REGULATION OF NON-AUDITING SERVICES: 
THE SPANISH CASE

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SUMMARY

The objective of this paper is to analyze through the positions of lecturers and auditors the legal aspects that regulate activities other than auditing of annual accounts, with the goal of providing relevant conclusions that could be of interest for the regulation of auditing activities.

The results indicate that whereas lecturers manifest a high level of global prohibition, auditors, both consolidated auditors (CA) and non-consolidated auditors (NCA), express the opposite point of view. On the other hand, lecturers and NCA grant the same level of importance to prohibitions on services directly associated with financial information submitted for auditing (SDA) as to prohibitions on services indirectly associated to the same information (SIA), while CA concede greater importance to prohibitions on SIA than to those on SDA. However, the difference between the groups of lecturers and NCA lies in their level of prohibition in comparison with the law; NCA favor prohibitions similar to the legislation, whereas lecturers tend to favor a level of prohibition greater than that existing in the legislation.

Key Words: Auditing, Independence, Incompatibilities, Regulation, Non-auditing services
1. Introduction

The proper functioning of products and services markets is a fundamental factor in the development of the economy of any country. Although in many cases markets themselves can solve internal problems, situations arise that require the existence of a set of rules determining regulation. For this reason, regulatory agencies pay special attention to vigilance and control in this area.

In the case of the auditing services market, the firms composing this market have become businesses that offer a more or less wide array of activities apart from the traditional auditing of accounts. This existing reality of the auditing market stands in sharp contrast to the position adopted by some on the strict prohibition of services carried out by these firms (Pany and Reckers, 1988; Gonzalo, 1995; Bartlett, 1993; Pany and Lowe, 1995; Shankar, 2001; Abbott, Parker, Peters and Raghunandan, 2003; Ashbaugh, Lafond and Mayhew, 2003; Felix, Gramling and Maletta, 2005; Basioudis, Papakonstantinou and Geiger, 2008; Davis and Hollie, 2008; Duh, Lee and Hua, 2009; among others).

In the Spanish context, Auditing Law reforms in the years 2002 and 2010 meant an increase in incompatibilities with auditing activity, although it should be emphasized that these restrictions were always accompanied by certain exceptions which shall later be discussed more in depth.

In this sense, this research fits in with other research on incompatibilities in financial auditing functions. The importance of this line of investigation lies in the possible controversial consequences affecting the independence of the auditor (Dopuch, King and Schwartz, 2003; Iyer and Branch, 2004 and Abbot, Parker, Peters and Rama, 2007; Monterrey and Sánchez, 2007; among others). Many of the studies carried out have tried to demonstrate whether the execution of non-auditing services damages the independence of the auditor and thus the quality of account auditing. In this sense, it is important to point out that the results obtained in different investigations are contradictory (for example, Frankel, Johnson and Nelson, 2002; Basioudis et al., 2008; David and Hollie, 2008; Duh et al., 2009 and Ye, Carson and Simnett., 2011; point out that these activities can harm the independence of auditor, whereas Antle, Gordon, Narayamoorthy and Zhou, 2003; Ashbaugh et al., 2003; Chung and Kallapur, 2003 and Monterrey and Sánchez, 2007; show opposite results).

In addition, due to the controversial effects of offering NAS (Non-auditing services) together with auditing services on the auditor’s independence, regulators have not been unaware of this controversy; in this sense, there have been many legislative efforts and actions to solve this conflict around the world (for example, the Sarbanes-Oxley Law in the United States, the reform of the Auditing Law in Spain, etc.).

In accordance with the above, the objective of this paper is to analyze the provision of NAS, carrying out an empirical study on the positions of lecturers and auditors on the legal aspects that regulate the execution of these services; the paper aims to determine the degree of agreement or disagreement with the current legislation and provide relevant conclusions that could be of interest for future reforms to auditing regulation. The research method used was a questionnaire, which was sent to the professionals enrolled in

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1 The set of activities permitted depends in each case on the prohibitions and exceptions established by the regulation where the auditing firm operates
2 To prove this reality, it is very eye-opening to consult the web pages of different auditing firms (Pérez y López, 2005).
3 The Sarbanes-Oxley Law in the United States is the most restrictive currently applicable legislation. Nonetheless, it is important to specify that although this law expressly prohibits a set of services (Book-Keeping, Design and Implementation of information systems; Assessments; Actuarial Services, and Internal Auditing, among others), it does allow for the realization of other additional services, such as tax services, if they have been previously approved by the Auditing Committee.
the Registry of Spanish Auditors⁴ (REA) and university lecturers enrolled in the Spanish Accounting Lecturers Association (ASEPUC).

The results obtained in this investigation indicate that three groups can be identified based on level of global prohibition of incompatibilities and level of importance assigned to prohibitions on what have been denominated “services related directly or indirectly to financial information submitted for auditing”: consolidated auditors (CA), non-consolidated auditors (NCA) and lecturers.

Thus, lecturers show a general high level of prohibition, whereas auditors, both CA and NCA, have the opposite tendency; in other words, CA and NCA show a low level of global prohibition. Nonetheless, lecturers and NCA grant the same level of importance to prohibitions affecting SDA as to those affecting SIA, while CA concede greater importance to prohibitions on SIA than to those on SDA. However, the difference between lecturers and NCA lies in their level of prohibition in relation to the legislation, as NCA tend to favor a level of prohibition similar to the legislation, whereas lecturers tend to favor more prohibition than that established in the legislation.

Thus, the implications of the results obtained in this research indicate that incompatibilities with auditing activity should be controlled by more regulations. This evidence is in accordance with other movements on an international level toward stricter incompatibilities with auditing activities (for example, the Sarbanes-Oxley Law in the United States).

The second section examines the current situation: on one hand, through a review of the literature, this section analyzes the most important consequences of auditors offering multiple services; and on the other hand, a description is provided of modifications made to auditing law which affect the joint provision of auditing and other additional services. The third section of the paper then describes the methodology and the research design used in the project. The fourth epigraph describes the main results obtained from the empirical investigation, and the fifth section points out the conclusions obtained from the research and its most important implications. To conclude, this final section details a series of limitations that condition this research.

2. Review of the Literature

In accordance with Beattie and Fearnley (2004), one of the main concerns that emerged following recent financial scandals⁵, is related to the execution of multiple and varied services by auditors. The matter became more serious as fees charged for these services grew even faster than those charged for auditing services. All of this led to the general belief that the execution of other services could cause these professionals to compromise their independence.

Namely, two main concerns arose. On one hand, auditors tend to avoid disagreements with the management of companies in order to maintain the abundant income derived from the provision of services not related to auditing. (Van Der Plaats, 2000; Ashbaugh et al., 2003; Nice and Trompeter, 2004; Ruddock, Taylor and Taylor, 2006; Basioudis et al., 2008; among others), and, on the other hand, the offering of a wide array of services could lead an auditor to identify himself or herself in a close manner with the management of businesses and to ultimately lose the neutrality necessary for auditing functions (Firth, 1997; Caplan and Kirschenheiter, 2000; Myring and Bloom, 2003; Ruddock et al., 2006; Cahan, Emanuel, Hay and Wong, 2008; among others).

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⁴ In Spanish: Registro de Economistas Auditores (REA)
⁵ In the context of the work cited, we can cite as examples the cases of WorldCom and Enron, in the United States, and Banesto and Gescartera, in Spain. However, we should point out that high impact fraud has continued to occur, as in the cases of Madoff, Forum Filatélico, Martinsa-Fadesa, etc.
According to some authors’ opinion (Bartlett, 1993; Canning and Gwilliam, 1999; Habib and Islam, 2007; Callagan, Parcas, and Singhal, 2009), the supply of NAS has been the most debated topic of all the threats to independence identified in literature. Thus, said provision of services can be considered a controversial topic. In this sense, many authors (for example, Windmöller, 2000; Ashbaugh et al., 2003; Bloomfield and Shackman, 2008; Quick and Waerming-Rasmussen, 2009) argue that such a practice has negative consequences on the functioning of the auditing market. The following consequences are to be noted:

- **It increases the economic dependence of the client** (EU Commission, 2000 a,b, 2003, IFAC, 2001a; Khurana and Raman, 2006)

- **It provokes a loss in auditing quality** (Gonzalo, 1995; Felix et al., 2005; Francis, 2006).

- **It increases familiarity and trust with the client** (EU Commission, 2000 a,b, 2003; IFAC, 2001a,b; Chen, Elder and Liu, 2005; Gul, Jaggi and Krishnan, 2007).

- **It creates complicated situations for self-revision** (IFAC, 2001a,b; Myring and Bloom, 2003).

- **It harms the prestige of the auditing profession** (Gonzalo, 1995; Francis and Ke, 2006, Law, 2008).

Nonetheless, the review of literature not only shows works emphasizing the negative effects of joint service provision and the execution of other types of work by auditors, but in fact other authors maintain that positive consequences can be perceived following the provision of such services. This paper shall later synthesize the studies which state that this practice carried out by auditing firms can create the following consequences of a positive nature:

- **It increases knowledge of the client** (Asare, Cohen, and Trompeter, 2005; Seunghan, 2006; Beck and Wu, 2006; Gul et al. 2007).

- **It improves competition within the market of auditing firms** (Ruiz, 2002; Wu, 2006).

- **It benefits auditors’ independence** (Arruñada, 1999; Lennox, 1999; Myungsoo, 2005).

- **It improves the satisfaction of clients of auditing firms** (García, Garrido, Vico, Moizer and Humphrey, 1999; Malley, 2000; Lee, Mande and Son, 2009)

- **It increases the chances of attracting and retaining personnel in auditing firms** (Hillison and Kennelley, 1988).

However, although both negative and positive consequences exist, expressions of alarm and concern are more frequent than those of praise for its positive consequences.

In regard to legislation on incompatibilities with auditing activity, a comparative study of the pronouncements by different international agencies shows that the agency adopting the strictest and most severe position on prohibitions is the Securities Exchange Commission (SEC) through the Sarbanes-Oxley Law. On the other hand, a greater consensus exists between the positions of the International Federation of Accountants (IFAC) and the General Accounting Office (GAO). Lastly, the American Institute of Certified Public Accountants (AICPA) is the least stringent agency in this respect (López, 2005).

The modification of legislation on auditing in Spain was a long-awaited event desired by all of the groups involved, as many topics required revision and updating in the context of the new panorama affecting the auditing services market.
This situation was especially urgent in regard to the provision of non-auditing services by auditors, because, given the evolution of the auditing market, it was a topic needing specific modification and above all, broader and more precise regulation. The previous rules established only a few sparse references on how to confront the topic of joint provision of auditing and other services.

Thus, through the terms of Law 44/2002, the legislation on auditing was modified with the objective of resolving existing conflicts and deficiencies. Specifically, Article 8.2 of the Auditing Law indicates that “it is established that the auditor does not possess sufficient independence in the exercise of his functions in relation with a business or entity, when he or she provides the following services or when a series of circumstances occur: the execution of services of design and launching of financial information technology systems, evaluation services, services of internal auditing, maintaining business relations, advocacy services, participation in the hiring of executives or key personnel for the auditing client, and the provision by the signing partner of services other than auditing to the audited entity, as well as the payment of fees for providing auditing and non-auditing services to the same client, if the latter constitute an unduly high percentage of the total annual income of the account auditor in relation to the average of the last five years”.

Moreover, in the same article, the law also established that the calculation period for incompatibilities will include the year in which the work was carried out as well as the third year previous to the tax year to which the financial statements audited refer.

3. Methodology and Research Design

To carry out this investigation, a system of e-mail surveys was chosen with the goal of compiling the opinion of auditors and the university community. This procedure was chosen because it is a comfortable research method for collecting opinions and allows us to reach a large number of elements of the population studied. In addition, it provides many other advantages, such as rapid reception of responses from those surveyed, the possibility of broadening the study’s geographical scope and a considerable reduction of research costs. Nonetheless, it also presents some disadvantages, such as difficulty in obtaining certain e-mail addresses, the fact that some people do not use e-mail, and the loss of some responses because the survey arrives along with a large number of spam messages.

In regard to the participating population, the choice of auditors was based on whether the regulated activity affected their professional work. Thus, they have a direct interest in the regulated matter, and they should also have a high knowledge of Auditing and Accounts.

On the other hand, lecturers were selected based on the fact that it is logical to think that they have a good knowledge of auditing; the regulated activity could influence their professional work as they must incorporate changes in rules into the classes that they teach and their opinion on said changes must be considered free of partisan bias.

For all of these reasons, these two groups are considered to be an excellent proxy for those involved in auditing functions, as they initially present disparate positions and both groups’ opinions are supported by their knowledge of the regulated area.

In this study, the usual steps were followed for this type of research: definition, design of the study, selection and definition of variables, design of the questionnaire, selection of the sample, validation and testing of the

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6 It is important to emphasize that each of the items in the questionnaire contained detailed information on what the legislation stipulates on each point, which served to clarify in case any of the survey subjects did not understand the details of the Auditing Law.
questionnaire (Ruiz et al., 1998) and, finally, results were obtained which allowed us to reach the conclusions of this paper. Next, the process carried out shall be briefly summarized.

3.1. Definition and Purpose of the Study

The paper attempts to verify whether changes made in the legislation will indeed contribute to a reduction of the existing controversy surrounding the execution of various services by auditors. If this is not the case, the authors hope that the study will serve to ease the conflict by proposing alternatives.

For this reason, it becomes necessary to analyze the changes produced by studying the opinion of the aforementioned groups, as users involved and committed to auditing activity. The objective of this investigation is to raise a debate on the modifications to auditing law with the purpose of reaching a consensus on such questions. In regard to those parts of the law which have undergone change, the aim of this study is to find empirical evidence of the level of acceptance shown by the individuals. In regard to those parts of the law which have not been modified, this paper aims to provide additional evidence related to matters not changed or treated in the reform but which individuals believe should have been taken into consideration.

The target population was composed of auditors belonging to the Registry of Spanish Auditors (REA) and lecturers belonging to the Spanish Accounting Lecturers Association (ASEPUC).

3.2. Selection and Definition of the Variables

At this point in this paper, the next step was the selection and definition of different items of interest that would allow us to obtain relevant information for pursuing the research’s objectives. Starting with each of the earlier concepts, a set of variables was constructed which would ultimately constitute the complete questionnaire. The variables analyzed correspond with different incompatibilities in Auditing Law which are described in the next to last paragraph of Epigraph 2.
Next, we show a summary template (Table 1) integrating the different variables analyzed and the modalities taken into consideration:

**Table 1. Studied variables and considered modalities**

<table>
<thead>
<tr>
<th>Nomenclature</th>
<th>Variables analyzed</th>
<th>Modalities considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>IncAS</td>
<td>Incompatibility related with “Assessment Services”</td>
<td>The same</td>
</tr>
<tr>
<td>IncIA</td>
<td>Incompatibility related with “Internal Auditing Services”</td>
<td>The same</td>
</tr>
<tr>
<td>IncRM</td>
<td>Incompatibility related with “Maintenance of Managerial Relationships”</td>
<td>The same</td>
</tr>
<tr>
<td>IncLS</td>
<td>Incompatibility related with “Legal Services”</td>
<td>The same</td>
</tr>
<tr>
<td>IncTM</td>
<td>Incompatibility related with “Top Manager or Key Personnel Recruiting”</td>
<td>The same</td>
</tr>
<tr>
<td>IncSP</td>
<td>Incompatibility related with “Signatory Partner of auditing report carrying out any type of non-auditing service”</td>
<td>N = No Prohibition S = Prohibition only signatory partner. A = Prohibition all members.</td>
</tr>
<tr>
<td>IncHF</td>
<td>Incompatibility related with “Payment of Fees for non-auditing services constituting an unduly high percentage of the firm’s total income.”</td>
<td>L = limitations on fees. N = no limitation on fees.</td>
</tr>
<tr>
<td>IncPC</td>
<td>Incompatibility related with “Period of computation for incompatibilities”</td>
<td>NP = no period. PL = period established by Law. S = stricter (3-7 years) RP = radical prohibition (+7 years)</td>
</tr>
<tr>
<td>IncOS</td>
<td>Incompatibility related with “Other services not prohibited in regulation”</td>
<td>Actuarial services Resolution of conflicts Managerial Function Broker-Dealer Services</td>
</tr>
</tbody>
</table>

3.3. *Design of the Questionnaire and Selection of the Sample*

The questionnaire used is of a mixed, structured type, using both open and closed questions. A codification phase facilitated the subsequent statistical treatment of data obtained through this survey.

On the other hand, the representative sample was composed of 1,610 members of REA who were sent a questionnaire by e-mail. The rate of response was around 12.3%.

In the case of the lecturers, the sample was composed of 900 individuals belonging to ASEPUC. The index of responses received was approximately 10.4%.

In both cases, the number of responses achieved was satisfactory in relation to the minimum standards established in the literature for this type of studies.
3.4. Validation and Test of the Questionnaire

For the validation and final test of the survey, a pretest was administered to a group of fifteen lecturers in the Department of Accounting and Financial Economics of the University of Seville. Likewise, with the goal of definitively validating the questionnaire, a pilot survey was carried out in the following groups: on one hand, students in a Master Degree Program in Bank Management, and on the other, auditing professionals, two from large firms and one from a medium local firm.

Finally, with the objective of not excessively extending the length of the paper, the text of the questionnaire employed has not been included.

3.5. Statistical Methodology

After carrying out a statistical analysis of the variables included in order to assure the absence of anomalies in the data, a principal components analysis was carried out with the goal of achieving a segmentation of individuals analyzed and determining the number and type of groups into which the individuals could be subdivided.

Once the segments of professionals were determined, groups were characterized depending on their behavior in the original variables. For this characterization, several hypothesis tests were carried out. They will be summarized:

I) Determination of the degree of agreement of each professional segment, for each of the incompatibilities studied, in relation with the level of prohibition in the regulation:

   Ho: Average level of prohibition of each professional segment = Level of prohibition established in the legislation.

   Hi: Otherwise.

   In accordance with this hypothesis, the study attempted to determine the position of each professional segment, for each of the incompatibilities studied, in terms of agreement or disagreement, regarding the level of prohibition established by the law.

II) Analysis of independence between the level of prohibition adopted for each of the incompatibilities studied and the professional segment to which the subject belongs:

   Ho: The professional group and the level of prohibition are independent.

   Hi: Otherwise.

   In this manner, it was then possible to contrast whether statistically significant relationships existed between the degree of prohibition for each of the incompatibilities studied, and each professional segment.

7 The questionnaire may be viewed online: http://www.sav.us.es/encuestas/rsa/cuestionario.htm.
4. Results

A multivariate study must be carried out in order to attempt to discover unobserved relationships between the variables. For this purpose, a Principal Component Analysis (PCA) is applied in order to construct latent variables to explain the joint behavior of the variables: IncD, IncAS, IncIA, IncRM, IncLS, IncTM, IncSP, IncPC y IncHF (Table 1).

It should be pointed out that this analysis was carried out excluding the variables IncPC and IncHF (Table 1), because the initial variables could be better represented by excluding these two variables than by including them.

The existing correlation between the different variables is then verified in order discover whether it is of interest to conduct this analysis. Barlett’s test of sphericity told us that the level of correlation between the variables was significant and thus that PCA could be carried out. Retaining the first two principal components, it is possible to retain 65.5% of the information provided by the original variables.

Taking all of the above into account, the following expressions have been obtained:

- Principal Component 1 (PC1):

  \[ \text{PC1} = 0.202 \times \text{IncD} + 0.213 \times \text{IncAS} + 0.203 \times \text{IncIA} + 0.200 \times \text{IncRM} + 0.203 \times \text{IncLS} + 0.194 \times \text{IncTM} + 0.183 \times \text{IncSP} \]

  The first component is interpreted as a joint level of prohibition of all the concepts analyzed; in other words, a new variable was obtained explaining the level of global prohibition for each individual of the set of variables analyzed.

- Principal component 2 (PC2):

  \[ \text{PC2} = -0.423 \times \text{IncD} - 0.446 \times \text{IncAS} + 0.219 \times \text{IncIA} + 0.393 \times \text{IncRM} + 0.353 \times \text{IncLS} + 0.324 \times \text{IncTM} - 0.419 \times \text{IncSP} \]

  The second component represents a contrast between the level of prohibition manifested in the variables IncIA, IncRM, IncLS and IncTM, on one hand, and concepts IncD, IncAS y IncSP, on the other.

Graph 1 then shows where the original variables are represented in the space of the first two principal components. As can be observed, there are two groups of variables: on one hand, variables IncD, IncAS and IncSP; and, on the other, variables IncIA, IncRM, IncLS and IncTM.

The first group of variables could be considered to represent additional services directly related to the financial information verified by the auditing (SDA); whereas the second group of variables would indicate services related indirectly to the financial information verified by the auditing (SIA).

Thus, the second principal component could be interpreted as a contrast between the importance granted to prohibitions on SDA, and the relevance granted to prohibitions on SIA.
Next, Graph 2 reflects the centroids of lecturers and auditors, with the objective of clarifying where the two groups analyzed are located in the space determined by the two principal components.

In accordance with Graph 2, auditors are located in the second quadrant and lecturers in the fourth, which provides us with the following evidence: on one hand, lecturers have a greater tendency to prohibit than auditors, and on the other, that auditors tend to prohibit more in variables IncIA, IncRM, IncLS and IncTM than in variables IncD, IncAS and IncSP. In the case of lecturers, the tendency is in the opposite direction; they tend to prohibit more in variables IncD, IncAS and IncSP than in variables IncIA, IncRM, IncLS and IncTM. Later, we will see that lecturers prohibit to the same degree in the two groups of variables.
The overlap in the scores of lecturers and auditors is shown graphically in a Box/Plot diagram (Graph 3):

- Component 1: in this case, it is observed that the scores for this component are higher in lecturers than in auditors. In addition, lecturers’ scores are asymmetric on the left; in other words, there are lecturers who clearly differ from the general behavior of the group in the sense that they assign a lower prohibition. In regard to auditors, there is no significant asymmetry.

- Component 2: in this case, the auditors’ score is higher than that of the lecturers. On the other hand, relevant asymmetries do not exist in either of the two professions in this case.

The next step is to corroborate through statistical tests (T test and the Mann-Whitney U test) the graphical observations made earlier on lecturers and auditors in the two principal components (Table 2). Specifically, the following hypotheses are analyzed

1) H0: Average level of prohibition in PC1 by lecturers = Average level of prohibition in PC1 by auditors.
   Hi: Otherwise.
2) H0: Average level of prohibition in PC2 by lecturers = Average level of prohibition in PC2 by auditors.
   Hi: Otherwise.
3) H0: Average rank of level of prohibition in PC1 by lecturers = Average rank of level of prohibition in PC1 by auditors.
   Hi: Otherwise.
4) H0: Average rank of level of prohibition in PC2 by lecturers = Average rank of level of prohibition in PC2 by auditors.
   Hi: Otherwise.
Thus, in accordance with the two earlier tests (Table 2), it is confirmed, on one hand, that lecturers have a global level of prohibition (PC1) higher than that of auditors and, on the other, that lecturers have a lower score than auditors in PC2, as was observed previously in graphic form.

Moreover, it was found that among auditors two subgroups could be defined according to the function of the type of auditor and his or her experience: on one hand, partners with considerable experience (5 or more than 5 years) and individual auditors with even more experience (10 years or more), who have been denominated consolidated auditors (CA); and, on the other hand, partners who do not have considerable experience (less than 5 years) and individual auditors who do not have much experience (less than 10 years), who have been denominated non-consolidated auditors (NCA).

Graph 4 shows the centroids of the three groups obtained.

Graph 4. Centroids of three groups obtained in the space of the first two Principal Components.
Table 3 shows the average score or the three groups of professional identified in the space of Principal Components. The following contrasts were carried out:

1) \( H_0: \) Average level of prohibition in PC1 by lecturers = Average level of prohibition in PC1 by CA = Average level of prohibition in PC1 by NCA.

\( H_1: \) Otherwise.

2) \( H_0: \) Average level of prohibition in PC2 by lecturers = Average level of prohibition in PC2 by CA = Average level of prohibition in PC2 by NCA.

\( H_1: \) Otherwise.

In this manner, observing the data from Tables 3 and 4, we obtain the following considerations, of relevance to this research:

- Principal component 1: As mentioned in earlier sections, lecturers show a high score in general prohibition for this component. However, auditors (both CA and NCA) show low scores in the same area.

- Principal component 2: In this case, it can be observed that CA show a high level of prohibition in SIA as compared to SDA. However, NCA are more similar to lecturers, in the sense that both groups prohibit more or less on the same level for both SDA and SIA. This aspect will be explained next.

We shall consider one variable, SIAav, which is the average of the variables including SIA (RE, A, AI and AD); along with another variable, SDAav, which is the average of the variables including SDA (SF, D and V).

Next, the study analyzes the behavior, in these new variables, of the three groups of professionals. Specifically, three contrasts, one for each professional segment, will be carried out:

\( H_0: \) Average of SIAav = Average of SDAav.

\( H_1: \) Otherwise.

To this end, a T test will be carried out for related samples, as is indicated in Table 5.

Thus, the following conclusions are obtained:

a) \( H_0: \) Average of SIAav = Average of SDAav in lecturers is accepted. In other words, lecturers prohibit equally in SIA and in SDA.

b) \( H_0: \) Average of SIAav = Average of SDAav in CA is rejected, and considering the sample values, the average of SIA is greater than the average of SDA. In other words, CA prohibit more in SIA than in SDA.

c) \( H_0: \) Average SIAav = Average of SDAav in NCA is accepted. NCA prohibit equally in SIA and SDA.
Table 3. Average score of the three professional groups identified in the space of Principal Components

<table>
<thead>
<tr>
<th>PC1</th>
<th>PC2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>p value (b)</td>
<td>Average</td>
<td>p value (b)</td>
</tr>
<tr>
<td>1</td>
<td>0.932</td>
<td>0.000</td>
<td>-0.411</td>
</tr>
<tr>
<td>2</td>
<td>-0.480</td>
<td>0.346</td>
<td>0.031</td>
</tr>
<tr>
<td>3</td>
<td>-0.300</td>
<td>-0.284</td>
<td></td>
</tr>
</tbody>
</table>

(a) 1= Lecturers  (b) Significant Value for p<0.05
2= Consolidated Auditors
3= Non Consolidated Auditors.

Table 4. Homogeneous Subgroups in the Principal Components

<table>
<thead>
<tr>
<th>PC1</th>
<th>PC2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subgroup 1</td>
<td>Subgroup 2</td>
<td>p value (a)</td>
<td>Subgroup 1</td>
</tr>
<tr>
<td>CA</td>
<td>NCA</td>
<td>0.856</td>
<td>CA</td>
</tr>
<tr>
<td>Lecturers</td>
<td>NCA Lecturers</td>
<td>0.736</td>
<td></td>
</tr>
</tbody>
</table>

(a) Significant Value for p<0.05

Table 5. T test for dependent samples

<table>
<thead>
<tr>
<th></th>
<th>SDAav</th>
<th>SIAav</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Average</td>
</tr>
<tr>
<td>Lecturers</td>
<td>80</td>
<td>0.7398</td>
</tr>
<tr>
<td>CA</td>
<td>147</td>
<td>0.6246</td>
</tr>
<tr>
<td>NCA</td>
<td>39</td>
<td>0.5721</td>
</tr>
</tbody>
</table>

(a) Significant Value for p<0.05
Thus, it can be established that, although in general the opinion of lecturers is quite divergent, when lecturers are compared to a group of auditors with little experience within their status, the criteria of both professions on the importance of prohibiting certain incompatibilities with auditing is very similar.

Next, these professional segments will be characterized using the original variables. In other words, we analyze how each professional segment behaves in different original variables. For this purpose, hypothesis contrasts reviewed in the previous section will be applied:

Firstly, the level of prohibition of each group shall be compared with the legislation, which was established in 0.5. In other words, the contrast which will be carried out for each variable and for each professional segment is the following:

\[
\text{Ho: Average level of prohibition of each professional segment (for a given variable) = Level of prohibition established in the legislation (for that variable).}
\]

\[
\text{Hi: Otherwise.}
\]

<table>
<thead>
<tr>
<th>Table 6. Behavior of the groups in regard to the initial variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Incompatibility</strong></td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>Average</strong></td>
</tr>
<tr>
<td>IncD</td>
</tr>
<tr>
<td>IncAS</td>
</tr>
<tr>
<td>IncIA</td>
</tr>
<tr>
<td>IncRM</td>
</tr>
<tr>
<td>IncLS</td>
</tr>
<tr>
<td>IncTM</td>
</tr>
<tr>
<td>IncSP</td>
</tr>
</tbody>
</table>

(a) Significant Value for p<0.05

The following conclusions may be drawn from Table 6. As the p-value for the seven contrasts of the lecturers is less than 0.05, it can be assumed that, for lecturers, all of the null hypotheses are rejected; thus, in comparison with the sample value, this group prohibits more than the legislation in all variables.

In the case of CA, as well as in the case just mentioned, all p-values are less than 0.05, meaning that for these groups all null hypotheses are rejected, and, taking into consideration the sample values of the variables, it can be assumed that AC prohibit more than the legislation in SIA and, in contrast, prohibit less than the legislation in SDA.

In the case of NCA, all p-values are greater than, 0.05, meaning that for this group all null hypotheses are accepted, and, thus, NCA prohibit on the same level as the legislation in all variables.

This gives us a clear characterization, using the original variables, of the three professional segments found through the analysis of principal components.
In this sense, delving more deeply into the aforementioned, it can be observed that the greatest differences among the three groups of professionals can be observed in SDA. Thus, for each variable belonging to SDA, hypothesis contrasts will be carried out measuring independence between the professional group and the level of prohibition in this variable:

Ho: The professional group and the level of prohibition (for the given variable in SDA) are independent.

H1: Otherwise.

Table 7. Adjusted Standardized Residuals (SDA).

<table>
<thead>
<tr>
<th>Level of Prohibition</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturers</td>
<td>IncD</td>
<td>-2.6</td>
<td>-2.2</td>
<td>-0.9</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>IncAS</td>
<td>-4.1</td>
<td>-2.2</td>
<td>-0.6</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>IncSP</td>
<td>-8</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>CA</td>
<td>IncD</td>
<td>3.2</td>
<td>1.2</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>IncAS</td>
<td>4.5</td>
<td>0.6</td>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>IncSP</td>
<td>7</td>
<td>-</td>
<td>0.1</td>
<td>-</td>
</tr>
<tr>
<td>NCA</td>
<td>IncD</td>
<td>-1.1</td>
<td>1.2</td>
<td>0.9</td>
<td>-0.7</td>
</tr>
<tr>
<td></td>
<td>IncAS</td>
<td>-0.9</td>
<td>2.1</td>
<td>0.8</td>
<td>-0.9</td>
</tr>
<tr>
<td></td>
<td>IncSP</td>
<td>0.5</td>
<td>-</td>
<td>-1.4</td>
<td>-</td>
</tr>
</tbody>
</table>

In effect, given the analysis of the residuals of the corresponding boxes, and considering significant those whose value exceeds 2 in absolute value, it can be assumed that in these three variables belonging to SDA, the following are true:

- Lecturers tend to prefer very high level of prohibition (level 5) and clearly avoid a very low level of prohibition (level 1).
- CA clearly avoid a very high level of prohibition (level 5) and tend toward to prefer a very low level of prohibition (level 1).
- NCA do not manifest a preference, nor do they avoid any particular level.
5. Conclusions

The fundamental pillar sustaining this research is a firm conviction that the auditing profession is necessary and useful to the economy of any country, given that it can provide an important added value to economic and financial information provided by firms.

However, in order for this to actually occur, the activity carried out by auditing firms must possess adequate professional quality. In this manner, the work of auditors must be executed, on one hand, with adequate competency and experience, and, on the other, with complete independence.

In this context, this investigation focuses on the analysis of the quality of independence of the auditor. Specifically, a matter is analyzed which has generated controversy in the auditing profession during recent years: the regulation of joint offering of auditing and other multiple services.

The present research shows the positions maintained by both auditors and lecturers regarding the legislation governing this type of activities. In this manner, three groups of individuals have been obtained: lecturers, non-consolidated auditors (NCA), and consolidated auditors (CA).

The research shows a great difference in criteria between the two professions. The joint analysis of the variable of experience and the type of professor/auditor indicates that CA do indeed diverge significantly from lecturers. However, NCA have a clearly intermediate opinion on prohibitions, between lecturers and AC.

Specifically, the characterization of these three groups using the original variables representing different services prohibited offers the following evidence:

- Lecturers tend to prohibit more than the legislation on all variables.
- CA prohibit more than the legislation in SIA; on the other hand, they prohibit less than the existing regulation on SDA.
- NCA prohibit on the same level as the law regarding both SDA and SIA.

Schematically, this could be expressed in the following table:

<table>
<thead>
<tr>
<th>Level of prohibition in comparison with the legislation</th>
<th>SDA</th>
<th>SIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less</td>
<td>CA</td>
<td>NCA</td>
</tr>
<tr>
<td>Equal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater</td>
<td>Lecturers</td>
<td>Lecturers</td>
</tr>
</tbody>
</table>

This is consistent with the professional reality of each group. Lecturers are in an impartial position that allows them to see the need to reinforce auditors’ independence through regulation, a fact which is reflected in their high level of prohibition, actually more elevated than the current legislation. On the other hand, CA, probably influenced by their line of work, consider that a high level of prohibition in regulation is detrimental to their professional activity.
Lastly, NCA are in an intermediate position between the two other groups, demonstrating agreement with the level of prohibition stipulated in the regulation. Given that they have not yet consolidated their position in the auditing profession, they share certain features of neutrality with lecturers and they do not yet show a pessimistic view of the influence of the regulations on their professional activity.

To finish, it should be noted that the results obtained in this investigation, convergent in great measure with statements made on the international level regarding stricter incompatibilities with auditing activity (for example, the Sarbanes-Oxley Law in the United States), provide important conclusions that could be taken into account for future legislation in auditing markets.

Lastly, a series of limitations affecting this research should be noted:

- The use of a questionnaire as a method for obtaining empirical evidence has a series of inherent limitations. Notable among these limitations are the participation of people who give random responses, problems in interpretation, and difficulties in responding to questions related to specific topics, etc.

- The conclusions obtained have full validity in reference to the two groups where the sample data was collected with the survey. Thus, the criteria of other groups such as firms, financial analysts, etc., cannot necessarily be extrapolated. For this reason, the research could be enriched by incorporating the opinion of these groups to give the results more perspective.

- The opinion shown in the questionnaire can contain a large burden of subjectivity, especially in reference to one of the groups surveyed: auditing professionals.
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