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Managerial Ability and Financial Reporting

Timeliness: A Further Evidence of the Audit Firm Size

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Abstract


The purpose of this study is to examine the relationship between Managerial Ability and the timeliness of financial reporting. Linear regression was used to test the two study hypotheses. The statistical population consisted of 115 companies listed on the Tehran Stock Exchange during the years 2013-2022 (1150 firm-year observations). Delay in auditor reporting is a variable for timely financial reporting. The model proposed by [1] was used to assess managerial ability. The study found a significant and positive relationship between managerial ability and timely financial reporting. In other words, as managerial ability increases, the delay in financial reporting decreases. Furthermore, the results indicate that the size of the audit firm moderates the relationship between these two variables.

Keywords: Management ability, Timeliness, Financial reporting.

1 | Introduction

The purpose of this study is to examine the relationship between Managerial Ability and the timeliness of financial reporting. Timely financial reporting has been a priority for regulators, standard setters and academics in recent years [2]. For example, the US Securities and Exchange Commission (SEC) has set deadlines for various corporate filings, including periodic accounting reports [3]. In addition, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) conceptual framework consider timeliness to be a fundamental characteristic of relevant financial reporting information. In addition, empirical study has long emphasized the importance of timely financial reporting. While previous research has examined several firm-specific, economic, and auditor-related characteristics associated with financial reporting timeliness (e.g., [4-7]), studies have yet to examine the relationship between managerial characteristics (particularly human capital attributes) and financial reporting timeliness. This lack of evidence

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is notable given the significant influence that managers have on the financial reporting and auditing process, particularly following legislative measures such as the Sarbanes-Oxley Act of 2002. Based on this, this study used a measure of managerial capability developed by Demerjian et al. [1] to examine the relationship between managerial capability and financial reporting timeliness. The timeliness of financial reporting is expected to be influenced by managerial ability. Krishnan and Yang [8] provide evidence that many firms announce earnings before their audits are complete, suggesting Earnings Announcement Delay (EAL).

Management confidence in its internal reporting system is somewhat enhanced by EAL. Audit Report Lag (ARL) is often used as a measure of audit efficiency, as it indicates management's ability to facilitate the audit process and negotiations with the auditors. Abernathy et al. [2] found that higher managerial ability is associated with shorter EAL and ARL. The findings of Abernathy et al. [9] contribute to the timely financial reporting literature by documenting a significant positive relationship between managerial ability and financial reporting timeliness. Given the significant interest of investors, regulators and researchers in the timeliness of financial reporting, and the foreseeable demand for greater timeliness of accounting information in the future [10], the findings of this study may be particularly relevant. The important role that more capable managers play in improving timeliness can, in turn, reduce information asymmetry by providing the market with earlier disclosure of audited financial information. As highlighted by Abernathy et al. [4] the provision of audited financial statements serves a critical function for capital markets in emerging markets. Our findings suggest to auditors, boards of directors, investors, and regulators that managerial ability is associated with the timeliness of financial information.

This study can demonstrate that managerial capability in improving the timeliness of financial reporting in firms is a critical attribute that contributes to the effectiveness of decision making and adds to the literature on managerial ability [1]. Developed an empirical measure to quantitatively assess managerial ability, sparking a new stream of literature investigating the impact of managerial ability on accounting policies and disclosures. The literature is extended by showing that managerial ability plays a crucial role in reducing information asymmetries through timely financial reporting to the benefit of shareholders.

2 | Theoretical Literature and Extension of Study Hypotheses

2.1 | Managerial Ability

Managers have always had a crucial and vital role to play in an organization. The impact of prominent managers on revenue, profitability and organizational success is evident in many successful organizations today [11]. With the proliferation of listed companies in recent decades and the separation of ownership and management, attention to managerial performance has increased. In publicly traded companies, business unit managers act as representatives of shareholders and are charged with maximizing shareholder wealth. They seek to grow the business through optimal financial and operational policies and strategies [12]. The first step is to set strategic objectives, which in turn guide managers in the effective implementation of operational strategies. The performance of managers in this regard is critical to value creation. On the other hand, companies face changing environmental conditions throughout their lifecycle, and managers play a crucial role in managing the company and responding to these changes [13]. Many researchers seek to answer the question of whether the ability and quality level of managers, as one of the most valuable human assets, contributes to improving firm performance [14]. One of the human assets that play a critical role in converting company resources into revenue and creating wealth for shareholders is the manager of a commercial enterprise. Information related to the capabilities of firm managers, such as their ability to seize investment opportunities, secure resources, allocate resources optimally, and their knowledge and experience, are considered important and valuable dimensions of intangible assets for commercial firms. In essence, the capabilities of managers represent one dimension of the human capital of firms, which is classified as an intangible asset [15].

2.2 | Managerial Ability and Timely Financial Reporting

Audited financial statements are regarded as credible external sources of information that companies are obliged to make available to their stakeholders. The timeliness of financial reporting is also one of the fundamental elements of disclosure. It enhances the value of financial reports. Irrespective of whether one views timeliness as an objective of accounting or as a beneficial characteristic of accounting information, it is clear that both disclosure requirements and a significant body of accounting literature have accepted that timeliness is a crucial condition that can significantly affect the attractiveness of financial markets and capital. Based on the points discussed, timely disclosure of financial information is particularly important for external stakeholders, especially investors.

Therefore, timely disclosure of information serves as a means to reduce information asymmetry and mitigate the spread of rumors about the company's health and financial performance [16]. According to Accounting Standard *No. 1* in Iran, the responsibility for preparing and presenting financial statements, as the core principle of financial reporting, rests with the management of the business unit, as delegated by the board of directors. Researchers have long focused on the role of business unit management in different dimensions of firms [17].

Kor [18] points out that managerial capability refers to the knowledge, abilities and experience of a manager. Managers' abilities are primarily derived from their breadth of experience, including their understanding of markets, business strategies and innovation. In recent years, managerial ability and its impact on both financial and non-financial indicators has become one of the preferred areas of research for academics. Access to timely information is a key factor in reducing uncertainty. It has a special place in economic decision-making and financial forecasting. It is therefore considered one of the essential components of an efficient capital market [19].

Financial and economic decisions made by users based on financial reports are significantly influenced by the timeliness of information. Delay in publishing financial statements leads to uncertainty in investors' decision-making process. Competent executive managers have greater ability in effectively managing resources, including achieving their goals such as timely financial reporting [9]. Increasing the internal confidence of responsible managers in their financial reporting system motivates them to initiate the publication of financial statements with greater enthusiasm and speed. In addition, with greater knowledge of their business environment and industry, they can more effectively and efficiently drive the financial reporting and audit process when dealing with complex issues. Therefore, the role of managers in business units in terms of management capability makes financial reporting highly significant [17]. Based on the literature, the first hypothesis is formulated as follows:

Hypothesis 1. There is a significant relationship between managerial ability and the timeliness of financial reporting.

2.3 | The Moderating Effect of Audit Firm Size

One of the most important factors influencing the decisions of potential and actual investors in the capital market is the information disclosed by companies at certain intervals determined by the capital market. However, this information is only effective if it is available to users in a timely manner [20]. Under Section 404 of the Sarbanes-Oxley Act, the deadline for filing audit reports has been reduced from 90 days to 60 days over a three-year period. This reduction indicates the need for independent auditors to report more quickly, despite having to do more work in less time [21]. With the implementation of this law, many companies have started to release financial information in advance of the audit report date. This practice affects the reliability of the information on which investors base their investment decisions. Furthermore, the regulations of Iran's capital market require companies listed on the Tehran Stock Exchange to disclose audited financial statements of the parent company and consolidated group at least 10 days before the ordinary general meeting and no later than 4 months after the end of the fiscal year [15]. Delays in the release of audit reports disrupt the

balance in users' access to financial information, which can ultimately affect stock market transactions and company valuations. Delay in audit reporting can lead to failure in timely disclosure of information and consequently to decrease in the quality of information [20]. Based on the above discussion, the second hypothesis of the research is formulated as follows:

Hypothesis 2. Audit Firm Size (ASIZE) moderates the relationship between managerial capability and financial reporting timeliness.

3 | Research Method

3.1 | Statistical Population and Sample Size

The statistical sample of this study includes selected companies listed on the Tehran Stock Exchange that meet the following criteria during the period from 2013 to 2022 (10 years):

- The selected samples should have been listed on the Tehran Stock Exchange before the year 2013.
- The selected samples should have financial periods ending in December to improve comparability.
- During the years under study, the selected companies should not have changed their business activities or fiscal year.
- The main activity of the enterprise is manufacturing, therefore financial institutions, investment companies and banks are not included in the sample.

Therefore, there are 115 companies that meet the above criteria and can be used as the statistical sample, resulting in a total of 1150 (firms-years of observations).

3.2 | Research Models

In order to test the first hypothesis of the research, the following model has been used.

$$\text{TIMELINESS}_{it} = \beta_0 + \beta_1 \text{MABILITY}_{it} + \beta_j \text{CONTROLS}_{it} + \varepsilon_{it} \quad (1)$$

For testing the second hypothesis of the research, *Model 2* has been utilized.

$$\text{TIMELINESS}_{it} = \beta_0 + \beta_1 \text{MABILITY}_{it} + \beta_2 \text{FSIZE}_{it} + \beta_3 \text{MABILITY} * \text{FSIZE}_{it} + \beta_j \text{CONTROLS}_{it} + \varepsilon_{it} \quad (2)$$

3.3 | Dependent Variable

Timeliness of Financial Reporting: This variable is measured by the delay in audit reporting, which is defined as the number of days between the end of the company's fiscal year and the date of the audit report.

3.4 | Independent Variable

Managerial Ability (MABILITY): Using the model proposed by [1], managerial ability is measured in two stages. In this model, managerial ability is calculated in two stages: first, by measuring firm efficiency and then incorporating it as an independent variable in a multiple regression along with controlling for inherent company characteristics. The Data Envelopment Analysis (DEA) model is used to measure business efficiency. DEA is a statistical model used to measure the performance of a system based on input and output data.

DEA measures the relative efficiency of units that have similar inputs and outputs. The efficiency or inefficiency of each decision-making unit depends on its performance in converting inputs into outputs compared to other units within a given domain. This method establishes an efficiency frontier for companies between zero and 1. Companies with an efficiency score of 1 are considered highly efficient, while companies with an efficiency score of less than 1 fall below the efficiency frontier and need to reach the frontier by either reducing costs or increasing revenues.

$$\max_v \theta = \frac{\text{sales}}{v_1 \text{COGS} + v_2 \text{SG\&A} + v_3 \text{NetPPE} + v_4 \text{Opsleas} + v_5 \text{R\&D} + v_6 \text{Goodwill} + v_7 \text{Intan}} \quad (3)$$

COGS: cost of goods sold.

SG&A: selling, general, and administrative expenses.

NetPPE: net property, plant, and equipment at the beginning of the year.

Opsleas: operating lease expense.

R&D: research and development expense.

Goodwill: purchased goodwill at the beginning of the year.

Intan: net intangible assets at the beginning of the year.

Sales: firms sales.

Max: efficiency.

In the second stage, firm efficiency is influenced by two factors: firm-specific characteristics and managerial ability (as shown in the following model). After the removal of firm-specific characteristics, the residual is a measure of management abilities.

$$\text{FirmEfficiency}_{it} = \alpha + \beta_1 \text{LN(TotalAssets)}_{it} + \beta_2 \text{MarketShare}_{it} + \beta_3 \text{FreeCashFlowIndicato}_{it} + \beta_4 \text{In(Age)}_{it} + \beta_5 \text{ForeignCurrencyIndicator}_{it} + \varepsilon_{it} \quad (4)$$

Firm Efficiency: the company's efficiency obtained from the DEA *Model 3*.

LN (TotalAssets): the logarithm of total assets extracted from financial statements.

Market Share: market share of each company, calculated by dividing its sales by the total industry sales at the end of the fiscal year.

Free Cash Flow (FCF): market share of each company, calculated by dividing its sales by the total industry sales at the end of the fiscal year. FCFs are calculated according to *Model 5*.

$$\text{FCF}_{it} = P_{it} - \text{TAXP}_{it} - \text{CIP}_{it} - \text{DPP}_{it} \quad (5)$$

P: operating profit before depreciation.

TAXP: tax paid.

CIP: interest expense.

DPP: dividends paid.

In(Age): age of the company, which is the natural logarithm of the number of years the company has been listed.

Foreign Currency Indicator: this variable represents foreign currency and is measured as follows: it takes the value of 1 if the company engages in exports, and 0 otherwise.

3.5 | Moderator Variable

Audit Firm Size (ASIZE): If the company has been audited by the Iranian Audit Organization, it is assigned a value of 1; otherwise, it is assigned a value of 0.

3.6 | Control Variables

ROA: the ratio of net profit to total assets.

LOSS: if an enterprise has a loss in a financial year, it receives a value 1; otherwise it receives a value 0.

LEV: the ratio of total liabilities to total assets.

AUFEE: audit fees as a percentage of total assets.

IC WEAKNESS: if a company discloses internal control weaknesses, it is assigned a value of 1; otherwise, it is assigned a value of 0.

MISTATE: if a company makes a restatement of its financial statements, it is assigned a value of 1; otherwise, it is assigned a value of 0.

4 | Findings of the Research

4.1 | Descriptive Statistics of the Data

Descriptive statistics focus on the state of the data using key metrics. *Table 1* illustrates the status of the data as follows:

Table 1. a. Descriptive statistics results.

Variable Name	Variable symbol	Mean	Median	Max	Min	S.D
Ability to manage	MA	0.012	0.007	0.211	-0.081	0.022
Timeliness of financial reporting	TimeLess	75.61	74.5	151	30	32.27
Profitability	ROA	0.105	0.090	0.63	-0.79	0.14
Audit FEE	AFEE	0.082	0.028	2.124	0.000	0.1121
Financial LEV erage	LEV	0.6524	0.6337	1.9757	0.0469	0.0616

Table 1. b. Results of dummy variables.

LOSS		IC		MISTATE		BIG	
Values (0)	Values (1)	Values (0)	Values(1)	Values (0)	Values (1)	Values(0)	Values (1)
885	265	945	196	644	506	437	713
% 77	%23	83%	% 13	%56	%44	%38	%62
1150		1150		1150		1150	

Based on the results in *Table 1.a*, it can be stated that on average, the delay in financial reporting is 74 days. In addition, on average, 65% of companies finance their assets through financial liabilities, with the highest percentage observed in Farabi Petrochemical Company in 2018. The average sales growth of companies is around 14%. The ratio of operating cash flow to total assets is around 11%. The growth of the company's assets is around 30%. Some 13% of companies had internal control weaknesses and 23% of them had an average financial loss for the financial year.

4.2 | Results of Hypothesis Test 1

Using linear regression, *Hypothesis 1* of the research was tested. Its results are presented in *Table 2*.

Table 2. Results of hypothesis test 1.

Variable symbol	Coeff	S.d	t-stat	Sig
MA	0.4588	0.2063	2.2239	0.0001
ROA	-0.3151	1.0341	-0.3047	0.7282
LOSS	0.2185	0.1372	1.5925	0.3727
AUFEE	0.4420	0.1241	3.5616	0.0000
ICW	0.0548	0.1954	0.2804	0.8721
MISTATE	0.1247	0.2145	0.5813	0.6461
LEV	-0.2587	0.1254	2.0629	0.0000
C	0.4514	0.1697	2.6599	0.0000
F stat	50.005		R-squ	0.4121
Prob	0.0000		Adj. R-squ	0.3955

Based on the results in *Table 2*, the F-statistic value is 50.005, and since the significance level is 0.05, we can conclude that the research model fits well. At a significance level of 5%, the test results indicate a statistically significant positive relationship between managers' capability and timeliness of financial reporting. Thus, hypothesis one is accepted.

4.3 | Results of Hypothesis Test 2

Hypothesis 2, which states that audit firm size moderates the relationship between managerial ability and financial reporting timeliness, was tested and the results are presented in *Table 3*.

Table 3. Results of hypothesis test 2.

Variable symbol	Coeff	S.d	t-stat	Sig
MA	0.4547	0.1454	3.1272	0.0000
ASIZE	0.3571	0.1546	2.3098	0.0000
MA*ASIZE	0.4378	0.1671	2.6199	0.0000
ROA	-0.1548	0.2411	0.6420	0.5487
LOSS	0.3614	0.4554	0.7935	0.4401
AUFEE	0.4773	0.2217	2.1529	0.0001
ICW	0.3674	0.4978	0.7380	0.4524
MISTATE	0.2198	0.4006	0.5486	0.5987
LEV	0.6973	0.3298	2.1033	0.0001
C	0.6601	0.2941	2.2444	0.0000
F statistic	53.1515	R-squared		0.5414
Prob	0.0000	Adj R-squared		0.5101

Based on the results in *Table 3*, the F-statistic value is 53.15 with a significance level of less than 0.001, indicating the overall significance of the research model. The test results of the research model at the 5% significance level indicate a statistically significant positive relationship between managerial ability, audit firm size and the interactive effect between these two variables with the timeliness of financial reporting. To put it another way, hypothesis two is accepted at a 95% confidence level.

5 | Interpretation, Discussion, and Recommendations

In this section, the results of the testing of each of the research hypotheses are interpreted on the basis of the theoretical foundations and previous studies.

5.1 | Discussion of Hypothesis 1

The test results at a 5% significance level indicate a statistically significant positive relationship between managerial ability and the timeliness of financial reporting. Therefore, hypothesis one is accepted. ARL is often used as a measure of audit efficiency, reflecting management's ability to facilitate the audit process and negotiate with auditors [9]. Found that higher managerial capability was associated with shorter ARL. The study by [9] found a significant positive relationship between managerial capability and timeliness of financial reporting.

Mehrani et al. [17] also found that competent managers have a mitigating effect on the delay of earnings announcements and audit reports, resulting in more timely financial disclosures. In summary, the results indicate that increasing managerial capability has a positive impact on the timeliness of financial reporting. By publishing financial information in a timely manner, it reduces the information asymmetry between the firm and investors.

5.2 | Discussion of Hypothesis 2

The test results of the research model at the 5% significance level show that there is a statistically significant positive relationship between managerial skills, audit firm size and the interactive effect between these two variables with the timeliness of financial reporting. Hypothesis two is accepted at a 95% confidence level. Based on the studies by Abernathy et al. [9] and Mehrani et al. [17] there is a significant positive relationship between audit firm size and financial reporting timeliness based on the ARL index. In other words, as the size of audit firm's increases, which is typically associated with greater expertise, experience, etc., the delay in audit reporting tends to decrease. Additionally, increased hiring and interaction between managers and auditors can also have a significant impact on this relationship. Competent managers tend to engage reputable and

experienced larger audit firms, resulting in reduced audit time due to their extensive experience. Based on the results of the research, it is recommended that capital market regulators recommend a ranking and disclosure of active companies based on the timeliness of financial reporting.

This would provide an appropriate information platform for making economic decisions and changing shareholder positions. By making timely information disclosure one of the essential components of a functioning market, it reduces information asymmetry, insider trading, rumors and information leakage in the market. This, in turn, helps in pricing securities, attracting capital and maintaining investor confidence in capital markets. Listed companies are advised to carefully consider the reputation and ranking of audit firms when hiring them. Additionally, various research studies have shown that considerable attention should be paid to the capability of managers when hiring them.

- I. It is recommended to use various other indicators, such as those proposed by [22], to test managerial abilities.
- II. In addition, it is recommended that future studies use other indicators of financial reporting timeliness, such as earnings announcements.

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