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# Fair Value Complexity and the Audit Risk

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## Abstract

*This paper checks if the auditors in an emergent context, where the fair value (FV) concept, its implementation and audit are relatively new, are aware of the estimation risk induced by the valuation process (the FV provider and FV disclosure), depending on the quality of internal control (IC). An experiment was applied to a group of auditors and master students, using two elements pertaining to FV reporting: "Valuation attributes and sensitivity of data", respectively "Methods, assumptions and model". This experiment revealed that: (1) FV audit risk is lower when the estimation is made by an external, instead of an internal valuator; (2) the master's students, compared to more experienced professional auditors, manifest an overconfidence in the external Valuation Report in terms of valuation attributes, data availability and solutions adopted to test the sensitivity of value; (3) the audit risk is lower when the valuator is external and hence the auditors verify in detail the information provided in the Valuation Report as inputs and methods applied; (4) when IC is strong as quality, the verification of methods, assumptions and model induces for auditors a higher risk than the other FV disclosed component, valuation attributes and sensitivity of data, in the case of management estimation.*

***Key words:*** *fair value measurement (valuation); audit risk; valuation methodology; valuation attributes*

***JEL Classification****: M42*

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## Introduction

Our research analyses the magnitude of audit risk when it comes to fair value (FV) estimate in relation to valuation process issues, supposed to be assessed by the auditors. Auditors apply specific tests on FV provided by companies' managers for financial reporting purpose. Aside the evaluation of management assumptions, these tests also must focus on the data/inputs used and valuation methods applied. Our main research question is if the appeal to an external valuator induces a lesser audit risk of FV estimation compared to the case when the assessment was performed by an internal valuator. Both external and internal valuators are the experts used by management to provide FV estimation. Another research question is if the valuation methodology (Methods, assumptions and model) disclosed in the valuation report can induce a higher audit risk and additional effort for the auditor compared to the other component of disclosure, Valuation attributes and sensitivity of data.

The subject raised and still raises interest even after the International Auditing and Assurance Standards Board (IAASB) publishing its new version of ISA 540 *Auditing accounting estimates and related disclosures* in 2019, with December as the initial date of application. Because, earlier, the professional body was accused it did not provide enough guidance in order to minimize the audit risk related to the uncertainty of estimates, the new ISA 540 (2019) brings a major revision of the earlier version, aiming to enhance requirements for risk assessment procedures and the auditors' work effort in responding to the assessed risks of material misstatement (IAASB, 2017).

The researchers are also aware of the specific nature of estimates. They argue that it is important to investigate the impact on the audit process of the risks related to FV estimate in relation with FV influential factors (*e.g.,* Christensen et al., 2012; Bratten et al., 2013). Cannon & Bedard (2017) and Glover et al. (2017) attest auditors' tendency to significantly rely on external valuation experts' work, hence drifting the need for further guidance for auditors in their work with valuators. Therefore, the factor we analyse is FV provider extended to the whole valuation process. Other factors which we treat tangentially are FV complexity and management bias, presumed to be significant sources of risk for the audit profession (Christensen et al., 2012; Bratten et al., 2013; Griffin, 2014; Brink et al., 2016). Because there are mixed results in the literature regarding the contribution of the quality of internal control (IC) on these issues (Brown-Liburd et al, 2014; Joe et al., 2017), we also integrated it in our model.

The investigation is conducted by an experiment applied to auditors as well to master level students. In this way we can compare auditors and master students' perceptions and also observe the specialized knowledge provided to future professionals. Other contributions of our research relate to enriching literature with new insides from an emergent context where FV as concept and implementation are relatively new, and respectively to audit and valuation practices and the linkage between the two professions.

The following sections present an analysis of literature and applicable audit standards, explain the proposed analysis framework, and provide and comment the obtained empirical results.

## Influential factors of FV estimation risk

If we refer to objective causes, FV is considered complex and volatile, due to the sophisticated nature of some assets that are valued, namely the input data used, collected from the market and constantly evolving. These characteristics increase the risk of estimation and hence the risk of auditing FV. In addition, some subjective causes that amplify these risks must be considered. Specific literature identified such influential factors, *i.e.,* estimation uncertainty, managerial bias, professional scepticism, fair value estimate provider, standards guidance, and auditors understanding of the valuation process (*e.g.,* Bratten et al., 2013 or Doliya & Singh, 2016). According to our research questions, we are interested in FV provider, FV complexity, and management bias in estimating fair value.

In relation to the *FV complexity*, Bratten et al. (2013) assert about estimations that they represent an unstructured task with complex nature, uncertain realisation, which does not have an objective verifiability. Also, there are some elements which are particularly complex due their unicity which leads to the lack of market comparable. In the audit process, auditors assess the reasonability of the management's valuation model and assumptions. ISA 540 (2019) mentions that

complexity arises when there are multiple valuation attributes and multiple or non-linear relationships between them. The revised standard further states that complexity also exists in relation to the method, when multiple sources of data, assumptions or valuation concepts or techniques need to be used in determining the outputs of the estimation process.

The concept of *management (managerial) bias* is related to management assumptions which are subjective in nature, as valuation models and inputs selected (Christensen et al., 2012; Bratten et al., 2013; Griffin, 2014; Brink et al., 2016). The management of audited companies is involved in estimation when using an internal expert/valuator. The subjectivism inherent to the valuation process *per se* may stir, in each of its steps, value manipulations. In order to adjust management bias effects, Martin et al. (2006) consider that the auditor must have the knowledge on how managers can induce, voluntary or not, errors in FV estimation. The same authors agree on the difficulty of such a task due to the lack of complete knowledge about how the information are combined to form management judgement. Management bias is difficult to detect also due to the FV complexity task (Bratten et al., 2013) and estimation uncertainty (Griffin, 2014).

## New requirements of the international auditing standards

IAASB has shown significant interest on the use of 'external information sources' which is equivalent to the use of the work of specialists, including valuators. This was a specific requirement, a complement to the other ones concerning the audit of accounting estimates, aiming to amend the extant auditing standard ISA 540 (IAASB, 2017). The intention was to strengthen the requirements for the auditor to evaluate as well the work of management's and auditor's expert (in the case of the auditor's expert, it is about the employed and auditor-engaged specialist), including establishing a risk-based approach in such cases. We are interested in the first case, the management's expert.

The standards' general message is that management's failure to use specialized skills and knowledge, including engaging an expert, increases control risks. The extant ISA 540 required, between the four responses to the risk of material misstatement relating to an accounting estimate, to test how management made the accounting estimate. Regulators and other key stakeholders in the audit process, especially financial institutions, asked for a revision of ISA 540; therefore, IAASB developed the updated version (IAASB, 2019). In this document, IAASB adopted an approach that includes, among others, and when the inherent risk is not low, further audit procedures to obtain audit evidence about certain matters in applicable circumstances when one or more factors represent the reason for the assessment of the risk of material misstatement. Particularly, control over models is viewed as critical in auditing accounting estimates. If we link the prescriptions of the revised ISA 540 on how management makes accounting estimates (classified in the standard as one of the risk assessment activity) to FV measurement, we basically reach the equivalent of the whole valuation process that has to be controlled. Detailing, para. 10 (e) of ISA 540 (2019) includes as requirements the verification of: the use of methods, selection of the assumptions, data used (including the sources), the specialized skills and knowledge applied by the management (including the use of an expert), the risk of management bias, the estimation uncertainty addressed by the management and the need for a change in estimates addressed by the management. We subsumed all these audit specific steps into our research framework.

The topicality of our research objective is also suggested by IAASB's other planned actions to revise its standards. Hence, as a consequence of reviewing ISA 540, IAASB decided to propose changes to ISA 500 for third-party pricing and non-pricing sources, under a new name, external information sources. There are pricing services for financial instruments, governmental organizations, central banks or stock exchanges data. The exposed reason is the increasing use of accounting estimates of large volume data, derived from complex information technology systems or provided by sources traditionally included in the financial reporting process (IAASB, 2017). For this reason, the professional body is preoccupied to develop recommendations for auditors in this vein. At the same time, although it does not treat this case in the revised ISA 540, IAASB is aware of the need to revise in the future ISA 500, including for the distinction between external information sources and management's expert. The extant ISA 500 disentangle these two notions, but not in a clear way. According to this standard, the management's expert is an individual or organisation that possess specific expertise which is applied in making an estimate for the financial

statements. If the individual or organisation provides prices (the new ISA 540 also includes here the non-pricing sources) data regarding private transactions, not otherwise available to the entity, which the entity uses in its own estimation methods, such information do not lead to the work of management's expert (IAASB, 2018 – ISA 500).

## Research framework

In order to cover the valuation process issues, in the framework we propose, the dependent variable which we found to be appropriate is *A higher risk of misstatement of the estimation* and the independent variables are 'FV provider' and 'FV disclosure'. ISA 540 and the literature suggested the relevance of the delimitation of valuator type, external expert versus management expert. Also, our choice for the variable 'FV disclosure' is inspired by the quantifiable elements suggested to auditors in ISA 540, when verifying an accounting estimate for a financial statement item, *i.e.,* the relevant quantitative and qualitative valuation attributes and the sources of data that would provide appropriate measures of those attributes. Therefore, we designed two components of 'FV disclosure', *i.e., Focus on inputs characteristics, their source, risk of their volatility,* and *Focus on valuation methods, assumptions and models.* The dependent variable was quantified by the participants on a 7-point Likert scale, anchored by 1 (very low likelihood of a higher risk of misstatement) and 7 (very high likelihood of a higher risk of misstatement).

The effects of the association between the dependent and independent variables form a matrix of 2x2 form, derived in two circumstances, depending on the *quality of the internal control* (IC). IC assessment and reliance is a key component of the audit process (Earley at al., 2008). According to the literature, the results of which we aim to test, we classify the quality (efficacy or compliance) of IC, in two categories: *week*, when some weaknesses were observed, under the form of deficiency, significant deficiency, or material weakness; and *strong* IC, otherwise.

As case materials, for the external valuation provider, *i.e.,* the valuator that assists the management in FV measurement, we used a standard Valuation Report (according to valuation standards applicable in Romania, SEV prescribed by the National Association of Authorized Romanian Valuers - ANEVAR). The subject of the Valuation Document is real estate (a building), which is valued for financial reporting purposes, by using the income and cost approach. For the internal valuation provider, namely management's own estimation, based on its employees/experts' opinions, we created a 'Management Valuation Worksheet' which was further used. For the item FV disclosure, we provided, apart the valuation document, a list of auditor steps to verify FV estimate disclosure, as inputs, methods and assumptions for the measurement.

In our inquiry, we deal with the case of the auditee's valuator, both in the case of a valuation generated internally by the auditee (auditee's management estimation), and of an estimation provided by an external consultant of the auditee (auditee's management's expert). This is because we believe that the work of the valuator that assists the auditor – the auditor's expert according to ISA 620 – is integrated in the audit process' global effort. Furthermore, this case does not lead to a real delimitation between the interested parties in the audit of fair value. Besides that, the ways to act and the efforts of the auditor differ in magnitude and nature when he verifies the valuation provided by the auditee versus when he evaluates the adequacy of his own expert's work. We chose to focus on the most demanding task for the auditor, which has the potential to induce the higher risks for the audit of estimates. In short, by FV estimate provider, we understand both the management who performs the valuation through its employees, and an external specialist including the pricing services which provide valuation expertise and data.

The experiment framework and the case materials – that result in 8 iterations – are presented in **Table no. 1**.

**Table no. 1. Case materials**

| *FV disclosure components and documents received by the participants* | *FV provider* | |
|---|---|---|
| | External valuation expert (Third party) | Internal valuation expert (Management estimation) |
| | *Conditioned by the type of IC: week or strong (a and b)* | |
| *Component 1 of FV disclosure named **Valuation attributes and sensitivity of data** (VASD).*<br>Valuation Document* and a list of issues to control**:<br>• Relevant quantitative and qualitative valuation attributes;<br>• Extent to which observable data is available to measure relevant valuation attributes;<br>• Method to develop information about the sensitivity of the estimate to possible variations in the initial data. | Case 1/ a, b | Case 2/ a, b |
| *Component 2 of FV disclosure named **Methods, assumption and model** (MAM).*<br>Valuation Document* and the following list of issues to control**:<br>• Selection of methods;<br>• Selection of assumptions;<br>• Models' content. | Case 3/ a, b | Case 4/ a, b |

* the Valuation Document is a Valuation Report if the valuation is performed by an external expert, respectively a Management Valuation Worksheet if the valuation is performed by an internal expert (management estimation); ** inspired from ISA 540 (540), section Application and others explanatory material: A36-49; we consider it as hints for auditors to control these valuation stages.

*Source*: Authors' projection

## Substantiation of research hypotheses

Divergent opinions can be observed on the appeal to an external valuation expert and its effects on the financial reporting quality and audit process. Besides preponderant favourable opinions such as enhanced reliability, objectivity and, in general, quality of the financial information, and also inclination to verify in detail the values provided by valuation reports - so an increasing quality of audit (Muller and Riedl, 2002; King, 2006; Deloitte, 2010; Salzsieder, 2016; IAASB, 2017), some reserved were also expressed about the benefits of using such external services. The questions of our research derive from the study of the sensitive aspects identified by the regulatory bodies of the profession and in the literature.

Particularly, King (2006) asserts more objectivity in the case of use of an external versus internal valuator. Also, FV estimation is viewed as less risky if it is generated by an external source, according to Brink et al. (2016). Therefore, our first empirical hypothesis is:

*H1: Overall, the risk of estimating FV is lower when the estimation is made by an external evaluator versus management.*

Regulators, such as the Public Company Accounting Oversight Board - PCAOB (2011) and SEC (2011), are concerned about the auditors' inclination to focus exaggeratedly on valuators reports, neglecting their own verification steps or audit procedures. Joe et al. (2017) reckon other weaknesses if the data disclosed in the valuation report are significant in quantity, in the case of a high risk of the client's IC. In this case, the auditor is inclined not to proceed to supplementary tests, for example checking the subjective inputs, but rather focus on other details and objective inputs. Finally, the nature and volume of the tests auditors will apply to verify FV are influenced by the valuation report content, in the case of a week IC of their client, conducting to an over reliance on the valuation report. Martin et al. (2006) reviewed a number of studies that affirmed that a person confidence increases with the amount of information they use. We believe that this inclination to rely on consultants' reports is justified by the auditors' consideration of a lower risk of estimating FV if they have a valuation report of an external consultant available (report supposed to contain a higher volume and quality of information compared to management's valuation document) and when the IC is weaker. Hence, our next empirical hypothesis, derived from H1 (H1a) is:

*H1a: When IC is week as quality, auditors manifest an overconfidence in the external Valuation Document (Valuation Report) in terms of valuation attributes, data availability and solutions adopted to test the sensitivity of value (the first variable of FV disclosure, VASD).*

Salzsieder (2016) argues that if the recourse to valuators is known, auditors manifest a tendency to verify in detail the values provided by the Valuation Reports. In the same vein, Martin et al. (2006) evoke the tendency of auditors toward a confirmation bias (search for information that supports, and not refutes, a previously belief or preference, *i.e.* management assumptions). To infirm the confirmation bias, an auditor is supposed to gather supporting data to arrive at FV inputs and distinguish between internal and external sources and ways of processing the inputs for the valuation models. Therefore, our next empirical hypothesis, also derived from H1 (H1b) is:

*H1b: Overall, the audit risk is lower when the valuator is extern and hence the auditor verifies in detail the information provided in the Valuation Report as inputs and methods applied (the second variable of FV disclosure, MAM).*

Besides the first empirical hypothesis, we developed a second one, linked to the components of the Valuation Document and to auditors' expertise in properties valuation methodology. Bratten et al. (2013) think that the lack of valuation knowledge of auditors, explicable by the complexity of FV, is one of the elements affecting the audit process performance and the ability of auditors to find and incorporate in their judgement management bias in FV estimation. IAASB, in its updated ISA 540, highlights the need for specialized skills or knowledge earlier in the auditing process, in relation to either the understanding or with the identification and evaluation of the risks of material misstatement (IAASB, 2017). Concerning IC over FV measurement, Martin et al. (2006) reckon that controls related to FV estimate require considerable audit work, consistent (each year) to understand and evaluate, and that the specific information and control processes needed to support FV estimate is very specialized. Therefore, we believe that, if internal control is strong as quality (even the internal controls related specifically to FV estimate), the auditor can focus on the Valuation Report and its components. We want to see which component would require more audit effort and our hypothesis is the following:

*H2: When IC is strong as quality, the verification of Methods, assumptions and model (MAM) induces a higher risk than the other FV disclose component, Valuation attributes and sensitivity of data (VASD).*

For all the research hypotheses, we vary the type of IC quality, respectively the respondents. For the IC quality, we look to other studies results linked to a week IC which were mentioned previously. For the respondents, we intend to observe similarities and dissimilarities between the perceptions of practicing auditors and students. Besides, we test whether the involvement of students as subjects in audit studies is really relevant.

## Study participants

The case materials were checked with two experimented auditors and, after some clarifications, we ruled the experiment with two groups of participants. The first group was formed out of 160 students enrolled in a relevant university in Romania, master's degree, first year, three specialisations, *i.e.* on audit, accounting and property valuation. The students had completed at the bachelors and master's level two courses in the field of auditing and two other courses in the field of valuation of assets and business, attesting their competencies related to the topic under investigation. The second group of participants was formed out of 76 experimented auditors registered under the Chamber of Financial Auditors in Romania (CAFR). The experimental materials have been completed through direct meetings in the fall of 2019. In the last part of the meeting, we asked the participants - auditors to fill in a short demographic survey in order to observe their understanding of the valuation process. The descriptive statistics revealed that the audit experience is higher than 10 years for 43% of the participants; that their experience in FV auditing as number of cases / reports is lesser than 15 for the whole activity; that the frequency of training courses on FV (often, but rather occasionally) denote a percentage of 63%, respectively, that they have used the services of a valuator (internal, of the audit firm, or external) frequently and occasionally, preponderantly (66%).

## Experiment results

As statistical tests we used, besides descriptive statistics that we mentioned above, univariate

analysis and respectively, mean values and simple effects test. The results of the univariate analysis with the dependent variable are presented in **Table no. 2**.

**Table no. 2. Univariate analysis results with 'A higher risk of misstatement of FV estimation' as dependent variable (ANOVA)**

| **Panel 1 - auditors** | | | | |
|---|---|---|---|---|
| ***Independent variables*** | *Sum of squares* | *df* | *F* | *p-value* |
| **FV disclosure** | 0.071 | 1 | 0.038 | 0.847 |
| **FV provider** | 4.051 | 1 | 2.185 | 0.150 |
| **IC** | 28.135 | 1 | 15.176 | 0.001*** |
| **FV disclosure x FV provider** | 6.475 | 1 | 3.492 | 0.071* |
| **FV disclosure x IC** | 2.269 | 1 | 1.224 | 0.277 |
| **FV provider x IC** | 1.635 | 1 | 0.882 | 0.355 |
| **FV provider x FV disclosure x IC** | 6.346 | 1 | 3.423 | 0.074* |
| ($R^2$=0.337; $R^2$adj=0.176) | | | | |
| **Panel 2 - students** | | | | |
| ***Independent variables*** | *Sum of squares* | *df* | *F* | *p-value* |
| **FV disclosure** | 4.050 | 1 | 1.848 | 0.178 |
| **FV provider** | 7.200 | 1 | 3.285 | 0.074* |
| **IC** | 22.050 | 1 | 10.061 | 0.002** |
| **FV disclosure x FV provider** | 0.200 | 1 | 0.091 | 0.763 |
| **FV disclosure x IC** | 0.450 | 1 | 0.205 | 0.652 |
| **FV provider x IC** | 0.800 | 1 | 0.365 | 0.548 |
| **FV provider x FV disclosure x IC** | 5.000 | 1 | 2.281 | 0.135 |
| ($R^2$=0.201; $R^2$adj=0.124) | | | | |

***Significant at 1%, **Significant at 5%, *Significant at 10%.

Source: Authors' projection

Univariate analysis indicates the significance of the quality of IC both for *auditors* and for *students* (*p-value*=0.001, and 0.002 respectively) when it comes to assess the risk of FV estimation. Apparently, the choices to reporting by the valuation expert of valuation results in the Valuation Document (FV disclosure) and also the type of valuator (FV provider) do not have significant impact on *auditors* if these variables act separately. But FV disclosure ways are important for auditors when linked to FV provider (internal or external) (*p-value*=0.071), and also when the quality of IC is added (*p-value*=0.074). Instead, the *students* differentiate FV provider independently from association with other variables (*p-value*=0.074). Also, students do not react significantly to the FV disclosure elements, which are related to the audit process specific to the audit practice.

The simple effects test and mean values allocated to participants' perceptions provide results for auditors, as well for students and verify our research hypotheses.

For the auditors, H1 is confirmed for 3 from 4 cases (**Table no. 3**, Panels 1a and 1b) if we look at the means. The exception is VASD, if IC is strong. This indicates that auditors rely on management assumptions, as well on the reliability of input data used in the estimation provided by this one. H1 is also confirmed for students, as means observed in Panels 2a and 2b: 3 from 4 cases, and equal perceptions for the 4th.

Related to H1a, auditors seem to manifest confidence in an external valuator, but not confirmed by statistical evidence (only by means), for none of the components of FV disclosure of interest, when the IC is week. Hence, for the auditors, H1a is invalidated. Instead H1a is validated for the students (*p-value*=0.066).

H1b is validated for auditors, in the case of one of two components of FV disclosure, namely MAM (*p-value*=0.020) and of a strong IC. The same results, based on means, could be observed for students, but without statistical significance. Therefore, P1b is not validated in the case of students.

H2 is validated in the case of auditors for FV estimation provided by management

(*p-value*=0.050). For students, H2 is confirmed only by mean values, without statistical significance, and also for the case of management's estimation.

**Table no. 3. Means and simple effects for 'A higher risk of misstatement of FV estimation' as dependent variable**

| | | | |
|---|---|---|---|
| **Panel 1a – auditors - when IC is week** | | | |
| | FV provider | | |
| FV disclosure | Use of a valuation external expert | Management estimation | Test of simple effects |
| Valuation attributes and sensitivity of data | 5.17[a] | 5.40 | F= 0.096 |
| | (0.477)[b] | (0.510) | p= 0.761 |
| | n=6 | n=5 | |
| Methods, assumptions and model | 4.75[a] | 5.00 | F= 0.090 |
| | (0.250)[b] | (0.775) | p= 0.768 |
| | n=4 | n=5 | |
| Test of simple effects | F= 0.269 | F= 0.258 | |
| | p= 0.611 | p= 0.618 | |
| **Panel 1b – auditors - when IC is strong** | | | |
| | FV provider | | |
| FV disclosure | Use of a valuation external expert | Management estimation | Test of simple effects |
| Valuation attributes and sensitivity of data | 3.33[a] | 2.75 | F= 0.371 |
| | (0.615)[b] | (0.750) | p= 0.552 |
| | n=6 | n=4 | |
| Methods, assumptions and model | 2.25[a] | 5.00 | F= 6.868 |
| | (0.250)[b] | (1.000) | p= 0.020** |
| | n=4 | n=4 | |
| Test of simple effects | F= 1.279 | F= 4.597 | |
| | p= 0.277 | p= 0.050** | |
| **Panel 2a – students - when IC is week** | | | |
| | FV provider | | |
| FV disclosure | Use of a valuation external expert | Management estimation | Test of simple effects |
| Valuation attributes and sensitivity of data | 3.10[a] | 4.50 | F= 3.600 |
| | (0.623)[b] | (0.477) | p= 0.066* |
| | n=10 | n=10 | |
| Methods, assumptions and model | 4.30[a] | 4.50 | F= 0.073 |
| | (0.517)[b] | (0.453) | p= 0.788 |
| | n=10 | n=10 | |
| Test of simple effects | F= 2.645 | F= 0.000 | |
| | p= 0.113 | p= 1.000 | |
| **Panel 2b – students - when IC is strong** | | | |
| | FV provider | | |
| FV disclosure | Use of a valuation external expert | Management estimation | Test of simple effects |
| Valuation attributes and sensitivity of data | 2.90[a] | 2.90 | F= 0.000 |
| | (0.233)[b] | (0.407) | p= 1.000 |
| | n=10 | n=10 | |
| Methods, assumptions and model | 2.80[a] | 3.60 | F= 1.926 |
| | (0.442)[b] | (0.499) | p= 0.174 |
| | n=10 | n=10 | |
| Test of simple effects | F= 0.030 | F= 1.475 | |
| | p= 0.863 | p= 0.232 | |

[a] mean; [b] standard error

***Significant at 1%, **Significant at 5%, *Significant at 10%.

*Source*: Authors' projection

## Conclusion

Our research documents the perception of the professionals and master's students in the field of audit and property valuation on the audit risk when it comes to FV estimation.

Firstly, our results argue, both in the case of auditors and students, that they see a lesser audit risk when the valuation is provided by an external valuator, instead of an internal one (management's estimation), confirming prior literature on the subject. We also emphasize for students, a good understanding of the objectives, concepts and methodology in audit and valuation areas, even in the absence of practical experience.

Secondly, detailing the above observation, we notice for the students, not for the auditors, an overconfidence in the Valuation Report provided by a consultant, and hence a lesser audit risk, when the internal control has a weaker quality. We believe that they perceive the external valuation more objective and credible. Therefore, if they had the status of auditors, they would not have to make an additional audit effort to discover FV misstatements. This statement is valid for the FV disclosure component, Valuation attributes and sensitivity of data. This is not a positive aspect, according to the literature, and we explain this view, in the case of students, due to the lack of audit practical experience. Other results are linked to auditors and their perception on the valuation methodology. They rely more on the external valuation that has the potential to reduce their own audit estimation risk, because it seems that they verify in detail the values provided in the Report as input data and valuation methods applied by the valuator (the component of FV disclosure, Methods, assumptions and model).

Thirdly, auditors are more careful about FV estimation provided by managers, when it comes to valuation methodology, which, apparently cannot give as many technical details in its Valuation Document compared to an external valuator. Hence, the audit risk and additional audit effort are higher in the case of methodology as in the other case, of Valuation attributes and sensitivity of data.

In conclusion, the assertions in literature and professional bodies (King, 2006; PCAOB, 2011; SEC, 2011; Brink et al., 2016) are empirically validated by our research, sometimes nuanced in relation to the internal control quality (Brown-Liburd et al., 2014; Joe et al., 2017), to the components of FV disclosure and to the type of participants.

These results must be discussed in the light of FV influencing factors that the literature evoked, and particularly the link between FV provider and FV disclosure on the one hand, and FV complexity and management bias on the other hand. We believe that in our study, FV presents a higher complexity due to the approach we used for real estate estimation, revenue and cost, instead of market approach, which is more accessible. In these conditions, we followed which of the two components of FV disclosure induces bigger concerns for the auditors; it seems that the component Methods, assumptions and model. We argue that one of the explanations is the valuation methodology and its specificities. Auditors understanding of the valuation process is a premise for the quality of audit of the valuation process. In relation to management bias, we determined that auditors are aware of management subjectivism and the need to make a larger audit effort when the FV provider is external (but hired by the management) and not internal. We believe that through a more consistent verification effort, there are premises that management bias would be easier to detect. This, especially in the context of auditors enriching their experience with other cases of fair value estimation which, so far, were not provided sufficiently by the market. A last observation refers to the future potential auditors, the students at master's level, in business. It seems that they represent an alternative for the empirical studies in audit, their general perceptions being close to those of professionals. In our view, the differences in hypotheses validation are explainable by their lack of practical practice.

The results of our study must be considered in the context of the inherent subjectivity of developing and implementing an experiment. Future developments of the analysis should consider extending the experiment to a higher number of participants.

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