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# THE IMPACT OF AUDITOR AFFILIATION ON FINANCIAL STATEMENT RELEVANCE

Case  
Study

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## Keywords

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## JEL Classification

*G32, G41, M42*

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## Abstract

*The role of the audit report is to provide a level of trust to the professional judgment behind the financial statements of a company. The market for audit services is not a homogenous one, and large audit partners known as the Big 4 dominate with their partner networks in both developed and emerging markets. The scientific literature provides a rich background of studies linking auditor affiliation and auditor independence. The current exploratory paper tries to approach the issue of auditor independence and affiliation by drawing on the Ohlson model for a sample of 552 firm-year observations from the Borsa Istanbul, covering the 2014 and 2015 financial periods. The results reveal a strong correlation for the year 2015 between the Big 4 affiliation and the value of the equities, possibly suggesting a correlation between auditor independence and financial statement relevance.*

## INTRODUCTION

The audit report does more than providing a certification for an entity's stakeholders in accordance with its corporate governance code. It can also serve as a selling point for the entity's financial instruments if the brand of the auditor provides the public with an image of integrity and independence.

The main focus of the audit committees should be the management of the client-auditor relationship in accordance with the interests of the shareholders and stakeholders. The deployment of a credible audit company to certify the financial statements is one of the key aspects of this vital activity as a healthy client-auditor relationship converts into mutual goodwill.

The goodwill of an audit company is a complex concept, but one of its key components is the independence perceived by the users of financial statements. An independent audit company will report unconditionally any discovered breach (DeAngelo, 1981). Some authors consider audit independence a psychological impossibility (Bazerman, Morgan, & Loewenstein, 1997). As such, auditor independence can only be a relative measure.

Auditor independence implies that the audit firm can outright reject an audit engagement which might jeopardize its integrity. Thus, while a multitude of audit companies can be called upon to perform audit and certification services for the public companies on the stock markets, only a few are strong enough to deal with the client in a proper manner. The audit firms' client portfolio can prove vital if the entity seeks a semblance of independence. Only companies who deploy an international network of partners and are active on many stock markets can afford the impact of losing a potential contract.

This paper argues that the relevance of financial statements is affected by the perceived independence of the financial audit company and by extension, the affiliation of the financial auditor.

While the determinants of auditor independence and audit selection receive a lot of attention in the scientific literature, with such examples as Abbot and Parker (Abbott & Parker, 2000), fewer studies are performed with consideration to the impact of auditor independence on the relevance of financial statements filled by audit clients. Such examples were mainly focused on the clients notorious audit firms like Arthur Andersen in the post-Enron world (Krishnamurthy, Zhou, & Zhou, 2006).

However, few papers deal with emerging markets, in relationship to the issue of auditor independence

and trust between the auditor and client. Feleaga et al (2013) are one such example in the context of the Romanian stock market, endorsing an interpretative framework.

Since the audit fees in emerging markets are confidential, there is no conclusive empiric way to identify the specific threats to auditor independence as in the case of developed stock markets like the New York Stock Exchange or NASDAQ.

Instead the study focuses on international audit firms which boast of large partner networks and can absorb the loss of a client with relative ease compared to their peers. This paper samples the Borsa Istanbul, a major Eurasian equity market outside of the European Union with emphasis on the relevance of the financial statements.

The structure deals with three parts. The first provides a brief history of the Big 4 audit firms. The second deals with specific issues of the Turkish equity markets while the last develops into the empiric study.

## BRIEF HISTORY OF THE AUDIT MARKET

The audit profession is not a recent development of the industrial revolution. The earliest recorded occurrences of the audit profession arise from the Ptolemaic administration as *antigraphais* in the service of the *oikonomos* (Bagnall & Derow, 2004). During the following centuries different authorities will have audit authority across a multitude of jurisdictions. However, it can be argued that the Anglo-Saxon accounting framework has laid the groundwork for the present insurance services providers.

Early accounting offices provided a host of services for their clients, including audit and insurance services. However, it was early 20<sup>th</sup> century author Sprague who distinguished between the lower-order „bookkeeping” and higher-order „auditing”, with the later being able to criticize the work of the bookkeeper (Loeb & Miranti, 2004). The earliest calls for the formation of specialized insurance companies in the US came from as early as 1883, during the emergence of large industrial enterprises. Even then, there was an international audit market available for audit services, as in 1873 PWC sent British auditors to the United States to examine the accounts of a British investment (Lee, 2006).

Differences in audit quality, client portfolios as well as scientific advancements enabled during the 20<sup>th</sup> century the concentration of the audit market. The concentration of the audit market materialized itself through the rise of the Big Eight audit firms, of which only four audit firms remain (the Big Four). The rise of the Big Eight firms can be at least partly attributed to business combinations, which generated cost savings and enabled access to larger and more lucrative clients (Sullivan, 2002).

Researchers like Healy and Lis (1986) note while accounting for business combinations in the industry that clients who preserved their existing audit engagement with the acquirer Big Eight audit company were chiefly concerned with access to specialized services and the auditors' reputation.

While the initial business combination arrangement saw Big Eight acquiring lesser non-Big Eight competitors, by the late 1980s such arrangements were being considered between the Big Eight audit companies themselves (Minyard & Tabor, 1991). At the collapse of the Iron Curtain only six large audit companies (Big Six) remained. These companies were more than able to take advantage of the opening emerging equity markets (Cooper, Greenwood, Hinings, & Brown, 1998).

Opening this equity market only helped solidify the competitive advantage enjoyed by these companies and enabled further market concentration and professional stereotyping of other audit companies.

For investors and clients alike the early 21<sup>st</sup> century audit scandals served as a warning on misplaced trust in dominant audit companies. Scandals like Enron destroyed the reputation of significant audit companies, leading to further market concentration after the demise of Arthur Andersen (Linthicum, Reitenga, & Sanchez, 2010). Since the collapse of Arthur Andersen only four dominant audit partners remain (PriceWaterhouseCoopers, Deloitte & Touche, Ernst & Young, KPMG).

The assumption that dominant audit partners were paragons of integrity was challenged by the public scandals of the early 21<sup>st</sup> century. Research reveals that assurance quality by Big Five auditors deteriorated over time (Lennox & Pittman, 2010). The ongoing demand for Big Five auditors might suggest additional aspects of their goodwill such as know-how and lobby capabilities are considered by audit clients.

## AUDITING THE BORSA ISTANBUL

The Turkish equity market presents a series of challenges for the accounting researcher. Turkey boasts of an emerging equity market at the fringes of Asia and Europe, with an unstable political situation.

Although the Ottoman Empire was a key business partner for many European powers and was exposed to a multitude of business models and practices, modern equity markets appeared quite late on the scene at Istanbul. The Dersaadet Securities Exchange, predecessor of today's Borsa Istanbul, was founded in 1866 (Maghyreh & Al-Zoubi, 2006).

This equity market, while disturbed by the fallout of the Great War (1914-1918), has continued to operate in a free market unlike many of its

counterparts in Eastern and Central Europe where the financial markets were disrupted for the better part of the 20<sup>th</sup> century by communism.

Nevertheless, cultural differences in organizational culture lead to specific phenomena, such as an information asymmetry gap between domestic and foreign investors (Diyarbakirlioglu, 2011).

The numerous listed equities provide a massive demand for audit services. The need for high-quality insurance is even more apparent when taking into consideration the fact that Turkish investors are risk-averse, preferring bank deposits over other financial instruments (Hanna, Kiyamaz, & Perdue, 2001).

Findings from the Istanbul Stock Exchange also suggest a correlation between the board structure and institutional ownership with audit quality, consistent with findings from previous studies. (Terzi, Kiyemli Şen, & Solak, 2014)

Under the guidance of the European Union, Turkish authorities have made even greater strides towards integrating their stock market with European counterparts and voluntary adoption of International Financial Reporting Standards started in 2003 (Senyigit, 2014). At the moment all listed companies on the Borsa Istanbul use the IFRS framework.

Lastly, recent research in the Turkish equity market found direct correlation between the auditor brand and the discretionary accruals of the client (Can, 2017). In this context it should thus appear that audit firms with significant reputation and expertise like the Big 4 auditors should offer an enhanced perception of auditor independence.

## METHODOLOGY, SAMPLE AND RESULTS

The paper proposes the modified Ohlson model to observe the impact of the auditor brand on the relevance of the financial statements.

Since the Can study (2017) linked auditor brand with discretionary accruals, the current model treats auditor brand as a variable of interest.

The Borsa Istanbul provides an extensive record for the accounting researcher, yet the period was limited to two consecutive financial periods, 2014 and 2015 respectively. There are two main reasons for choosing this data collection period. The first reason is that the data collection period nears the present date while increasing the chances that all entities have submitted their financial reports in a timely matter. The second reason is that the data is not significantly affected by the political upheavals during the year 2016.

Regarding the sample itself, for the purpose of this paper 276 equities were selected in the sample for the two consecutive financial periods yielding 552 firm-year observations.

Only equities with uninterrupted financial reporting from at least 2007 were considered worthy for inclusion in the sample. The reason behind this decision is related to the experience of the corporate governance officers as well as the increased probability that the entity would have performed at least one audit rotation.

The sample in itself presents a diverse array of equities from different TRBC sectors. No equities from the sample were removed for belonging to a distinct TRBC sector. For consistency purposes only the original financial statements were considered. Restatements or corrections to the annual financial statements were ignored for data collection purposes.

Regarding the auditor brand, for each of the firm-year observations the auditor was identified and classified. If the company was affiliated with a Big 4 auditor, the variable (AU) value was the positive Boolean one. For all other observations, the variable value was zero. For unaudited firm-year observations the treatment was the same as in the case of independent local unaffiliated auditors.

The standard Feltham & Ohlson (1995) model was deployed with the incorporation of this Boolean independent variable for a linear regression model. Studies such as Dahmash et al (2009) and Craig et al (2010) also deploy a modified Ohlson model as an explanatory mechanism. The model in this paper also follows a similar line of thought.

The database selected for the observations was Thomson Reuters Eikon for Excel. The codes used to extract the variables from the database were

- TR.NetIncomeAfterTaxes,
- TR.TotalEquity,
- TR.TtlCmnSharesOut and
- TR.CompanyMarketCap.

The period in question was the last fiscal year, with Euro as the selected reporting currency. The selection of the Euro was meant to address the possible issues with inflation in the native Lira. Three variables were selected to represent the basic Ohlson model, excluding the AU variable:

- KB  
(TR.CompanyMarketCap/TR.TtlCmnSharesOut),
- KP  
(TR.TotalEquity/TR.TtlCmnSharesOut) and
- PR  
(TR.NetIncomeAfterTaxes/TR.TtlCmnSharesOut)

To ensure that the linear regressions avoid the Simpsons paradox, the correlation matrix was analyzed using a Pearson correlation matrix generated in Matlab 2011b, using the `corrcoef()` function, as seen in Table no.1.

The two samples were tested in Matlab 2011b using the `regstats()` function as seen in Table no.2 using a linear model with intercept. The first results suggest that there is no autocorrelation between the residuals (Durbin-Watson test is close to 2 for both periods) and that the Fisher test also validates the

model (~0.01%). Also, the “barebones” variables included in the Ohlson model have the appropriate p-values, suggesting relevance for both the KP and PR variables.

The surprising results come from the analysis of the AU variable. During the 2014 financial period it is not statistically relevant, while during the subsequent period it becomes relevant. These findings would correlate with increased trust in the Big Four audit partners and their associates. Mere goodwill in the brand of the financial auditor would not suffice to explain the positive feedback from the market, as the audit partner often had a name that did not include the initials of the network. Many of the audit reports only had a brief mention of the auditors’ affiliation in the footnotes or in the signature. Few if any used the header of their affiliate in their report. Thus the results indicate that the Auditor affiliation gains relevance over time for financial statements users.

Considering the fact that many equities were traded without an appropriate audit process, the results should suggest that the increase in audit quality and independence had a positive impact on the relevance of the financial information. However other factors besides auditor independence could play a role in explaining the results, such as know-how and audit committee engagement.

## CONCLUSIONS

An auditors’ brand should not be a proxy for audit quality. The audit opinion or the lack of thereof should not be conditioned by the brand under which the accounting professional operates. The internationalization of the audit market is occurring due to a multitude of factors, and not just the native advantages of the international audit firms.

The experiences of the Big 4 auditors with the IFRS framework as well as financial resources enable them to overpower their competition and establish a cartel structure in each market they settle.

However, the shift in significance might be a statistical fluke and thus this paper should be considered an exploratory study instead of a definite solution to the research question.

Further research might consider an improved selection of variables, and possibly combine the Ohlson model with variables indicative of creative accounting practices. A greater data range might also help remove doubts about the statistical relevance of the data used in the study. Additional data sources should be deployed to cover all possible explanations if the results can be recreated within a similar equity market.

If confirmed by other studies, these findings should not distort the image of the homegrown audit firms. Clients with riskier equities might be rejected

outright by the Big 4 audit partners. Investment patterns already described for the Istanbul Stock Exchange might favor those with more stable circumstances and auditors might be exposed to fewer risks and challenges than in the case of the rest.

The last conclusion is that perceived independence may not correlate with actual independence, and thus a positive result does not imply an effect of genuine auditor independence, but an effect of perceived auditor independence.

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## Appendices

### Appendix A

Table No.1  
*The significant correlations in the 2014/2015 samples*

Statistics	KP	PR	AU	KB
<b>KP</b>	1/1	<b>0.637/0.672</b>	-0.003/-0.017	<b>0.83/0.815</b>
<b>PR</b>	<b>0.637/0.672</b>	1/1	-0.031/-0.004	<b>0.602/0.63</b>
<b>AU</b>	-0.003/-0.017	-0.031/-0.004	1/1	0.008/0.07
<b>KB</b>	<b>0.83/0.815</b>	<b>0.602/0.63</b>	0.008/0.07	1/1

*Source (own research based on the Thomson Reuters database)*

### Appendix B

Table No.2  
*The output of the two linear regression models*

Statistics	F-test	Adjusted R <sup>2</sup>	DW Test	AU (t-stat/p/coeff)	KP (t-stat/p/coeff)	PR (t-stat/p/coeff)
<b>2014</b>	0.01%	69.46%	<b>1.8959</b>	(0.43/0.66/0.347)	(17.35/0.01/0.945)	(2.89/0.01/0.717)
<b>2015</b>	0.01%	67.94%	<b>1.9183</b>	(2.42/0.02/1.745)	(15.53/0.01/2.358)	(3.23/0.01/1.857)

*Source (own research based on the Thomson Reuters database)*