

Accounting Data In A Corporate Decision-Making Process Evidence: A Case Study In Egypt

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Abstract

This study aims to investigate the influence of financial reporting, budgeting system and bookkeeping systems in the decision-making process of Egyptian firms. A sample of balanced data was collected from the 40 most active non-financial enterprises with 240 firm variables in Egypt. The Partial Least Square Structural Equation Modelling was utilized in this study, in order to test the hypotheses association. To meet the multivariate normality assumption and the need for bigger sample size, Covariance Based-Structural Equation Modelling was utilized. The outcome of the study shows that financial reporting, budgeting systems and bookkeeping systems have a significant positive influence on corporate management. This illustrates how a good corporate financial position results from strong business performance on shareholders.

Keywords: Corporate management, accounting data, decision-making process

1. Introduction

The company's financial reporting will be of higher quality if there is strong corporate management and accounting quality. Accounting is seen as the established financial reporting standards and procedures that demand caution from businesses when dealing with risks and uncertain situations [1]. To protect the interests of the shareholders and increase business value, it limits the manager's expedient behaviour [2]. It also has an impact on accounting data, which investors need to make judgments, which increases the number of research on accounting [3]. Financial reporting is a useful contractual and management strategy to decrease knowledge asymmetry and settle agency disputes, claims the good accounting standard [4]. Because of new issues including comparability, dependability, and understandability among others, the adoption of global and consistent financial reporting standards is progressing. The financial reporting process is significantly impacted by the accounting constraint of conservatives, particularly when selecting accounting standards that are in line with the traditional approach.

Accounting and financial reporting practises are significantly impacted by the business environment in Egypt [5]. Cultural influences are likely to result in more cautious and opaque accounting and transparency practices in Egypt. That's because conservatives are prevalent in a nation with poor protection of property rights [6]. The fact that not all aspects of accounting are covered by accounting standards may be the cause of the increased interest in accounting. In developing nations like Egypt, ownership is concentrated between the government and families, which might result in collusion and undermine the rights of young shareholders to learn about the company [7]. Because of the efficient corporate management in Egypt, the predominance of independent directors, the split of the CEO and chairman, and the establishment of domestic audit sections are increased. By increasing accounting performance, the corporation will help the capital market function more effectively and bring in more investors.

The two concepts of accountability and transparency serve as the foundation for the relationship between corporate management and accounting. The efficiency of the system of accounting data is anticipated to boost the regulatory framework and the capital markets' effective operation [8]. The information that continually flows from the company to stakeholders is provided by the accounting data system. The decision-making of the shareholders is based on this data flow [9]. The interests of the stakeholders are protected by increasing honesty and accountability, and effective management also strengthens Egypt's position as an economic capital [10]. This study aims to investigate the influence of financial reporting, budgeting systems and bookkeeping systems of the Egyptian listed firms. This study investigates the answer to the questions to know about performance level. The 40 most active financial firms' balanced statistics were used to test the proposed hypotheses. The study shows a practical and theoretical view by examining the effect of BS, FR and BKS on Egyptian firms.

2. Literature review and hypotheses

2.1 Financial reporting

Due to a growth in shareholder expectations for both financial and non-financial data over the past two decades, the corporate reporting process has become increasingly dynamic. Financial reports remain essential, especially for people having financial interests in businesses, such as shareholders, creditors, and tax officials [11]. They include data on productivity, cash flow for a fixed date or timeframe, modifications in shareholders' equity and the financial position of a company. In order to facilitate comparability between years, as well as between different firms and industries, financial reports are generated in line with accounting principles and financial reporting standards [12]. In addition to supervising, monitoring, and overseeing the financial reporting process of the firm as produced by its accountants, directors are responsible for providing investors with accurate information about the financial situation of the company [13]. Corporate failures result from misrepresenting the company's true financial situation through fraud or mistake. Financial reports are not reliable due to a variety of factors, including faults in the board members and accounting staff that prepare and audit the reports, the regulatory structure or the nature of financial reporting. Therefore, it is anticipated that the grade of the financial data included in financial reports and the efficient management of reports will positively impact corporate governance. As a result, we create the following hypotheses:

Hypotheses 1: Corporate governance is positively impacted by the proper use of financial reporting in decision-making.

2.2 Budgeting system

Through monitoring, internal reporting and the delivery of timely and pertinent information, management accounting plays a significant part in the implementation of good corporate governance in addition to the duties of external supervisors like auditors and regulators [14]. Budgeting is a key management accounting strategy that corporate organisations utilise for internal planning and control [15]. Numerous earlier kinds of research have shown that firms still rely on it as a crucial tool for management decision-making. It establishes restrictions on managers' ability to make arbitrary purchases. Therefore, a good budgeting system helps with corporate governance by preventing managers from mishandling company funds and by determining the best distribution of resources. As a result, we create the following hypotheses:

Hypotheses 2: Corporate governance is positively impacted by the effectiveness of the budgeting mechanism.

2.3 Bookkeeping system

Bookkeeping refers to the routine recording of financial transactions by accountants in the accounting information system. The arrangement and categorization of corporate transactions via bookkeeping are essential to accounting procedures and financial analysis [16]. Since errors or fraud in accounting have a cascading impact on other procedures, the accuracy of financial reporting is directly related to the use of the right bookkeeping techniques [17]. If accountants make incorrect entries, whether on purpose or by mistake, this leads to false financial statements, and they lose their effectiveness in both external and internal decision-making. As a result, we create the following hypotheses:

Hypotheses 3: Corporate governance is positively impacted by the efficient utilization of the bookkeeping system.

3. Research Methodology

3.1 Research conceptual framework

The conceptual framework of this research is shown in Fig.1. In this the effectiveness of the accounting data in the corporate system consists of books keeping system, the effectiveness of financial reporting and the effectiveness of the budgeting system. In this research, a basic sampling technique was utilized. The Partial Least Square Structural Equation Modelling was utilized in this study, in order to test the hypotheses association. The partial least square method is utilized to estimate a set of equations coefficient. To meet the multivariate normality assumption and the need for bigger sample size, Covariance Based-Structural Equation Modelling was utilized.

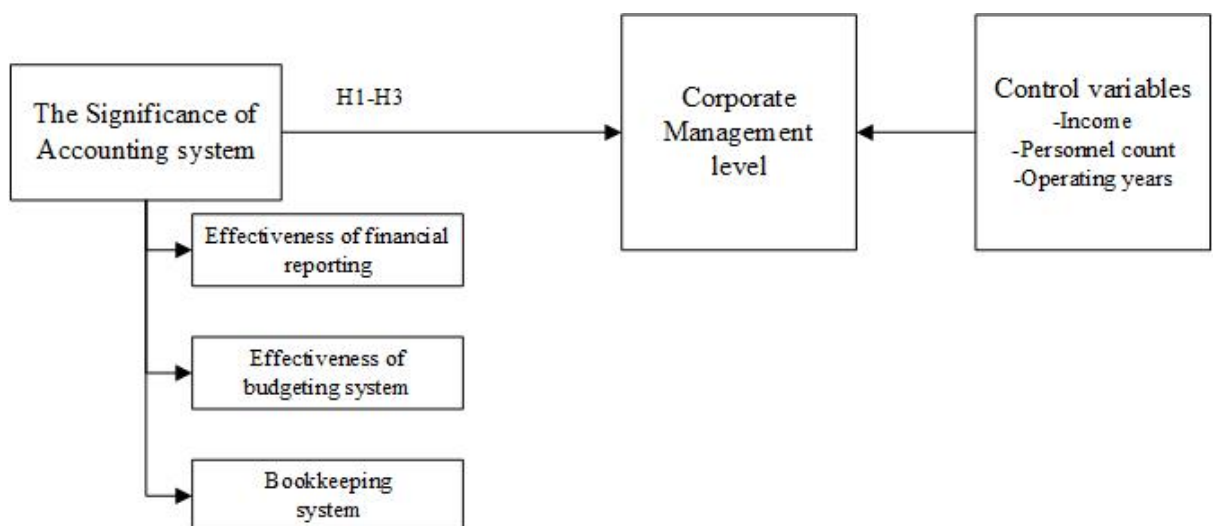


Figure 1: Conceptual framework

3.2 Data Collection and analysis

This analysis makes use of disclosure book-provided balanced panel data from the 40 most active businesses on the Egyptian Stock Market. The availability of data was utilized to

choose which companies to hire. The proposed hypothesis was tested using balanced data from the 40 most active non-financial enterprises with 240 firm-year variables. Most of the firms in Egypt are microbusinesses, small-scale enterprises and medium-sized businesses. General Managers, assistant general managers, directors of financial affairs, and others with related roles at the companies received the survey. The information was gathered by direct management interviews, online surveys, and phone calls to the companies whose addresses were found in business organisations. The questions about accounting data and corporate management are asked in the survey and the basic questions asked in the survey are given in table1.

Table 1: **Basic Questions**

The Organization's Name	
Personnel count	<input type="checkbox"/> 0-8 <input type="checkbox"/> 9-48 <input type="checkbox"/> 49-98 <input type="checkbox"/> 99-248 <input type="checkbox"/> more than 249
Service-related industry	<input type="checkbox"/> Only local market <input type="checkbox"/> Only global market <input type="checkbox"/> Both
Operating years	<input type="checkbox"/> under 9 years <input type="checkbox"/> 9-18 years <input type="checkbox"/> 19- 28 years <input type="checkbox"/> 29-38 years <input type="checkbox"/> over 39 years
Academic level	<input type="checkbox"/> Secondary education <input type="checkbox"/> Higher education <input type="checkbox"/> under graduate <input type="checkbox"/> Doctorate
Income	<input type="checkbox"/> Less than 1.000.000 EGP <input type="checkbox"/> Between 1.000.000 – 7.000.000 EGP <input type="checkbox"/> Between 7.000.001 – 30.000.000EGP <input type="checkbox"/> Between 30.000.001 – 70.000.000 EGP <input type="checkbox"/> Between 70.000.001 – 100.000.000 EGP <input type="checkbox"/> More than 100.000.001 EGP
The proportion of top managers who are not related	<input type="checkbox"/> No one <input type="checkbox"/> 1-4 individuals <input type="checkbox"/> 4-7 individuals <input type="checkbox"/> 7-10 individuals <input type="checkbox"/> more than 10 individuals

Survey Questions about accounting data

FR1. Corporate finance reports are generated at the end of the year and utilised in decision-making.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

FR2. Management evaluates employee performance utilizing the data on financial reports.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

FR3. The firm also creates optional financial reports in addition to the required financial reports.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

BS1. Operating budgets are generated on a regular basis and modified if required.

a) I totally object b) I object c) Neutral d) I approve e) I totally approve

BS2. Management decisions are based on operating budgets.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

BS3. The establishment of a distinct budgeting unit allows for enhanced management and planning inside the firm.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

BKS1. The creators and recipients of the documents both have to sign them.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

BKS2. There are defined protocols for utilizing the current accounts.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

BKS3. The company has set rules and guidelines for recording accounting transactions.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

Survey Questions about corporate management

CM1. For every role, we have prepared a job explanation.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

CM2. Performance is properly evaluated for everybody.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

CM3. People's work is evaluated in accordance with clearly stated and documented guidelines.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

CM4. In the internal audit function, in addition to family members, department leaders and specialists are also included in the evaluation process.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

CM5. Worker obligations, duties, and job descriptions are all in writing.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

CM6. For organisational procedures and the interaction between the departments, we have explicit written rules of conduct.

a)I totally object b) I object c) Neutral d) I approve e) I totally approve

3.3 Statistically descriptive data

According to the findings, 54.6% of the companies had been in business for at least 19 years, and 33.5% of the examined companies had workforce sizes between 9 and 48. And 32% of the companies had an annual income between 1 million and 7 million EGP and nearly half of them offered services to local customers it is found that 43.4% of the business employed administrators with at least a bachelor's degree. In addition, only members of the family make choices at the highest level of the company in 32.6% of the enterprises, which

lack professional top executives. Table.2 displays appropriate analysis data for personnel, working years, service sectors, income, number of top managers, and level of education.

Table 2: Statistically descriptive data

		Frequency	Percentage
Personnel Count	0-8	32	20.5
	9-48	47	33.2
	49-98	23	16.3
	99-248	28	20.0
	More than 249	17	10.0
Total		147	100.0
Service-providing industry	Only local market	63	44.5
	Only global market	10	6.5
	Both	74	49.0
Total		147	100.0
Number of top managers who are not related to them	No one	51.1	32.4
	1-4	57.9	39.6
	4-7	19.1	13.4
	7-10	15.0	9.7
	More than 10	3.9	4.9
Total		147	100.0
Operating years	Under 9 years	34	25.4
	9-18 years	44	27.6
	19-28years	31	22.9
	29-38years	20	15.1
	Over 39 years	18	9.0
Total		147	100.0
Academic level	Secondary education	24	13.0
	Higher education	35	22.6
	Undergraduate	28	18.8
	Doctorate	64	45.6
Total		147	100.0
Income	Less than 1,000,000 EGP	28	20.0
	Between 1,000,000 – 7,000,000 EGP	45	30.0
	Between 7,000,001 – 30,000,000EGP	31	20.1
	Between 30,000,001 – 70,000,000 EGP	18	11.9
	Between 70,000,001	7	5.0

	- 100,000,000 EGP		
	More than 100,000,001 EGP	18	13.0
Total		147	100.0

3.4 Factors loading

There were three control variables and four factors. The efficacy of the accounting data system and the degree of corporate management were the hidden variables. Additionally, the control variables were income, personnel count, and the number of years that the company had been in business. Since larger companies often have more resources available to dedicate to the construction of a strong corporate management system, company sizes, as measured by revenue and employee counts, are anticipated to positively affect company performance. On the other side, it is thought that corporate management structure is also impacted by the duration of the business, as shown by the number of operational years. It is advised that the factor loading value be greater than the cross-loading value along each building column. Table.3 represents the factors loading.

Table 3: **Factors loadings**

	FR	BS	BKS	CML	OY	INC	PC
FR1	0.916						
FR2	0.939						
FR3	0.876						
BS1		0.756					
BS2		0.933					
BS3		0.938					
BKS1			0.898				
BKS2			0.845				
BKS3			0.879				
CM1				0.845			
CM2				0.824			
CM3				0.872			
CM4				0.856			
CM5				0.865			
CM6				0.879			
OY					1.000		
INC						1.000	
PC							1.000

3.5 Confirmatory factor analysis

Confirmatory factor analysis was employed to evaluate the variables' validity and reliability. In order to verify the construct validity and model fit of the research model utilizing the maximum likelihood technique, the constructs were exposed to Confirmatory factor analysis once the data was collected. Comparative fit index, standard root mean

square, chi-square, corrected goodness of fit index, quality of fit index, and root mean error of approximation are a few of the metrics utilized to measure the fitness of the model. Chi-square<3, QFI>0.96, CFI>0.91, CGFI>0.81, RSRM<0.08, ARMSE<0.06 and PCLOSE>0.06 are some of the fit measures with threshold values. The outcome shows that the chi-square was 145.94, 0.86 was the corrected goodness of fit index, 0.91 as the quality of fit index, 0.97 was the incremental fit index, 0.97 was the index of the comparative fit, the approximation's root mean square error was 0.04, the residual with the standardised root mean was 0.03 and the PCLOSE has a value of 0.39. As a result, the model fit was satisfactory, and the validity of the measurement properties was proved. ** represents Coefficients at 0.01 significance level. Table 4 displays the Confirmatory factor analysis outcomes.

Table 4: **Results of the reliability analysis and correlation coefficients**

Constructs	EA V	TD	GS V	MS V	α	1	2	3	4	5	6	7
FR	0.8 28	0.9 36	0.6 64	0.3 90	0.8 96	0.910						
BS	0.7 72	0.9 10	0.6 40	0.3 66	0.8 50	0.733 **	0.879					
BKS	0.7 62	0.9 06	0.6 24	0.3 34	0.8 44	0.553 **	0.755 **	0.873				
CML	0.7 32	0.9 43	0.6 64	0.3 77	0.9 27	0.790 **	0.200 **	0.634 **	0.856			
OY	1.0 00	1.0 00	0.0 44	0.0 28	1.0 00	0.172 **	0.453 **	0.670 **	0.130 **	NA		
INC	1.0 00	1.0 00	0.2 75	0.1 58	1.0 00	0.383 **	0.452 **	0.487 **	0.454 **	0.153 **	NA	
PC	1.0 00	1.0 00	0.2 75	0.1 52	1.0 00	0.335 **	0.386 **	0.425 **	0.210 **	0.212 **	0.567 **	NA

4. Analysing the measurement model and discussion

4.1 Reliability and Validity

To analyse the measurement model analysis, feature validity, internal coherence and individual item dependability are required. In order to accomplish this, the total dependability (TD), the Greatest-shared variance (GSV), the median-shared variance (MSV), the extracted average variance (EAV), and the correlation coefficients with the sum of squares of EAV values were computed. The factor loadings of the variables were correlated with the dependability of each individual item. All variables over the threshold values were included and the threshold values (factor loadings of 0.80) were excluded. Table.4 makes it evident that the measurement model's dependability requirements were fulfilled.

4.2 Modeling of structural equations

4.2.1 Predictive ability

The proposed model's validity and the hypothesised correlations were both tested using the Structural Equation Modelling with a Partial Least Square approach. Table.5 provides an illustration of the path coefficients, directions, and significance levels between the variables. At a 1% level of significance, the Structural Equation Modelling findings showed a very significant positive correlation between the corporate management level and the bookkeeping system ($\beta= 0.37, p<0.01$); the effectiveness of the budgeting system and the degree of corporate management at a 6% level of relevance ($\beta = 0.23, p<0.06$); the effectiveness of financial reporting and the degree of corporate management at a 1% level of significance ($\beta=0.34, p<0.01$). *** represents Coefficients at a 0.06 significance level. As a consequence, H1, H2, and H3 were supported by the path analysed data.

Table 5: Modeling of structural equations

Hypothesized connection		Coefficients	e-statistics	Outcomes
Hypotheses 1	FR → CML	0.3698***	5.340	supported
Hypotheses 2	BS → CML	0.3473***	3.400	supported
Hypotheses 3	BKS → CML	0.2210***	2.280	supported
Control Var	OY → CML	0.052	1.500	
Control Var	INC → CML	0.036	1.010	
Control Var	PC → CML	0.015	0.410	

4.2.2 Explanatory ability

Utilizing the Partial least square and Structural equation modelling the predictive relevance, the predictive powers and the explanatory abilities are calculated. The explanatory power is calculated using the value of the variance (\square^2). The threshold values for \square^2 ranges are: significant (0.68), moderate (0.34) and weak (0.20). Since the corporate management level's \square^2 value is 76.3%, this shows how well the model captured the variation of the dependent variable. The overall prediction accuracy of the model was evaluated utilizing the Goodness of Fit index. It is determined utilizing the geometric mean of the average \square^2 value and commonality index. The proposed model's Goodness of fit index was 82.4%, showing that it accounted for 82.4% of the attainable fit. As a result, a significant portion of the variance at the corporate management level was described. Table .6 explained the predictive relevance values of the corporate management level.

4.2.3 Predictive relevance

The \square^2 test was employed to evaluate the predictive significance of the model for fit in addition to its explanatory capacity. By eliminating one item at a time and then estimating the model parameters for the remaining cases, the blindfolding approach is used to get the \square^2 value. Then, depending on the remaining parameters, the values of the excluded case are anticipated. Positive ($\square^2 > 0$) numbers show that the model has predictive significance, whereas negative ($\square^2 < 0$) numbers show that the model does not. As a result, the \square^2 values revealed the model's greatest standard of predictive significance.

Table 6: The corporate management level Total's explained predicted relevance values

Total	Squared Total of the	Squared total of the	\square^2	\square^2
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	Observations	Prediction error		
CML	1954.000	956.420	0.490	0.780
Goodness of fit	0.810	-	-	-

5. Conclusion

This study intends to look into how Egyptian firms' decision-making processes are influenced by financial reporting, budgeting systems, and accounting systems. In this work, partial least square structural equation modelling was employed to investigate the hypotheses. The study's findings demonstrate the enormous positive impact that financial reporting, budgeting, and accounting systems have on company management. Furthermore, the empirical data suggests that the importance of management accounting systems for corporate management should not be understated. The budgeting system's major impact on corporate management highlights the conclusion that boards should prioritise management accounting processes, such as budgeting, to maintain internal monitoring procedures in addition to external reporting and monitoring.

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