BUDGET PREPARATION, REPORTING AND MEASUREMENT, AND FINANCIAL PERFORMANCE: A STUDY ON ADVENTIST HIGHER EDUCATION IN SOUTH-EAST ASIAN REGION

Harlyn Lindon Siagian

Dosen Fakultas Ekonomi-Universitas Advent Indonesia, Bandung.

Email: siagian_unai@yahoo.co.id Phone 082217213688

Abstract

Each organization expect a satisfactory performance, specially in financial performance. Management organization was expetec to achieve the goal of organization. In this study, the performanceis measured by financial as dependent variable, budget preparation, and repoting and measurement aas independent variables. The respondent of this research was reguler worker of Adventist higher education in South East Asian region (SSD). The instrument of this study was questionnaire and measured by perceptions of respondent. Independent variable (budget preparation, and reporting measurement) had very strong positive (0.610) to financial performance. Constant value was 28.957, the amount of financial performance primarly influence by greater budget preparation (0.153) and followed by reporting and measurement (0.403).

Keywords: *budget, measurement, financial performance*

Introductions and Problem

Each organization having a goal, each goal has become a basic activity of the organization. Organization has a management to direct the activities of the organization and the vision and mission can be put together. the purposes of any organization can be achieved, need a system to control each planning that has been prepared. The development of the economy and business nowdays is significantly triggered by the development of science and technology in various aspects and the increasing impact of risks facing an organization. Thus, continous control is required to be perfomed by direct management in the implementation of preventive or repressive measures. This is also in order to accomplish tasks effectively and efficiently. The control should also be in accordance with the plan of activities so as to form a management control system and human resource practice that are capable of directing and guiding towards attainment organizational goals.

Buhavoc and Slapnicar (2007) maintained that organizations can achieve high levels of performance without using both financial and nonfinancial performance measurement system. Buhovac and Slanicar claimed that a focused performance measurement system that is well-aligned with the business strategy and supported by tight controls can improve firm performance.

The goal of a business is to make money by providing goods or services to customers. Businesses try to maximize their profits by generating high revenues, low costs, and thus high profit. However, business competitors are also trying to do the same and thus a business can only maximize its profit by gaining an advantage over its competitors (Warren, Reeve, & Duchac, 2007). Profitability is ability to earn or the capacity to make a profit. It is the primary goal of all business ventures. Without profit the business will not survive in the long run. Measuring current and past profitability and projecting future profitability is very important (Hoffstrand, 2006).

Review of Related Literature and Hypothesis

Budget Preparation

Anthony and Young (2003) stated that a budget is a plan expressed in quantitative, usually in monetary terms. It covers a specified period, usually a year. In the budget preparation phase of the management control process, each program's objectives are translated into terms that correspond to the spheres of responsibility of the manager charged with implementing them. Thus, during the budget preparation phase, plans made in program terms are converted into responsibility terms.

The process of arriving at the budget is essentially one of the negotiations between responsibility center managers and their superiors. The end product of these negotiations is a statement of the output expected during the budget year and the resources (inputs) to be used to achieve these outputs. As such, the agreed upon budget is a bilateral commitment. Responsibility center managers commit to producing the planned output with agreed amount of resources, and their superiors commit to agreeing that such performance is satisfactory. Both commitments are subject to the qualification unless circumstances change significantly.

A budget is related to a one year slice of the strategic plan. An operating budget shows the details of revenues and expenses for the budget year. The process starts with the dissemination of guidelines approved by senior management and based on these guidelines, each responsibility center manager prepares a proposed budget and review with superior, and agreed position is negotiated. When these individual pieces reach the top of business unit, or of the whole organization, they review for consistency and adherence to overall corporate goals (Anthony & Govindarajan, 2004).

A study done by Qomoyi (2008) entitled “The Budget Preparation Process: a compliance review of the City of Tshwane Metropolitan Municipality” found that in budget preparation they need to request proposal from the department, receive departmental estimates for accuracy, then the department provides budget manual in order to assist them in capturing their income, expenditure, and activity planning. This is done to be able to extract reports, and do budget hearing to discuss their requested budget and required funding.

Operating and Measurement

Neely (2002) noted that it is necessary for organization to implement an effective performance measurement system that “enables informed decisions to be made and actions to be taken because it quantifies the efficiency and effectiveness of past action through acquisition, collation, sorting, analysis, interpretation, and dissemination of appropriate data. Marshal (2002) indicated that the non-financial measurement would predict subsequent financial performance, in other words, the non-financial would serve as leading performance indicators and the financial as lagging indicators, as measures summarize performance.

According to Anthony and Govindarajan (2004), the goal of performance measurement is to implement strategy. These measures can be seen as current and future critical success factors; if they are improved, it means that the company has implemented its strategy. The strategy success depends on its soundness.

“What you measure is what you get” is an often-heard phrase which emphasizes the importance of performance measurement to the success of an organization. According to Atkinson and Waterhouse as cited in Hammermeister (2005), performance measurement can be defined as the quantification of either a process output or the activities that constitute that process. An effective set of performance measures should have the following characteristics: (a) communicate and summarize those critical activities necessary to meet customer requirements, (b) reflect output of processes and outcomes, (c) be comprehensive, and (d) provide feedback to organization. Selecting the proper performance measures is one of the key challenge facing management.

A research conducted by Gerhard (2000) indicated that the measurement system directly affects employee performance, where in employees tend to focus on keeping their jobs and getting a raise and they consider the measurement system as the primary tool in determining their personal goal achivement. The trick is for management to identify what that measurement system should be in order to maximize corporate goal achievement.

Financial Performance

Financial reporting may ultimately lead to the creation of financial statements that let managers, investors, and other stakeholders evaluate financial strength or weakness. Naturally, a degree of uniformity is approached and presentation must exist in order for the statement to be useful. If no standard existed, then every company would simply do as it pleases, making it impossible to compare performance across companies or, indeed, within a company, if it decided to change its standards every year (Banks, 2007).

Titman, Keown and Martin (2011) stated that the basic objective of financial statement analysis is to assess the financial condition of the firm being analyzed. In a sense, the analyst performs a financial analysis so he or she can see the firm's financial performance the same way an outside investor would see it.

Power and Needles (2011) descibed financial performance measurement, as using all the techniques available to show how important items in a company's financial statement relate to the companys' financial objectives. All the plans that management formulates to achieve a company's goal must eventually be stated in terms of financial objectives and related performance objectives.

The Effect Among Variables

A study conducted by Shastri and Stout (2008) indicated that the majority of respondents believe that the budget is "useful"as it relates to the list of business objectives. Traditionally, the budget was considered to be important for planning and control purpose only. The mere fact is that the budget preparation indicated is also useful for other functions such as strategic planning, communication, team work, and incentive rewards determinations.

Silva and Jayamaha (2012) conducted a study which found that budgetary process has significant associations with the organizational performance of apparel industry in Sri Lanka. This confirms that efficient apparel companies maintain sound budgetary process which contributes to higher levels of organizational performance. John and Ngoason (2008) mentioned in their study that practices of integrating strategic management and budgeting which increase organizational performance.

Stiver and Joyce (2001) mentioned that observers have noted that performance measurement has gained added significance, because organizations are faced with the twin challenge of adapting to new rules of competition and responding to the rapid changes often taking place in the marketplace. They added that the right measures correctly linked to the organization's strategy give managers and employees the guidance they need to appropriately measure.

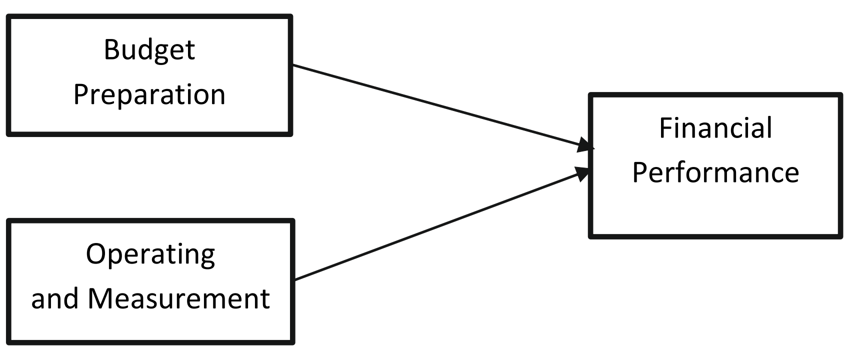
Evan (2004) conducted a study, obtained from an online survey, on relative emphasis and types of performance measurements analysis approach used by organizations in manufacturing, service, and for non-profit (including education and health care) sectors. The results suggest that organizations with more performance measurements reported better results in terms of customer, financial, and market performance. Garrea, Ilies, and Stegerean (2011) researched in over 135 manufacturing companies in Rome Italy and found a strong relationship between the performance measurement and organizational performance.

Based on the research above, the author hypothesized as follow:

1. Budget preparation positively effect on financial on Seventh-day Adventist Higher Educational Institutions in SSD
2. Operating and measurement positively effect on financial on Seventh-day Adventist Higher Educational Institutions in SSD

This research has the following paradigm:

Figure 1. Research Paradigm



Method of Study

The researcher used the descriptive research method, an approach considered appropriate to answer the research questions. The design of this research is descriptive-correlational. It examined and considered the relationship of management control system, and human resource management practices to organizational performance. A descriptive-correlational study attempts to determine the relationship of two variables whether the relationship is perfect, very high, high, marked or moderate, slight or legible (Palmer-Calmorin & Calmorin, 2007).

The correlational design was utilized to determine if there was a significant relationship of management control system and human resource management practices to organizational performance. Therefore, the correlation procedures allow researcher to make inferences about the relationship between two or more variables (Cresswell, 2003)

This research involved SDA Higher Educational Institutions in Indonesia, Philippines, and Thailand. The Higher Educational Institutions are owned and operated by the Seventh-day Adventist Church in the Southern-Asia Division (SSD).

The population of this research were the regular employees of higher education institutions under the supervision of the Southern-Asia Division (SSD). The higher educational institutions are as follows: Indonesia Adventist University, Klabat University, Surya Nusantara Adventist College, Adventist University of the Philippines, Central Philippine Adventist College, Manila Adventist Medical Center and Colleges, Naga View Adventist College, Northern Luzon Adventist College, and Asia-Pacific International University. Data was gathered from all of them using the questionnaire designed for the study. The questionnaire was designed based on the researcher's review of related literature and previous studies, the conceptual framework, as well as key informants from respondent organizations. The total number of regular employees of each institution was taken from the president and HRM director of each institution.

The sample size was computed using the Slovin's Formula to establish the minimum number requirement of respondent which is $n = N/(1+Ne^2)$, where N = population size, and e = error of tolerance. It was computed as follows: $n = 1071/(1 + (1071*(0.05*0.05))) = 291$. This ensured that enough respondents were considered in this study.

To ensure that the minimum number of respondent is collected, the researcher distributed 654 questionnaires to the respondent institutions but only retrieved 496. From the total of 496 retrieved questionnaires, 13 respondents did not answer the questionnaires. There were 483 questionnaires encoded and used for data processing. The researcher was only able to retrieve 29 of the questionnaires distributed in Asia-Pacific International University because most of the respondents went home for vacation at the time data was collected. The number of employees of institutions, number of questionnaires distributed and retrieved are shown in Table 1.

Table 1
Respondents' Population and Questionnaires Distribution and Retrieved

Institution	Population	Distributed Questionnaires	Retrieved Questionnaires
Adventist University of Indonesia	120	112	81
Adventist University of Philippines	348	144	127
Asia-Pacific International University	168	60	29
Central Philippine Adventist Colleges	80	56	52
Klabat University	131	80	57
Manila Adventist Medical Center and Colleges	60	60	45
Naga View Colleges	35	35	23
Northern Luzon Adventist Colleges	83	64	51
Surya Nusantara Adventist Colleges	46	43	31
Total	1071	654	496

The convenience sampling technique was used in this study. This is a sampling design which selected the most accessible sample what to immediately get their reaction to certain issues (Calderon & Gonzales, 2004).

Result of the Study

Analysis and research results in this paper include descriptive statistics and description, as well as the subsequent statistical processing of the result of the hypothesis test as describe below

Budget Preparation

All the respondents in terms of budget preparation in Table 2 were rated *oftentimes* except in item 8. The responses indicated that the respondents' institutions were doing very well in dealing with their worker. The grand mean of 3.9472 with a standard deviation of 0.71674 reveals that the institutions had *good* budget preparation as perceived by the respondents' institutions. This implies that the institutions *oftentimes* follow a budget preparation process toward accomplishing their goals and objectives.

This study supports the study of Hartman as cited in Narbarte (2000). He explained that since the budget is prepared by several persons, in the organization, all those involved must follow the same direction. Consequently, the first step in the budget process is the preparation of guidelines for the individual preparing a portion of the budget. The guidelines frequently contain such items as: directives from the board concerning the size of the budget; limitations in expenditure requests; accompanying the use of the forms; and, cost estimating procedures, among others.

Table 2. Descriptive Statistics of Budget Preparation

Item No	Statement	Mean	SD	Scaled Responses	Descriptive interpretation
13	Budget are approved by appropriate committee.	4.2625	0.8819	Oftentimes	Good
7	The budget explains the need for expenditure.	4.1444	0.8773	Oftentimes	Good
6	Budget is adjusted according to available funds.	4.1444	0.8262	Oftentimes	Good
4	The administration receives budget proposal from the department.	4.1420	0.9360	Oftentimes	Good
5	Budget provides an estimated amount of money needed to carry out the plan.	4.1253	0.8575	Oftentimes	Good
1	Budget reflects to objective of plan	4.0983	0.8670	Oftentimes	Good
3	The department heads are involved in preparing the budget.	4.0919	0.9488	Oftentimes	Good
2	The administrators prepare budget according to guidelines.	4.0774	0.8739	Oftentimes	Good
11	The increases of the estimated expenditure depend on the increase in economic inflation.	3.9540	0.8386	Oftentimes	Good
10	Program includes allocation for expenditure.	3.9561	0.8973	Oftentimes	Good
12	Administrators conduct a budget hearing.	3.9189	1.0543	Oftentimes	Good
9	Administrators evaluate all programs	3.8170	1.0425	Oftentimes	Good
14	Once the budget is approved, it is communicated to the employees.	3.6432	1.2112	Oftentimes	Good
8	Every employee is involved in preparing the budget.	2.8852	1.2579	Sometimes	Fair
	Grand Mean and SD for Budget Preparation	**3.9472**	**0.7167**	**Oftentimes**	**Good**

Legend: Very Good (4.50 – 5.00); Good (3.50 – 4.49); Fair (2.50 – 3.49) Poor (1.50 -2.49); Very Poor (1.00 – 1.49)

Operating and measurement

Table 3 shows the perception of the respondents toward institutions which were ranked from highest to lowest.

Table 3

Descriptive Statistics of Operation and Measurement

Item No	Statement	Mean	SD	Scaled Responses	Descriptive interpretation
1	The goals are communicated to the employees	4.0872	0.9113	Oftentimes	Good
6.a	Performance measurement is used for: a. improvement.	3.9604	0.9359	Oftentimes	Good
6.b	Performance measurement is used for: b. monitoring.	3.9480	0.9174	Oftentimes	Good
2	Employees understand and agree on work goals	3.9066	0.8482	Oftentimes	Good
3	Management coordinates between groups of employees.	3.8441	0.8894	Oftentimes	Good
7	Performance measurements are aligned with strategy.	3.8235	0.9168	Often times	Good
12	Employee skills are matched to their work.	3.8108	0.8221	Oftentimes	Good
10	Each department has the freedom to adapt to their goals as needed.	3.7884	0.9688	Oftentimes	Good
13	Employees have the equipment to do their work.	3.7842	0.8368	Oftentimes	Good
11	Abilities of employees are matched to their work.	3.7630	0.8890	Oftentimes	Good
5	Performance measurements are frequently discussed in staff and management meeting.	3.7079	1.0010	Oftentimes	Good
4	Measurement feedbacks are proactively sought and welcomed.	3.6778	0.9609	Oftentimes	Good
9.b	Employees contribute with: b. organizational directions.	3.6381	0.9249	Oftentimes	Good
8	Employees work together with outside community to meet mutual needs.	3.5565	1.0235	Oftentimes	Good
9.a	Employees contribute with: a. up-to-date information competitors.	3.4449	1.0131	Sometimes	Fair
	Grand Mean and SD for Operation and measurement.	**3.7828**	**0.7169**	**Oftentimes**	**Good**

Legend: Very Good (4.50 – 5.00); Good (3.50 – 4.49); Fair (2.50 – 3.49) Poor (1.50 -2.49);
Very Poor (1.00 – 1.49)

The grand mean of 3.7828 with a standard deviation of 0.7169 reveals that the institutions had *good* inof operation and measurement as perceived by respondent's institution. This implies that the institutions *oftentimes* follow operation and measurement in accomplishing their goals and objectives.

Result of this study is supported by the study of Anthony and Young (2003) that demonstrated the three basic measurement categories such as social categories, result measures, and process measures. The social indicator is a broad measure of output that reflects the impact of organization's work in the society at large. Social indicators can be useful in strategic planning, however, in that they can help guide senior management's decisions about the overall directions the organization should take. Result measures, on the other hand, attempt to express output in terms that are related to an organization's objectives. Objectives are stated in measurable terms, and output measures are stated in these same terms. A result measure relates to an organization's success in attaining its goals. Furthermore, the process measures (also called a productivity measure) relate to an activity carried out by the organization. A process measures related to what a responsibility center or an individual does to help organization achive its objectives. Thus, process measures help managers gauge efficiency.

Financial

The perception of respondents on financial performance is ranked from highest to lowest in Table 4. The grand mean of 3.7765 and a standard deviation of 0.5734 reveal that the organizational performance in terms of financial was *good.* This means that the institutions were capable of paying the salaries of their employees on time, institutions availed scholarship from the government, institutions had the capacity to settle their financial obligations, and revenue growth was also caused by quality service offering.

Table 5. Descriptive Statistics of Financial

Item No	Statement	Mean	SD	Scaled Responses	Descriptive interpretation
15	The organization pays employees salaries on time	4.3568	0.7949	Oftentimes	Good
13	The organization avails of government scholarship programs.	3.9710	0.9218	Oftentimes	Good
9	Promotional campaigns are conducted periodically.	3.9313	0.8407	Oftentimes	Good
14	The organization has the capacity to settle its financial obligations.	3.9170	0.8382	Oftentimes	Good
10	Organizational facilities accommodate additional students.	3.7967	0.8174	Oftentimes	Good
4	Revenue growth is caused by quality service offering.	3.7827	0.8528	Oftentimes	Good
5	External sources (such as donation, grants, and subsidies) also finance capital expenditure.	3.7755	0.8992	Oftentimes	Good
2	The ancillary service generates income.	3.7271	0.9123	Oftentimes	Good
11	Effective marketing impacted to a number of students.	3.6985	0.8847	Oftentimes	Good
8	The organization finds new sponsors for student scholarships.	3.6674	0.8555	Oftentimes	Good
6	The organization implements cost reduction activities.	3.6646	0.8598	Oftentimes	Good
7	The number of enrollment is increased.	3.6021	1.0010	Oftentimes	Good
12	The students are open-minded for fee increases.	3.5996	0.8662	Oftentimes	Good
3	Organization industries increase organization's revenue.	3.5854	0.9138	Oftentimes	Good
1	Tuition fees are enough to support organizational operation.	3.5717	1.0344	Oftentimes	Good
	Grand Mean and SD for Financial	**3.7765**	**0.5734**	**Oftentimes**	**Good**

Legend: Very Good (4.50 – 5.00); Good (3.50 – 4.49); Fair (2.50 – 3.49) Poor (1.50 -2.49); Very Poor (1.00 – 1.49)

The Hypothesis Testing

From the hypoyhesis mentioned before, indicated that budegt preparation had positive effect on financial performance, as well as that reporting and measurement also affects on financial performance. The author using SPSS statistical processing as it existed in the Table 6.

Based on the statistica; result, shown that budget preparation, and reporting and measurement with financial performance was very strong positive (0.610) and significant at the 0.001 level.

Table 6

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.610[a]	.372	.369	7.183

a. Predictors: (Constant), Rep, Bud

Table 7

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	14659.979	2	7329.990	142.077	.000[b]
1	Residual	24764.012	480	51.592		
	Total	39423.992	482			

a. Dependent Variable: Fin

b. Predictors: (Constant), Rep, Bud

The influence between variable can be explained by regression equation, where financial performance = 28.957 + 0.153 budget preparation + 0.403 reporting and measurement. Based on equation above it can be explained that if all independent variables (budget preparation, reporting and measurement) is 0 (zero), financial performance was 28.957. with constant value was 28.957.

Table 8

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.957	1.762		16.432	.000
	Bud	.153	.044	.179	3.487	.001
	Rep	.403	.044	.469	9.109	.000

a. Dependent Variable: Fin

The amount of financial performance primarly influence by greater budget preparation (0.153) and followed by reporting and measurement (0.403). Thus budget preparation,and reporting and measurement is very important to increase financila performance.

Conclusion and Recommendation

Each organization expect a satisfactory performance, specially in financial performance. Based on analysis above, found that organizations had a good in term of budget preparation, reporting and measuremet and financial performance. Independent variable (budget preparation, and reporting measurement) had very strong positive (0.610) to financial performance. Constant value was 28.957, the amount of financial performance primarly influence by greater budget preparation (0.153) and followed by reporting and measurement (0.403) and provide input or recommendations to institutions that to involve every employee in preparing budget and employees contribute with: a. up-to-date information competitors.

References

Anthony, R. N., & Govindarajan. (2004). *Management control system.* 11th Edition. New York. McGraw-Hill.

Anthony, R. N. & Young, D.W. (2003). *Management control in nonprofit Organization*. 7th Edition. New York: McGraw-Hill.

Banks, E. (2007). *Finance: The Basis.* New York-Routledge.

Buhovac, A. R., & Slapnicar, S. (2007). *The role of balanced, strategic, cascaded and aligned performance measurement in enchancing firm performance*. Economic and Business Review, vol 13, pp 177-203

Cresswell, J. W. (2003). Research design: quantitative, qualitative, and mix methods approaches. London. Sage Publication.

Evan, J. R. (2004). *An exploratory study of performance measurement systems and relationships with performance results*. Journal of Operation Management vol 22, issue 3. Jun 2004 pp 219 – 232.

Garrea, C., Ilies, L., & Stegerean, R. (2011). *Determinants of organizational performance: the case of Romania*. Management & Marketing Challenge for the Knowledge Society. Vol 6, No 2, pp 285 – 300.

Gerhard, P. (2000). *How measurement systems act as employee motivators*. Hospital material management quarterly. Vol 21 issue 4 p.69-73. Aspen publisher. Proquest.com.

Hammermeister, J. (2005). *Management control system and organization effectiveness: a transaction cost economic perspective*. Published dissertation. Nova Southern University. Proquest.com

Hoffstrand, D. (2006). *Understanding profitability*. Retrieved from: www.agmrc.org/agmrc/business/operatingbusiness/understandingprofitabiliy.htm

John, A. O., & Ngoason, L. N. (2008). *Budgetary and management control process in a manufacturing case of Guinness Nigerian PLC*. Thesis Malardalen University (online). Proquest.com/

Nabarte, R. E. (2000). *Allocation and utilization of funds for strategic planning and control of the Adventist higher education institutions in the Philippines: a proposed model*. Unpublished Dissertation. University of Santo Thomas Manila.

Neely, A. (2002). *Busisness performance measurement theory and practice*. Cambridge University Press. United Kingdom.

Power, M. and Needles, B. E. (2011). *Financial accounting.* 11th Edition. International Edition. China: South-Western Qomoyi , N. (2008). *The budget preparation process: a compliance review of the city of Tshwane metropolitan municipality*. Published Thesis Tshwane University of Technology.

Shastri, K., & Stout, D. E. (2008). *Budgeting: prespective from the real world. United States – Business and Economic* – Mangement, Business and Economic – Accounting 2008. Pages 18 – 25, Volume 10, Issue 1 (online). Proquest.com.

Silva, L. M. D., & Jayamaha, A. (2012). *Budgetary process and organizational performance of apparel industry in Sri Lanka.* Journal of Emeerging Trends in Economics and Management Science. Vol 3, No 4, pp 354-360. Retrieved from: www.jetems.scholarlinkresearch.org/articles/budgeteryProcessandorganization.pdf.

Stiver, B. P., & Joyce, T. (2001). Building a balanced performance management system. SAM Advanced Management Journal. Vol 65, no 2. Proquest.com.

Titman, S., Keown, A.J., & Martin, J.D. (2011). *Financial management: principle and application*. New Jersey-Pearson.

Warren, C. S., Reeve, J. M., & Duchac, J. E. (2007). *Accounting*. 22nd Edition. USA. Thomson South-Western.