Professor Theodore Mock (University of Southern California Los Angeles, USA and Universiteit Maastricht) who generously provided the opportunity, continuing support, guidance and space to learn.

I am also most grateful to Assistant Professor Tatiana Sandino for her suggestions on my research. Thank you to Melissa Boyle for providing valuable input. Thanks to Ralf Struffert for helpful research discussions and for keeping the faith during my stay at the University of Southern California.

I appreciate the financial support of the German Academic Exchange Service for major parts of this research.

My sincere thanks to the many individuals who participated in the experimental studies.

This document is dedicated to my parents. They constantly supported me throughout this project.

Thank you all.

Christiane Strohm

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List of Abbreviations

AICPA	American Institute of Certified Public Accountants
al.	alii (<i>others</i>)
ANOVA	Analysis of Variance
BAnz.	Bundesanzeiger
BGBI.	Bundesgesetzblatt
CEO	Chief Executive Officer
Co	Company
CPA	Certified Public Accountant
Df	degrees of freedom
e.g.	exempli gratia (<i>for example</i>)
e.V.	eingetragener Verein
EEC	European Economic Community
EU	European Union
F	F-statistic
FEE	Fédération des Experts Comptables Européens (<i>The European Federation of Accountants</i>)
H	Hypothesis
HGB	Handelsgesetzbuch (<i>German Commercial Code</i>)
i.e.	id est (<i>that is</i>)
IDW	Institut der Wirtschaftsprüfer in Deutschland e.V.
IFAC	International Federation of Accountants
IT	Information Technology
KPMG	Klynveld Peat Marwick Goerdeler
LLP	Limited Liability Partnership
MAS	Management Advisory Service(s)
P	p-value

PCAOB	Public Company Accounting Oversight Board
PwC	PriceWaterhouseCoopers
R&P	Roberts & Partner
RGBI.	Reichsgesetzblatt
RPICS	Roberts & Partner Independence Compliance System
RQ	Research Question
S&H	Streich & Holz
SDA	Scuola di Direzione Aziendale
SEC	Securities and Exchange Commission
Std. Dev.	Standards Deviations
t	t-statistic
UK	United Kingdom
URN	Uniform Resource Names
US	United States
USA	United States of America
US-GAAP	United States Generally Accepted Accounting Principles
WP	Wirtschaftsprüfung

Chapter I. Introduction

A. Motivation and Objective

The harsh criticism of the audit profession, which followed in the wake of the Enron collapse, had a major impact on regulators' activities worldwide. One result of the Enron debacle was that regulators started to address auditor independence issues as never before,¹ claiming auditors' independence was impaired for the following reasons:

1. Arthur Andersen, the audit firm of Enron, was earning more from the provision of non-audit than audit services (\$27 million and \$25 million, respectively) and non-audit services included assisting Enron devise accounting schemes compliant with US-GAAP, but which had the objective of keeping liabilities off the balance sheet,
2. Enron had been the managing partner's only client for some years and was the principal client of Andersen's local office, thus both the partner and the office were economically dependent on retaining Enron as a client,
3. a number of ex-Andersen staff worked for Enron and the relationship was believed to be very intimate, and
4. there were concerns about how Andersen managed its internal quality control and its partner incentive mechanisms (Fearnley and Beattie 2004: 118).

After the Enron collapse and several other accounting scandals,² there were demands for significant revisions in accounting practices, foremost being the rotation of audit firms, the implementation of an effective audit committee and the banning of the provision of many non-audit services by incumbent auditors.

Regulating bodies in the United States and the European Union provided two different responses: the Sarbanes-Oxley Act of the United States (2002) and the European Union proposal for a revised 8th Directive (European Commission 2004a). These regulations include more severe penalties and larger enforcement budgets to help protect financial markets from fraud and other inappropriate behavior. However, although the goals of both regulations are essentially the same, the paths taken by the American and European regulators to achieve their objectives are quite different.

¹ For a more detailed analysis of structural deficits of the US-Corporate Governance System pre Sarbanes-Oxley see Schwarz and Holland (2002).

² A detailed analysis of auditors' responsibility for German accounting scandals is provided by Wüstemann (2001).

Whereas the Sarbanes-Oxley Act tends to be more rules-based, the European approach tends to be principles-oriented.

The Sarbanes-Oxley Act directly addresses audit firms and auditors, whereas the European proposal issues minimum requirements for the 25 European Member States. Thus, after the European proposal becomes law, it is each Member States' responsibility to implement, at a minimum, these requirements into national law to promote harmonization in Europe. This explains to some extent why the European conceptual approach is based on principles, because it provides Member States with the possibility to address the national legal environment by adding local requirements which may either be rules-based or principles-based.

Since I am interested in the effects of solely rules-based and principles-based regulation, it is important for this research to assume that Member States will adopt only the principles-based requirements as proposed by the European Union. However, even if the Member States add local requirements, this research will provide some evidence on whether these additional requirements should be more rules-based or principles-based.

In line with this, I will provide a short summary of the regulatory actions of Germany prior to the adoption of the European proposal but after the Sarbanes-Oxley Act was issued. Many European Member States issued national regulations concerning auditor independence regulation as a response to the Sarbanes-Oxley Act and started to issue requirements as a response to the European Union proposal and other recommendations. Thus, as soon as the European proposal becomes law, many European Member States will have to adjust their national requirements to satisfy the European requirements.

The primary objective of this research is to study the effect of regulation approach, which is based on detailed rules or on broad principles, on subjects' decisions as they apply the regulation. Since auditor independence regulation is designed to help minimize auditor independence risk in practice, accurate communication is critical. Such regulation should reduce both independence in fact and independence in appearance. Impaired auditor independence in fact occurs when the auditor compromises professional decisions. When a third party reasonably concludes that

auditor integrity or objectivity is compromised, auditor independence in appearance is questioned (International Federation of Accountants 2004).

However, there is little research on the approach of regulation where two different regulation approaches are involved. The main aim of this research is to contribute to the existing body of knowledge on regulation approaches in accounting by investigating the effects of rules- and principles-based auditor independence regulation on auditor independence risk. The first research question asks whether the approach to auditor independence regulation is associated with the effectiveness of the regulation in reducing risks to auditor independence in fact. This research question is studied in experiments one and two. I assess the effectiveness of the regulation approach by investigating subjects' decisions about the performance of additional non-audit services for a financial statement audit client³.

Experiments one and two test whether there is a difference in the communication accuracy and safeguarding intention of the regulation depending on the regulatory approach used. Prior research suggests that the choice of regulation approach has an incremental effect on behavior, since the communication accuracy of the regulations may differ according to complexity (Nelson 2003).

A rules-based approach includes both specific prohibitions, such as the prevention of some non-audit services, as well as specific requirements, such as the pre-approval of non-audit services by the audit committee. Because rules are written with explicit detail, it is expected that what is required and what is prohibited will be more clearly understood, and this suggests higher communication accuracy. Alternatively, the principles-based approach requires greater interpretation of what is or is not allowed, and this suggests lower communication accuracy.

A third experimental study, to be discussed later, was designed to address questions related to stakeholders' assessments of independence risk. Specifically, experiment three investigates whether greater transparency in the way audit firms communicate the policies and procedures that they use to minimize independence risk is an effective mechanism to reduce the risk of auditor independence in appearance as assessed by stakeholders.

³ The term audit client is used as a synonym for 'issuer' as defined in Section 2 (7) of the Sarbanes-Oxley Act and for 'public interest entities' as defined in Article 2 (11) in the European proposal for a revised 8th Directive.

This thesis uses the auditor independence risk model by Mock, Srivastava and Turner (2005)⁴ and Task Complexity Theory (e.g., Wood 1986, Bonner 1994, Nelson 2003) as overall theoretical frameworks. Figure 1 presents an extract of these frameworks modified for this research. Auditor independence regulations, which itself differs in how requirements are specified (see the rectangle labeled Safeguard: Auditor Independence Regulation), are issued to help mitigate threats (incentives, opportunities and/or lack of integrity). Regulations concerning the opportunity to provide certain non-audit services may affect an audit firm's decision on whether to perform additional non-audit services for a financial statement audit client (see the rectangle labeled Audit Firm Decisions).

Under-compliance occurs when a regulation is not applied where it is intended to be applied (e.g., a certain service is prohibited, but the regulation is interpreted as if this service is allowed to be performed). Over-compliance occurs when a regulation is applied where it is not intended to be applied (e.g., a certain service is allowed, but the regulation is interpreted as if this service is prohibited). As for this research, I define the optimal decision making quality as the non-audit decision based on auditor independence regulation that complies exactly with the intended outcome. Thus, decision making is compromised when subjects under or over-comply with the regulation, meaning the decision deviates from the intended outcome.

Based on the quality of this decision, incentive and opportunity threats (see the rectangles labeled respectively) may lead to biased auditor decisions concerning audit work and the client's financial reporting (see the rectangle labeled respectively)⁵. For example, an audit firm may perform additional non-audit services for a financial statement audit client, although the auditor independence regulation intends to restrict these services.

Due to this multi-service engagement, incentive and opportunity threats may occur. Incentives to compromise the audit work and the client's financial reporting may derive from additional non-audit fees and may lead to impaired auditor independence (see the rectangle labeled Auditor Decisions). Furthermore, an opportunity related to additional knowledge concerning the client's business and a strong professional relationship may also affect auditor's independence.

⁴ See Appendix 1 for the complete model.

⁵ In Figure 1, integrity is assumed not to be directly affected by the audit firm decisions concerning the performance of additional non-audit services.

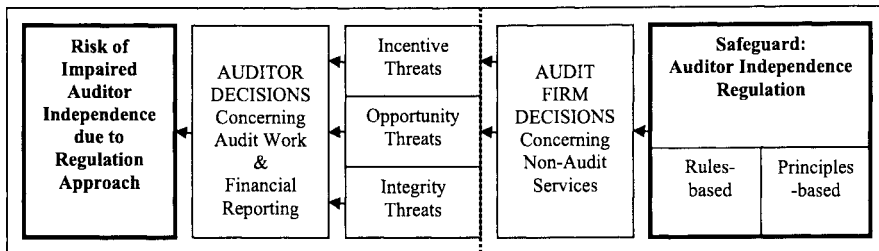


Figure 1: Auditor Independence Risk and Regulation

B. Empirical Studies

Experiment on Regulation Approach and Knowledge

Task complexity decreases with an increase in task-specific knowledge. To achieve a task, people need task-specific knowledge (Bonner 2005). Since I study the complexity of regulation, I am concerned with the decision maker's knowledge about specific regulatory requirements, including their ability to understand the content and to apply the regulation as intended. Regulatory knowledge can be present due to experience in the field, and one can assume auditors and assurance partners have more task-specific knowledge due to both training and experience than novices.

Different knowledge levels can also be generated through experimental manipulation. This means that higher level knowledge can be achieved through a special introduction into the field of the regulation and through special tools to use this knowledge given in an experimental setting. The first experiment addresses the questions of whether the approach to auditor independence regulation and the knowledge level of a person applying the regulation is associated with the effectiveness of regulation to reduce auditor independence risk. Figure 2 shows the modified auditor independence risk and task complexity models including the experimental design used.

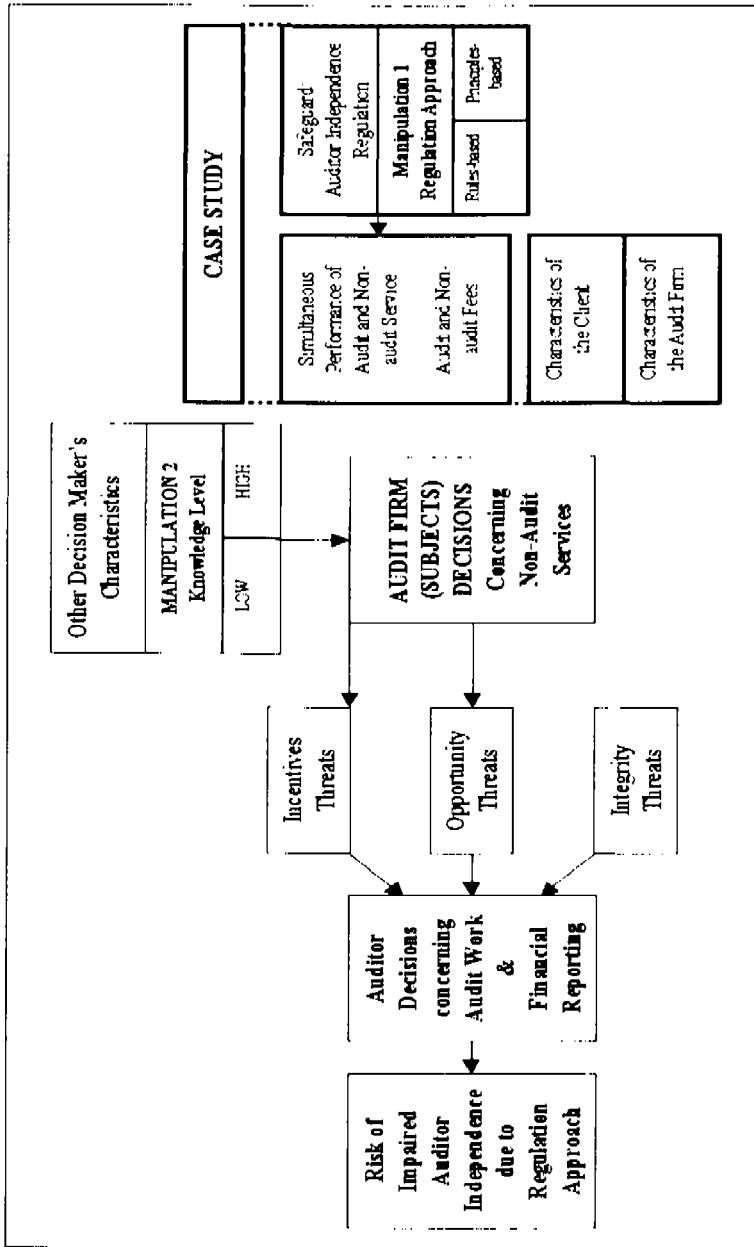


Figure 2: Auditor Independence Risk and the Experiment 1 Manipulations of Regulation Approach and Knowledge

I study the different effects of rules- versus principles-based auditor independence regulation and different knowledge levels in an experimental 2 x 2 between subjects design. In the first experiment I manipulated regulation approach and thus task complexity by taking European or Sarbanes-Oxley Act regulation which proxy for principles- or rules-based regulation respectively (see the rectangle labeled Manipulation 1) and provided knowledge at two levels (low and high) (see the rectangle labeled Manipulation 2). In the high knowledge treatment, subjects got a detailed introduction into the audit firm's own policies and procedures addressing auditor independence issues.

This information was given to provide subjects with the knowledge needed to perform the task of deciding whether the audit firm should perform additional non-audit services for a financial statement audit client. With more information the interpretation of auditor independence regulation is expected to be as intended by the regulation. Subjects of the low knowledge setting did not get any special introduction into the field of the regulation and therefore may lack the information needed to apply the regulation as intended.

The experiment was conducted using 39 undergraduate students, who were put in the position of a deciding audit firm representative. Subjects got a case study reflecting an audit firm client engagement whereas the audit firm earns audit fees and is able to earn additional non-audit fees by performing non-audit services. Furthermore, the case study details the client characteristics, such as size, number of employees, financial strength and market presence and share (see the rectangles labeled Case Study).

The experimental task was to decide whether an audit firm should provide additional non-audit services for a financial statement audit client given different regulation approaches (see the rectangle labeled Audit Firm Decisions). In addition to integrity, other decision maker's characteristics are relevant when performing this task (see the rectangle labeled Other Decision Maker's Characteristics). Subjects' decisions concerning additional non-audit services provide measures of the dependent variables. One manipulation check question was used to test the success of both manipulations.

Results indicate the communication and safeguarding effect of a regulation to not significantly affect subject decisions, depending on regulation approach. The first experiment was used to improve the research instrument and the experimental setting.

To address possible demand effects, the audit firm-client setting of the second experiment leaves the performance decision entirely to the subjects. In addition, I increased the overall task complexity by adding regulations concerning the implementation of an audit committee. Finally, I control for the decisions subjects make by asking them related questions in the main experiment.

Regression Analysis to Identify Relevant Threats

Additional statistical analysis was undertaken based on two post-experimental questions taken from experiment one. Subjects were asked to assess the significance of the listed fee threats to the risk of auditor independence. Three potential incentive threats were given: audit service fees, tax service fees and information technology service fees. This analysis facilitates examining the relationship between these threats and perceived auditor independence risk. Thus, the research question addressed ask for the most relevant threat, represented by fees, to auditor independence risk in a multi service audit firm-client engagement and whether auditor independence regulation is perceived to safeguard against perceived threats.

Regression analysis was undertaken to identify the most relevant threat, represented by fees, to auditor independence risk. I compared the subjects' decision depending on the regulation approach made in experiment one with their assessed fee threat perceptions from regression analysis to investigate whether auditor independence regulation safeguards against perceived threats. That is, I compare the results of experiment one with the results from the regression analysis based on the post-experimental questions. Results of regression analysis indicate that the tax fee is not assessed to be a threat. However, results of subjects' decision in experiment one show that subjects were unsure about the performance decision. Thus, the subjects' assessment of this fee threat and their decision making in experiment one are not completely consistent.

Experiment on Regulation Approach and Audit Firm-Client Characteristics

Audit firm-client characteristics affecting the audit firm's litigation risk and monetary incentives as a proxy for task motivation can compromise the safeguarding effect that an imprecise regulation has because incentive-consistent interpretation of a regulation is more likely (Bonner 2005). If an audit firm-client setting is characterized by an audit

firm that is more dependent on client fees, the audit firm is more likely to interpret an inexact regulation in favor of performing a non-audit service to earn an additional fee.

The opposite situation is also conceivable. An audit firm's fear of litigation may outweigh the incentive to earn a fee. If so, then it is more likely that an imprecise regulation will be interpreted in favor of not performing a non-audit service. Thus, my research question asks whether the effectiveness of a regulation to reduce auditor independence risk is dependent on certain audit firm-client engagement characteristics affecting litigation risk and monetary incentives.

In experiment two, different effects of rules-based versus principles-based auditor independence regulation and different audit firm-client engagement characteristics were studied in an experimental 2 x 2 between subjects design. The research design is shown in Figure 3. I again manipulated regulation approach and thus complexity by taking Sarbanes-Oxley Act or European regulation which proxy rules- or for principles-based regulation respectively (see the rectangle labeled Manipulation 1).

Litigation risk and monetary incentives were manipulated at two levels (low and high). The high litigation risk and monetary incentives manipulation depicted a small audit firm in terms of employees, services offered and international presence, versus a large client in terms of employees, international presence, market position and management tenure which represent major audit firm and client characteristics, respectively. In addition, the relative non-audit and audit fee amounts represented a great portion of the total revenues the audit firm is earning. This manipulation captures both a weak position for the audit firm in a potential litigation situation if the regulation is applied incorrectly, as well as an engagement where monetary incentives are strong. In comparison, subjects of the low litigation risk and monetary incentives version were informed that the client is small and the audit firm is large, the same characteristics given as before (see rectangle labeled Manipulation 2).