

Determine the Impact of the Related Party on the Financial Reporting Quality Using Factor Analysis - Case Study of Algerian Institutions -

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Abstract This study analyses the relationship between the financial reporting and related party using factor analysis method. We find that accounting and auditing increase the quality of information and this contributes to protecting companies from fraud and manipulation. We argue that governance has a lower impact on the financial reporting in Algerian institutions. The survey conducted on a group of accountants and auditors confirm this argument. Overall, our results indicate that accounting and auditing can lead to better financial reporting via their impact on the quality of information.

Keywords Financial Reporting Quality, Accounting, Audit, Governance, Factor Analysis

1. Introduction

The recent crisis has caused a business environment changes and revealed the weaknesses in financial reporting quality, and highlighted the need to improve the quality of accounting system, governance processes and the audit, in order to answer the needs and expectation of the economic agents, whether internal or external, because the financial statements give the very first impression about a firm to various stakeholders are the result of a accounting processing, and the objective of the financial statements is to provide truthful information about the financial condition, results, cash flows and changes in the financial position of the entity that is useful for a number of users (Kozuharov et al [2015]).

There are many other users of financial statements who have less of a demand for “True and Fair View” (TFV). Governments demand tax information from companies, debtholders demand information about companies’ ability to service their debt and labor unions require information to negotiate labor contracts, Forces of informational demands from different contracting parties influence the outcomes of financial reports (Soderstrom, Sun [2007]).

This study attempts to identify the relation between financial reporting quality and the accounting system, the

audit and the governance, and examines the effect of the related party on the financial reporting quality using the factor analysis, and the objective of this method is to determine (DeCoster [1998]):

- The number of common factors influencing a set of measures.
- The strength of the relationship between each factor and each observed measure.

We investigate whether and how financial reporting quality related to accounting, audit and governance, we will look into the definition of the financial reports is nature, we also discussed the relationship between financial reports quality and accounting information, regulation, disclosure, audit and governance. Financial statements are generally manipulated to inflate/deflate income and expenses as the need may be, this is why we should define/ clarify the impact of the related party on the financial reporting quality.

To test the relationship between financial reporting quality and the related party, we use the factor analysis method, this method determine (DeCoster [1998]):

- Identify the nature of the constructs underlying responses in a specific content area.
- Determine what sets of items “hang together” in a questionnaire.
- Demonstrate the dimensionality of a measurement scale.
- Determine what features are most important when classifying a group of items.
- Generate “factor scores” representing values of the underlying constructs for use in other analyses.

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2. The Relation between Financial Reporting Outcomes and Accounting

Every transaction a company undertakes is with either a related or an unrelated counterparty, i.e, with a counterparty who has some extra-transaction relationship with the company through employment, ownership, or both; or with a counterparty who has no extra-transaction relationship with the company for financial reporting purposes, it is not purely the “related party-ness” of a transaction that warrants particular attention, but rather the transaction’s potential economic effect on the company; Financial accounting standards show which of these transaction require disclosure (Henry et al [2012]), and lead to similar financial reporting outcomes, which makes meaningful comparison of financial reports (Soderstrom, Sun [2007]). By financial reporting outcomes, we mean the quality of financial reporting, measured in a variety of ways (Holthausen [2009]). Our study examines the impact of accounting standards and accounting disclosure on the financial reporting quality. Because many forces shape the quality of financial reporting, and accounting standards should be viewed as one of those forces. Indeed, the international accounting literature suggests that the effect of accounting standards alone may be weak relative to the effects of forces such, auditor quality and, regulation, enforcement, ownership structure, and other institutional features of the economy in determining the outcome of the financial reporting process (Holthausen [2009]).

A fundamental concern of accounting standard setters is to ensure that financial reporting is informative and reliable. This concern has stimulated a vast amount of research on the quality of financial reporting (Marinovic [2013]), Therefore Provide predictable information can lead to reliance on financial reporting. Moreover, financial accounting information is the product of corporate accounting and external reporting systems that measure and routinely disclose audited, quantitative data concerning the financial position and performance of publicly held firms (Bushmen, Smith [2003]).

It should be noted that, Users of accounting information are generally interested in assessing current performance as well as estimating future performance, and there is considerable debate concerning how well various accounting measures reflect these goals. Some of a firm’s transactions require only a mechanical application of accounting rules while other types rely on the judgment of the firm’s managers and accountants. This judgment introduces errors both intentional as well as unintentional. Intentional errors are often referred to as discretionary. However, with respect to quality, the source of the error does not matter; both types reduce the quality of accounting information (Chaney et al [2009]).

So that, we cannot address the issue of accounting quality unless we agree on what accounting is supposed to do. Financial reports then take on meaning as products supplies

to a customer (Penman [2002]).

Corporate disclosure of information can take several forms and the annual report to stockholders is a very important form of periodical corporate disclosure (Singhvi, Desai [1971]), It is often said that financial reporting should have the objective of providing all relevant information to capital market. So if both historical cost information and fair values are relevant, should be reported. Nothing here subtracts from that position. The issue is which measurement basis should go through the discipline of the accounting system to determine the summary, bottom-line numbers, earnings and book value on which investors and analysts focus (Benman [2007]).

Several of the accounting theory literatures argue that financial reporting reduces information asymmetry by disclosing relevant and timely information. because there is considerable variation in accounting quality and economic efficiency across countries, international accounting systems provide an interesting setting to examine the economic consequence of financial reporting (Soderstrom, Sun [2007]). The reduction of uncertainty and information asymmetry would smooth the communication between managers and other related interested parties, such as shareholders, lenders, regulatory and supervisory authorities (Latridis [2010]).

3. The Relation between Financial Reporting Quality and the Governance

The effect of sound governance practices on the quality of financial reporting has recently received attention from researchers, and the main focus has been the relation between audit committees and fraudulent financial reporting (Goodwin, Seow [2002]). The new governance rules of 2002 came after a series of corporate scandals involving accounting irregularities and share price manipulation. The most notorious of these scandals is perhaps the collapse of the energy company Enron in 2001 (Chaochharia, Grinstein [2006]). Prior accounting research and the accounting profession have focused primarily on the board of directors and the audit committee. For instance, the public oversight board (POB1993) defined corporate governance as “those oversight activities undertaken by the board of directors and audit committee to ensure the integrity of the financial reporting process” (cohen et al [2008]). So that the focus of part this paper is to analysis the relation between the financial reporting quality and the corporate governance’s roles.

Also the main provisions in corporate governance are (Chaochharia, Grinstein [2006]):

- All firms must have a majority of independent directors.
- Independent directors must comply with an elaborate definition of independent directors.
- The compensation committee, nominating committee,

and audit committee shall consist of independent directors.

- All audit committee members should be financially literate, in addition, at least one member of the audit committee is required to have accounting or related financial management expertise.
- In addition to its regular sessions, the board should hold additional sessions without management.

One of the fundamental principles of good corporate governance is transparency (e.g., OECD, [2004]). In its simplest form, the principle states that an organization should disclose all the information in its possession that stakeholders would find useful in evaluating the organization and in making economic decisions regarding it. Thus, stakeholders are able to obtain a clear and complete "picture" of a corporation's activities and financial situation (C. Gaa [2009]).

4. The Relation between Financial Reporting Quality and the Audit

Corporate governance proponents consistently emphasize the internal audit function's role in enhancing financial reporting quality. Nonetheless, the internal audit function's role in the financial reporting process is not yet fully understood and empirical evidence concerning the impact of internal audit function quality is minimal, (Abbott et al [2016]). Otherwise the external auditor plays a significant role in monitoring financial reporting quality and hence can be viewed as an important participant in the governance process (Cohen et al [2008]).

Audit committee members, along with management and auditors provide oversight with respect to financial reporting. Audit committees have specific responsibility for overseeing financial reporting activities. Regulators and the accounting profession have touted the role of audit committees in protecting investors, and accounting research suggests that market participants see audit committees as providing meaningful oversight of the financial reporting process (McDaniel, et al [2002]). The literature suggests that an effective audit committee should play an important role in strengthening the financial controls of an entity. A number of studies have found that companies with an audit committee, particularly when that committee is active and independent (Goodwin, Seow [2002]).

5. Results and Discussion

5.1. Statistical Method Used

In the light of the objectives of the study and the nature of variables, and the method of measurement (Factor Analysis), a set of statistical package science (SPSS v21) in the entry and processing of data collected from the form.

The research is conducted in order to identify current issues and ambiguities in the area.

5.2. Applied Study

The sample of the study included the accounting and auditing professionals in Algeria, where 65 forms were distributed to accountants, auditors and academic, 47 valid forms of analysis were retrieved and approved.

Table 1. Scientific level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valide	Secondary	4	8,5	8,5	8,5
	License	16	34,0	34,0	42,6
	Master	9	19,1	19,1	61,7
	Ph.D.	18	38,3	38,3	100,0
	Total	47	100,0	100,0	

From Table 1 we find that 8.5% have a secondary level but their professional experience allowed us to rely on their answers. 34% have a bachelor's degree, 19.1% have a master level and 38.3% have a PhD level, this means that 91.5% have a university level, which supports the validity of the results obtained.

Table 2. Specialty Scientific

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accounting	9	19,1	19,1	19,1
	Finances	9	19,1	19,1	38,3
	Finances/ accounting	8	17,0	17,0	55,3
	Accounting/ taxation	21	44,7	44,7	100,0
	Total	47	100,0	100,0	

From Table 2 We find out that specializations of the respondent sample is 19.1% for both accounting specialization and finance specialization and 17% for the accounting and finance specialization which are generally close ratios but the specialty of the respondent sample accounting and taxing was 44.7%, a percentage that can be explained by having a good composition in the axes related to taxing and accounting Regulation.

Table 3. Label variables and the number of questions associated with them

Variables name	Number of questions
Information Quality	6
Accounting disclosure	5
Accounting Standards	5
Accounting Regulation	5
Audit	6
Accounting System(scf)	4
Governance	4

From Table 3, we find that 40.4% of the sample respondents are accountants. Which supports the validity of the results considering that the accountant is more familiar with accounting, and the academic accounting by 34%, they also have a significant role in academic issues as knowledge producers. We find that 21.3% are audited; their opinions on questioning can't be dispensed with for what they can add to the results of the study.

Based on the baseline data of the study, we used the factor analysis method to identify the relevant stakeholders in the quality of financial reports to answer the following questions:

- What are the minimum Explanatory factors for common contrast between study variables?
- Can the study variables be classified into homogeneous subgroups?
- If so, what are the meanings of these groups?

The purpose of the factor analysis method "Principal Component Analysis" (PCA) is to derive a relatively small number of components that can account for the variability found in a relatively large number of measures. This procedure, called "Data Reduction", is typically performed when a researcher does not want to include all of the original measures in analyses but still wants to work with the information that they contain. An illustration of the "PCA" model is provided in figure 1 (DeCoster [1998]):

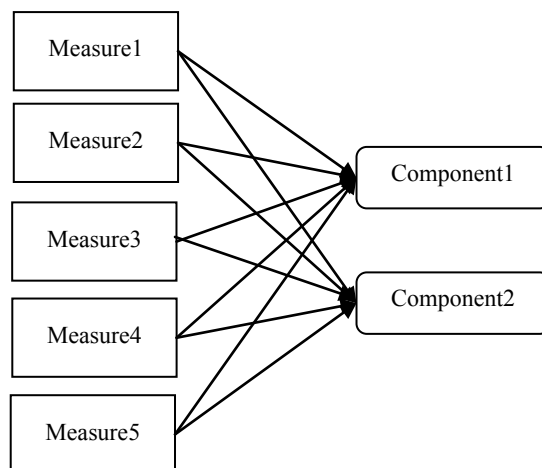


Figure 1. The model for principal components analysis

5.3. Correlation Matrix

The most important assumption to achieve the condition of the factor analysis method is that the correlation between the variables is zero and this is what was achieved in our study, which indicates the integrity and validity of the data and analysis of the results, as shown in Table 4.

Table 4. Correlation Matrix

		Information quality	Disclosure	Standards	Regulation	Audit	Scf	governance
Corrélation	Information Quality	1,000	0,374	0,287	0,134	0,157	0,368	-0,400
	Disclosure	0,374	1,000	0,363	0,132	0,367	0,475	-0,690
	Standards	0,287	0,363	1,000	0,568	0,453	0,501	-0,373
	Regulation	0,134	0,132	0,568	1,000	0,382	0,456	0,036
	Audit	0,157	0,367	0,453	0,382	1,000	0,552	-0,466
	Scf	0,368	0,475	0,501	0,456	0,552	1,000	-0,396
	Governance	-0,400	-0,690	-0,373	0,036	-0,466	-0,396	1,000
a. Déterminant = ,009								

Table 6 show the results of the Kaiser-Meyer-Olken test are 0.796, which is a good result of the study, and the results of Bratlett are zero. This is an excellent indicator, is explained by the correlation matrix for the unit matrix. That is means it exists a common contrast between study variables which constitute a set of hidden factors.

Table 5. KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,796
Bartlett's Test of Sphericity	Approx. Chi-Square	214,668
	Df	21
	Sig.	,000

Table 6. Communalities

Communalities		
	Initial	Extraction
axe1	1,000	,973
axe2	1,000	,831
axe3	1,000	,819
axe4	1,000	,910
axe5	1,000	,824
axe6	1,000	,826
axe7	1,000	,928
Extraction Method: Principal Component Analysis.		

From the foregoing, it is clear that the basic conditions of the factor analysis of the study are available. Therefore we can apply this to our study to arrive at the main problem. As we have already mentioned, this method attempts to find the minimum variables that represent all the proposed initial variables. The following table shows the quality of representation of these variables.

Table 7 shows that the first column in the table refers to the square of the multi-correlation value between a variable and the other variables, while the second column shows the sum of the squares of the common variances at each variable

Table 7. Extraction Method: Principal Component Analysis

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,170	59,569	59,569	4,170	59,569	59,569	3,128	44,689	44,689
2	1,302	18,598	78,167	1,302	18,598	78,167	1,663	23,754	68,443
3	,640	9,143	87,310	,640	9,143	87,310	1,321	18,867	87,310
4	,327	4,666	91,976						
5	,252	3,594	95,570						
6	,182	2,596	98,166						
7	,128	1,834	100,000						

Extraction Method: Principal Component Analysis.

This table shows that the three extracted factors interpret 87.31% of the phenomenon studied, which is very good to take these axes as factors explaining the effect of the relevant parties that influence the quality of the financial reports, or in other words, we can say that the raw data table has been reduced in three axes so that the three axes together explain (87%) of the total information, and using the process of rotation of the axes, which aims at positioning the components (factors) in the form that achieves the greatest possible saturation of the variables, and use the kaiser method in determining the factors depending to their own values, we get a matrix Factors after the rotation process as shown in the following table:

Table 8. Rotated Component Matrix

Rotated Component Matrix ^a			
	Component		
	1	2	3
Quality information			,938
Disclosure		,660	
Standards	,841		
Regulation	,923		
Audit	,821		
Accounting system (Scf)	,790		
Governance		-,958	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

in the extracted factors. Through the matrix, the quality of representation is excellent for all variables because the value of all the axes is very high.

The analysis by this method reflects the search for the intrinsic values and ratios associated with the main axes where the intrinsic value refers to the amount of the explained variance in the variables by the factor to which it is associated, i.e., the variance of the variables around each factor axis. For this purpose, we list Table 8 which shows the intrinsic values and variance ratios.

This matrix clearly allows observing the variables associated with each of the factors extracted, which facilitates the process of interpretation axes and reveal the meanings that it contains as shown in the Figure 2.

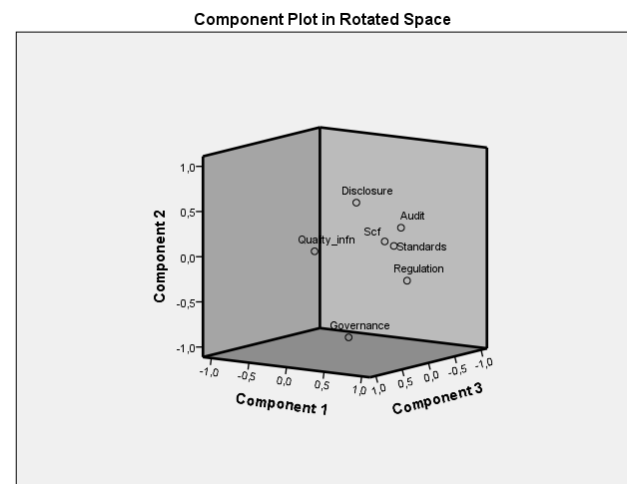


Figure 2. Example of an image with acceptable resolution

Through Figure 2, it is clear that there are three main axes in which the variables of the study are gathered, it is also evident in the same format that the first axis includes the following variables: the accounting system, regulation, auditing and disclosure, the second axis include the governance, the third axis include quality information.

6. Conclusions

These studies determine the impact of the related party on the financial reporting quality point to a variety of factors that influence that quality and suggest that the accounting standards are also important as regulation, audit and accounting system. This study demonstrates three factors (components) that explain the variation between the variables of the study:

- The first factor includes: accounting standards, accounting regulation, audit, and accounting system.
- The second factor includes the disclosure.
- The third factor includes the quality of information.

The three factors together explain 87% of the information in the financial reporting. The audit contributes to obtaining reliable accounting information in decision making and improving the effectiveness of the internal control system. Also the quality of the financial reporting reflects the quality of the audit in its information. Disclosure plays a crucial role in helping to promote financial reporting quality.

Recent work suggests that existing measures of the audit and the accounting information are correlated with the financial reporting quality. As such, it is conceivable that the audit has an important effect on how the adoption of accounting standards affect financial reporting quality. As the accounting information will increase the competitiveness of companies by providing transparency in their financial reporting. Also, the governance can ensure the quality of the financial reporting process.

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