

THE AUDIT FIRM ROTATION RULE: A REVIEW OF THE LITERATURE

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EXECUTIVE SUMMARY

There has been considerable interest in mandatory audit firm rotation (RR) as a means to protect auditor independence. A small number of countries, Brazil, India, Italy, Singapore and South Korea, have a legal requirement for audit firms to be rotated after a maximum specified period. In 2002, and in a 2004 update, the independent academics of SDA Bocconi School of Management studied the impact of mandatory audit firm rotation in Italy (SDA Bocconi School of Management, 2002) and concluded that the policy seems to lead to additional cost, greater concentration of work amongst the largest audit firms, negative impact on audit quality (most noticeably in the years immediately after the rotation) and is ignored by the stock market. The aim of the present study is to give a rather complete framework of the available studies on the topic.

First of all this study reviews the conclusions and findings of 26 reports by regulators or other representative bodies from around the world¹. Of the 26 reports, 22 conclude against the benefits of mandatory audit firm rotation and while 4 are in favour. The vast majority of reports (88%) were published within the last 5 years and as such can be considered to reflect opinions and evidence from recent high profile business case failures.

The study also looked at 34 academic studies (9 opinion based and 25 based on empirical evidence). The majority did not support mandatory audit firm rotation. It is noticeable that studies based on empirical evidence had a larger majority against firm rotation (76%) than opinion based studies (56%).

A large number of the academic studies (58,8%) were also produced in the last five years. 64% of them are empirical studies and 45% are opinion based.

Moreover, the empirical studies are grouped considering the relation between RR and the following topics:

- auditor independence
- audit quality
- audit costs
- audit market competition
- capital market reaction

to assess whether or not the policy is judged to be effective. Results reported in the empirical studies do not support the rotation rule with respect to any of the cited topics.

¹ Assirevi, (Italian Association of Audit Firms), sent a letter in April 2005 to the Italian Prime Minister expressing disagreement with mandatory audit firm rotation. This letter was not included in the following analysis because it was available publicly (on the Assirevi website) starting from 6 October 2005, after the end of this research. Considering this latest position on 27 reports, 23 concluded against RR and 4 in favour.

INTRODUCTION

This paper aims to contribute to the international debate about the requirement that some companies have to rotate their independent auditors periodically by providing a review of the relevant studies on this topic. The focus of this paper is the audit firm rotation rule (RR).

In recent times RR has received more and more attention first in academic circles and then in professional and public debates. Accountants and academics have debated the need for mandatory audit firm rotation for decades but after the major financial fraud which has (e.g. Enron and WorldCom) occurred in recent years, the item has become the object of discussion also for a broader number of National Governments and Institutions (e.g. European Union Commission, the American Institute of Certified Public Accountant – AICPA, the U.S. Securities and Exchange Commission – SEC) as well.

The first part of the present paper is devoted to the description of the current regulatory frameworks. In chapter 1 the description of selected national requirements about RR is set out and in the second one an analysis of the reports, state of positions and studies issued by regulators and relevant bodies representing the auditee's stakeholders is conducted. The second part deals with the review of the studies carried out by academics on the RR (empirical studies and opinions). As suggested by ICAEW (ICAEW, 2002) there is a significant amount of opinion and conjecture on the topic compared to the empirical evidence. In fact evaluating the effectiveness of mandatory audit firm rotation is a complex process, due to the fact that there are a lot of theoretical arguments for and against this rule. So a sound empirical study has to deal with a limited number of these. In Chapter 3 the method used for the research and classification of the academic studies (empirical studies and opinions) is illustrated and the following chapters summarize the major findings of the analyzed studies, the empirical one being classified on the basis of the specific effect of RR they aim to consider. In the last part of the paper conclusions are drawn up.

PART 1

CURRENT REGULATORY FRAMEWORKS

In order to protect auditor independence in various countries a RR has been proposed.

However, this rule was introduced in a very small number of countries and was effective in an even smaller number of them.

In the following pages an overview of current regulatory framework in a selected number of countries is presented.

CHAPTER 1

DESCRIPTION OF SOME ROTATION RULE NATIONAL REQUIREMENTS

Before focusing on the rotation rule as it has been addressed and analyzed by regulators and economic literature, it may be useful to consider the current regulatory framework of some countries along with the past experience that they had in relation to this rule and the future developments.

In the selection of the countries to be analyzed, we used the following criteria. First of all, we included all the countries belonging to the group of the seven most industrialized nations (G-7 countries: Canada, France, Germany, Italy, Japan, United Kingdom and U.S.A.). Then, the 15 European Union countries before the enlargement of 2004 were considered. In particular, beside the G7 countries already mentioned, they are: Austria, Belgium, Denmark, Finland, Greece, Ireland, Luxembourg, the Netherlands, Portugal, Spain and Sweden. The other countries included in table A in the appendix (Australia, Brazil, Hong Kong, India, Singapore and South Korea) are countries for which data about RR are available. Among them, there are some of the most important developing countries. They are also IOSCO members.

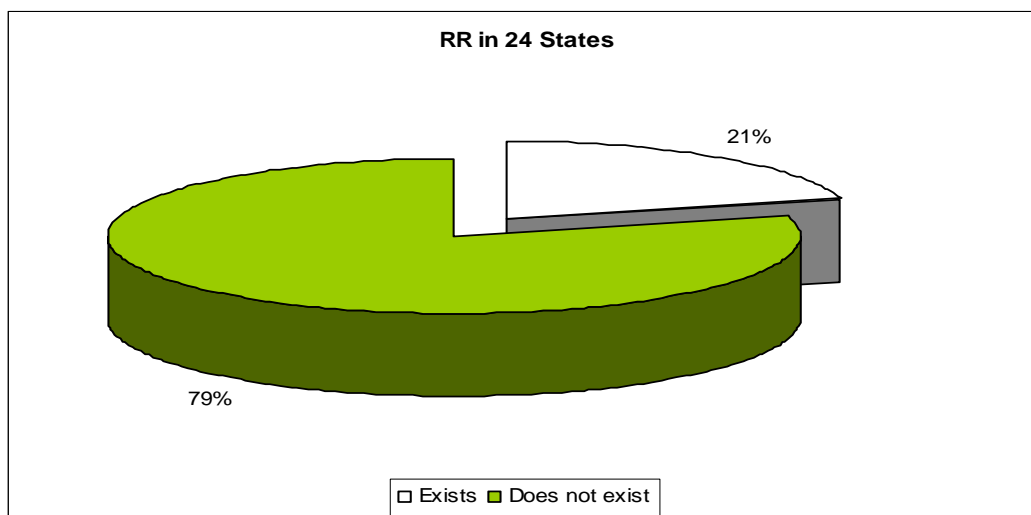
The information was collected thanks to firms belonging to the KPMG network who were asked to send all available information about RR in their countries.

In total we considered the position of 24 states. For the complete list see **Table A**, in the appendix.

The preliminary analysis of this data shows that in only 5 out of 24 of the countries analyzed, the mandatory rotation is required. In the other countries the rule has been discarded or there is an ongoing debate aimed at understanding the advantages and disadvantages of RR. (see Figure 1)

Figure 1 - RR in 24 states

	n.	%
Exists	5	21%
Does not exist	19	79%
Total	24	



In the following, we briefly address how this rule is enforced in the five countries that require it and what the situation is in other relevant countries.

In Italy, since 1974, a periodical rotation of auditing firms has been required for listed companies. The obligation of mandatory rotation of audit firm, originally imposed upon listed companies, has been extended over the last 30 years to other companies (e.g. life and damages insurances).

The audit engagement may be re-tendered every 3 years and the same public accounting firm may serve as auditor for a maximum of 9 years. There is also a minimum time lag of 3 years before the previous auditor can be re-appointed. The new 2005 bill proposes an extension of the maximum term to 12 years (six-year term, renewable once).

In Brazil, the rule was adopted in 1996 for banks, motivated by events involving fraud and the bankruptcy of two major banks and it was later also enforced for listed companies in 1999. The rotation period is of five years. The first rotation occurred in 2001 for banks and in 2004 for listed companies.

In South Korea, legislation passed through National Assembly on 21/11/03 made rotation mandatory for companies listed in KSE (Korean Stock Exchange) or registered with KOSDAQ (Korea Securities Dealers Automated Quotations) to change auditors every six years (starting in 2006). Exceptions are:

- foreign-investment companies, which are subsidiaries of foreign parent companies as defined by the laws of that country and which intend to appoint the same auditors as the parent;
- companies listed on foreign exchange (NYSE, NASDAQ, and London Stock Exchange only).

In the other two countries (Singapore and India) the rule is enforced only for specific companies. In particular, from March 2002, the Monetary Authority of Singapore stated that banks incorporated in Singapore should not appoint the same public accounting firm for more than 5 consecutive financial years. This requirement does not apply to foreign banks operating in the country. The minimum period for audit firm rotation has not yet expired.

Moreover, in India the rotation is already applicable for banks (every four years), privatised insurance companies and Governmental companies. For other listed firms subject to SEBI (Securities and Exchange Board) rotation is not mandatory.

Some other countries, in particular with regard to our samples of Austria, Spain and Canada, had enforced the rule and subsequently dropped it.

In Austria, the Commercial Law of 2004, required a mandatory audit firm rotation every 6 years with a minimum time lag of 3 years before the previous auditor can be reappointed. However the implementation of this rule was postponed awaiting developments at EU level. In 2005 it was finally dropped by the company law (GesRÄG 2005) that changed the articles of Austrian Commercial Law on auditing (§ 271a HGB).

From 1989 Spain had a system that required mandatory audit firm rotation with a maximum term of 9 years, which included mandatory retention of 3 years. In 1995 it was dropped. As the maximum period was eliminated, an indefinite annual appointment is permitted after the initial one.

Mandatory audit firm rotation is not currently being considered in Canada. Until 1991, only Canadian banks were required to rotate their auditor of record. In 1991 banking legislation was amended and the mandatory audit firm rotation requirement was abandoned

In the other countries considered, the audit firm rotation is not required. In several situations there is an explicit refusal to follow this rule set forth by government or independent commissions on law reform. In other cases (i.e. Sweden, UK and US) this rule was analyzed and discussed but the conclusions were against its introduction because it was considered to be lacking in real benefits.

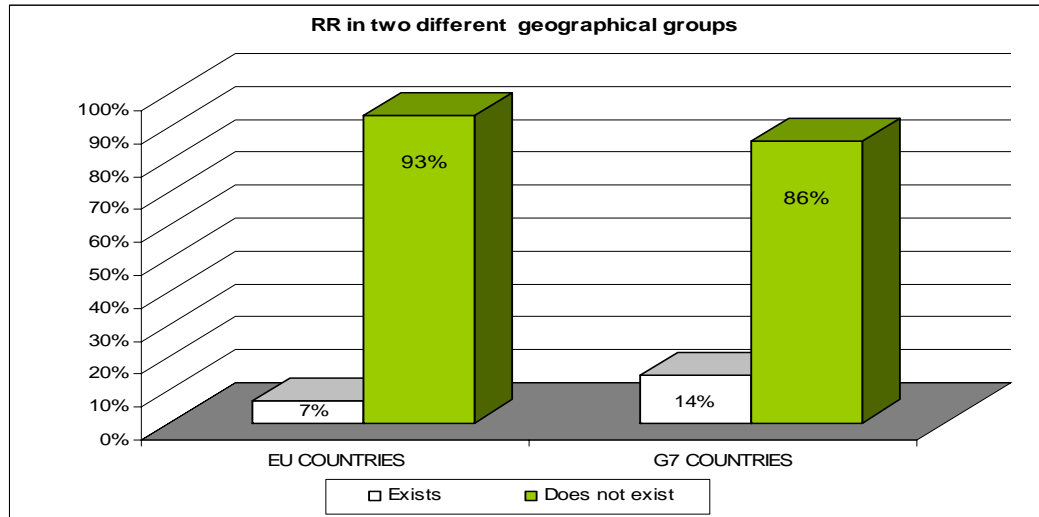
To further analyse the positions of the countries considered, we have classified them into “EUROPEAN UNION COUNTRIES” (EU COUNTRIES) and “G7 COUNTRIES”. Note that some countries (France, Germany, Italy and UK) belong to both groups.

In each group only a country have a rotation rule: Italy.

The results are shown in Figure 2.

Figure 2 - RR in two different geographical groups

	n.			%	
	Exists	Does not exist	Total	YES	NO
EU COUNTRIES	1	14	15	7%	93%
G7 COUNTRIES	1	6	7	14%	86%
Total	2	20	22		



The other countries (Australia, Brazil, Hong Kong, India, Singapore and South Korea) were not considered in the above analysis because it was not possible to collect a representative sample of the geographical area (or of countries at a similar stage of economic development) they belong to. In fact, many of these countries were included in this survey because they have a RR that was publicly available.

CHAPTER 2

REPORTS ISSUED BY REGULATORS AND OTHER RELEVANT BODIES

The aim of this part of the paper is to analyse the different positions that regulators and other relevant bodies have taken with regard to the RR.

After the financial collapses of recent years, the RR is a topic which has been discussed at length in congressional hearings or in professional circles, with the aim of enhancing auditor independence and audit quality and understanding the effects that such a rule may have, in a general sense or in a particular context

As shown earlier the rule is only applied in a small number of countries.

Our survey includes 26 reports conducted by regulators, particular institutions or other relevant bodies representing auditees' stakeholders². Among them are statements of position, final reports by governmental study commission and comments about the local regulatory framework with proposals of reform. The topic that is most frequently considered in these documents is the relation between the independence of the auditor and the rotation rule. In general, the analyzed reports considered are not supported by empirical evidence or data analyses. Only a few of them are based on questionnaires or interviews (see **Table B**, in the appendix).

Later in this analysis, the position of the various regulators and bodies are summarized, distinguishing between accounting and non-accounting bodies. The second category of bodies includes independent governmental commissions, non-accounting professional bodies and independent non-accounting bodies (other than governmental commissions).

In a 1992 position statement, AICPA (American Institute of Certified Public Accountant) argued that mandatory rotation would be costly and counterproductive as well as ineffective in improving audit quality. This position has been maintained over time and a comment of 2004 relating to corporate governance regulation confirms the position against mandatory audit firm rotation.

FEE (Fédération des Experts Comptables Européens) addressed the mandatory rotation rule in six documents issued between 2002 and 2004, all against the introduction of the rule. In 2004 FEE conducted a specific study on this topic, based on the positions of other regulators and a review of the literature concluded that compulsory rotation is a threat to audit quality.

²Assirevi, (Italian Association of Audit Firms), sent a letter in April 2005 to the Italian Prime Minister expressing disagreement with the mandatory audit firm rotation. This letter was not included in the following analysis because it was available publicly (on the Assirevi website) starting from 6 October 2005, after the end of this research.

This opinion was further reaffirmed in the official comments on the EU 8th Directive proposal (Proposal for a Directive of the European Parliament and of the Council on statutory audit of annual accounts and consolidated accounts and amending Council Directives 78/660/EEC and 83/349/EEC/COM/2004/0177 final - COD 2004/0065). In 1998 EFAA (European Federation of Accountants and Auditors) expressed a negative judgement on the introduction of rotation in its comment on the EU green paper on auditing. Among the other two local accounting bodies considered, the association of German auditors (Institut der Wirtschaftsprüfer) is against mandatory rotation while the Italian Assirevi (Italian Association of Audit Firms) considers this rule to be useful in preserving the independence of auditors³.

Our survey includes both the reports of non-accounting bodies as well as the reports of independent commissions to the local government authorities that commissioned them with the purpose of analyzing a particular matter. This kind of report can be considered as independent because it does not reflect the point of view of an interested party but has the purpose of finding solutions and making proposal in the public interest. We considered seven reports by commissions coming from several countries. All of them express concerns about the introduction in their State of the rotation rule, except for the Italian Commissione Galgano, which in a study on the transparency of listed companies supports the validity of the rotation rule as a means of preserving auditor independence. The other reports are against the introduction of this rule. US General Accounting Office, on its study on the potential effects of mandatory audit firm rotation, supported conclusions against the rotation rule in its report issued with a questionnaire mailed to a wide number of stakeholders and in particular to the CFOs of public companies and to audit firms. The report to the Indian Minister of Finance by Naresh Chandra Committee, concludes against mandatory rotation on the grounds that it is a measure which increases the risk of audit. Note that this conclusion was reached in an economic environment, such as India, that suffered from the 1997-1998 South East Asia crisis which was partly caused by inadequate accounting and auditing standards.

Finally, we consider the position of other non-accounting institutions, which can be divided into two categories. The former are the positions of professional bodies different from the above mentioned accounting ones. In particular we surveyed the position of bodies such as ABI (Association of British Insurers), ICC (International Chamber of Commerce) and UNICE (Union of Industrial and Employer's Confederations of Europe). They address the matter of independence from a particular point of view, that of their associates. All of these bodies expressed an opinion against mandatory rotation.

³ This opinion was expressed by Assirevi, (Italian Association of Audit Firms) during an Italian parliamentary hearing after the Parmalat scandal. More recently, Assirevi issued a letter against RR. This letter was not included in this report because it was available publicly after the close of this research (see note 2).

The latter category includes independent non-accounting bodies other than governmental commissions and associations from the same profession.. We considered the position of the New York Stock Exchange Committee on accountability and listing standards, which considers mandatory audit firm rotation a threat to audit quality and independence, and the opinion of the MAS (Monetary Authority of Singapore), which sustains the validity of this rule in preserving the independence and the fresh view needed for a good audit. In Singapore the rotation of audit firms is mandatory for local banks. The last two reports considered are issued by research agencies which operate in independent way. In particular, MORI (Market and Public Opinion Research Agencies), using a questionnaire, concludes that mandatory rotation has implications for audit, quality and failure risk. On the other hand, The Conference Board (an independent research organization) considers the costs that mandatory rotation implies significantly less than the ones faced by investors in capital market when a loss of confidence in the financial statements occurs.

Of the 26 reports analysed, 22 are against and only 4 are for the RR. So a large majority of the reports considered are against mandatory rotation.

In order to further analyse this result we have separated the reports according to the geographic influence of the regulators or other bodies that issued them.

In the group called “EUROPE” we have included all the reports issued by the European bodies (FEE, EFAA,...) or by bodies belonging to an European countries (Assirevi, ABI,...). In the group called “USA” we have inserted all the US reports (GAO, NYSE). In “OTHER AREA” we have grouped the position papers of all regulators belonging to countries outside Europe and the US.

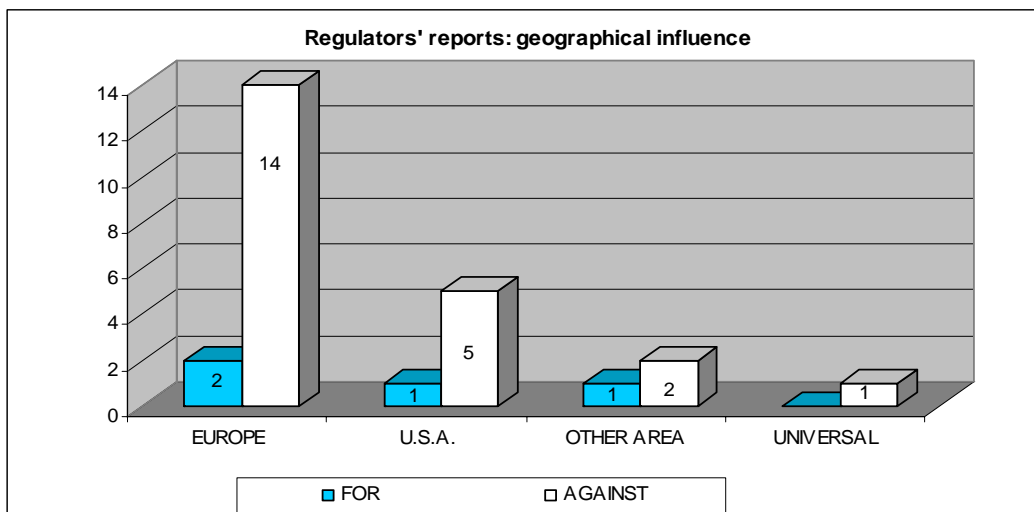
Next, in the “UNIVERSAL” group we have inserted the position statements of supranational bodies, in our sample only the ICC (International Chamber of Commerce) belongs to this group.

The results are summarized in Figure 3.

There is no region where reports issued by regulators or other relevant bodies in favour of firm rotation are in the majority.

Figure 3: Geographical influence of reports issued by Regulators/Bodies

	FOR	AGAINST	Total
EUROPE	2	14	16
U.S.A.	1	5	6
OTHER AREA	1	2	3
UNIVERSAL	0	1	1
Total	4	22	26

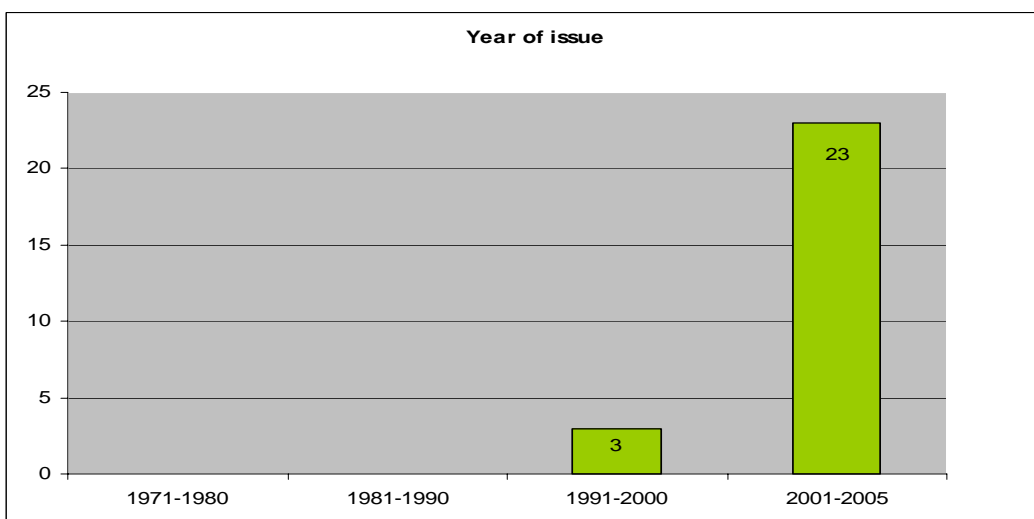


Then we have focused our attention on the year of issue (Figure 4).

A large part of reports (about 88%) were issued in the last 5 years, namely after the Enron collapse. So one might expect more regulators / other bodies to favour mandatory firm rotation. However, this is not the case.

Figure 4: Year of issue

Date	No of reports
1971-1980	0
1981-1990	0
1991-2000	3
2001-2005	23
TOTAL	26



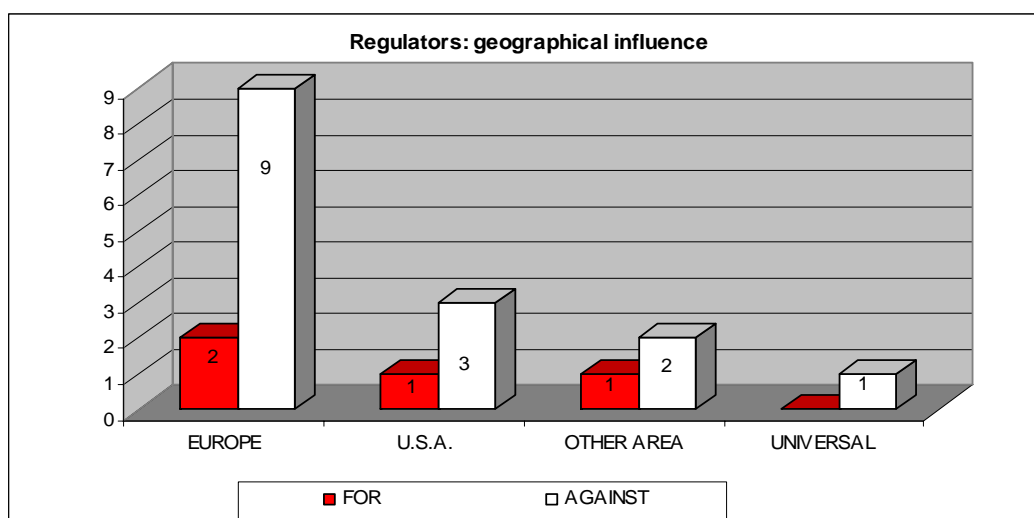
These results are confirmed when we consider the number of bodies that have expressed an opinion rather than the number of reports they issued. The regulators are listed in the appendix, **Table C**.

As in the previous analysis we have classified the regulators into different groups depending on their geographical area of influence (Europe USA, Other Area and Universal).

The total number of regulators is equal to 19, and the vast majority of them are against RR (see Figure 5). There is no region where regulators in favour of firm rotation are in the majority.

Figure 5: Geographical influence of Regulators/Bodies

	FOR	AGAINST	Total
EUROPE	2	9	11
U.S.A.	1	3	4
OTHER AREA	1	2	3
UNIVERSAL	0	1	1
Total	4	15	19



We further divided the positions of regulators between the “NATIONAL” category, which includes the regulators belonging to a specific country (for example Assirevi=Italia, ABI = UK, GAO=USA,...) and the “OTHER” category, which includes the opinions of FEE, EFAA, ICC and UNICE.

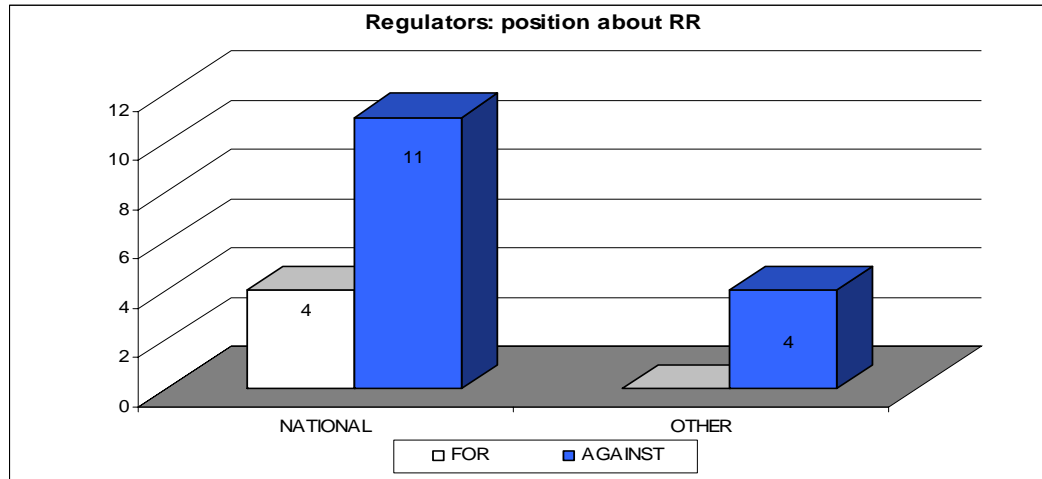
The results do not change. 15 out of 19 regulators/other relevant bodies are against mandatory rotation rule. No supra-national regulatory bodies were in favour of firm rotation and only a minority of national regulatory bodies (see Figure 6).

The four national regulators in favour of the RR are: Assirevi (Italian Association of Audit Firms)⁴, the Galgano Commission, MAS (Monetary Authority of Singapore) and the US independent Conference Board. Note that two of them are from Italy where rotation of audit firm is mandatory for some companies (i.e. all listed companies). Moreover, in Singapore (area of influence of MAS), the same rule applies to incorporated banks (for details see chapter 1).

⁴ This opinion was expressed by Assirevi, (Italian Association of Audit Firms) during an Italian parliamentary hearing after the Parmalat scandal. More recently, Assirevi issued a letter against RR. This letter was not included in this report because it was available publicly after the close of this research.

Figure 6: Type of Regulators/Bodies

	FOR	AGAINST	Total
NATIONAL	4	11	15
OTHER	0	4	4
Total	4	15	19

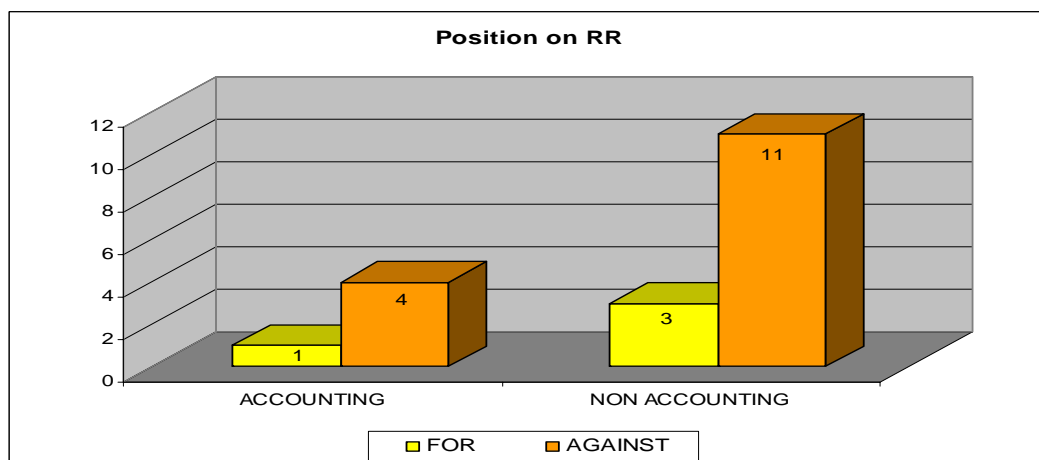


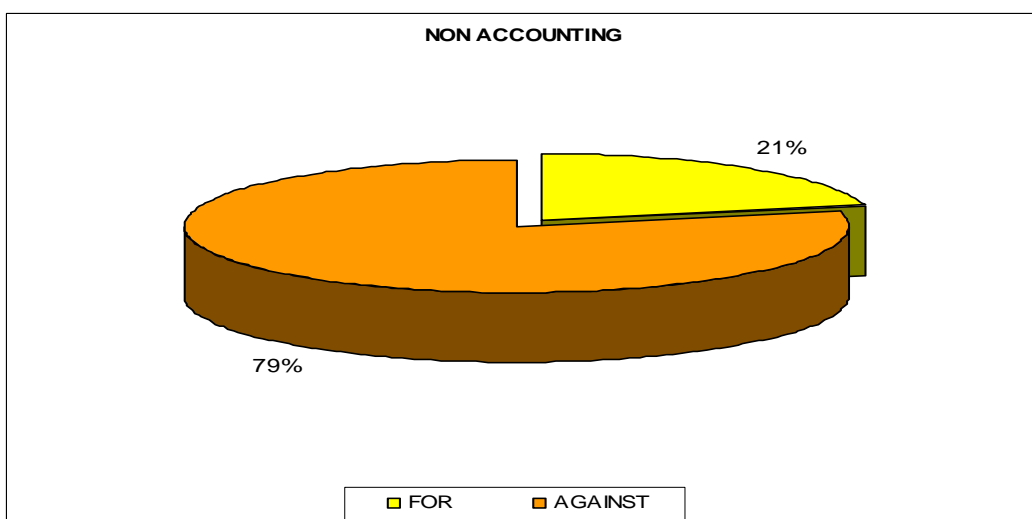
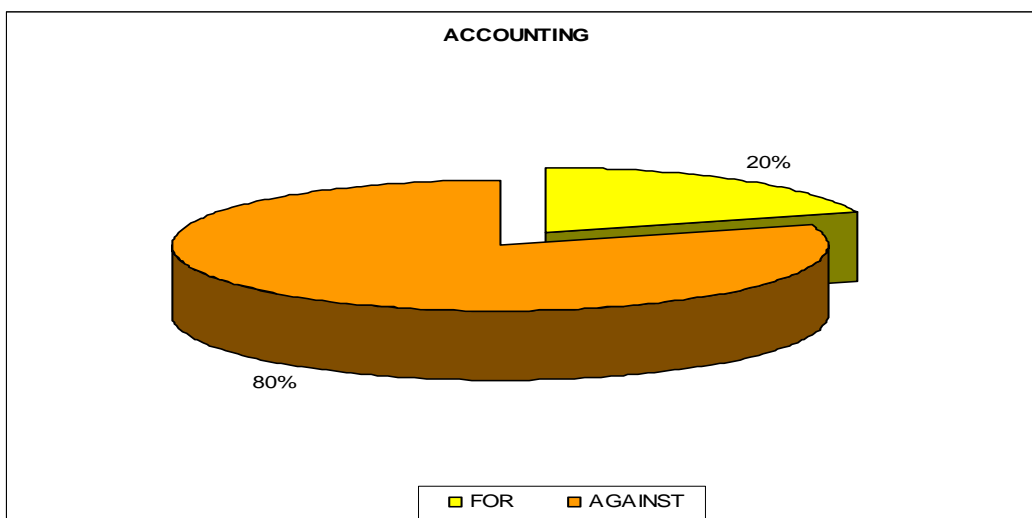
An important role in the debate on mandatory rotation is performed by the associations of accountants. Our survey includes five bodies of this kind which either belong to a specific country or are supranational.

To further analyse the positions of these particular bodies we have classified the regulators into “ACCOUNTING” and “NON ACCOUNTING” and then we have distinguished them with regard to their geographical influence. The results of studies by accounting bodies and non-accounting bodies have identical results (Figure 7).

Figure 7: Accounting/Non accounting bodies: position on RR

	FOR	AGAINST	Total
ACCOUNTING	1	4	5
NON ACCOUNTING	3	11	14
Total	4	15	19





Dividing between accounting and non-accounting bodies, there is no region where those in favour of firm rotation are in the majority in either category (Figure 8).

The percentages are similar in the two kinds of bodies.

Figure 8: Accounting-Non Accounting bodies: geographical influence

	FOR		AGAINST		Total
	Accounting	Non Accounting	Accounting	Non Accounting	
EUROPE	1	1	3	6	11
U.S.A.	0	1	1	2	4
OTHER AREA	0	1	0	2	3
UNIVERSAL	0	0	0	1	1
Total	1	3	4	11	19
Total	4		15		

PART 2 ACADEMIC LITERATURE

Mandatory audit rotation has been suggested as a means of strengthening independence, reducing the incidence of audit failure and improving the quality of audits.

Opposing this point of view there are also some other research and studies that have shown that RR increases audit costs and prices, reduces auditor incentives to invest in specific industries, destroys the knowledge of client companies that an audit firm usually accumulates over a period of years and distorts the competition in the market.

In the following chapters, the relevant studies which have been collected and classified as illustrated in Chapter 3 are summarized on the basis of the main aspect of RR they dealt with.

CHAPTER 3

METHOD OF RESEARCH AND CLASSIFICATION USED

For our research we have used the on-line databases available at the Bocconi University and we also searched in the most important academic and professional journals. Note that in order to ensure independence and uniformity in the study, from the professional journal we have selected only articles on the rotation rule written by academics.

On line databases used for the present research are:

✓ **BUSINESS SOURCE PREMIER**

This is a database containing business, management, economics, accounting, marketing and related topics; company profiles and industry country reports

✓ **ECONLIT**

In this database there are some elements connected with economics (finance, banking, country studies, econometrics, economic forecasting, labour economics, monetary theory, ...)

✓ **FACTIVA**

Here **news** and business information from nearly 9,000 sources all over the world are available (press releases, newspapers, magazines, etc.)

✓ **EBSCOHOST EJS**

In this database there are over 400 electronic journals which the Library subscribes to, both in print and online

✓ **ELSEVIER / KLUWER (SCIENCE DIRECT ON SITE)**

The database contains more than 2,700 academic journals by Elsevier and Kluwer on all subject areas

✓ **EMERALD**

About 140 academic journals published by Emerald focusing on management

✓ **JSTOR**

Academic journals published by more than 800 worldwide institutions covering a wide range of subject areas

✓ **SOCIAL SCIENCE RESEARCH NETWORK (SSRN)**

The database contains abstracts on over 60,500 academic working papers and forthcoming papers, and over 38,400 downloadable full text documents, including research papers of fee based partner publications. Papers cover each of the social sciences (accounting, finance, economics, information systems, law, management, marketing, negotiations)

Moreover, the **academics journals** analysed for this study are:

- ✓ Journal of accounting research
- ✓ Auditing: A Journal of Practice & Theory
- ✓ The Accounting Review
- ✓ International journal of accounting auditing and taxation
- ✓ Journal of accounting and public policy
- ✓ Accounting Horizons
- ✓ Journal of accounting auditing and finance
- ✓ Accounting, Organizations and Society
- ✓ Journal of Accounting & Economics
- ✓ Accounting and Business Research

First of all, in these databases and journals we searched the keyword “AUDIT ROTATION” or others like:

- Mandatory audit rotation
- Auditor switching
- Auditor change
- Tenure of audit services

in the complete text.

Many other articles were also identified in the bibliography of other papers on the topic. To recover them we look in the same sources used before (online databases of academic journals, Bocconi University Library and Interlibrary network).

First of all the collected studies were divided into “empirical” and “opinion”.

- The empirical studies draw their conclusions on the basis of tests conducted using e.g. experiments, questionnaires or mathematical models;
- In the so called opinion studies the conclusions reflect the author’s point of view, sometimes on the basis of the evidence collected in previous studies.

Secondly, we identified the main object analysed and the results obtained in the single empirical study.

Then, based on the main topic, empirical studies were grouped into different categories.

In particular we considered the relationship between the rotation rule and the following topics:

- auditor independence (chapter 4);
- quality of audit (chapter 5);
- cost of audit (chapter 6);
- audit market competition (chapter 7);
- reaction of the capital market to auditor rotation (chapter 8).

Furthermore the empirical studies were classified on the basis of the research method used.

This classification was not applied to opinion studies because in these papers the authors do not focus on a specific topic. They overview both the arguments in favour of and against the rotation rule and then they express an opinion.

In particular we have distinguished among:

- Archival studies: data are collected from databases or public information and than they are analyzed trough statistical methods;
- Analytical studies: developing a formal model in which the relation among variables are tested (e.g. audit game);

- Experiment: the data are collected using the result of an experiment conducted under particular conditions;
- Questionnaires/Interviews: in this case a questionnaire was mailed to a particular target (for example the CFO of listed companies) and the collected data are further analyzed;
- Experimental economics: a formal model is developed and moreover tested using archival data.

Tables D and E, in the appendix, show respectively empirical and opinion papers.

Full bibliographic references of all items cited appear at the end of work.

A brief summary of each empirical study grouped according to the main subject it deals with is presented (chapter 4: auditor independence, chapter 5: quality of audit, chapter 6: cost of audit, chapter 7: audit market competition and chapter 8: reaction of the capital market to auditor rotation) and then, in chapter 9, the conclusions are drawn up.

CHAPTER 4

ROTATION RULE AND AUDITOR INDEPENDENCE

Introduction

In this chapter we focus on the relationship between auditor independence and the rotation rule as considered in the academic literature and other relevant studies that specifically address this topic.

The independence of auditors is a relevant matter in evaluating the reliability of the auditor's report. This feature has several implications. The first is of a political nature: the independence of the auditor can improve the credibility of published financial reporting and then add value for several categories of stakeholders. The second implication directly involves the profession: the trait of independence is the best way of demonstrating to the regulator and the public that the auditors are performing their task according to ethical principles, such as objectivity and integrity. Objectivity it means that the auditor has the ability to suppress biases and "integrity" implies that the auditor expresses an opinion reflecting what he has discovered during the audit. Despite this, a definition of independence is rather difficult to state. Independence implies the two following aspects:

- Independence of mind: which means that the expressed opinion has not been affected by factors that can compromise integrity, professional scepticism and objectivity of judgment;
- Independence in appearance: is what a reasonable and informed third party perceives to be independent, after considering all the factors that can threaten the objectivity of the auditor.

The auditor's independence is not a rigid and absolute standard to be complied with, free from all economic, financial and other relationships which could appear to entail dependence. The judgement of independence must consider the specific circumstances in which the auditor operates.

With this definition in mind, we now consider in general terms the relationship between independence and the rotation rule. This review is useful in order to better understand the position and the conclusions of the papers described below.

Independence of auditors can be threatened by a large number of situations that have to be carefully analyzed because their existence can not be interpreted in only one way. The relationship between the aspects that help to define the general concept of independence and the rotation rule can be interpreted differently. A long term auditor-client relationship is considered by the proponents of mandatory rotation as the main element that could impair independence and objectivity. A long tenure can reduce the incentive for the auditor to carry out his duties with professional independence. In this way, the auditor's and the client's the point of view tend to converge, so the auditor report results biased. Opponents of mandatory rotation acknowledge this point of view, but they consider the introduction of mandatory rotation rule as an excessive tool whose benefits are not relevant. They

argue that there are other factors motivating the auditor to maintain his independence, such as the need to preserve reputation and client revenue. There are also external safeguards useful for preserving independence. Among them, the most important are the quality control standard (e.g. peer review) and market forces (e.g. litigation costs and negative reputation). The above - mentioned mechanisms prevent unwanted auditor behaviours. Before considering any individual paper, it is important to underline that independence is difficult to measure because it involves items like behaviours that can be quantified and supported by empirical evidence only with difficulty. This justifies the small number of studies based on archival data.

The analyzed articles on this topic are grouped on the basis of the method of analysis used.

Archival analysis

Riuz-Barbadillo and Gòmez-Aguilar (Riuz-Barbadillo and Gòmez-Aguilar, after 2000 because this is the date of the last citation) in an unpublished paper, studied the effects that the duration of audit engagement has on so-called opinion shopping. This phenomenon takes place when a company obtains from his/her auditor an opinion much more favourable than the one based on the auditee's real situation. The subject of independence is afterwards analyzed through a proxy item. They developed a model as follows. Firstly, a model of audit opinion was built using only the variables that express the financial situation of the companies. The authors used a logistic regression where the dependent variable is the type of audit report (qualified versus the other case). Secondly, they compared the opinion that the companies deserved according to the proposed model with the opinion actually received. In this way the situations where a company receives an audit opinion better than it should be according to the financial situation, are determined. In the third step they analysed how the length of the audit contract affects the possibility that a company may receive a more favourable audit opinion. In doing so they developed a model in which the dependent variable is the value of opinion shopping (which takes the value 1 in the case of a qualified opinion and 0 in the contrary case) and the main explanatory factor is tenure. For the empirical study a sample of non-financial Spanish companies was used. Such companies are quoted on Madrid Stock Exchange and represent the types of subject that, under the auditing rules, are obliged to present their audited annual financial reports. The sample consists of 1997 company/year whose data was collected between 1991 and 2000. The univariant analysis of the effects of the explicative variable on opinion shopping shows that significant differences exist among the companies in which opinion shopping takes place and those in which this not happen. In particular, the mean length of the audit contract is less in the company in which opinion shopping has been observed. This result supports the point of view that the auditors tend to be more dependent in the first years of the auditing engagement. The multivariant analysis,

which considers the relationship between the contract length and the issue of a favourable opinion, shows that the variable “tenure” has a negative coefficient. In other words, the shorter the time the auditors have been working for the company, the more they behave in a dependent fashion. This confirms the current thinking that auditors try to avoid disagreement with the client at the beginning of the engagement in order to recover the initial investment made in the company. Once the initial investment has been recovered, the opinion of auditor is affected by other and more important factors such as reputation. From the empirical results it can be deduced that in the subsequent years of the engagement auditors are less obliging and more independent. On the basis of this evidence the authors concluded that mandatory rotation is not a suitable mechanism for improving auditor independence in the Spanish context.

Analytical research

In this paragraph three papers based on formal economic models are considered. Formal models help to identify the most significant variables that best explain the phenomenon considered. Each model is based on simplifying assumptions. When we consider the results, this limitation must be kept in mind.

We summarize the studies according to their data.

Summer (Summer, 1998) analyses the hypothesis that mandatory rotation can enhance auditor independence. This test is carried out within the framework of a stylized game model between borrowers, auditors and capital market, in a context with imperfect information. The author considers a two period model in which there are two categories of audit client. In particular, he has considered the firms with safe projects and the ones with risky projects. All this projects need funds in the form of borrowing. In general, the interest rate of the loan will be lower for the safe projects. The model assumes that the project’s riskiness is not public information, so a problem of adverse selection may occur. The situation is improved by the role of the auditor, who discharges the function of investigating the projects and making the results public. The game considers two kinds of auditors: the independent ones and the opportunistic ones, divided according to their attitude to resist or comply with the client’s pressure to obtain a favourable report (safe project). The consequences of this game are as follow:

- If the auditor agrees to issue a report in which the risky project is presented as safe, the client obtains an interest saving, but the auditor runs the risk of damaging his reputation. The client can be forced to replace the auditor in the next period;

- The client in this replacement is restricted by the capital market because the auditor's reputation influences the future cost of loan.

A two period model was developed. When audit engagement lasts for both periods, the equilibrium entails that opportunistic auditors report risky projects as risky, with a positive probability, in the first period. On the other hand, when the auditor engagement lasts only for one period, the equilibrium shows that opportunistic (i.e. non independent) auditors will report risky projects as safe in the first period. The author concludes that auditors are less independent in short term than in long term engagements and a rotation rule might have adverse effects on auditor independence because it undermines the incentives for building up a reputation for honesty. Competition between auditors and capital markets are considered the best safeguard for the protection of auditor independence.

Gietzmann and Sen (Gietzmann and Sen, 2002) studied the trade off between the concerns of the auditors to be reappointed by the client and the costs that mandatory rotation rule implies. In other terms, the auditor receiving high fees from the client is interested in a renewal of the engagement and this can impair the auditor's incentive to be independent. The authors developed two different audit games. The first is a single period audit game, where the auditor client relationship is limited by law to a finite number of years. The second game is a two period game in which no mandatory rotation exists. The possible equilibrium of the proposed games is analytically derived and demonstrated. A long standing relationship can induce the auditor to give much more importance to the economic interest in preserving the client than to independence. However, this result is meaningful only under specific circumstances. If audit markets are sufficiently thin, with few large clients, mandatory rotation is a desirable political instrument. In this case, where the possibility of reappointment is potentially indefinite, the auditor is concerned about holding the existent client, so the risk of colluding with management is high. In such a case, mandatory rotation could solve the problem. When the audit market is developed (there are many large clients), the reputation effects associated with the potential loss of future business is sufficiently strong to prevent the risk of collusion. So, mandatory rotation could lead to unnecessary costs. The authors concluded that in the case of market concentration the proposal for mandatory rotation may be justifiable.

Wu, Hung and Shih (Wu, Hung and Shih, 2002) in an unpublished study examined analytically the possible effect of the auditor's reputation on the effectiveness of mandatory rotation in improving auditor independence. They develop a two period game model in which three players are considered: a limited liability manager who needs to raise funds, a creditor who provides the

funds to the manager and the auditor, whose task is to confirm the information provided by the manager. This model has the aim of improving prior studies in this field which, according to the authors' point of view, ignore two important topics such as the auditor's reputation and the side payment effect at the end of the auditor engagement. Reputation is important in evaluating the future audit fees that the auditor will earn in new audit engagements after mandatory rotation. Following Chi, Yu and Chiu's reasoning, the other studies do not consider the effect of reputation in future audit pricing, and in particular the audit fee premium matter. Mandatory rotation will harm the independence of the auditor at the end of first period because no further consequences take place. The equilibrium of the game shows that if the effect of auditor's reputation on future fee determination is ignored, mandatory rotation will impair the independence of auditor in the last period before rotation. If the theme of new future engagements is explicitly introduced, the effect of mandatory rotation can be improved through an increase in future audit fee premiums or normal audit profits. In particular, mandatory rotation can have positive effects only in the following situations:

- the market premium paid to a good reputation auditor is high;
- the normal market profits are not compressed toward zero;
- the clients belong to a high risk market (i.e. high tech, waste management) in which the costs of a dishonest report are high.

Without considering these particular aspects, the rotation rule does not have positive effects. These conclusions suggest that regulators have to carefully analyse the real situation of the audit market before introducing such a rule.

Experiment and Questionnaires

Dopuch, King and Schwartz's (Dopuch, King and Schwartz, 2001) paper aims to assess whether mandatory rotation and / or retention of auditors increases their independence. This is analyzed through the willingness of the auditor to issue a report biased in favour of management. The authors draw their conclusions from data collected in an experiment. This is a multi-period interaction between a manager who invests in a risky asset and an auditor who issues a report about this asset. In order to test the relationship between auditor rotation and independence, a setting was created in which the auditor has the incentive to compromise his independence. The experiment is conducted under four regimes, defined as follow:

- in the first, no mandatory rotation or retention is required. The manager can decide in each period to maintain or retain the auditor;
- in the second regime, the manager must retain the auditor for a minimum of three years;

- in the third, the auditor has to be rotated each four period;
- in the third regime there is both the retention of three years and the rotation every four years.

144 subjects participated in the experiment, whose role, as manager or auditor, was assigned randomly. The results support the hypothesis that the auditor compromises his independence most often in the no rotation/no retention regimes. On the other hand, the results are consistent with the assumption that mandatory rotation coupled with retention increases the auditor's independence. The mean biases in the auditor's report reach the highest level in the first regime, whilst it is totally offset when both rotation and retention are introduced. Following the authors' logic, mandatory rotation limits the repeated interaction between manager and auditor that can lead to collusion. So this rule can improve an auditor's independence stand alone or in conjunction with mandatory retention.

Hussey and Lan (Hussey and Lan, 2001) analysed the opinions of U.K. financial directors about the factors which may affect the roles and responsibilities of the external auditor. Three main topics were identified. The most important was mandatory rotation. The opinion of U.K. CFOs on the rotation of auditors after a certain period of time was collected. 3.000 questionnaires were mailed with a response rate of 25.9%. In total, 776 usable replies were obtained. The majority of the respondents agreed that there should be no compulsory rotation of audit firms after a fixed number of years. A multiple regression analysis was further used in order to test the relationship between rotation and the other variables identified. These were the Finance Directors' perception of audit quality, the costs of the audit and the assessment of the nature of the relationship with external auditor. The results showed that the perception of audit independence would be enhanced by prescribing the rotation of auditors even if the concerns about audit quality and costs are predominant and overall opinion on the rotation rule is negative.

O'Leary's (O'Leary, 1996) article aims to analyse the concept of independence and the relative consequences that mandatory rotation may have. For this purpose a questionnaire was mailed to 300 of the most important Australian listed companies and to 180 audit partners. In particular, three aspects were considered: the actual audit independence, the perceived independence and mandatory rotation. 97% of the auditors and 87% of the public listed companies were against compulsory auditor rotation. The respondents consider the cost of rotation to outweigh any benefit. However, when the perception of independence is considered, the results change. Indeed, 63% of public listed companies and 37% of auditors consider the introduction of such a proposal as a useful means of improving the perception of independence.

SDA Bocconi (SDA Bocconi School of Management, 2002) in an unpublished work conducted by a group of independent academics investigates auditor independence, both effective and perceived, using data collected in the Italian market, in the audit segments where the rotation rule is compulsory. The effective independence was analysed through measures such as partner suspensions, qualified opinions and auditor changes. The results relating to each of these variables are as follow:

- the greatest number of partner suspensions occur during the first year of appointment;
- the highest number of qualified opinions occur in the third year of the engagement. This supports the idea that three years is the period required for an audit firm to achieve complete knowledge of the auditee;
- due to the small number of auditor changes before the end of the 9 year period (the maximum period after which audit firm rotation is mandatory) it can be inferred that in the absence of the rule auditees would keep their auditor for a longer period.

For the analysis of the perceived independence questionnaires and interviews were used. The subject categories that were considered are as follow: managers, internal auditors and Big 5 controllers. The responses state that mandatory rotation enhances the perceived independence as considered by third parties. The study concluded that mandatory auditor rotation produces positive effects on perceived independence but the impact on effective independence is negative on the basis of the data collected.

Conclusions

In our review of the literature on the relationship between mandatory rotation and the independence of auditors, eight papers were considered. Among these, one is based on empirical data, the other three develop an analytical model and the last four are based on experiment or questionnaire. So the results have to be judged on the basis of these features. The effects of mandatory rotation on independence are the main topics studied, even if some studies focus their attention on specific related problems. In particular, the link between auditor tenure on either reputation or the phenomenon of opinion shopping is considered, along with the concerns of the auditor in the reappointment. These features help in considering the wide and even generic concept of independence. Two papers conclude that a short term engagement can impair independence because it undermines the incentive to build up a reputation for honesty or because of the interest of the auditor in maintaining the client for the recovering of the initial investment. Another two studies provide conclusions on the basis of conditions. The first considers mandatory rotation useful only if the market audited has a few large clients and the second states that mandatory rotation can have positive effects only if some strictly exogenous conditions are

satisfied. Only one study concludes definitely in favour of mandatory rotation. In our survey there are also three papers that consider both actual and perceived independence. On the basis of the results they found we can observe a gap between the two aspects of independence. A large number of the subjects interviewed consider mandatory rotation useful for improving perceived independence but all concluded that the associated costs are too high. The paper of SDA Bocconi School of Management, in particular, reaches this conclusion using both archival data and questionnaires.

CHAPTER 5

ROTATION RULE AND AUDIT QUALITY

Introduction

Audit quality is another important feature to consider in evaluating the usefulness of the rotation rule. The quality of audit can be defined, in general terms, as the probability that an auditor will both discover and truthfully report material errors, misrepresentations or omissions detected in a client's accounting system (De Angelo, 1991). This probability depends upon the broad concept of an auditor's professional conduct, which includes factors such as objectivity, due professional care and conflict of interest. The quality of audit work can be evaluated from several points of view. The main factors that can be considered in evaluating the audit quality are as follow:

- performance determinants: they relate to the ability of auditors, intended both as knowledge (training, education) and experience (professional, industry, client specific). Professional conduct, a general concept including ethical constraints and judgement belongs to this category as well;
- economic incentives: as the audit firm's performance is affected by economic considerations (i.e. fees, costs, profits), these incentives have to be evaluated when both detection and reporting of matters are analyzed;
- audit market structure: the auditor's performance is influenced by the state of professional ethics, the visibility of the profession's enforcement actions and interaction with professional peer groups.

The impact of mandatory rotation on the factors cited above is debated by proponents and opponents of mandatory rotation. The proponents consider this rule as a way to improve audit quality because the familiarity with the client has the effect of reducing the fresh point of view that auditors have in the first years of the engagement. The rotation can lead the market to competition based on the quality of services which can lead to a growth in the number of competent firms. According to the opponents of mandatory rotation, these benefits are largely unproven and they can not balance the costs and risks of such a proposal. They support the view that the best audit work can be made only after the first few years of the engagement (due to the specific knowledge that has been developed during the engagement).

The impact of the rotation rule on particular factors of audit quality represents the most relevant aspect that the academic literature has studied. This justifies the number of papers considered. As the matter can be analyzed from different points of view, each study focuses only on a few aspects of audit quality. Firstly we summarised empirical papers based on archival data, ordering them according to the particular aspect of audit quality they dealt with and by publication date,

then we considered the other studies on the following order: analytical, experimental economics and experiment.

Archival studies

St. Pierre and Anderson (Pierre and Anderson, 1984) in their study consider the main factors that can lead clients and third parties to have conflicts with public accountants resulting in lawsuits. For this purpose 129 legal cases tried between 1960 and 1973 were selected, in which one of the defendants was an auditor. The cases heard in courts were considered regardless their outcome. In total, 334 alleged errors were identified. In each lawsuit the authors identified the type of engagement, the kind of error alleged, the events that led to the lawsuit and the background to each case. The results that are of interest in this treatment relate to the accountant's expertise with the client. Indeed the number of years the auditors worked for the same client has an important bearing in the number of legal cases. Actual errors and the outside expectation of errors are related to the learning time process of the auditors. The results show that thirty of the 129 cases analyzed involved public accountants with less than three years of experience with the client. In terms of errors committed, they represent approximately 40% of the total errors committed, relating to accounting principle interpretation, audit procedural errors and fraud cases. Following the authors' conclusions, this adds credibility to the contention that risks increase with new clients and this has to be kept in mind in the discussion regarding mandatory rotation.

Copley and Doucet's (Copley and Doucet, 1993) paper has the aim of investigating the relationship between the quality of audit services and auditor tenure, along with the quality/fixed fees relation. The first relationship is important to evaluate the usefulness of mandatory rotation. They describe and test a statistical model that is a regression between the dependent variable "substandard audit quality" and other independent variables, of which the most important is "tenure". The dependent variable is dichotomous, i.e. it indicates whether the audit is of unacceptable quality or not. The model focuses on the auditor's incentive to provide a quality service. The analysis is performed on a sample of U.S. companies. These are entities that receive federal funds, and in that way the law requires them to receive an independent audit. This data come from a previous GAO's research, and consists of questionnaires and audit quality assessments of 165 companies. The empirical results show a positive sign for the estimated parameter of "tenure". This means that the likelihood of receiving a substandard quality audit increases with the length of the auditor – client relationship. This means that the longer the period

of engagement, the higher the risk that the quality of audit services decreases. The authors conclude that a periodic rotation of auditors may improve the audit quality.

Geiger and Raghunandan (Geiger and Raghunandan, 2002) examine the association between the length of the auditor/client relationship and audit reporting failures. The aim is to test the relationship between auditor tenure and audit reporting failures. Audit reports of a sample of U.S. companies entering into bankruptcy during years 1996 – 1998 are examined. In particular, the authors examine if the audit report highlights going-concern problems. A multivariate logistic regression is used, in which the dependent variable is the audit report immediately preceding bankruptcy and, among the independent variables, “tenure” is considered as the most relevant. The list of public company bankruptcies was collected from the yearly publication “Bankruptcy Almanac”, relating to the U.S. market. Real estate and financial utilities companies were deleted from the sample. In total, 117 companies that filed for bankruptcy between 1996 and 1998 were considered in the analysis. The results exhibit that the tenure variable is consistently positive and significant but the effect appears to taper off for periods greater than five years. This conclusion is consistent with the position that auditors may be more influenced in the first years of the engagement and it does not support the argument of those who propose that the rotation of auditors must be mandatory.

Johnson, Khurana and Reynolds (Johnson, Khurana and Reynolds, 2002) test whether the length of the relationship between a company and audit firm is associated with financial reporting quality. The analysis is conducted using two empirical proxies of quality: the absolute value of unexpected accruals and the relationship between current period accruals and future income. A statistical regression was developed and tested with the use of a sample of U.S. companies audited by a Big 6 auditor in the period 1986-1995. In total 11.148 observations of firms were considered. Three groups were then formed on the basis of the audit tenure (short – until 3 years, medium – between 4 and eight years, long – over 9 years). The model’s outcomes indicated that the level of unexpected accruals observed in the short tenure group of companies was higher than that reported by the medium tenure group. Furthermore, in the long tenure group, no significant increases in unexpected accruals were observed. In other words, short relationships are associated with higher unexpected accruals that are also less persistent in future earnings. These findings were also tested using multivariate and sensitivity analyses. As the financial reporting quality declines with short audit firm tenure, the authors concluded that mandatory rotation may not be the best solution.

Myers, Myers and Omer (Myers, Myers and Omer, 2003) investigate the relationship between audit tenure and audit quality. In this paper proxy variables are used for audit quality such as discretionary accruals and current accruals. These measures are the most representative of the management's discretion in the financial reporting process. The sample used consists of all firms-years from 1998 to 2000 whose data on the database Compustat was sufficient to estimate accruals. In total, 42.302 firm annual data were considered. The univariate results show that negative value of accrual measures is less extreme (i.e. closer to zero) when auditor tenure is longer. This result was further tested using multivariate analysis in order to verify if the discovered relationship between tenure and accrual is not affected by other factors. This further analysis strengthened the validity of this relationship. On the other hand, the authors found that extended auditor tenure had a beneficial effect on the dispersion of accruals. So auditors appear to place greater constraints on both income increasing and income decreasing accruals as the audit-client relation lengthens. These results suggest that audit quality does not appear to deteriorate with tenure. So if the claim is that audit quality is impaired by a long period engagement, the authors conclude that their findings do not support this argument.

Vanstraelen (Vanstraelen, 2000) focuses on audit-client relationship and the quality of audit in practice. In particular, the paper considers the impact of renewable long-term audit engagements on the auditor's reporting behaviour and independence. The empirical analysis was conducted on the basis of two samples taken from the data submitted to the Belgian National Bank over the period 1992-1996. So the annual accounts of Belgian companies were considered. The two samples containing the data of large companies were divided into "financially stressed" and "financially non-stressed". The sample was further divided by year, industry and size. A logistic regression was used in which the dependent variable was "unclean" audit reports that occurred in case of qualified opinion, adverse opinion and disclaimer of opinion. The most important independent variable is "tenure". The relationships between the identified variables were tested using both univariate and multivariate analyses. The results showed that companies receiving a clean audit report have a significantly longer relationship with the auditors than companies that receive an unclean report. This suggests that auditors are more willing to issue an unclean report in the last year of the official mandate than in previous years. So a long tenure reduces the likelihood that the auditor issues a qualified report. The author states that a political implication of this finding is the usefulness of mandatory auditor rotation to maintain the value of an audit to external users.

Walker, Lewis and Casterella (Walker, Lewis and Casterella, 2001) provide empirical evidence relating to the link between the length of the auditor engagement and audit failures. For this purpose a sample of 110 U.S. companies which failed during the period 1980-1991 was used. The sample was divided between companies that were involved in litigation, were declared bankrupt or were the target of a SEC enforcement release. This data was further divided by tenure length. To better address the issue of risk, failure rates were calculated by relating the number of failures in each tenure sample to the total number of audits in each period. The data showed that the majority of failures occur with long term tenure but the highest failure rates involve short term relationships. Moreover, a logit model was used to predict failures. The results suggest that risk increases early on in audit client relationship and then declines over long term periods. As the failure rate in long term engagements is low, the authors concluded that mandatory auditor rotation may not be necessary.

SDA Bocconi (SDA Bocconi School of Management, 2002) in the unpublished work cited, investigated the quality of audit, both effective and perceived, using data collected in the Italian market, in the audit segments where the rotation rule is compulsory. The effective audit quality was analysed using the same criteria used for independence (see chapter 4), such as partner suspensions, qualified opinions and auditor changes.

For the analysis of the perceived audit quality questionnaires and interviews were used. The categories of subjects that were considered are as follows: managers, internal auditors and Big 5 controllers. The responses state that mandatory rotation produces a decrease in the quality of the issued opinions due to the lower knowledge of the client that the new auditor has in the first years of the engagement.

Carcello and Nagy (Carcello and Nagy, 2004) as in the above mentioned study also consider the relationship between audit quality and mandatory rotation which is investigated from the point of view of fraudulent financial reporting. A logistic regression model is used. The cases of fraudulent financial reporting are identified by examining the SEC Accounting and Auditing Enforcement Releases issued between 1990 and 2001. These relations allege a violation of the Securities Act and a related enforcement action taken by SEC. The sample is therefore relative to the U.S. market. 267 companies were considered. The relationship between audit tenure and fraudulent reporting was tested using two different sets of control firms. Firstly, each firm cited for fraud was matched with a non fraudulent firm. Secondly, the sample of fraudulent firms was compared with all other companies available. The authors found a significant positive relationship between short auditor tenure and the number of fraudulent financial reports, but they didn't

discover a significant positive relationship between long auditor tenure and fraud. As fraud is more likely to occur in the first years of the auditor – client relationship, mandatory rotation can have negative effects on audit quality.

Chung (Chung, 2004) examined the impact of limited auditor tenure on earnings and audit quality. For this purpose the proxy variables of discretionary accruals were used as dependent variables in a cross-sectional modified model. The sample was formed of Korean publicly held companies listed on the Korea Stock Exchange, collected in the 1985-1995 period. The year in which mandatory rotation was enforced in Korea, 1990, was excluded from the sample because it represents a transitional period. This analysis was carried out considering the particular regime existing in Korea, closer to mandatory rotation. The results show that discretionary accruals by firms that fulfil the rotation requirement decrease after the passage to a mandatory rotation regime. Following the author's reasoning, a limit on the length of the auditor – client relationship results in greater incentives for auditors to maintain independence. So the firm's opportunistic manipulation of earnings is effectively restricted. This suggests that audit quality appears to improve when the duration of the audit – client relationship is truncated.

Nashwa (Nashwa, 2004) attempted to verify whether a long term auditor-client relationship can increase the risk of audit failures. A sample of 90 U.S. failed companies was considered, belonging to the 1996-2001 period. The failures were divided into litigation, bankruptcy and SEC enforcement actions and then three sub-samples were identified. The collected data showed that failure occurs more frequently in the first three years and in seven or more of audit tenure. Furthermore, the failure rates were computed by relating the number of failures in each tenure class to the total number of audits involving the same period of tenure. To address the issue more deeply, a logic model was used to predict failure using tenure as the variable. The results indicated that risk increases early in the auditor client relation and then declines over time. The author concluded that the results of his survey do not support the hypothesis that mandatory rotation improves audit quality.

Nagy (Nagy, 2005) in his paper examined the effects of mandatory auditor change on audit quality. In particular, the association between auditor tenure and discretionary accruals were analysed considering the influence of increased scepticism associated with a forced auditor change. This analysis was conducted considering the particular environment created by the failure of Arthur Andersen which forced a significant number of companies to change auditors. This situation was considered by the author as being very close to mandatory rotation. A regression

equation was used in which “accruals” is the dependent variable and among the independent ones the most relevant is the length of the engagement. The estimation period is represented by the four years surrounding the demise of Arthur Andersen (2000-2003). The sample used contained all the firms listed on Research Insight (U.S.) with sufficient data to estimate discretionary accruals. The regression suggests that a reduction in the absolute value of accruals occurs when a small company is forced to change auditor from Arthur Andersen. Instead, large companies did not show any incremental association between short tenure and audit quality. This means that audit quality improves when the bargaining power of the auditee is limited. The results were further tested through additional analyses, such as sensitivity analyses, in order to verify their validity. The results suggest that the association between short auditor tenure and discretionary accruals disappears in the years subsequent to the auditor change. In this way, scepticism mitigates the hazards relating to a new audit engagement. This provides some support for mandatory auditor rotation even if the results are for small companies.

Analytical studies

Elizur and Falk (Elizur and Falk, 1996) provided a multiperiod model for the planning of external audit quality when the total period of engagement is known and finite as it is in case of mandatory rotation. The analysis was conducted using a theoretical setting. In particular, three features relating to audit quality were considered: the efficiency of auditors, the fees and the expected losses due to failure. The models suggested that:

- in a competitive market efficient independent auditors will plan a higher audit quality than the less efficient ones;
- the periodic increase in audit fees will create an increase in planned audit quality for all the expected periods of the engagement except the final one;
- a high level of expected losses due to audit failure will result in a higher level of audit quality for all the years of the engagement except the last one. So the planned audit quality level diminishes over time and the level of the last period is the lowest.

It is possible to motivate the auditors to perform higher quality auditing in the last period by increasing the penalty for audit failure relative to the previous period. However this measure will impair the audit quality during the whole period of the engagement except the final one. The authors concluded that planned audit quality is negatively affected by the policy of mandatory rotation.

Arruñada and Paz-Ares (Arruñada and Paz-Ares, 1997) analysed the mandatory rotation of audit firms from two different points of view: the effects on audit quality and the costs that it implies. This second effect of mandatory rotation rule will be considered in Chapter 6. The starting point is the classical definition of audit quality: competence, i.e. the ability to detect anomalies in the financial statements, and independence, defined as the auditor's willingness to report the irregularities detected. Regarding the first feature, the authors state, on the basis of the previous literature, that there is a positive correlation between tenure and auditor competence due to specific assets developed during the engagement. These assets represent the knowledge and the specific competences that the auditor has developed regarding a specific company. The matter of independence is considered by the presentation of a formal model representing the expected financial consequences of the auditor's reporting decision which are analyzed with regard to three topics: the value of the relationship with the client, the value of all other contracts and the value of a potential contract. Following the author's reasoning, limiting the time horizons of the engagement does not reduce the risk of collusion. If the auditor is willing to relax his vigilance, rotation has no power to prevent this because the parties have a mechanism at hand for implementing immediate side-payment. Furthermore, under mandatory rotation it is more difficult to recognise and punish via reputation the lenient auditors that can hide their behaviours by transferring problematic clients to the incoming auditors. The authors concluded that the rotation rule does not modify the transaction cost of collusion and reduces both the probability of detecting non reporting auditors and the amount of sanctions associated with such detection.

Experimental economics

Lennox (Lennox, 1998) studied whether auditor switching can help to explain why auditors fail to warn about impending bankruptcy. For this purpose two formal models (structural models) were developed, one of auditor bankruptcy and the other of auditor switching. These models were tested using a sample of U.K. quoted companies, during the period from 1987 to 1994. Among them there were 160 failed firms, i.e. gone into administration, receivership or liquidation. The evidence found support for the view that companies successfully engage in opinion shopping. Audit reporting is much less persistent in the switching state than in the non switching one. Companies that carry out opinion shopping tend to switch auditors who give qualified reports and retain auditors who give unqualified reports. This supports the idea that switching the auditors exogenously reduces the accuracy of the audit report which is a truthful indicator of financial distress only if it is issued by the incumbent auditors rather than new less well informed ones. The author underlines the political implications of these findings which are against the periodic compulsory switching of auditors.

Experiment

Bates Ingram and Reckers (Bates Ingram and Reckers, 1982) aimed in their articles to test whether past experience with a client affects audit judgement. This is tested considering the hypotheses of firm rotation, partner rotation and a no rotation case. An experiment is developed with the participation of sixty-seven Certified Public Accountant operating in the U.S. market. They represent 4 national, 2 regional and 2 local audit firms. They were asked to make a quantitative materiality judgment about a lawsuit contingency disclosure. Three groups were formed. In the first the partner audits a new client of the audit firm, in the second a new partner audits a company that were audited by the same audit firm in the last five years, and the third the partner is in charge for more than 5 years. The results show that the highest degree of auditor-client affiliation occurs in the no-rotation group and produces the largest materiality threshold. These results indicate a potential need for rotation to mitigate the psychological effect which develops from long term auditor client relationships. Further, partner rotation was found to be effective in eliminating the audit bias as was rotation of audit firms. This supports the accounting profession's position against mandatory rotation.

Conclusions

In our review of the literature papers relating to the link between audit quality and mandatory rotation, sixteen studies are considered. The majority of the works surveyed focus on how audit tenure relates to the matter of quality and in this way the effectiveness of the rotation rule is considered. Several authors use accruals, both discretionary and current, as a proxy for audit quality. Four out of six studies that explicitly analyze the effect of tenure on audit quality conclude that mandatory rotation is not necessary. The findings suggest that audit quality is affected by short audit tenure, long term engagements do not impair audit quality and that the quality of audit is positively judged over time. One paper concludes that a long tenure affects the objectivity of the auditor but, on the basis of the data analyzed, it considers partner rotation as effective as audit firm rotation. The studies that conclude in favour of mandatory rotation state that tenure erodes objectivity and a new audit engagement may mitigate the hazard problem. The positions are sharper when we consider the studies that focus on the relationship between tenure and either audit failure or financial fraud. All the studies reviewed concluded against the rotation rule because the risk of audit failures, fraudulent financial reporting and lawsuits increases in the early years of the engagement. Two studies consider the effects that a limited period of engagement has on audit quality. They are both in favour of mandatory rotation because they find that long tenure reduces the likelihood that the auditor issues a qualified report and so opportunistic behaviour can be avoided when the relation is truncated.

Finally, two papers used analytical models to address the matter of audit quality. The conclusions are against rotation rule because a limited period of engagement impairs audit quality in the last years of the mandate and the rule can not prevent the risks of collusion.

CHAPTER 6

ROTATION RULE AND AUDIT COSTS

Introduction

The claim that mandatory rotation may increase audit costs is an important aspect that must be considered when this theme is addressed. These costs involve both the auditors and the clients. From the auditor's point of view, start-up costs can be considered. They are generated by familiarization with the client's accounting procedures. This is necessary in order to reach a sufficient knowledge of the audited firm. On the other hand, the client must devote resources to make the first audit possible, in terms of assistance and material resources. These are the explicit costs that an auditor change involves (e.g. the selection of the new auditor). Moreover implicit costs also have to be considered. They arise from the loss of specific assets developed during the past engagement. Among them the most important are the confidential information obtained (for the auditor) and the mutual trust built up over the years. The costs sustained by the auditor, and in particular the start-up ones, could be transferred to the price of the audit service. However, the price might also decline. This happens when competition occurs only in the first year and once the engagement is obtained the auditor imposes higher prices in the following years. The theme of audit costs is not frequently addressed specifically in the literature and this explains the low number of studies surveyed.

Questionnaires/Interview

SDA Bocconi (SDA Bocconi, School of Management, 2002) in an analysis considered the costs relating to mandatory rotation. A questionnaire was mailed to internal auditors, manager and Big 5 controllers of Italian listed companies. 91% of the internal auditor respondents stated that in the first year of engagement (for which the rotation rule is effective) the time spent to explain to the new auditor the internal control structure increases. All the interviewed managers said that in the first year the time dedicated to the auditor increases and this affects the total costs of the audit. Big 5 controllers said as well that it is necessary to spend more hours, about 40%, in a new auditee than in the following years. So in the first year of the engagement both the auditee and auditor costs increase. Despite these results, the audit fee paid to the new auditor is less than the fee paid to the previous external auditor. This can be explained considering both that companies perceive auditing as a standard service and that they choose the auditor that asks the lowest audit fee and that fierce competition arises around audit fees when a mandatory rotation occurs. The conclusions underline that mandatory rotation increases the start up costs of auditor and auditee.

Analytical study

Arruñada and Paz-Ares (Arruñada and Paz-Ares, 1997) in their paper analysed the impact that mandatory rotation has on costs and audit prices. The first matter was addressed using an analytical model in which various type of costs are considered. In particular, total costs were analysed. They included the cost of recurring audit, the start up costs incurred by the auditor and the costs faced by the client in the change of auditors. It was assumed that the change of auditor occurred every “r” years. The situations of voluntary and mandatory rotation were compared. The model shows that the total cost of audit increases as the rotation period decreases. So any rule that leads to an engagement period shorter than that which would be the case in a deregulated situation tends to increase costs. The authors demonstrated that if a company reduces the audit tenure from 40 to 9 years, the present value of the total cost of audit increases between 7 and 20%. Furthermore, as the auditors transferred the start up costs to the price, an increase in the auditor’s billing was expected. On the basis of empirical evidence from Italy and Spain, the authors inferred that an increase in fees between 4 and 15% occurs. The phenomenon of “low-balling”, under which audit fees decrease in the first year of engagement, is considered illusory, because it is offset by price rises in subsequent years. The authors concluded that mandatory rotation is counterproductive.

Conclusions

The effects that mandatory rotation has on audit costs and prices are addressed in a specific way by only two papers. Both conclude against mandatory rotation using different methods of analysis. In particular, SDA Bocconi’s paper uses data from the Italian market collected by interviews and questionnaires. Results show that both auditors and listed companies face start-up costs in the first year of engagement. The second paper analysed reaches the same conclusions considering the total cost of the audit, whose amount increases when the period of engagement is shorter. Moreover, in Arruñada and Paz-Ares, the effect of the start-up costs on fees is demonstrated and the low-balling phenomenon is considered as illusory because fees increase in the subsequent periods of the engagement. Both the analyzed papers were developed by researchers in countries in which mandatory rotation is still operative or was operative in the past.

CHAPTER 7

ROTATION RULE AND AUDIT CAPITAL MARKET COMPETITION

Introduction

Another important effect of mandatory rotation that must be considered is the impact on the competition in audit market. This particular argument is not deeply analysed in the literature because this problem involves the standpoint of the antitrust authorities rather than the accounting point of view. However the relationship between mandatory rotation and market competition is important to consider in order to better evaluating this rule. The rotation rule can modify audit market competition by introducing potential distortions or improvements. Moreover, proponents of mandatory rotation argue that the audit market is too concentrated and that rotation could improve the competition between Big and non Big audit firms if auditees were forced to change their current auditors.

As in the case of audit cost, in this section only two studies, that consider explicitly this matter, were reviewed.

Archival studies

SDA Bocconi (SDA Bocconi School of Management, 2002) analysed the situation of the Italian audit market, in which the rotation of auditors is compulsory. The data collected revealed that market shares are not stable in the market segment where audit rotation firm is not mandatory. This evidence is provided by the voluntary appointments fulfilled by the group of Big audit firms whose market shares decreased in 1992-1997 period. Otherwise, market shares are stable in the segment where the rotation rule is enforced. In the Italian market the Big 5 cover more than 90% of listed companies. So the evidence is that the new auditor is chosen among the same group and when a company has to rotate his auditor there are only 4 competitors. The findings support the idea that mandatory rotation leads to higher market concentration in the larger client segment because there is a high probability that a large size listed company will appoint as auditor one of the Big 5 firms. Moreover, mandatory rotation increases the probability of collusion among audit firms in order to coordinate acquisition of the client.

Arruñada and Paz-Ares (Arruñada and Paz-Ares, 1997) in addressing the theme of audit competition provided a simulation using the data of the Spanish market. In particular, the large audit firms' market shares were projected into the future assuming that a mandatory rotation rule

was effective. The results supported the evidence that small audit firm increase their market share, the leading firms suffer a decline and the equilibrium is reached when all firms have an equal market share. In the situation in which the audit firms have the same market share, the rule has the effect of fixing the starting point, making it difficult for the most efficient firms to increase their shares. This has the consequence of reducing the incentive to improve efficiency because the investment does not provide a full return due to the rotation rule that reduces the potential demand. Moreover, the probability of collusion is increased because the audit firm does not have the incentive to breach the collusive agreement and in this way increase market shares and profits, because this gain is balanced by the loss of the new clients at the end of the maximum allowed period.

Conclusions

The matter of the market competition is analysed in two studies. Both conclude against the mandatory rotation rule. In fact, findings show that on the basis of effective data (SDA Bocconi School of Management, 2002) or using a simulation (Arruñada and Paz-Ares, 1997) the rotation rule increases the probability of collusion among audit firms. Moreover, in a setting where the rotation rule is effective for the segment of larger auditees, the results show that market shares are stable. So these findings do not support the idea that mandatory rotation can improve auditor competition.

CHAPTER 8

ROTATION RULE AND MARKET REACTION

Introduction

Auditors carry out two valuable roles for capital market participants: an information role and an insurance role. They give an independent verification of the financial statements prepared by managers and can prevent conflict of interests between managers and shareholders, thus enhancing the value of companies. When auditors find that some information has not been disclosed or has been manipulated, they issue a qualified report. The public announcement of a qualified opinion would impact negatively on share prices. In this situation, managers would be removed by shareholders and the conflict of interests resolved, with a new team appointed.

The problem arises when we consider that auditors and managers are closely related, as managers often dismiss incumbent auditors without consulting shareholders. The consequence of this situation would endanger the independence of auditors- who could give a flawed opinion – and of managers – who could dismiss good auditors to avoid a qualified opinion or use their influence to manipulate it. The final outcome of this conflict is an increase in the monitoring costs and information costs, which result in a higher cost of capital for the firm, thus limiting its potential to raise financial capital.

If both auditors and managers may lack the quality of independence, and if financial markets are not efficient enough to react and signal to shareholders that incumbent managers should be removed, a way to solve the problem and ensure that auditors really monitor management behaviour would be the imposition of audit rotation after a certain period of mandate. The rotation would ensure that if the incumbent auditor is opportunistically acting against the shareholders' interest, the newly appointed auditor would re-state the required independence. The new appointment would therefore signal to the market that the quality of the information is higher.

In modern financial studies, the usual approach to detecting investors' sensitivity to certain events consists in the analysis of the stock price around the time of the event.

Archival studies

SDA Bocconi (SDA Bocconi School of Management, 2002), examined the reaction of stock prices following a change in the audit firms. For this purpose 97 rotations relating to Italian listed companies from 1980 to 2001, both voluntary and mandatory, were checked. The number of companies involved was 47. If rotation yields important information on the quality of the audit services provided to the firm audited, a change in the auditor after a long period of mandate would be perceived by the market

as an improvement in the firm's accountability. On average, we should observe an increase in the firms' stock returns following the change in their auditors. However, the study showed no change in prices – and no impact on the cost of equity - that could be attributed specifically to specific rotation of each firm.

The empirical results suggest that:

- financial markets don't react to the audit rotation (mandatory and voluntary) of a specific company and this phenomenon is particularly evident for large stocks included in synthetic indexes;
- financial markets do react to audit rotation as a systematic source of risk;
- there is no clear evidence that stock pickers may get excess returns during the rotation period;
- on average, rotation does not affect the liquidity of the single security;
- financial markets seem more interested in the quality of the audit process.

The paper concludes that if rotation has no impact on the cost of capital, and if it is considered that the rotation increases audit costs (either observable and not) due to the loss of experience and higher training costs, the net effect on shareholder value will be negative.

Mansi, Maxwell and Miller (Mansi, Maxwell and Miller, 2003) examined the relationship between auditor characteristics (in particular quality and tenure) and the cost of debt financing. A sample of 1,305 companies collected in 1974-1998 period was used. The other data considered were the bond price information and the number of audit firms, divided into large and small firms (i.e. Big 6 and non-big 6 firms). The most important dependent variable used was “credit spread” representing the risk premium that investors require to hold the firm's debt. In particular two regression models were developed in order to test both if the information on audit is incorporated in credit ratings and if a relationship between audit choice and credit spread exists. The results suggest that firms with small auditors are downgraded by one minor rating category and then that the informational function of audit as well as auditor characteristics are considered by rating agencies when they evaluate the bond rating. Moreover, firms with auditors of long tenure receive a better rating on their bond. Furthermore, investors place a premium on the bonds of firms which have large auditors. So the insurance effect of audit also adds value to the capital market participant. The finding that investors require lower rates of return as the length of tenure increases provides direct evidence regarding the value investors attach to audit tenure.

Ghosh and Moon (Ghosh and Moon, 2005) analysed how investors and intermediaries perceive audit tenure. A basic regression model is developed to discover whether investors, rating agencies

and financial analysts perceive earnings quality as being affected by tenure. For each of these categories a particular dependent variable was considered, using the same set of independent variables. In particular, stock ranking, bond ranking and expected earnings per share were considered. The data covered the period 1990-2000 and related to public companies included in Compustat. The outcomes were consistent with the hypothesis that investors and analysts perceive earnings quality as improving with longer auditor tenure. The results provide limited evidence that independent rating agencies view long auditor tenure as having a favourable impact on earnings quality. As many capital market participants view long tenure as having a favourable impact on audit quality, mandatory limits on the duration of the engagement might impose unintended costs on capital markets.

Conclusions

The papers surveyed analyse the relationship between the capital markets and the role of the auditor, with specific attention on the rotation rule. Only one study addresses this matter in a specific way by evaluating the reaction of the market to a change in auditors. In the Italian context, in the segment where rotation is mandatory, no improvement in the cost of capital was found and the net effect of the rule on shareholder value was considered to be negative. The other two studies considered how investors and capital markets perceive a particular feature of audit: the tenure. Both the papers found, on the basis of an analysis of the market reactions, that a long tenure is considered by market participants as an measure of audit quality. So the conclusions are against mandatory rotation rule.

PART 3 OVERALL SUMMARY AND CONCLUSION

CHAPTER 9 OVERALL SUMMARY AND CONCLUSION

Introduction

In this chapter conclusions are drawn up based on a summary of the analysis conducted below.

The structure of the chapter is as follows. Firstly we present the results of the analysis of some selected national requirements, then of the reports issued by regulators and other relevant bodies and finally of the academic literature divided into empirical studies and opinions.

National requirements about RR

We considered 24 countries belonging to different geographical areas. Mandatory rotation is required in only 5 of the 24 countries analysed (Brazil, India, Italy, Singapore and South Korea).

In particular in the group of G7 countries and among the 15 European Union countries, before the enlargement of 2004, only 1 (Italy) has a rotation rule.

Regulators

We considered 26 reports by 19 different regulators and other relevant bodies representing auditees' stakeholders⁵.

22 out of 26 papers considered are against the introduction of mandatory rotation rules (see Figure 9). Only the local authority of Singapore, two Italian bodies (Assirevi⁶ – Italian Association of Audit Firms – and the Galgano Commission) and, limited to particular circumstances, the Conference Board Commission on Public Trust and Private Enterprise (USA) are favorable.

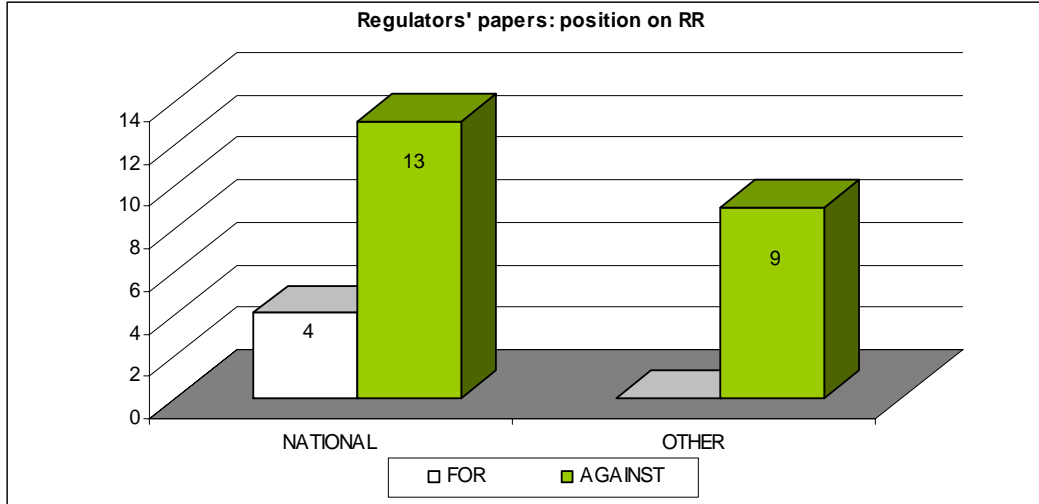
Dividing the reports between national and other we found that no reports issued by supra-national regulatory bodies (other) and only a minority of the reports by national bodies were in favour of firm rotation.

⁵ Assirevi, (Italian Association of Audit Firms), sent a letter in April 2005 to the Italian Prime Minister expressing disagreement with mandatory audit firm rotation. This letter was not included in the following analysis because it was available publicly (on the Assirevi website) starting from 6 October 2005, after the end of this research. Considering this latest position on 27 reports, 23 concluded against RR and 4 in favour.

⁶ This opinion was expressed by Assirevi, (Italian Association of Audit Firms) during an Italian parliamentary hearing after the Parmalat scandal. More recently, Assirevi issued a letter against RR. This letter was not included in this report because it was available publicly after the close of this research.

Figure 9: Regulators' papers: position on RR

	FOR	AGAINST	Total
NATIONAL	4	13	17
OTHER	0	9	9
Total	4	22	26



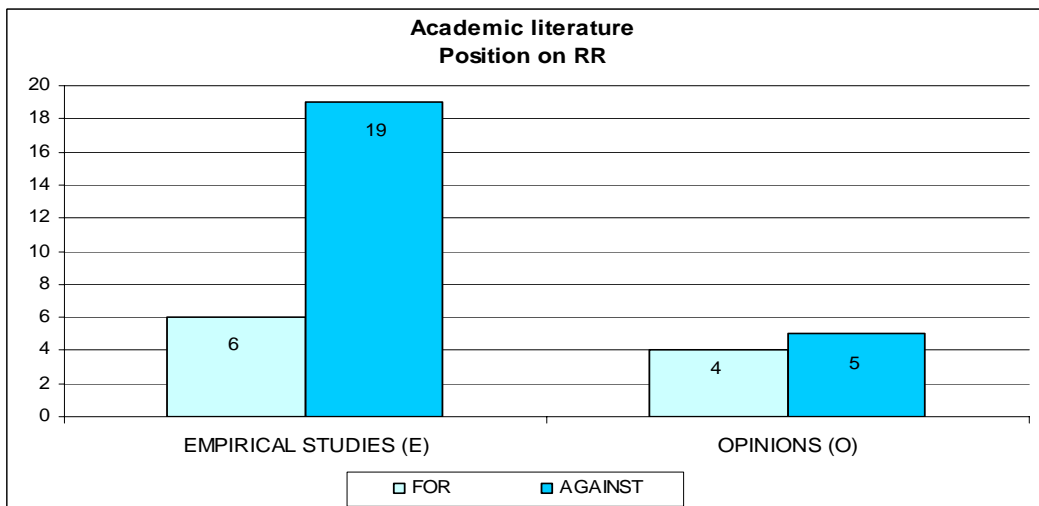
Academic literature

In the analysis of the academic literature 34 studies were considered, both empirical (25) and opinion-based (9).

As can be seen in Figure 10, 24 studies are against the rotation rule and 10 are in favour.

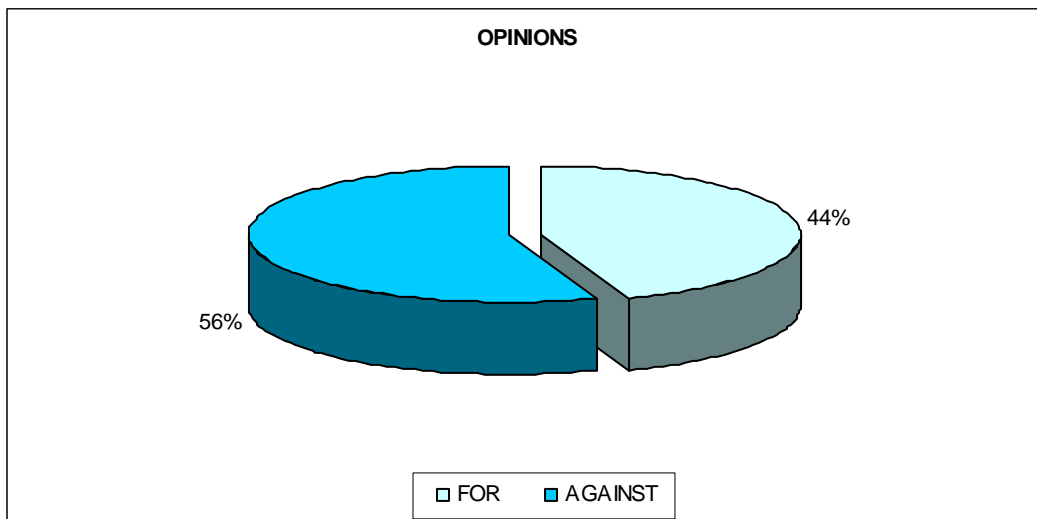
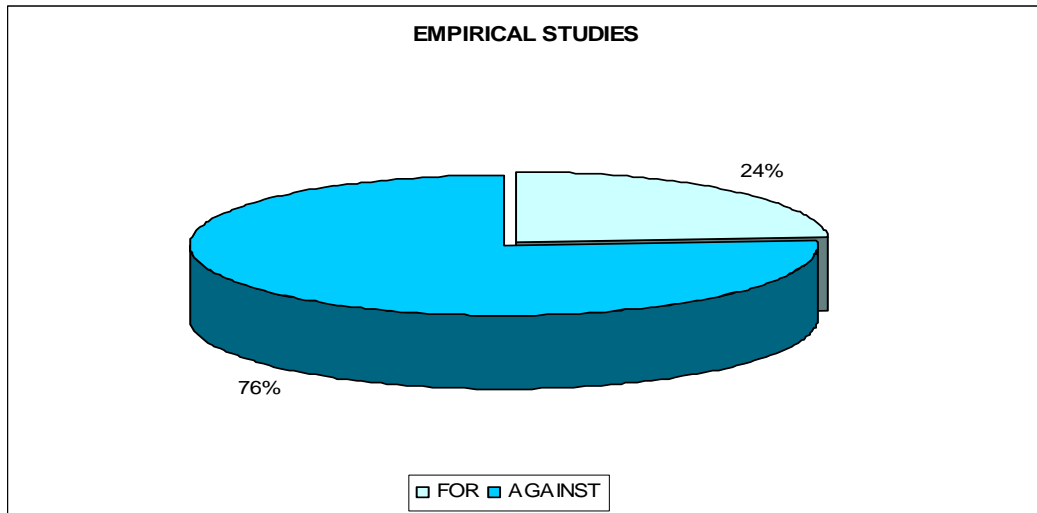
Figure 10: Position on RR (academic literature)

	FOR		AGAINST		Total
	Published	Unpublished	Published	Unpublished	
EMPIRICAL STUDIES (E)	5	1	15	4	25
OPINIONS (O)	3	1	4	1	9
E + O	8	2	19	5	34
Total	10		24		



The results of evidence based empirical studies show that in a large majority of cases (76%), academic studies do not support firm rotation. If we consider only published empirical studies 15 out of 20 are against the rule (75%). The two percentages are almost identical

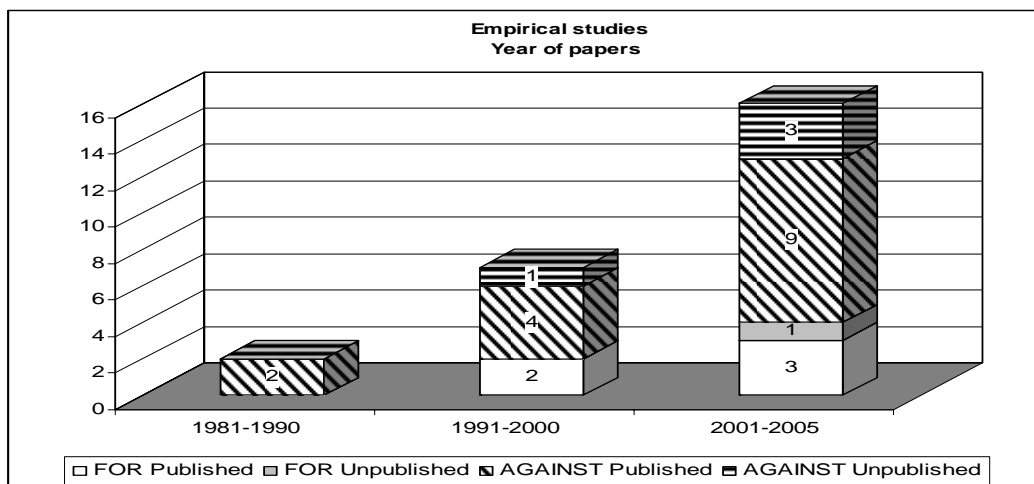
In the case of opinion-based studies, whilst majorities still do not support firm rotation (56%), the majority is much smaller. This suggests that while opinions might be more supportive of firm rotation (perhaps in response to major financial collapses), the evidence rejects firm rotation.



Then we have divided the studies (both empirical and opinion-based studies) by date to identify whether there is a period in which the topic of RR was more debated (see Figures 11 -12). Indeed the vast majority of empirical studies were conducted in the last four years (16 out of 25 papers), perhaps in response to Enron's case.

Figure 11: Year of papers (empirical studies)

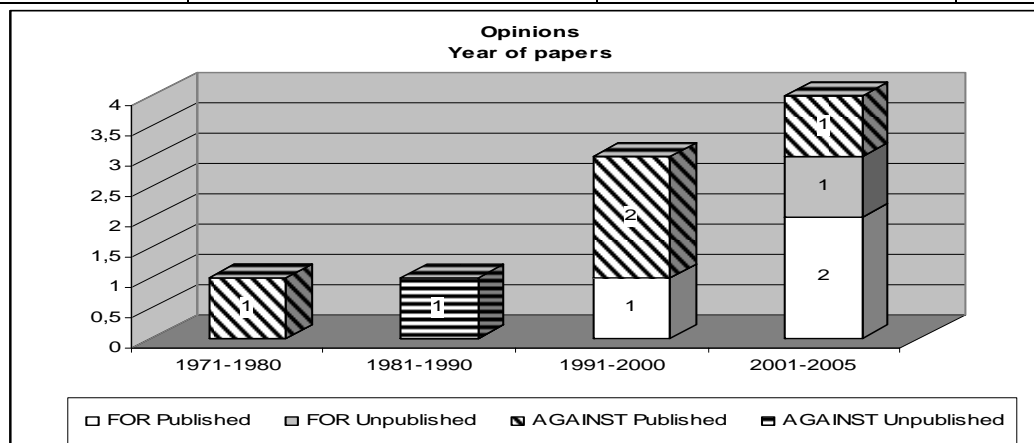
EMPIRICAL STUDIES					
	FOR		AGAINST		Total
	Published	Unpublished	Published	Unpublished	
1981-1990	0	0	2	0	2
1991-2000	2	0	4	1	7
2001-2005	3	1	9	3	16
Total	5	1	15	4	
Total	6		19		25



The majority of opinion-based papers were conducted as well in the last few years (4 out of 9 papers), too.

Figure 12: Year of papers (opinion studies)

OPINIONS					
	FOR		AGAINST		Total
	Published	Unpublished	Published	Unpublished	
1971-1980	0	0	1	0	1
1981-1990	0	0	0	1	1
1991-2000	1	0	2	0	3
2001-2005	2	1	1	0	4
Total	3	1	4	1	
Total	4		5		9

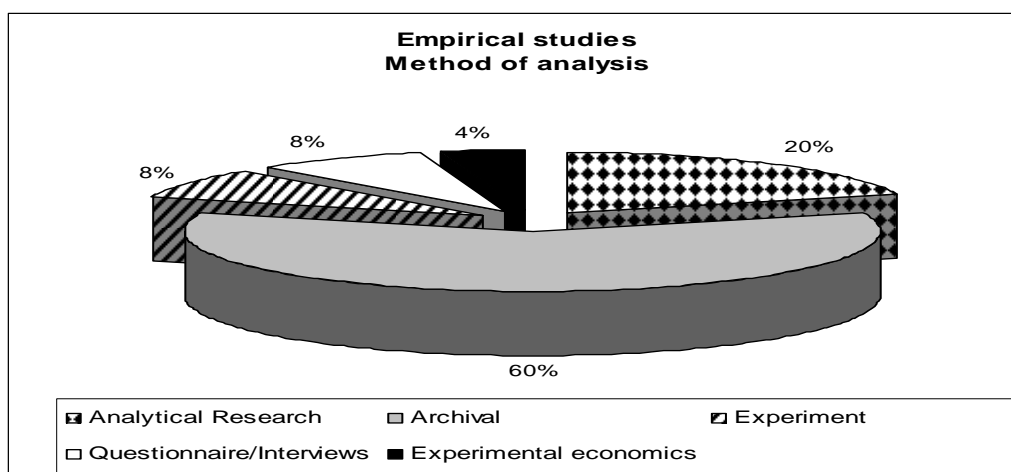


The papers were also classified on the basis of the methods of analysis used. As Figure 13 shows, a large number of papers are based on data collected in several ways. They represent 76% of the empirical papers. In this category we can find the archival studies (60%), experiments (8%) and studies based on questionnaires/ interviews (8%). The other 24% are based on mathematical/micro-econometrical models.

Figure 13: Method of analysis (empirical studies)

EMPIRICAL STUDIES					
	FOR		AGAINST		Total
	Published	Unpublished	Published	Unpublished	
Analytical Research	1	0	3	1	5
Archival	3	1	9	2	15
Experiment	1	0	1	0	2
Questionnaire/Interviews	1	0	1	0	2
Experimental economics	0	0	0	1	1
Total	6	1	14	4	25
Total	7		18		

Note: SDA Bocconi, 2002's paper is inserted only in the Archival research although in it there is an analysis conducted through the use of interviews.



Finally, we have considered the main effect that the rotation rule can have on different topics (auditor independence, audit quality, audit costs, audit market competition and capital market reaction to the RR).

As Figure 14 shows, empirical results do not support the RR with respect to no one of the possible advocated advantages.

Figure 14: Main results (empirical studies)

EMPIRICAL STUDIES							
	FOR		AGAINST		Total FOR	Total AGAINST	Total FOR + AGAINST
	Published	Unpublished	Published	Unpublished			
Auditor independence	2	0	3	3	2	6	8
Audit quality	3	1	10	2	4	12	16
Audit costs	0	0	1	1	0	2	2
Audit market competition	0	0	1	1	0	2	2
Capital market reaction	0	0	2	1	0	3	3
Total	5	1	17	8	6	25	31
Total	6		25				

Note: The total of the empirical studies (25) is different from the total shown in this figure (31) due to the fact that some studies dealt with more than one impact of RR.

Conclusions

A small number of countries (Brazil, India, Italy, Singapore and South Korea) have a legal requirement for audit firms to be rotated after a maximum specified period. In particular, among the G7 countries and the 15 European Union countries, before the 2004 enlargements, only Italy has RR. Of the 26 reports issued by regulators and other representatives bodies around the world, 22 conclude against the rotation⁷. The four national regulators in favour of the RR are: Assirevi (Italian Association of Audit Firms)⁸, the Galgano Commission, MAS (Monetary Authority of Singapore) and the US independent Conference Board (in particular circumstances). Note that two of them are from Italy (Assirevi and Galgano Commission) where firm rotation is mandatory for some companies (i.e. all listed companies). Moreover, in Singapore (area of influence of MAS), the same rule is effective for incorporated banks.

Based on the academic literature collected the present analysis supports the idea that the benefits of the rotation rule are largely doubtful.

Moreover most of empirical papers present data contrary to the introduction of this rule. Furthermore an analysis of the empirical studies shows that the evidence doesn't support the RR with regard to non one of the advocated possible advantages (increase in auditor independence, audit quality, audit market competition and financial market reaction).

ACKNOWLEDGEMENTS

The study has benefited from the invaluable advice given by Ginevra Rossi. Funding received from European Contact Group is gratefully acknowledged.

⁷ Assirevi, (Italian Association of Audit Firms), sent a letter in April 2005 to the Italian Prime Minister expressing disagreement with mandatory audit firm rotation. This letter was not included in the following analysis because it was available publicly (on the Assirevi website) starting from 6 October 2005, after the end of this research. Considering this latest position on 27 reports, 23 concluded against RR and 4 in favour.

⁸ This opinion was expressed by Assirevi, (Italian Association of Audit Firms) during an Italian parliamentary hearing after the Parmalat scandal. More recently, Assirevi issued a letter against RR. This letter was not included in this report because it was available publicly after the close of this research.

APPENDIX

TABLE A**NATIONAL REQUIREMENTS OF ROTATION RULE**

COUNTRIES	MANDATORY AUDIT FIRM ROTATION
AUSTRALIA	ROTATION RULE: does not exist
AUSTRIA	ROTATION RULE: does not exist NOTE: For listed companies a mandatory rotation rule (RR every 6 years and time lag of 3 years) was enforced by law but its application was postponed pending developments at EU level. It was dropped in 2005 by the company law (GesRÄG 2005) that changed the articles of Austrian Commercial Code on auditing (§ 271a HGB).
BELGIUM	ROTATION RULE: does not exist
BRAZIL	ROTATION RULE: exists FIRM SUBJECT TO RR: banks (first rotation in 2001) and listed companies (first rotation in 2004) MANDATORY ROTATION PERIOD: every 5 years
CANADA	ROTATION RULE: does not exist Note: Until 1991, only Canadian banks were required to rotate their auditor of record. In 1991 banking legislation was amended and the mandatory audit firm rotation requirement was abandoned.
DENMARK	ROTATION RULE: does not exist
FINLAND	ROTATION RULE: does not exist
FRANCE	ROTATION RULE: does not exist
GERMANY	ROTATION RULE: does not exist
GREECE	ROTATION RULE: does not exist
HONG KONG	ROTATION RULE: does not exist
INDIA	ROTATION RULE: exists FIRM SUBJECT TO RR: banks, privatised insurance companies and Government companies. MANDATORY ROTATION PERIOD: every 4 years

COUNTRIES	MANDATORY AUDIT FIRM ROTATION
ITALY	<p>ROTATION RULE: exists</p> <p>FIRM SUBJECT TO RR: listed companies and some other firm identified by law.</p> <p>RETENDER: 3 years</p> <p>MANDATORY ROTATION PERIOD: 9 years</p> <p>TIME LAG: 3 year</p> <p>NOTE: New 2005 bill proposes an enlargement of the maximum term to 12 years (six-year term, renewable once).</p>
IRELAND	ROTATION RULE: does not exist
JAPAN	ROTATION RULE: does not exist
LUXEMBOURG	ROTATION RULE: does not exist
NETHERLAND	ROTATION RULE: does not exist
PORTUGAL	ROTATION RULE: does not exist
SINGAPORE	<p>ROTATION RULE: exists</p> <p>FIRM SUBJECT TO RR: banks incorporated in Singapore (not for foreign banks operating in the country)</p> <p>MANDATORY ROTATION PERIOD: every 5 years</p> <p>NOTE: The minimum period for audit firm rotation has not yet been expired</p>
SPAIN	<p>ROTATION RULE: does not exist</p> <p>NOTE: Since 1989 Spain has had a system that required mandatory audit firm rotation with a maximum term of 9 years, which included mandatory retention of 3 years. In 1995 it was dropped. After the 9 year engagement period the audit firm may be reappointed even if only for annual periods.</p>
SOUTH KOREA	<p>ROTATION RULE: exists</p> <p>FIRM SUBJECT TO RR: companies listed in KSE (Korean Stock Exchange) or registered with KOSDAQ (Korea Securities Dealers Automated Quotations)</p> <p>MANDATORY ROTATION PERIOD: every 6 years (starting 2006)</p> <p>NOTE: Exceptions are:</p> <ul style="list-style-type: none"> - foreign-invested companies, which are subsidiaries of foreign Parent companies as defined by the laws of that country and intend to appoint the same auditors as the Parent. - companies listed on foreign exchange (NYSE, NASDAQ, and London Stock Exchange only) <p>The minimum period for audit firm rotation has not yet been expired</p>
SWEDEN	ROTATION RULE: does not exist
UK	ROTATION RULE: does not exist
USA	ROTATION RULE: does not exist

TABLE B - REGULATOR AND OTHER RELEVANT BODY'S PAPERS

	REGULATOR / BODY	GEOGRAPHICAL INFLUENCE	TITLE AND YEAR	MAIN OBJECT	POSITION ON RR	METHOD OF ANALYSIS
1	ABI (Association of British Insurers)	UK	“Response of the association of British insurers to the DTI consultation on the EU proposal for a statutory audit directive”, October 2004	Position of the members about some aspects of the 8th Directive proposal	AGAINST	Questionnaires mailed to the associated insurance firms
2	AICPA (American Institute of Certified Public Accountants)	USA	“Statement of position regarding mandatory rotation of audit firms of publicly held companies”, 1992	Mandatory rotation (benefits and costs)	AGAINST	Opinion based on: Official Commissions result; statistics; audit experience
3	AICPA (American Institute of Certified Public Accountants)	USA	“Proposed amendments to corporate governance regulation”, June 2004	Proposed rules on corporate governance	AGAINST	Opinion based (see GAO)
4	Assirevi (Italian Association of Audit Firms)	Italy	“Indagine conoscitiva sui rapporti tra il sistema delle imprese, i mercati finanziari e la tutela del risparmio”; Audizione del 16 febbraio 2004	The reform of audit regulation: a proposal	FOR	Opinion based
5	CGAA (Co-ordinating group on audit and accounting issues)	UK	“Final report to the Secretary of State for trade and industry and the Chancellor of the Exchequer”, January 2003	Auditor Independence	AGAINST	Opinion based
6	Commissione Galgano - Commissione di studio sulla trasparenza delle società quotate	Italy	Relazione finale, Settembre 2002	Auditor Independence	FOR	Opinion based

	REGULATOR / BODY	GEOGRAPHICAL INFLUENCE	TITLE AND YEAR	MAIN OBJECT	POSITION ON RR	METHOD OF ANALYSIS
7	Committee on the Financial Aspects of Corporate Governance (Cadbury Committee)	UK	“The financial aspects of corporate governance”; Report of the Committee, December 1992.	Professional objectivity	AGAINST	Opinion based
8	EFAA (European Federation of Accountants and Auditors)	Europe	“The role, the position and the liability of the statutory auditor within the European Union, 1998”, April 1998	Comments on EU Green Paper	AGAINST	Opinion based
9	FEE (Fédération des Experts Comptables Européens)	Europe	“European accountants welcome revised EU audit directive”, Press release, March 2004	Auditor Independence	AGAINST	Opinion based
10	FEE (Fédération des Experts Comptables Européens)	Europe	“European Commission proposed directive on statutory audit of annual accounts and consolidated accounts”; Policy on EC proposed directive, March 2004	Comments on the 8th Directive proposal	AGAINST	Opinion based
11	FEE (Fédération des Experts Comptables Européens)	Europe	“FEE Position on the Proposed Audit Directive”, November 2004	Comment on the 8th directive proposal	AGAINST	Opinion based
12	FEE (Fédération des Experts Comptables Européens)	Europe	“FEE Study: Mandatory Rotation of Audit Firms”, October 2004	Audit firm rotation	AGAINST	Review of the position of regulators and academic literature

	REGULATOR / BODY	GEOGRAPHICAL INFLUENCE	TITLE AND YEAR	MAIN OBJECT	POSITION ON RR	METHOD OF ANALYSIS
13	FEE (Fédération des Experts Comptables Européens)	Europe	“The new era for auditing”; FEE seminar, December 2004	Comment on the 8th directive proposal	AGAINST	Opinion based
14	FEE (Fédération des Experts Comptables Européens)	Europe	“The role of accounting and auditing in Europe”; Position Paper, May 2002	Comments on the 8th Directive proposal	AGAINST	Opinion based
15	ICC (International Chamber of Commerce)	International	“The adverse effects of compulsory audit firm rotation”; Policy statement, March 2005	Auditor independence	AGAINST	Opinion based
16	IDW (Institut der Wirtschaftsprüfer)	Germany	“Stärkung der Abschlussprüfung: IDW positioniert sich in der aktuellen Reformdebatte”, Presseinformation, 6 May 2002.	Improvement of auditor activity	AGAINST	Opinion based
17	MAS (Monetary authority of Singapore)	Singapore	“The Five ‘C’s in Banking: emerging issues and policy responses”; Speech of the executive director, March 2002	Auditor independence	FOR	Opinion based
18	MORI (Market & opinion research international)	UK	“Stockholder's views on the future of auditing”, 2003	Audit rotation	AGAINST	Questionnaires mailed to institutional investors, audit clients and auditors
19	NYSE - New York Stock Exchange Corporate Accountability and Listing Standards Committee	USA	Recommendation, June 2002	Enhance the ability of honest and well-intentioned directors, officers and employees to perform their functions effectively	AGAINST	Opinion based

	REGULATOR / BODY	GEOGRAPHICAL INFLUENCE	TITLE AND YEAR	MAIN OBJECT	POSITION ON RR	METHOD OF ANALYSIS
20	Review Group on auditing - Commission of the Minister of Enterprise, Trade and Employment	Ireland	The report of the review group on auditing, July 2000	Auditor independence	AGAINST	Opinion based
21	Report to the Minister of Financial Services and Regulation; Commission chaired by Ian Ramsay	Australia	Independence of Australian company auditors: review of current Australian requirements and proposal reform, October 2001	Auditor Independence	AGAINST	Opinion based
22	Report of the Committee on Corporate Audit and Governance (Naresh Chandra Committee - Department of Company Affairs)	India	Report to the Ministry of Finance and Company Affairs After 2002	Independence of auditors	AGAINST	Opinion based supported by a large number of stockholder's points of views
23	The Conference Board Commission on Public Trust and Private Enterprise	USA	Findings and Recommendations, January 2003	Seven principles are listed (mandatory rotation is one of these) to restore public confidence in audited financial statements	FOR (in particular circumstances)	Opinion based
24	UNICE (Union of Industrial and Employers' Confederations of Europe)	Europe	"Proposal for modernizing the 8th company law directive on statutory audit", June 2004	Comments on the 8th Directive proposal	AGAINST	Opinion based

	REGULATOR / BODY	GEOGRAPHICAL INFLUENCE	TITLE AND YEAR	MAIN OBJECT	POSITION ON RR	METHOD OF ANALYSIS
25	U.S. General Accounting Office (GAO)	USA	“Accounting Firm Consolidation: Selected Large Public Company Views on Audit Fees, Quality, Independence and Choice”, September 2003	Auditor Independence	AGAINST	Questionnaires mailed to public company CFOs
26	U.S. General Accounting Office (GAO)	USA	“Public Accounting Firms: required study on the potential effects of mandatory audit firm rotation”, Washington, D.C., Government Printing Office 2004.	Mandatory audit firm rotation: independence, quality, cost, competition	AGAINST	Questionnaires, discussions with stakeholders, information from other countries, analysis of failures

TABLE C - REGULATOR AND OTHER RELEVANT BODY

	REGULATORS/BODIES	TYPE OF REGULATOR (GEOGRAPHICAL INFLUENCE)	No OF REPORTS ANALYZED	POSITION ON RR
1	ABI - (Association of British Insurers)	UK	1	AGAINST
2	AICPA - American Institute of Certified Public Accountants	USA	2	AGAINST
3	Assirevi - Italian Association of Audit Firms	Italy	1	FOR ⁹
4	CGAA - Co-ordinating group on audit and accounting issues	UK	1	AGAINST
5	Commissione Galgano - Commissione di studio sulla trasparenza delle società quotate	Italy	1	FOR
6	Committee on the Financial Aspects of Corporate Governance (Cadbury Committee)	UK	1	AGAINST
7	EFAA - European Federation of Accountants and Auditors	Europe	1	AGAINST
8	FEE - Fédération des Experts Comptables Européens	Europe	6	AGAINST
9	ICC - International Chamber of commerce	International	1	AGAINST
10	IDW - Institut der Wirtschaftsprüfer	Germany	1	AGAINST
11	MAS – Monetary authority of Singapore	Singapore	1	FOR
12	MORI - Market & opinion research international	UK	1	AGAINST
13	New York Stock Exchange - Corporate Accountability and Listing Standards Committee	USA	1	AGAINST
14	Review Group on auditing (Commission of the Minister of Enterprise, Trade and Employment)	Ireland	1	AGAINST
15	Commission chaired by Ian Ramsay - Report to the Minister of Financial Services and Regulation	Australia	1	AGAINST
16	Naresh Chandra Committee - Department of Company Affairs (DCA) Report to the Ministry of Finance and Company Affairs -	India	1	AGAINST
17	The Conference Board Commission on Public Trust and Private Enterprise	USA	1	FOR (in particular circumstances)
18	UNICE - Union of Industrial and Employers' Confederations of Europe	Europe	1	AGAINST
19	GAO - U.S. General Accounting Office	USA	2	AGAINST
TOTAL REPORTS ANALYZED			26	

⁹ For more recent Assirevi's opinion on the topic, see note 3.

TABLE D**EMPIRICAL STUDIES**

	TITLE	PAPER DETAILS	POSITION ON RR	METHOD OF ANALYSIS	COUNTRIES WHERE DATA USED IN THE PAPER WERE COLLECTED	MAIN RESULTS
1	Arrunada, B., and C. Paz-Ares, "Mandatory rotation of company auditors: A critical examination".	PUBLISHED <i>International Review of Law and Economics</i> 1997	AGAINST	ANALYTICAL RESEARCH		<ul style="list-style-type: none"> - the rotation rule does not modify the transaction cost of collusion and reduces both the probability of detecting non reporting auditors and the amount of sanctions associated with such detection - increases production costs (auditor) - distortion of competition through an artificial division of the market
2	Bates H. L., Ingram R.W. and Reckers M.J., "Auditor-client affiliation: the impact on «materiality»" (a study of the effect of auditor rotation on materiality judgments)	PUBLISHED <i>Journal of Accountancy</i> 1982	AGAINST	EXPERIMENT (CPA firms: two nation and two regional)	U.S.A.	<ul style="list-style-type: none"> - auditor materiality judgement is affected by long term auditor client associations (mandatory rotation is too expensive as a solution. It's sufficient the rotation of partner)
3	Carcello Joseph V., and Nagy Albert L., "Audit Firm Tenure and Fraudulent Financial Reporting"	PUBLISHED <i>Auditing: A Journal of Practice & Theory</i> 2004	AGAINST	ARCHIVAL (logistic regression model)	U.S.A	<ul style="list-style-type: none"> - fraudulent financial reporting is more likely to occur in the first years of engagements
4	Chung H., "Selective Mandatory Auditor Rotation and Audit Quality: an Empirical Investigation of Auditor Designation Policy in Korea"	UNPUBLISHED <i>Working paper</i> October 2004	FOR	ARCHIVAL (cross sectional modified model)	KOREA (listed companies)	<ul style="list-style-type: none"> - audit quality is improved when the duration of the auditor client relationship is truncated.
5	Coopley P. and Doucet M.S., "Auditor Tenure, Fixed Fee Contracts, and the Supply of Substandard Single Audits"	PUBLISHED <i>Public Budgeting & Finance</i> 1993	FOR	ARCHIVAL (cross sectional model)	U.S.A	<ul style="list-style-type: none"> - the probability of receiving a sub – standard audit increases with the length of the engagement
6	Dopuch, N., King R. and Schwartz R., "An experimental investigation of retention and rotation requirements"	PUBLISHED <i>Journal of Accounting Research</i> 2001	FOR	EXPERIMENT (multi-period interaction between manager who invests in a risky asset and an auditor who issues a report about this asset)		<ul style="list-style-type: none"> - the likelihood that the auditors bias their reports in favour of the management decreases with the rotation requirement
7	Elitzur R. and Falk H., "Planned Audit Quality"	PUBLISHED <i>Journal of Accounting and Public policy</i> 1996	AGAINST	ANALYTICAL (multiperiod model)		<ul style="list-style-type: none"> - planned audit quality is negatively affected by a mandatory independent auditor rotation policy

	TITLE	PAPER DETAILS	POSITION ON RR	METHOD OF ANALYSIS	COUNTRIES WHERE DATA USED IN THE PAPER WERE COLLECTED	MAIN RESULTS
8	Geiger, M.A. and Raghunandan K., <i>“Auditor tenure and audit reporting failures”</i>	PUBLISHED <i>Auditing: A journal of Practice & Theory</i> 2002	AGAINST	ARCHIVAL (multivariate logistic regression)	U.S.A.	- there are more audit reporting failures in the first years of the auditor/client relationship
9	Ghosh A. and Moon D., <i>“Auditor Tenure and Perceptions of Audit Quality”</i>	PUBLISHED <i>The Accounting Review</i> 2005	AGAINST	ARCHIVAL (basic regression framework)	U.S.A.	- the influence of reported earnings on stock ranking becomes larger with extended tenure although the association between debt ratings and reported earnings does not vary with tenure
10	Gietzman M. B. and Sen P.K., <i>“Improving auditor independence through selected mandatory rotation”</i>	PUBLISHED <i>International Journal of auditing</i> 2002	FOR	ANALYTICAL (audit game)		- if the audit market is sufficiently thin (few large clients) mandatory rotation increases the independence and reduces the risk of collusion
11	Hussey R. and Lan G., <i>“An examination of auditor independence issues from the prospective of U.K. Finance Director”</i>	PUBLISHED <i>Journal of Business Ethics</i> 2001	AGAINST	QUESTIONNAIRE and multiple regression (financial directors)	U.K.	- perceived independence of auditors can be enhanced by mandatory rotation
12	Johnson V. E., Khurana I. K. and Reynolds J. K., <i>“Audit-firm tenure and the quality of financial reports”</i>	PUBLISHED <i>Contemporary Accounting Research</i> 2002	AGAINST	ARCHIVAL (matched sample statistical regression)	U.S.A.	- short audit firm tenures are associated with a decline in the financial reporting quality
13	Lennox C.S., <i>“Bankruptcy, Auditor Switching and audit Failure. Evidence from the UK 1987-1994”</i> .	UNPUBLISHED	AGAINST	EXPERIMENTAL ECONOMICS	U.K. (listed companies)	- compulsory auditor switching reduces the accuracy of auditor reports
14	Mansi S., Maxwell W. And Miller D. <i>“Does auditor quality and tenure matter to investors? Evidence from the bond market”</i>	PUBLISHED <i>Journal of Accounting Research</i> 2003	AGAINST	ARCHIVAL (multivariate analysis)	U.S.A.	- audit characteristics are important to the capital markets: (i) auditor quality and tenure are negatively and significantly related to the cost of debt financing, (ii) the relationship between auditor characteristics and the cost of debt is most pronounced in firms with non-investment grade debt, and (iii) both the insurance and information role of audits are economically significant for the cost of debt
15	Myers J. N., Myers L. A. and Omer C. T., <i>“Exploring the Term of the Auditor-client relationship and the quality of Earnings: A case for Mandatory Auditor rotation?”</i>	PUBLISHED <i>The Accounting Review</i> 2003	AGAINST	ARCHIVAL (univariate and multivariate analyses)	U.S.A.	- longer auditor tenure is associated with less dispersion in the distribution of discretionary accruals
16	Nagy A., <i>“Mandatory audit firm turnover, financial reporting quality, and client bargaining power: the case of Arthur Andersen”</i>	PUBLISHED <i>Accounting Horizons</i> 2005	FOR	ARCHIVAL (regression)	U.S.A. (small companies)	- for small companies there is an insignificant relationship between short audit tenure and discretionary accruals

	TITLE	PAPER DETAILS	POSITION ON RR	METHOD OF ANALYSIS	COUNTRIES WHERE DATA USED IN THE PAPER WERE COLLECTED	MAIN RESULTS
17	Naswa G. " <i>Auditor Rotation and the Quality of Audits</i> "	PUBLISHED <i>The CPA Journal</i> 2004	AGAINST	ARCHIVAL	U.S.A.	- in the study there isn't credible evidence that mandatory rotation improves audit quality or reduces audit fees
18	O'Leary C., " <i>Compulsory Rotation of Audit Firms for Public Companies?</i> "	PUBLISHED <i>Accountancy Ireland</i> 1996	AGAINST	QUESTIONNAIRE	AUSTRALIA	- the benefits of mandatory rotation are outweighed by the associated costs, even if the perception of independence is improved.
19	Pierre K. St. and Anderson J.A., " <i>An Analysis of the Factors Associated with Lawsuits Against Public Accountants</i> "	PUBLISHED <i>The Accounting Review</i> 1984	AGAINST	ARCHIVAL	USA	- the number of lawsuits increases with new engagements
20	Ruiz-Barbadillo E. and Gomez-Aguilar N. " <i>Does Auditor Tenure Improve Audit Quality? Mandatory auditor Rotation Versus Long Term Auditing: An empirical analysis</i> "	UNPUBLISHED <i>Working paper</i> after 2002	AGAINST	ARCHIVAL (logistic regression)	SPAIN (listed companies)	- the auditor shows most dependence in the first year of the contract because the auditors want to recover the initial investment made in order to understand the business of the client
21	SDA Bocconi - Scuola di direzione aziendale, " <i>The impact of mandatory audit rotation on audit quality and on audit pricing: the case of Italy</i> "	UNPUBLISHED 2002	AGAINST	ARCHIVAL (quantitative analysis) QUESTIONNAIRES (CFOs of listed companies, CFOs, "Sindaci" and internal auditors)	ITALY	- Mandatory rotation produces positive effects on perceived independence but it generates excessively high social costs; - In the first year of appointment both the auditee's internal costs and those of the auditor increase; IV: MR leads to a higher market concentration and the probability of collusion among audit firms is increased; - Financial markets do not like mandatory rotation because this rule does not give the market tools to punish the company.
22	Summer M., " <i>Does mandatory rotation enhance auditor independence</i> "	PUBLISHED <i>Zeitschrift für Wirtschafts- u. Sozialwissenschaft</i> 1998	AGAINST	ANALYTICAL (game between borrowers, auditors and capital market)		- auditors are less independent in short than in long term engagements so a rotation rule might have adverse effects on auditor independence
23	Vanstraelen A., " <i>Impact of renewable long-term audit mandates on audit quality</i> "	PUBLISHED <i>The European Accounting Review</i> 2000	FOR	ARCHIVAL (univariate analysis)	BELGIUM	- long term auditor client relationship significantly increase the likelihood of an unqualified opinion.
24	Walker P.L., Lewis B.L. and Casterella J.R., " <i>Mandatory auditor rotation: Arguments and current evidence</i> "	PUBLISHED <i>Accounting Enquiries</i> 2001	AGAINST	ARCHIVAL	USA	- the rate of failure is much lower in long term relationships
25	Wu-Chun C., Hung-Chao Y. and Shih-Tsung C., " <i>Mandatory rotation and auditor independence an analysis of auditor's reputation effects</i> "	UNPUBLISHED <i>Working paper</i> 2002	AGAINST	ANALYTICAL (two period model)		- mandatory rotation may have negative effects on auditor independence if the audit fee premium, normal audit profit and the probability of bad states are ignored

TABLE E**OPINIONS**

	TITLE	PAPER DETAILS	POSITION ON RR	METHOD OF ANALYSIS	MAIN RESULTS
1	Arrunada, B., "Audit quality: attributes, private safeguards and the role of regulation"	PUBLISHED <i>The European Accounting Review</i> 2000	AGAINST	OTHER (REVIEW)	- as a safeguard of audit quality mandatory rotation is too expensive (III: increase of the start-up costs)
2	Arrunada, B., "Audit failure and the crisis of auditing"	PUBLISHED <i>European Business organization law review</i> 2004	AGAINST	OTHER (OPINION)	Summary of the paper of 1997
3	Brody, R. G. and Moscovice S.A., "Mandatory Auditor Rotation"	PUBLISHED <i>National public Accountant</i> 1998	FOR	OTHER (OPINION)	- (perceived) the user considers as more independent an auditor which has a short relationship with the client
4	Healey T.J. and Kim Y.J., "The benefits of mandatory audit rotation"	PUBLISHED <i>Regulation</i> 2003	FOR	OTHER (OPINION)	- mandatory audit rotation increases investors' confidence and auditor independence
5	Hoyle J., "Mandatory rotation is not the best solution to the problems of independence and public protection"	PUBLISHED <i>The Journal of Accountancy</i> 1978	AGAINST	OTHER (OPINION)	- mandatory rotation cannot improve independence because it ignores the complexity of modern business organizations and the costs that accompany the initial engagement
6	Kaplan R., "The mother of all conflicts: auditor and their clients"	PUBLISHED <i>Illinois public law and legal theory research paper series</i> 2004	FOR	OTHER (OPINION)	- long term client relationships corrode the detachment that "auditor independence" requires.
7	Lennox C., "Audit quality and auditor switching: some lessons for policy makers"	UNPUBLISHED <i>Working paper</i> 1988	AGAINST	OTHER (REVIEW)	- mandatory retention is preferable to mandatory rotation as a way of reducing managerial influence over auditor switching
8	Moore D. A., Tetlock P. E., Tanlu L. and Bazerman M.H., "Conflicts of interest and the Case of Auditor Independence: Moral Seduction and Strategic Issue Cycling"	UNPUBLISHED <i>Working paper</i> 2005	FOR	OTHER (OPINION)	- mandatory rotation is an instrument to pursue independence of audit and remove conflicts of interest
9	Petty R. and Cuganesan S., "Auditor Rotation: framing the debate"	PUBLISHED <i>Australian Accountant</i> 1996	AGAINST	OTHER (SUMMARY OPINION)	- it is unclear whether all of the purported advantages/disadvantages of RR are realised in practice

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