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Study of factors affecting financial reporting transparency using meta-analysis method (Investigating different criteria for measuring transparency and adoption of international financial reporting standards)

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Abstract

The purpose of this research is to study the factors affecting financial reporting transparency using the meta-analysis method. In the present research, 3rd version of the meta-analysis software was used to test the hypotheses and objectives of the research. The results showed that the square of accord (I2) statistics was above 90%. For both research hypotheses, a z-value of 1.96 was obtained; on the other hand, the p-value was less than 0.05 for each research, which indicates that the research hypotheses can be confirmed with a 95% confidence level or 5% error. The Z-values are 3.15, and 5.30, respectively, and the p-values are 0.001, and 0.000 for the first and second hypotheses respectively.

Keywords: Transparency of financial reporting, International standards, Meta-Analysis

 $2020~{\rm MSC};\,62{\rm P}10,\,91{\rm G}15$

1 Introduction

Nowadays, a large part of literature advances in any field originates from the improvement of measurement techniques [61]. There is an urgent need for more appropriate criteria in the field of measuring transparency and its related economic effects, just like in other fields [12]. Company transparency is a term that is interpreted differently by different people [107]. Some interpret it as a single concept such as the items disclosed in the annual activity report [1]. Some people believe that transparency means disseminating information from a channel other than financial statements or annual activity reports, such as the press channel [39]. But some also emphasize the comprehensive view based on the information environment of the company [2]. Transparency is at the heart of modern financial reporting [72]. In this research, an effort was made to extract a multidimensional criterion based on a comprehensive study of the literature and various aspects, and following Bushman et al. [27], it was also used as a single indicator of financial reporting transparency along with incongruent criteria of financial reporting transparency that are used separately by different researchers [2]. Based on the research of Dbuksi and Gilt [26], multidimensional models

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significantly increase the explanatory power of transparency concerning external credit rating, capital expenditures, market risk (represented by the firm's beta) and liquidity [5]-[11], compared to the one-dimensional indicators used by researchers such as Bushman et al. [26], Francis et al [50], Madhani [84], Bareth et al [13], and Lang and Mifit [77] The aforementioned framework, compared to other multidimensional models of financial reporting transparency, such as Kim [71] and Maines et al [86], is mentioned more in literature because it considers a broad view of financial reporting transparency based on three different dimensions of information (information disclosed to the public, quality of information, internal information) instead of providing an aggregate criterion of financial reporting transparency [44, 55]. Previous studies (for example Bushman et al [26], Francis et al [50], Madhani [84], Bareth et al [13] and Lang and Mifti [77] and have shown that one of the most important factors that make the company attractive from the point of view of investors is transparency [4, 16, 31, 47, 54]. The agency theory determines how the audit committee affects the transparency of financial reporting [56], However, the board of directors has to design and deploy monitoring mechanisms due to its commitment to shareholders [35]. While Farber [45] and Ritsberry et al [99], Kent et al [66], Gosh et al [53] and Hamadan et al [55] did not observe any significant relationship between independent committee members and financial reporting transparency [28, 34, 37, 41, 59], the results of the research related to the independence of the audit committee and the fulfilment of the goals of internal controls governing financial reporting are accompanied by contradictions and inconsistencies [40], For example, the results of the studies conducted by Bedard et al [15], Bradbury [22], Abbott et al [1], Norman et al [93], Branson et al [23], Lari et al [81], Careslo et al [29] and Woidtke et al [108] indicate the positive effects of the independence of audit committee members on financial reporting transparency [1, 5, 12, 13, 19, 50, 56, 64]. Previous studies (such as Bidel et al [16], Francis et al [50], Kurdestani and Majdi [76], Norush and Hisarzadeh [94] have emphasized the importance of profit and its quality [6, 24, 27, 32]. Also, Blomfield, Hereishleifer and Teo [59] state that easy detection of profit management reduces the expected value of profit management due to the transparency of financial reporting [7]. If managers are concerned about stock prices [69], the requirement for greater transparency in financial reporting will reduce profit management and reduce its prevalence [9, 39]. Maines and McDaniel [86] also emphasize that more transparency is achieved when studying and interpreting information is easier [8, 111]. A limitation that Bushman et al [27], and Dbuksi and Gilt [54] have also acknowledged is that there are no comprehensive theories regarding the determinants of transparency in accounting and economics and this field is very limited and there are few theoretical and empirical principles in its literature [62]. The first factor motivating the researchers to conduct this research is the lack of academic research that seeks to aggregate distinct criteria and provide a multidimensional measure of financial reporting transparency to increase the explanatory power of transparency about its economic consequences [25] the important role of disclosure (as an important dimension of any transparency model) [104], in the process of efficient allocation of resources as well as corporate governance has addressed this issue [52, 112]. In addition, this research has pointed to the important role of analysts, institutional investors and creditors in the flow of information to stakeholders [9]. According to the above-mentioned points, this research aims to study the factors affecting the transparency of financial reporting using the meta-analysis method [108], in which different criteria for measuring transparency and adoption of international financial reporting standards have been examined [67]. To answer the question of the present research and due to contradictions, the meta-analysis methodology was employed to integrate the results of different studies and identify the factors that moderate the relationships between the variables [31]. The aim is to provide an answer to the contradictions and results regarding the effects of the adoption of international financial reporting standards on the transparency of financial reporting information [3].

Tiklaf has modeled the transparency of accounting and competent accountant using torque conditions as follows:

$$C_t = \pi_t + w_t - w_{t-1}$$

$$E_t = \pi_t + v_t - v_{t-1}$$

$$A_t = -w_t - w_{t-1} + v_t - v_{t-1}$$

where, E_t is the profit time series, C_t is the cash flow from operations, and A_t is the accrual item. Tiklaf obtained the following cultivation conditions:

$$m(1): \qquad E(E_t E_t) = \sigma_{\pi}^2 + 2\sigma_v^2$$

$$m(2): \qquad E(C_t C_t) = \sigma_{\pi}^2 + 2\sigma_w^2$$

$$m(3): \qquad E(A_t A_t) = 2\sigma_w^2 + 2\sigma_v^2$$

$$m(4): \qquad E(E_t E_{t-1}) = \rho_{\pi} \sigma_{\pi}^2 - \sigma_v^2$$

$$m(5): \qquad E(C_t C_{t-1}) = \rho_{\pi} \sigma_{\pi}^2 - \sigma_w^2$$

$$m(6): \qquad E(A_t A_{t-1}) = -\sigma_v^2 - \sigma_w^2$$

where, σ_{π}^2 is the actual performance variance, σ_{w}^2 is the variance of performance component of accruals, σ_{v}^2 is the variance is an accounting error component. In addition to the above torque conditions, the following torque conditions can also be proposed for the differential specification of variables:

$$\Delta C_t = C_t - C_{t-1} = (\pi_t + w_t - w_{t-1}) - (\pi_{t-1} + w_{t-1} - w_{t-2}).$$

Then

$$\Delta C_t = \Delta \pi_t + w_t - 2w_{t-1} + w_{t-2}.$$

With the same calculation, ΔE_t and ΔA_t can be obtained:

$$\Delta E_t = \Delta \pi_t + v_t - 2v_{t-1} + v_{t-2}$$

$$\Delta C_t = -w_t + 2w_{t-1} - w_{t-2} + v_t - 2v_{t-1} + v_{t-2}.$$

In the following, the following torque conditions are explained for the differential specification of variables:

$$m(1'): E(\Delta E_t \Delta E_t) = \sigma_{\Delta \pi}^2 + 6\sigma_v^2$$

$$m(2'): E(\Delta C_t \Delta C_t) = \sigma_{\Delta \pi}^2 + 6\sigma_w^2$$

$$m(3'): E(\Delta A_t \Delta A_t) = 6\sigma_w^2 + 6\sigma_v^2$$

$$m(4'): E(\Delta E_t \Delta E_{t-1}) = \rho_{\Delta \pi} \sigma_{\Delta \pi}^2 - 4\sigma_v^2$$

$$m(5'): E(\Delta C_t \Delta C_{t-1}) = \rho_{\Delta \pi} \sigma_{\Delta \pi}^2 + 6\sigma_w^2$$

$$m(6'): E(\Delta A_t \Delta A_{t-1}) = -4\sigma_v^2 - 4\sigma_w^2.$$

After estimating the desired parameters, accounting quality (AQ) is defined as follows:

$$AQ = \frac{\sigma_w^2}{\sigma_w^2 + \sigma_v^2}.$$

2 Psychological Theories

Studying the background of the studies conducted by Botosan [21], Kothari and Short [74], Leuz et al [82], Bushman et al [27], Biddle et al [16], Bareth et al [13], Hill et al [58], Yan and Yang [109], Lang et al [78], and Dbuksi and Gilt [54] and reviewing indirect one-dimensional indicators that measure transparency at the company level [97], (such as researcher- made disclosure indicators or disclosure indicators of professional organizations [110], transparency and profit management [57], the explanatory power of profit and the relationship between profit and efficiency [41], the quality of accounting standards, the quality of auditors, the characteristics of information disclosed by analysts and the characteristics of managers' profit forecasts, etc.) [33]. that transparency indicators generally deal with four aspects including quantity, quality, characteristics of the information disclosed to certain people such as analysts and institutional owners and the information disclosed by the media [4, 6, 11, 12, 14, 33, 35, 41, 48, 52]. Previous studies (Biddle et al [16], Francis et al [49], Kurdistani and Majdi [76], Norush and Hisarzadeh [94] have emphasized the importance of profit and its quality [6, 24, 27, 32]. Bloomfield [18] and Herchleifer and Teo [59] stated that easy detection of profit management reduces the expected value of profit management due to the transparency of financial reporting [37]. If managers are concerned about stock prices; the requirement for greater transparency in financial reporting will reduce profit management and its prevalence [9, 39]. Mines and McDaniel [86] also emphasize that more transparency is achieved when it becomes easier to study and interpret information [8]. Pope and McLeay [96] state that companies that manage profit are more likely to choose the less transparent disclosure procedure. So it seems that considering the dimension of profit quality as one of the dimensions of financial reporting transparency will enrich the model [51].

3 Methods

This research is retrospective and correlational, and its main goal is to integrate the results of the studies to reach a generalizable result for all studies with different time domains and to determine the reasons behind the conflict between the results of the studies, by determining the variables modifying the relationship between independent and dependent variables of the research. In this research, sampling was done and all the collected information was used for summarizing and drawing conclusions. To implement the meta-analysis method, all the studies on the research topic were identified and collected as the statistical population of the research using keywords such as financial reporting transparency, independence of the audit committee, quality of financial reporting, international standards of financial reporting and discretionary accrual items from the websites of foreign journals (articles published from 2000 to 2019) and the internet database of domestic scientific research publications (articles published from 2000 to 2019). The population of this research is the articles (results of empirical research) related to the financial reporting transparency around the world. More precisely, this population is the articles in primary and authentic management and accounting journals. Finally, from the total of 295 studies collected, according to the restrictions applied in the table below and using the systematic elimination method, finally 61 studies were analyzed. The method of selecting sample studies can be seen in the table. To measure the degree of relationship between the dependent variables in this article (financial reporting transparency), a measure called the effect size will be calculated, which shows the magnitude of the relationship between the variables. For the studies in which the correlation coefficient (r) is reported, this statistic is used to measure the effect size.

Table 1: The method of selecting financial reporting transparency studies for meta-analysis

Studies	Frequency
The number of studies	295
The total number of studies in foreign journals (Scopus, Science Direct, Springer, Emerald,)	134
Exclusion criteria of foreign studies	
Number of articles without Q1 index	62
Articles with different methodology	19
Articles that were not related to the variables of the research subject.	11
Articles that were published before 2000.	18
The final number of foreign studies	24
The total number of studies in domestic journals (Noor specialized journals database, Scientific	161
Center database of Jahad Daneshgahi, comprehensive humanities portal, Meg Iran, Civilica)	
Exclusion criteria of domestic studies	
Articles indexed in conferences	71
Articles that did not report Pearson's correlation coefficient or its converted statistics.	24
Articles that were published before 2001	13
Journals that have not been approved by the Ministry of Science.	16
The final number of domestic studies	37
The final sample	61

According to the mentioned points, the following hypotheses are formulated: different criteria for measuring financial reporting transparency, moderating the relationship between the independence of the audit committee and the transparency of financial reporting, and the second hypothesis is based on the significant effect of the adoption of international financial reporting standards on the transparency of reporting.

4 Results

In the present research, articles published in domestic and foreign journals were used. Having identified potential and important studies, the researchers reviewed the studies once more to make sure that the criteria of the research design were applied in these studies. In the table below, the extracted primary information is displayed.

5 The Forest Plot

The main output of every meta-analysis is the forest plot, which is actually a graphic form presented in plot 1.

The forest plot shown above is for the 61 studies collected in the present study. These forest plots have the following features: Some of the confidence intervals are completely in the positive part of the null hypothesis column (0.00). These studies show a statistically significant positive effect size. Other confidence intervals are completely on the negative side of the null hypothesis column (0.00). These studies show a statistically significant negative effect size. Those confidence intervals in the null hypothesis column are related to studies that show an effect size that is not statistically significant. This table is actually presented in the forest plot of the meta-analysis on its left side (Figure 2).

The bottom row (or summary row) is the forest plot of part of the meta-analysis. This is the line that shows the meta-analysis results. In a meta-analysis, these meta-analytical results (yellow line in diagram 2), include two

Row	Research	Correlation	Sample size	Adoption of international financial reporting standards	Financial reporting transparency	Independence of audit committee	Different criteria for measuring financial reporting trans-
1	Ibrahimi Kordlore and	0.225	102	0.562	0.972	0.102	parency 0.780
2	Rahmani Picha [43] Ahmadpour & Ahmadi	0.861	85	0.559	0.930	0.085	0.790
_	[3]	0.001		0.000	0.000	0.000	000
3	Etemadi et al. [44]	-0.020	107	0.452	0.929	0.189	1.210
4	Izadinia & Nazarzadeh [63]	-0. 668	170	0.466	0.854	0.109	1.146
5	Badavar Nahandi et al [63]	0.445	122	0.448	0.836	0.105	1.234
6	Bazrafshan et al [14]	0.044	30	0.684	0.988	0.035	0.461
7	Bazrafshan et al [14]	0.563	203	0.640	0.987	0.001	0.563
8	Bani Mhad et al [11]	0.162	106	0.550	0.977	0.221	0.817
9	Baharestan et al [10]	0	20	0.649	0.917	0.150	0.541
10	Piri et al [95]	-0.013	10	0.622	0.973	0.057	0.608
11	Saqafi [103]	0.8	141	0.441	0.930	0.596	2.515
12	Saqafi & Ibrahimi [103]	0.553	166	0.293	0.978	0.010	2.410
13	Saqafi & Kurdistani [102]	0.5	50	0.267	0.983	0.214	2.743
14	Jarjarzadeh & Nasrabadi [64]	0.22	101	0.394	0.979	0.012	1.540
15	Hosseini & Dastgir [60]	-0.086	125	0.319	0.984	0.177	2.131
16	Khodadadi et al [70]	0.058	100	0.144	0.904	0.115	5.863
18	Royayi & Ibrahimi [101]	0.092	52	0.067	0.967	0.082	7.314
19	Zahmatkesh et al 113	0.58	158	0.126	0.982	0.389	1.246
20	Alavi Tabari & Parsaei [6]	0.71	74	0.120	0.951	0.087	0.225
21	Alavi Tabari & Aref Manesh [5]	0.12	468	0.445	0.976	0.081	0.754
22	Foroghi & Sakiani [48]	0.023	119	0.570	0.962	0.013	1.001
23	Foroghi & Sakiani [48]	0.022	119	0.500	0.966	0.156	0.950
24	Ghaemi et al [98]	0.275	136	0.513	0.853	0.058	0.591
25	Kardan et al [65]	0.025	91	0.629	0.855	0.025	1.163
26	Ebrahimi & Naqdi [43]	0.36	102	0.462	0.867	0.158	1.542
27	Kokabi et al [73]	0.158	94	0.393	0.903	0.003	2.260
28	Lari et al [80]	0.283	201	0.307	0.789	0.195	2.289
29	Mohammadi et al [89]	0.263	118	0.304	0.873	0.112	1.341
30	Moradzadeh Fard [91]	0.48	552	0.427	0.884	0.009	1.805
31	Moradi et al [90]	0.033	86	0.357	0.850	0.157	1.968
32	Maranjori [87]	0	27	0.337	0.825	0.176	4.838
33	Mahdavi & Jamalian- pour [85]	0.286	1794	0.171	0.775	0.041	5.850
34	Mehrazin et al [88]	0.273	368	0.146	0.696	0.013	0.977
35	Nasri et al [92]	0.676	60	0.514	0.804	0.018	1.258
36	Norosh et al [112]	0.296	672	0.013	0.776	0.350	5.880
37	Yousefi Asl et al [111]	0.393	102	0.443	0.957	0.076	9.176
38	Che-Ahmad & Abidin [32]	0.07	343	0.145	0.861	0.031	0.716
39	Ahmad et al [4]	0.072	57	0.098	0.846	0.127	2.238
40	Habiba Toms [8]	0.083	772	0.583	0.875	0.138	0.699
41	Butler et al [28]	0.06	523	0.309	0.783	0.006	0.629
43	Bronson et al [24]	0	2204	0.614	0.838	0.046	3.539
44	Blanco et al [17]	0	10002	0.689	0.881	0.147	3.136
45	Bohm et al [19]	0.05	202	0.220	0.832	0.041	8.670
46	Tsipourido & Spathis [106]	0.528	1479	0.085	0.956	0.043	0.211
47	Chaney et al [30]	0.223	4038	0.103	0.932	0.035	0.171
48	Chen et al [34]	0.58	209	0.826	0.946	0.177	0.270
49	Khalif & Hussainey [68]	0.75	42	0.854	0.918	0.004	0.356
50	Khalif & Chalmers [68]	0.24	27	0.787	0.919	0.076	0.420
51	Demerjian et al [38]	0.23	1834	0.738	0.841	0.191	9.395
52	Dimitropoulo et al [43]	0.111	101	0.704	0.874	0.152	6.824
53	Sultana et al [105]	0.48	494	0.096	0.944	0.180	4.625
54	Abidin & Ahmad-Zaluki [2]	0.555	112	0.128	0.957	0.049	0.889
55	Felo et al [46]	0.09	77	0.083	0.931	0.220	3.163
56	Fifka et al [47]	0.064	186	0.033	0.877	0.029	3.315
58	Cullinan et al [36]	0.614	318	0.529	0.892	0.167	2.441
59	Garcia et al [51]	-0.021	16	0.240	0.849	0.238	2.353
60	Lang et al [78]	0.655	46	232	0.928	0.222	2.163
61	Leventies & Weetman	0.377	91	0.105	0.916	0.222	1.932
51	[83]	5.611	J.1	0.100	0.010	5.000	1.002

confidence intervals, both of which are placed around two similar circles. The small black interval is the confidence interval. The large green interval is the predictive confidence interval. It is worth noting that each study is assigned a weight due to the sample size of the study. If the weight of a study is high, it indicates the large sample size of that

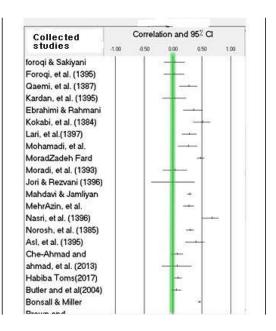


Figure 1: The forest plot of the current research

study. In other words, that study provides a large amount of information. In the previous diagram, a column entitled "Weight of each study" is considered, which indicates the weight of each study in each row. In the following sections, we will explain in detail how to interpret these two.

Table 3: Significant results for medium effect size

Odds ratio and 95½ Cl		P-value	Z-value	Upper limit	Lower limit	Odds Ratio	Model
0.01 0.10 1.00	10.00 100.00	0.000	8.948	3.984	2.424	3.108	Model with accidental effects

As it is clear in the above table, which is the output of the meta-analysis software, the average effect size is equal to 3.108, which has a p-value and Z-value of 0.000 and 8.948, respectively. This information is for the model with random effects and since these values are smaller than 0.05 and larger than 1.96 respectively, we can accept the influence of the collected studies with 95% confidence. On the other hand, the horizontal line presented in the 95% confidence interval did not cut the null hypothesis column and because it is in the positive part of this column, therefore, the positive effect of these studies is acceptable.

6 Discussion and Conclusion

In this section, we investigate and test research hypotheses using meta-regression and logarithm of risk ratio (effect size).

H1: different criteria for measuring financial reporting transparency moderate the relationship between the independence of the audit committee and the transparency of financial reporting.

Table 4: Results of the first hypothesis

Hypothesis	Path coefficient	Standard error	Confidence interval %		Z-value	P-value (2- tailed)
			Lower limit	Upper limit		
The moderating effect of differ-	0.1904	0.0605	0.0718	0.3089	3.15	0.0016
ent financial reporting trans-						
parency measurement criteria						
on the relationship between						
audit committee independence						
and financial reporting trans-						
parency						

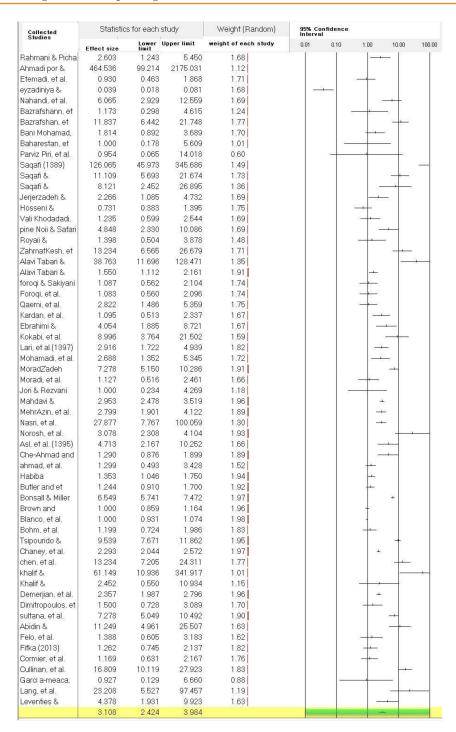


Figure 2: Part of the forest plot in the meta-analysis along with the table and statistical information corresponding to it

As the information in the above table shows, the z-value statistic for this hypothesis is equal to 3.15, which is higher than the absolute value of 1.96. Also, the p-value is less than 0.05, which is equal to 0.0016. The path coefficient of this relationship is equal to 0.1904 and it means that any variable added to different criteria of financial reporting transparency and the mentioned relationship increases the logarithm of the risk rate by 0.1904. In this hypothesis, the value of the Q statistic is equal to 9.90 with 1 degree of freedom and the P-value is 0.0016, which is due to the moderating effect of different criteria for measuring the transparency of financial reporting on the relationship between the independence of the audit committee and the transparency of financial reporting.

H2: Adoption of international financial reporting standards has a significant effect on reporting transparency.

Table 5: Results of the second hypothesis

Hypothesis	Path coefficient	Standard error	Confidence interval %		Z-value	P-value (2- tailed)
			Lower limit	Upper limit		
The effect of adopting interna-	0.304	0.435	1.452	3.155	5.30	0.0000
tional financial reporting stan-						
dards on financial reporting						
transparency						

As the information in the above table shows, the z-value statistic for this hypothesis is equal to 5.30, which is higher than the absolute value of 1.96. Also, the p-value is less than 0.05, which is equal to 0.000. The path coefficient of this relationship is equal to 2.304 and it means that any value added to the variable of the adoption of international financial reporting standards increases the logarithm of the risk rate by 0.304. In this hypothesis, the value of the Q statistic is equal to 28.11 with 1 degree of freedom and a p-value of 0.000, which means the correlation of the effect size with the variable to the adoption of international financial reporting standards. A summary of the results of the hypothesis testing is presented in the table below.

Table 6: Summary of the results of rejecting or accepting research hypotheses

Row	Research Hypothesis	Path coefficient	Z-value	P-value (2-tailed)
H1	Different criteria of measuring financial reporting transparency mod-	0.190	3.15	0.0016
	erate the relationship between audit committee independence and fi-			
	nancial reporting transparency			
H2	Adopting international financial reporting standards has a significant	0.304	5.30	0.000
	effect on reporting transparency			

As can be seen from the results of the above table, all hypotheses have a z- value of more than 1.96. On the other hand, the p-value statistic was less than 0.05 for each study. This shows that all research hypotheses can be accepted with 95% confidence interval or 5% error. The Z- values for the first and second hypothesis are 3.15 and 5.30, respectively, and the p- values for the first and second hypothesis are 0.001 and 0.000, respectively.

Conclusion based on testing the first hypothesis: different criteria for measuring the financial reporting transparency moderate the relationship between the independence of the audit committee and financial reporting transparency.

The results of the present hypothesis showed that different criteria for measuring financial reporting transparency moderate the relationship between audit committee independence and financial reporting transparency. Although it may be expected that the independent audit committee improves the financial reporting process in scientific studies, the fact is that the existing literature has not reached such a conclusion. Considering the importance and benefits of high-quality audit committees in organizations and the ambiguity and confusion in the findings of studies on the effectiveness of committees, it seems necessary to investigate this issue to clarify the positive or negative effects of the formation of such committees. The purpose of this research is to provide an answer to the contradictions and inconsistencies of the research on the relationship between the independence of the audit committee and the transparency of financial reporting. The results of the studies conducted on the relationship between the independence of the audit committee and financial reporting indicate that these studies are inconsistent. Therefore, by combining the documented correlation statistics in this research, it is not possible to reach a specific conclusion regarding the existence and extent of such a relationship. Thus, to identify the cause of this inconsistency, by dividing the research based on different criteria of financial reporting transparency and calculating the intragroup chi-square statistic, we found that different criteria used in the research were the sources of contradiction in the research results. Legislators can use the reliable results of meta-analysis to determine the importance of the characteristics of audit committee members and their effects on the transparency of financial reporting and the passing of appropriate laws. Investors can also benefit from the reliable results of meta-analytical research to assess the inherent risk of accounting information when making decisions to buy and sell securities. This research provides a unified perspective to the audience while creating a clear insight into the reasons for the existence of contradictions around the independence of the audit committee.

Conclusion based on the second hypothesis: Adoption of international financial reporting standards has a significant effect on reporting transparency.

The results of the present hypothesis showed that the adoption of international financial reporting standards has a significant impact on reporting transparency. The globalization of accounting standards indicates one of the significant changes in the accounting legal system. While the adoption of international financial reporting standards and comparing it with the generally adopted internal principles of countries show that international financial reporting

standards are a set of higher quality accounting standards, but the economic consequences of this transition are still under investigation. In this research, a meta-analysis of a set of empirical studies was conducted regarding the effects of adopting international financial reporting standards on the transparency of financial reporting including discretionary accruals, and therefore, a comprehensive analysis of the consequences of adopting international financial reporting standards was done. For this purpose, based on the claim of the formulators of international financial reporting standards regarding the benefits of information provided in the form of international financial reporting standards and previous theoretical foundations, the research hypothesis regarding the adoption of international financial reporting standards on the transparency of reporting was formulated and tested.

Also, according to the theoretical foundations of the research, the modifying effects of other factors, including the legal origin of the countries, the executive guarantee of accounting and auditing, the compatibility between the generally adopted domestic principles and the international financial reporting standards, the selection of the research design and the necessity of adopting the international financial reporting standards (voluntary or obligatory adjustment) were investigated. The results of these studies indicate that, in general, the adoption of international financial reporting standards does not improve financial reporting through a reduction in discretionary accruals and the application of these standards has reduced profit management just in countries with high accounting and auditing executive guarantee. Also, the adoption of these standards in countries with written legal origin has increased profit management, which was probably due to the characteristics of secrecy and legal control prevailing in these systems, which have been discussed in previous research (Pope and McLeay, [96]). Finally, the model used to measure the effect of the adoption of international financial reporting standards on profit management affects the results, so that in the studies in which Kothari's model [75] is used, it has a negative effect and in the models based on Larcker and Richardson [79] the positive effect of using international standards has been reported. The results based on other models were not significant. In this way, in addition to the conditions that affected the relationship between the adoption of international financial reporting standards and discretionary accruals, contradictory results have been obtained from the measurement models of discretionary accruals, which makes the process of drawing the final conclusion difficult. It seems that future research on the effects of the adoption of international standards on the transparency of financial reporting can consider other criteria and make new classifications, based on the incremental or conservative movement of profits in the period after the adoption of international financial reporting standards. In this case, a more realistic analysis of the effects of applying international financial reporting standards can be done. Finally, according to the theoretical foundations of the research, the results show that the benefits of adopting these standards in terms of reducing profit management will be greater than the costs of adopting them only when there is a real commitment to transparency and strict implementation. These results can be interesting for standards drafting authorities and companies that are looking for benefits of these standards. However, this research may not include all research related to the effects of adopting international financial reporting standards and may not have reviewed all available evidence. Also, other factors, apart from what was considered a moderating variable in this research, may have influenced the effects of adopting these standards. The financial system and macroeconomics of the countries, the motivations for adopting these standards (Ramanna and Sletten, [100]), the role of the accounting profession, the concentration of ownership, and the corporate governance system are among the factors that can influence the effects of adopting international financial reporting standards which are not considered in this research and can be the topics of future research.

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