Volume 19 Issue 14
Originally issued as D2

Global Journal of Management and Business Research: D
Accounting and Auditing
Volume 19 Issue 2 Version 1.0 Year 2019
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Financial Reporting Practices in Public Universities of Bangladesh

By Dr. Shakhawat Hossain Sarkar
Jatiya Kabi Kazi Nazrul Islam University

Abstract- The objective of recording and reporting of financial transactions in government and non-profit organization is to make sure good governance through ensuring transparency, accountability, reliability, and fairness on dealing of public money. By using primary sources of data, this study strives to appraise the practices of recording and reporting of financial transactions of public universities in Bangladesh. To ascertain the financial reporting compliance practices dichotomous procedure used. Statistical results report that most of the public universities under the study follow cash basis of accounting, prepared receipts and payments accounts, and bank reconciliation statement. All of the universities maintain payment voucher, the majority of the universities doesn't value and record fixed assets and, half of them don't prepare debt receipts and payments account. Financial Reporting Compliance Index (FRCI) of public universities under the study is satisfactory (78.10) but not outstanding.

Keywords: financial reporting, financial reporting compliance index (FRCI), public universities, bangladesh.

GJMBR-D Classification: JEL Code: M40



Strictly as per the compliance and regulations of:

© 2019. Dr. Shakhawat Hossain Sarkar. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Financial Reporting Practices in Public Universities of Bangladesh

Dr. Shakhawat Hossain Sarkar

Abstract- The objective of recording and reporting of financial transactions in government and non-profit organization is to make sure good governance through ensuring transparency, accountability, reliability, and fairness on dealing of public money. By using primary sources of data, this study strives to appraise the practices of recording and reporting of financial transactions of public universities in Bangladesh. To ascertain the financial reporting compliance practices dichotomous procedure used. Statistical results report that most of the public universities under the study follow cash basis of accounting, prepared receipts and payments accounts, and bank reconciliation statement. All of the universities maintain payment voucher, the majority of the universities doesn't value and record fixed assets and, half of them don't prepare debt receipts and payments account. Financial Reporting Compliance Index (FRCI) of public universities under the study is satisfactory (78.10) but not outstanding. Statistical results testimony that there is a significant relationship between universities' size and FRCI, and financial activities of universities and FRCI but there is no significant relationship between university category and FRCI. The regression model can explain 61.8 percent of total variation by R^2 and 50.3 percent of total variation by $AdjR^2$. To ensure good governance in the public sector government should take the initiative to establish an accounting standard-setting organization for public bodies like Institute of Chartered Accountants of Bangladesh. It is needed to introduce accrual basis of accounting in the public sector to ascertain the financial performance and determine the financial position of the public bodies like Sri Lanka, Australia, New Zealand, and the United Kingdom.

Keywords: financial reporting, financial reporting compliance index (FRCI), public universities, bangladesh.

I. Introduction

Governmental accounting is the system of official financial reporting of governmental and non-profit organizations. The main objective of public sector accounting is to protect the money as a trustee and ensure transparency and accountability. Public and government universities run with the budget provided by the government and a little share of internal sources collected through tuition, fees, etc. from the students. To ensure the proper utilization of the budget apposite and latest accounting methods need to introduce for transparency, accountability, and good governance. The above circumstances insist to discover the existing accounting systems used in the government organization especially in public universities of Bangladesh. The study is an attempt to achieve the goal.

a) Literature Review

Accounting and reporting is a part of financial control in the public sector. A budget as a control mechanism has some role compared to the private (Chowdhury, 2012). Government accounting and financial reporting aim to protect and manage public money and discharge accountability (Chan, 2003). Supporters of the shift to accrual accounting argue that a range of significant benefits is available to governments which move from the cash to the accrual basis of accounting (Wynne, 2008). The standard setters and accounting professionals firmly believe that well presented financial reports act as a 'sine-qua-non' to the proper functioning of a developing economy like Bangladesh (Chowdhury, 2012). Developments in governmental activities in recent years have raised concerns over whether the cash basis of accounting is sufficient for accounting and reporting (Rayegan, Parveizi, Nazari, & Emami, 2012). Accrual accounting practices in the private sector and cash accounting practices in the public sector are unconsciously institutionalized. However, in the recent past the Association of Public Finance Accountants of Sri Lanka, which became the public sector wing of the Institute of Chartered Accountants of Sri Lanka in 2012, has initiated accrual accounting practices to the public sector in the country (Nagendrakumar, Fonseka, & Dissanayake, 2015). Almost all the public enterprises prepare their financial statements based on the information determined by them which conform to the accrual basis and double entry system of accounting (Hossain, 2012). The Office of the Comptroller and Auditor General (CAG) of Bangladesh has been working since independence to make the government more transparent and accountable in utilizing public resources. The powers and mandate of the CAG lie in the Constitution of the Peoples Republic of Bangladesh (Hakeem, 2012). Actual expenditure has exceeded the revised budget of public universities. Lack of disclosure on excess over budgeted expenditure and nonuse of budget manual is a clear indication of poor governance (Sarkar, Hossain, & Rahman, 2014). The purpose of prudent public sector financial management is to

Author: Associate Professor, Department of Accounting and Information Systems, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh 2224, Bangladesh. e-mail: sarkar_knu@jkkniu.edu.bd

© 2019 Global Journals

manage the public financial resources with the economy, efficiency, and effectiveness (Hakeem, 2012). From the above-reviewed literature it is found that some research works have conducted in the field of public accounting reforms, public sector accounting and governance, allocation and utilization of budget in public universities, etc. There is a scope of research in the area of recording and reporting of financial transactions at public universities in Bangladesh. That's why the present study attempts to fill in this gap.

b) Justification

Government as a whole as well as its different ministries, departments, and corporations have involvement with financial activities. The main source of the finance is tax and non-tax revenue collected from the citizen of the country. So it is an issue to ensure the proper and appropriate use of the fund.

The study has both theoretical and practical values, and it is important for several reasons. First, the research shall rich the existing stock of knowledge in the field of government accounting. Second, the findings of the study would help the policy planners to take suitable policy measures to get benefits from practicing appropriate accounting to ensure accountability, transparency, and reliability of the financial reporting of the public universities.

c) Objectives

i. To examine the existing accounting systems of public universities in Bangladesh;
ii. To focus on the ways of upgrading the accounting and financial reporting of public universities in Bangladesh.

d) Methodology

This section presents the source and collection of data, information items included in the FRCI, Scoring in the FRCI and analysis of data, dependent variables, explanatory variables and hypotheses, multiple regression models.

i. *Source and Collection of Data*

The research was empirical research based on both primary and secondary sources of data. The population for the study was considered top and mid-level officials of public universities engaged with the maintenance of accounts and preparation of financial reports. There were 37 public universities in Bangladesh, where four universities' (BSMRMU, BOU, NU, and IAU) nature of activities are dissimilar with all others. To generalize, the researcher has excluded four universities from the study. The population includes one relevant official from each university. So the population size for the study was 33. According to Krejci & Morgan table (1970 cited in KENPRO) for determination of sample size of finite population, the study required a sample size 30 (32 if population size is 35). To collect data from primary source, 30 questionnaires were distributed among the targeted officials of 30 public universities. Out of them, 14 respondents were returned the questionnaire with their valuable opinions. So the sample size of the study is 14. Some secondary sources of data were also collected through the review of related literature.

ii. *Information Items Included in the Financial Reporting Compliance Index (FRCI)*

The major task of the present research is to develop a suitable compliance index comprising items of financial accounting information that are expected to include for accounting and preparation of financial reports. To find out financial reporting practices scenario, 15 items selected through reviewing related literature (Appendix-1).

iii. *Scoring in the FRCI and Analysis of Data*

To compute financial reporting compliance score (FRCS), the researcher followed a dichotomous procedure and awarded each of the compliance information items with a score of '1'. However, it would be applicable if the university appeared to comply with the item, otherwise it would be '0'. The total score of each university obtained through accumulating the score of all compliance information items of the university as follows:

$$FRCS = \sum_{i=1}^{n} di$$

Where,

d= 1 if the item d_i is complied

d= 0 if the item d_i is not complied

n= number of items

FRCI computed by using the following formula:

$$FRCI = \frac{\text{FRCS of Individual University}}{\text{Maximum Possible Score Obtainable}} \times 100$$

For effective and easily understandable results, the researcher has used descriptive statistics like frequency, percentile, mean, SD and inferential statistics like multiple linear regressions. He has analyzed data through SPSS (Statistical Packages for Social Science) version 20.

iv. *Dependent Variables, Explanatory Variables, and Hypotheses*

FRCI, as a dependent variable, has been developed for each of the universities studied. Three corporate attributes, considered as independent variables, are the size (proxied by the seat at undergrad program), financial activities (proxied by revenue budget size), and university category. The following three hypotheses were developed to test the results.

© 2019 Global Journals

H01: There is no relationship between FRCI and university size.

H11: There is a relationship between FRCI and university size.

H02: There is no relationship between FRCI and financial activities of the university.

H12: There is a relationship between FRCI and financial activities of the university.

H03: There is no relationship between FRCI and university category.

H13: There is a relationship between FRCI and university category.

v. *Multiple Regression Models*

Multiple linear regression models used. The model is-

$$FRCI = \alpha + \beta_1 UNVSIZ + \beta_2 UNVFINACT + \beta_3 UNVCAT + \varepsilon$$

Where,

FRCI= financial reporting compliance index

α= the constant

ε= the error term

Table 1: List of independent variables, their labels and expected signs and relationships in the regression

Variable Labels	Variables	Expected sign and relationship
UNVSIZ	University Size	UNVSIZ has a negative relationship with the levels of financial reporting compliance.
UNVFINACT	University Financial Activity	UNVFINACT has a positive relationship with the levels of financial reporting compliance.
UNVCAT	University Category	UNVCAT has a positive relationship with the levels of financial reporting compliance.

II. Results and Discussion

In this section, data was analyzed and discussed the results. The section divided into two parts. In the first part, existing accounting systems of the sample universities presented. In the second part, a regression model was developed for the study problem.

a) Existing Accounting Systems in Universities

Here it is emphasized on the analysis and interpretation of a different aspect of accounting and financial reporting of public universities in Bangladesh.

i. *Basis of Accounting*

Table-2 testimony that most of the public universities (71.4 percent) under the study are followed cash basis of accounting whereas a minor portion (28.6 percent) of public universities is followed modified accrual basis of accounting to record accounting transactions. According to the World Bank (2007), Bangladesh does not comply with the International Public Sector Accounting Standards (IPSAS) cash basis. Pure government departments use cash basis accounting but, state-owned enterprises use accrual accounting like the private sector (Chowdhury, 2012).

Table 2: Basis of Accounting

Categories	Frequency	Percent
Cash Basis	10	71.4
Modified Accrual Basis	4	28.6

Source: Analysis of Primary Data.

ii. *Voucher Maintained*

Table-3 indicates that all of the public universities (100 percent) under the study are prepared expenditure voucher, 71.4 percent prepared income voucher and, 85.7 percent of them are adjustment voucher to record accounting transactions.

Table 3: Voucher Maintained

Categories	Frequency	Percent
Income Voucher	10	71.4
Expenditure Voucher	14	100.0
Adjustment Voucher	12	85.7

Source: Analysis of Primary Data.

© 2019 Global Journals

iii. *Books of Account Maintained*

Table-4 indicates that all of the public universities (100 percent) under the study prepared to cash book, ledger, cheque issue register, income tax register for contractors, and advanced register whereas, 92.9 percent of them prepared budget register, and only 71.4 percent of them are prepared income tax register for employees.

Table 4: Prepared Books of Account

Categories	Frequency	Per cent
Cash Book	14	100.00
Ledger	14	100.00
Cheque Issue Register	14	100.00
Income Tax Register for Contractor	14	100.00
Budget Register	13	92.9
Advance Register	14	100.00
Income Tax Register for Employees	10	71.4

Source: Analysis of Primary Data.

iv. *Financial Statements*

Table-5 demonstrates that most of the public universities (92.9 percent) under the study prepared receipts and payments account, and bank reconciliation statement. According to the World Bank (2007), statement of cash receipts and payments is presented in the formats inconsistent with the IPSAS. Income and expenditure account prepared only half (50 percent) of the universities under the study. The balance sheet do not prepare by any university. Wilson, Reck, and Kattelus (2010) suggested that public colleges and universities required to the prepare statement of net assets, the revenues, expenses, and change in net assets, and the statement of cash flows.

Table 5: Financial Statements

Categories	Frequency	Per cent
Receipts and Payment Account	13	92.9
Income and Expenditure Account	7	50.0
Bank Reconciliation Statement	13	92.9
Balance Sheet	0	00

Source: Analysis of Primary Data.

v. *Software used to Maintain Accounts*

Table-6 reveals that all of the agricultural universities (100 percent), most of the general universities (75 percent), and the majority of engineering (67 percent), and science and technology (60 percent) universities under the study are used software to maintain accounts. In the era of globalization and technological development, it is annoying.

Table 6: The distribution of Software used to maintain Accounts

Category of University	Software is used to Maintain Accounts		Total
	Yes	No	
General	3.0 (75%)	1.0 (25%)	4.0 (100%)
Engineering	2.0 (67%)	1.0 (33%)	3.0 (100%)
Science and Technology	3.0 (60%)	2.0 (40%)	5.0 (100%)
Agricultural	2.0 (100%)	0 (0%)	2.0 (100%)
Total	10.0 (71%)	4.0 (29%)	14.0(100%)

Source: Analysis of Primary Data.

vi. *Valuation of Fixed Assets*

Table-7 demonstrates that most of the engineering (67 percent), and science and technology (60 percent) universities under the study are valued fixed assets, only one-fourth of general universities are maintained the same. No agricultural universities maintain the value of fixed assets. Governmental Accounting Standards Board Statement (GASBS) 34 suggested to depreciating other than inexhaustible or infrastructure assets. So valuation and recording fixed assets is must fulfill the requirement of GASBS 34.

© 2019 Global Journals

Table 7: The distribution of Value of Fixed Assets

Category of University	Value of Fixed Assets is Recorded		Total
	Yes	No	
General	1.0 (25%)	3.0 (75%)	4.0 (100%)
Engineering	2.0 (67%)	1.0 (33%)	3.0 (100%)
Science and Technology	3.0 (60%)	2.0 (40%)	5.0 (100%)
Agricultural	0 (0%)	2.0 (100%)	2.0 (100%)
Total	6.0 (43%)	8.0 (57%)	14.0(100%)

Source: Analysis of Primary Data.

vii. *Debt Receipts and Payments Account*

Table-8 express that most of the engineering (67 percent), and science and technology (60 percent) universities under the study are prepared debt receipts and payments account, only one-fourth of general universities are maintained the same. Half of the agricultural universities are maintained debt receipts and payments account. According to Wilson et al. (2010, p. 668), the loan activities should be operated on a self-sustaining basis. The repayment of loans and the interest received on loan are deposited and are available for lending to other eligible persons. To achieve the above objective, every university should maintain debt receipts, and payments account separately.

Table 8: The distribution of Debt Receipts and Payments Account

Category of University	Debt Receipts and Payments Account is Maintained		Total
	Yes	No	
General	1.0 (25%)	3.0 (75%)	4.0 (100%)
Engineering	2.0 (67%)	1.0 (33%)	3.0 (100%)
Science and Technology	3.0 (60%)	2.0 (40%)	5.0 (100%)
Agricultural	1.0 (50%)	1.0 (50%)	2.0 (100%)
Total	7.0 (50%)	7.0 (50%)	14.0 (100%)

Source: Analysis of Primary Data.

viii. *Descriptive Statistics of FRCI*

Evident from table-9, mean FRCI is 78.10 which is a satisfactory index, but there is a high deviation of FRCI among the universities as high standard deviation (7.13) and a large volume of range (20). The variation implies that the mean is not able to represent the overall scenario due to the high standard deviation of FRCI among the universities. Statistical results indicate that though mean index is satisfactory, but it's not the scenario for some universities under the study. Some universities are not up to the mark regarding practices of financial reporting.

Table 9: Descriptive Statistics of FRCI

Mean	78.10
Maximum	86.67
Minimum	66.67
Range	20.00
Standard Deviation	7.13
Standard Error of Mean	1.91

Source: Analysis of Primary Data.

b) Results of Regression Model

In table-13 the estimated value for University category is .955, and its t-value is .726 with p-value is 0.485, the universities size is -0.007 and its t-value is -2.243 with p-value is 0.049, and the universities financial activities is .267 and its t-value is 2.890 with p-value is 0.016. Although universities' size and activities are significant at 5 percent levels of significance, the university category is insignificant at the same significant level. The variance inflation factor (VIF) values for all three independent variables are less than five which indicate that the data is free from multi-collinearity. Upon review of the correlation matrix (table-13), the highest value is 0.276 which is much lower than 0.7±.1. The result of correlation matrix testimony that there is no variable with a higher correlation in the data set. The Durban Watson test statistics value (table-11) is 2.326 which are in a normal range of 1.5 to 2.5 (Field, 2009). So the statistical result suggested that there is no autocorrelation. The histogram indicates that the data set are normally distributed. The R^2 value for this model is 0.618, and AdjR^2 value is 0.503 (table-11). Therefore, the predictor variables can explain about 61.8 percent of the total variation by R^2 and about 50.3 percent of the total variation by AdjR^2.

$$FRCI = 71.990 - 0.007UNVSIZ + 0.267FINACT + 0.955UNVCAT$$

© 2019 Global Journals

Table 10: Regression Coefficients

Model	Regression Coefficients	t	P value	Collinearity Statistics	
	B			Tolerance	VIF
(Constant)	71.990	12.933	.000		
Size	-.007	-2.243	.049	.918	1.089
Financial Activities	.267	2.890	.016	.965	1.037
Category	.955	.726	.485	.892	1.122

a. *Dependent Variable: FRCI*
Source: Primary data collected through a semi-structured questionnaire

Table 11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.786(a)	.618	.503	5.02562	2.326

a. *Predictors: (Constant), Total Budget in Million Taka, Seat at Undergrad, Category of University*
b. *Dependent Variable: FRCI*

Table 12: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	408.181	3	136.060	5.387	.018[b]
	Residual	252.568	10	25.257		
	Total	660.749	13			

a. *Dependent Variable: FRCI*
b. *Predictors: (Constant), Category of University, Total Budget in Million Taka, Seat in Undergrad*

Table 13: Correlations

		FRCI	Seat in Undergrad	Total Budget in Million Taka	Category of University
Pearson Correlation	FRCI	1.000	-.485	.590	.376
	Seat in Undergrad	-.485	1.000	.025	-.276
	Total Budget in Million Taka	.590	.025	1.000	.172
	Category of University	.376	-.276	.172	1.000
Sig. (1-tailed)	FRCI	.	.039	.013	.093
	Seat in Undergrad	.039	.	.466	.170
	Total Budget in Million Taka	.013	.466	.	.278
	Category of University	.093	.170	.278	.
N	FRCI	14	14	14	14
	Seat in Undergrad	14	14	14	14
	Total Budget in Million Taka	14	14	14	14
	Category of University	14	14	14	14

III. Conclusion

The objective of public sector accounting is to ensure proper utilization of resources for earmarked purposes as well as maintain transparency, accountability, reliability, and fairness. Bangladesh is at the developing stage of increasing transparency of accounting information in the government sector. The objective of the study is to find out the practices of accounting recording and reporting of public universities in Bangladesh. A dichotomous procedure was used to measure the compliance index of recording and reporting of financial transactions. Both descriptive and inferential statistical analysis made through SPSS. Half of the universities under the study is not prepared income and expenditure account though GASB guidelines suggested preparing the statement of revenue, expenditure and changes in net assets. A mentionable part of the universities under the study is not valued fixed assets and maintain the record of fixed assets though GASB 34 suggested maintaining the record of fixed assets. On the other hand, the same

© 2019 Global Journals

scenario in the case of debt receipts and payments account. FRCI (78.10) is satisfactory but not outstanding in public universities of Bangladesh. There is a deviation of FRCI among the universities under the study. Regression result discovered that the predictor variables could explain about 61.8 percent of total variation by R^2 and about 50.3 percent of total variation by $AdjR^2$. The above results lead to the conclusion that there is a significant relationship between universities' size and FRCI, and between financial activities of universities and FRCI but there is no significant relationship between university category and FRCI. Thus, the hypothesis H1 and H2 rejected, and H3 accepted at 5 percent level of significance. Considering related and relevant literature, and analyses and discussions, finally it is suggested to prepare books of account and financial reporting of public universities based on international standards.

Acknowledgment

The article is the modified copy of the research project report funded by the University Grants Commission of Bangladesh.

References

1. Chan, J.L. (2003). Government accounting: An assessment of theory, purposes and standards. *Public Money and Management*, 23(1), 13-20.
2. Chowdhury, A. (2012). Strengthening public sector accounting and auditing in Bangladesh. *The Bangladesh Accountants,* January-March, 5-34.
3. Chowdhury, D. (2012). *Incentives, control and development: Governance in private and public sector with special reference to Bangladesh*. Dhaka Viswavidyalay Prakashana Samstha, Dhaka.
4. Hakeem, A.A. (2012). Bangladesh perspective of public sector accounting & auditing: Status review, issues and reforms. *The Bangladesh Accountants*, January-March, 53-59.
5. Hossain, M.S. (2012). Improvement of accounting system of public enterprises is essential to ensure the accountability of public sector. *The Bangladesh Accountants*, January-March, 35-38.
6. KENPRO. Sample Size Determination Using Krejcie and Morgan Table. http://www.kenpro.org/sample-size-determination-using-krejcie-and-mo..
7. Nagendrakumar, N., Fonseka, M. & Dissanayake, K. (2015). The development of public sector accounting and financial reporting in Sri Lanka. *International Journal on Governmental Financial Management*, 15(2), 70-88.
8. Rayegan, E., Parveizi, M., Nazari, K., & Emami, M. (2012). Government accounting: An assessment of theory, purposes and standards. *Interdisciplinary Journal of Contemporary Research in Business*, 3(9), 521-531.
9. Ruppel, W. (2005). *Governmental Accounting Made Easy.* John Willey & Sons Inc., United States of America.
10. Sarkar, S.H., Hossain, S.Z., & Rahman, R.A. (2014). Budgetary provision for higher education: Evidence from Bangladesh. *Journal of Public Budgeting, Accounting and Financial Management*, 26 (4), 643-671.
11. The World Bank, (2007). *Bangladesh public sector accounting and auditing: A comparison to international standards.* Country Report, South Asian Region Financial Management Unit, Report no. 39175-BD.
12. Wilson, E.R., Reck, J.L., & Kattelus, S.C. (2010). *Accounting for Governmental and Nonprofit Entities.* McGraw-Hill Irwin, New York.
13. Wynne, A. (2008). Accrual accounting for the public sectors—a FAD that has HAD its day?. *International Journal on Governmental Financial Management*, 8(2), 117-132.

Appendix-1

List of book keeping and financial reporting compliance information

No.	Information Items
1.	Followed cash basis of accounting
2.	Prepared voucher after approval of file for receipt, payment or adjustment
3.	Maintained cash book
4.	Maintained ledger
5.	Maintained cheque issue register
6.	Maintained income tax register for contractor
7.	Maintained budget register
8.	Maintained advance register
9.	Maintained income tax register for employees
10.	Prepared receipts and payments account
11.	Prepared income and expenditure account
12.	Prepared bank reconciliation statement
13.	Prepared balance sheet
14.	Value of fixed assets is recorded
15.	Debt receipts and payments account is prepared

Source: Review of related literature

© 2019 Global Journals