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ABSTRACT

This paper reviews on IAS-24, Related Party Disclosure in the context of listed commercial banks in Bangladesh and discusses issues surrounding such disclosure. And, this study highlights the compliance of IAS-24, Related Party Disclosure requirements of listed banks as well as the role of regulatory authorities. IAS-24, Related Party Disclosure states the related-party relationships of commerce and business. Effective financial reporting disclosure of related-party measures the strength of a company. In order to remove the asymmetry of accounting information worldly, this study has been focused on to analyze getting the actual scenario of related-party disclosure and benefits of fully application of IAS-24, Related Party Disclosure. This study also identify that most banks have poor application of IAS-24, Related-Party Disclosure. With the evidence, this study has tried to present the scenario of related-party disclosure in annual report and how to improve such disclosure, IAS- 24, Related Party Disclosure efficiently to meet the demand of information users.

Keywords: Compliance, IAS-24, Related Party Disclosure, Regulatory Framework,

INTRODUCTION

The purpose of this study is to identify content analysis using IAS-24, Related Party Disclosure to understand more about the effect of financial reporting. Transaction between entities that are considered related parties must be adequately financial disclosed in statements. Such disclosures have been a common feature of financial reporting, and most accounting standards-setting bodies have imposed similar mandates (Epstein and Jermakowicz, 2009). Transaction with related-party of an entity is necessary to measure financial position and profit/loss that may have been affected by the existence of related parties. Business entity frequently makes transaction through parent, subsidiaries. and associates. Unavailable information regarding transaction with related parties (parent, subsidiaries, and associates) may occur indecision or improper presentation in annual report. In addition, the information users as well as stakeholders of an entity enable to assess the effect of financial and operating policies which takes to control, joint control or significant influence.

While IAS-24, Related Party Disclosure has been operating for over two decades, it is

party commonly observed that related disclosures are not being properly disclosed in all instances. IAS 24, Related Party Disclosures is to be applied in dealing with related parties and transaction between a reporting entity and its related parties. IAS-24, Related Party Disclosures is to be employed in determining the existence of related party that may be instructed by its parent and subsidiaries. Since related-party transactions could have an effect on the financial position and operating results of the reporting entity. Besides, an entity's transactions with parent company and subsidiary companies may affect assessments of its operations and users of financial statements.

LITERATURE REVIEW

Regulatory guide 76 (2011) on Related Party Transactions set out a guidance to promote better disclosure and governance for related party transactions. Independent valuation on related party transaction can help members better understand and make an informed decision about how to vote. Related party disclosure can also play an important part in maintaining investor confidence in the management of the entity. IAS-24, Related Party disclosure designed for public companies,

responsible entities of registered managed investment schemes, experts, public company directors and their professional advisers.

Mohamad and Hashim (2013), presented in their study about existing regulation that surrounds RPTs disclosure practise by looking into the accounting standards on RPTs. listing requirement. security commission's and guidelines. They also examine the measures of RPTs being used in empirical research that analyzed the economic consequences of RPTs information. They found that the level of RPTs disclosure varied, and the variations were due to the different nature and types of RP transactions. They proposed that research on RPTs should apply content analysis using a voluntary disclosure index to understand more about the breadth and depth of the RPTs information.

Zuni Barokah (2013), discussed the institutional factors that potentially influence RP disclosures and the extent of IAS 24 adoption in the selected Asia-Pacific countries. Countries in the Asia-Pacific region provide an important setting to investigate RP disclosures for at least two reasons. First, companies in some Asian countries are commonly characterized by dominant shareholders and family-controlled ownership. Second, Asia-Pacific countries differ in legal origin, capital market development, enforcement, control for corruption, and corporate governance structures. While those country factors provide an important setting to investigate the nature and extent of corporate RP disclosures, there is no known empirical evidence on the influence of these country factors on the extent of RP disclosures.

This study also highlighted the potential influences of these country factors on the extent of RP disclosures. First, legal origin is likely to influence the financial reporting system. Specifically, common-law countries tend to have greater disclosures than civil law countries.

OBJECTIVE OF THE STUDY

IAS-24, Related Party Disclosure addresses the related party issue and prescribes extensive disclosures. For that reason, extensive disclosure of such transaction is deemed necessary to covey full picture of an entity. The major objectives of this study are to assess the present status of related party disclosure and practices level of IAS-24, Related Party Disclosure in annual report by selected banks in Bangladesh. There have been specified the following objectives:

• to evaluate the disclosure level of IAS-24, Related Party Disclosure of banking business in Bangladesh,

• to identify the reason for practicing IAS-24, Related Party Disclosure in presenting financial report of banking business, and

• to formulate some specific suggestions to develop related party disclosure in annual report for this industry.

Key Regulatory Authorities for Disclosure

The Securities and Exchange Commission (SEC)

The functions of the Commission as laid down in the SEC Act 1993 are to ensure proper issuance of securities, to protect the interests of investors in securities, and to promote the development of, and regulate, the capital and securities market (Akhtar Uddin, 2005).

The Institute of Chartered Accountants of Bangladesh (ICAB)

The ICAB is an active member of various International and Regional accounting regulatory bodies such as the International Federation of Accountants (IFAC), the International Accounting Standards Board (IASB), the Confederation of Asian and Pacific Accountants (CAPA) and the South Asian Federation of Accountants (SAFA). The institute circulates all IFAC releases in relation to IFRSs to its members. They work for adoption of accounting standards.

The Institute of Cost and Management Accountants of Bangladesh (ICMAB)

The primary objective of the institute is to develop and train cost and management accountants. The fellows qualifying from ICMAB are not required to go through practical accounting and auditing training with a professional accounting firm (Solaiman, 2006). The ICMAB's capacity is constrained by the shortage of well-trained instructors and resources. The institute has no auditing power, and hence does not play any role regarding financial accounting standards.

The Dhaka Stock Exchange (DSE)

The Dhaka Stock Exchange (DSE) is a regulatory authority for financial reporting and its activities are regulated by its Articles of Association rules and regulations. The volumes

of transactions and the number of quoted companies in the DSE have increased significantly (Siddiqui, 2010).

The Registrar of Joint Stock Companies (RJSC

The function of the Registrar is to grant registration to new incumbents (Hasan*et al.*, 2008). The Companies Act1994 requires that every joint stock company obtains a registration from the Registrar and files a copy of their annual report. However, the Registrar's role is reduced to one of routine licensing of companies, in exchange of a specified fee and housing the file of companies' accounts.

Hypotheses Of The Study

This study has tried to identify the positive association and significance of disclosure with IAS-24, Related Party Disclosure for corporate reporting of selected banks. To determine the impact of companies' determiners of disclosure with IAS- 24, Related Party Disclosure, four hypotheses are formulated:

H1. The level of disclosure with IAS-24, Related Party Disclosure is positively associated with a bank's Age.

H2. The level of disclosure with IAS-24, Related Party Disclosure is positively associated with a bank's Size.

H3. The level of disclosure with IAS-24, Related Party Disclosure is positively associated with a bank's Profitability.

H4. The level of disclosure with IAS-24, Related Party Disclosure is positively associated with a bank's Liquidity

METHODOLOGY OF THE STUDY

This study is based on secondary data which has been collected from different published documents; like journals, brochures, audit reports, web sites of different banks. Furthermore, some secondary information has been collected from the annual reports (2014) of banks and from related parties and regulatory authorities. Mainly, descriptive analysis method has been applied. The information with IAS-24, Related Party Disclosure in annual is presented using checklists of banks. For making checklist, it gives tick mark ($\sqrt{}$) if the item of IAS-24, Related Party Disclosure is disclosed in annual reports and gives cross mark (x), if it is not disclosed in annual reports. Bhuiyan and Kamal (2003) argued on using this method for determining disclosure checklist. The following steps have been applied to measure the result of analysis of data:

Calculating the Value of Index

In order to test the hypothesis, this study identifies dependent and independent variables. To measure the level of disclosure with IAS-24, Related Party Disclosure, Disclosures Index (DI) has been obtained. Disclosure Index (DI) is used as the dependent variables and the banks' attributes (age, size, profitability, and liquidity) are used as independent variables. Disclosure Index has been developed based on the following functional formula:

Number of Items disclosed in the Annual Reports

DI = -----

Total Number of disclose able Items

Symbolically, Where, M

DI= Disclosure Index

DI= $\sum di$

d=1 if the item di is disclosed

i=1 0= if the item di is not disclosed

n= number of items

Table-1 has shown a disclosure index with IAS-24, Related Party Disclosure of selected ten commercial banks (Appendix A). The result of Table-1 has shown that no bank fully disclosed with IAS-24, Related Party Disclosure in annual reports.

 Table 1
 Range of Disclosed items with IAS-24, Related Party Disclosure

	ABL	BDBL	JBL	HBL	NBP	PBL	RBL	SCB	SBL	UBL	Total
Total Disclosure Requirements	16	16	16	16	16	16	16	16	16	16	160
Disclosed Items	7	7	6	6	6	2	4	7	3	6	54
Disclosure Index (DI)	.43	.43	.37	.37	.37	.12	.25	.43	.18	.37	.33

 Table 2 Descriptive Statistics of IAS-24, Related Party Disclosure

No. of Companies	Mean	Minimum	Maximum	S. Dev

	10	4.5	2	7	3.3326
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The Table -2 has shown that the mean, minimum and maximum score of disclosures with IAS-24, Related Party Disclosure. The average score is 4.5% of disclosure with IAS-24, Related Party Disclosure. This table also indicates that the minimum disclosure score is 2%, while the maximum score is 7%.

Model Development

In this step, this study has investigated the relationship between the level of disclosure with IAS-24, Related Party Disclosure and the banks' attributes. Following is a function form of the econometric model:

DI = f {age, size, profitability, liquidity}

Measurement of Dependent and Independent Variables

Now the present study examines the

Table 3. Descriptive Statistics of Independent Variables

measurement of dependent and independent variables using the following equation: $DI = \beta 0 + \beta 1 age + \beta 2 size + \beta 3 profitability + \beta 4 liquidity + \varphi$ Where: DI = Disclosure Index $\beta 0 = The intercept$ Age= number of years that passed since being founded to the end of the year 2014 Size= total assets at the end of the year 2014 Profitability= the return on equity (ROE) (Net profit/ Shareholder's equity) Liquidity= current asset to current liability **Descriptive Statistics of Independent** Variables

Table 3 presents descriptive statistics for all independent continuous variables (age, size, profitability, and liquidity).

	Ν	Minimum	Maximum	Mean	Std. Deviation
Age	10	14.00	29.00	18.1000	5.93390
Size	10	5.27E8	1.10E10	3.2985E9	4.13111E9
Profitability	10	.12	47.45	22.1867	17.45577
Liquidity	10	.73	1.59	1.1802	.37102
Valid N (listwise)	10				

The descriptive statistics presented in the table 3 where shows that Profitability ranges from 0.12% to 47.45% with a mean 22.18%. And, **Model Summary**

Liquidity ranges from 0.73 to 1.59 with a mean 1.18.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate						
1	.273 ^a	.074	.074666 .14228							
a. Predictor	rs: (Constant), Liq	uidity, Profitabilit	y, Size, Age							

ANOVAb

	Model	Sum of Sq	uares	Df	N	Iean Square		F	Sig.
1	Regression	.008		4		.002	.1	101	.978 ^a
	Residual	.101		5		.020			
	Total	.109		9					
a. Prec	lictors: (Constar	nt), Liquidity, Profi	itability,	Size, Age					
b. Dep	endent Variable	: DI							
				Coefficient	ts ^a				
	Model	Unstandardized	Coeffici	ents	Standard	lized Coefficien	ts	t	Sig.
	WIOUEI	В	Std.	Error		Beta		ι	Sig.
1	(Constant)	.336	.2	02				1.662	.157
	Age	.005	.0	10		.265		.493	.643
	Size	-1.890E-12	.0	00		071		135	.898
	Profitability	.000	.0	03		070		151	.886
	Liquidity	065	065 .140			220		468	.659
	a. Depe	endent Variable: D	Ι						

Result of Hypothesis Testing Result of Hypothesis Testing: H1 Hypothesis H1 predicted that the level of disclosure with IAS-24, Related Party Disclosure is positively associated with bank's

age but does not support at the 0.05level of significance.

Result of Hypothesis Testing: H2

Hypothesis H2 predicted that the disclosure with IAS-24, Related Party Disclosure is negatively associated with bank's size. Table 4 also shows that the result does not support at the 0.05 level of significance.

Result of Hypothesis Testing: H3

Hypothesis H3 predicted a significant

relationship between profitability of banks and disclosure with IAS-24, Related Party Disclosure requirement in the annual reports. It **Table 4.** *Summary of Regression Results*

can be seen from the table 4, profitability is neither positively correlated with disclosure with IAS-24, Related Party Disclosure nor support at 0.05 level of significance.

Result of Hypothesis Testing: H4

Hypothesis H4 predicted a significant relationship between liquidity of banks and disclosure with IAS-24, Related Party Disclosure.

Table 4 indicates that bank's liquidity has negative association with disclosure with IAS-24, Related Party Disclosure and does not support at 0.05 level of significant.

Bank's attributes	Reported sign	Significance of association
Age	+	Not significant
Size	-	Not significant
Profitability	-	Not significant
Liquidity	-	Not significant

Item wise Disclosures

This study has found out the scenario of disclosure with IAS-24, Related Party Disclosure in annual reports by selected banks. Surveying the annual reports of selected banks, the study has been identified the following status of disclosure with IAS-24, Related Party Disclosure:

Disclosure of an entity shall disclose the name of its parent

It can be seen (Table-5) that 100% of selected banks have disclosed the name of its' parent company.

An entity shall disclose the name of its ultimate controlling party if different to its parent

It can be seen (Table-5) that the frequency of disclosure level in annual report is 0% out of 10 selected banks.

Disclose the name of the next most senior parent (where neither the entity's parent nor the ultimate controlling party produces consolidated financial statements available for public use) It can be seen (Table-5) that the item 'the name of next senior parent or controlling party' did not disclosure by any of the selected banks in

annual report.

Disclose key management personnel compensation for each of the following categories:

- Short-term employee benefits; have been disclosed by 80% selected banks in their annual reports (Table-5).
- **Post-employment benefits;** have been disclosed by 60% of selected banks in annual report (Table-5).

Disclosure of Related Party Transactions by separate category for each of the following:

- **The parent;** company of selected companies did not disclosure separately of Related Party Transaction (Table5).
- Entities with joint control or significant influence over the entity; did not present by selected companies separately in annual report (Table-5).

 Table 5. Frequency of disclosure level of IAS-24, Related Party Disclosure

Sl. No.	Required Compliance Status	Sample company	Disclosures level	Disclosure Percentages (%)
1	Disclosure of An entity shall disclose the name of its parent.	10	10	100
2	An entity shall disclose the name of its ultimate controlling party if different to its parent.	10	0	0

3	Disclose the name of the next most senior parent (where neither the entity's parent nor the ultimate controlling party produces consolidated financial statements available for public use).	10	0	0
4	Disclose key management personnel compensation for each of the following categories.			
	(i) short-term employee benefits	10	8	80
	(ii) post-employment benefits	10	6	60
5	Disclosure of Related Party Transactions by separate category for each of the following:			
	(i) the parent;	10	0	0
	(ii) entities with joint control or significant influence over the entity	10	0	0
	(iii) subsidiaries;	10	8	80
	(iv) associates;	10	6	60
	(v) joint ventures in which the entity is a venture;	10	1	10
	(vi) key management personnel of the entity or its parent; and	10	10	100
	(vii) other related parties.	10	5	50
6	Government-related entity taken exemption Where the government-related entity applies the exemption in paragraph 25 of IAS 24 (2009) it shall			
	(i) disclose the name of the government;	10	0	0
	(ii) disclose the nature of its relationship with the reporting entity (i.e. control, joint control or significant influence);	10	0	0
	(iii) disclose the following information in sufficient detail to enable users of the entity's financial statements to understand the effect of related party transactions on its financial statements:(a) the nature and amount of each individually significant transaction; and	10	0	100
	(b) for other transactions that are collectively, but not individually, significant, a qualitative or quantitative indication of their extent.	10	0	0

- **Subsidiaries**; related information have been disclosed by 80% of selected banks (Table-5).
- Associates; related information have been disclosed by60% of banks in their annual reports (Table-5).
- Key management personnel of the entity or its parent; has been disclosed by all selected banks (Table-5).
- Other related parties; have disclosed by 50% of companies (Table-5).

Government-related entity taken exemption where the government-related entity applies the exemption in paragraph 25 of IAS 24 (2009) it shall

The level of disclosures of this item is 30% by among 10 banks presented in the Table -1, and

under this categories there have some subheadings disclosures whereas;

- **Disclose the name of the government;** has not been disclosed by any of the bank (Table-5).
- Disclose the nature of its relationship with the reporting entity (i.e. control, joint control or significant influence); has not been disclosed that have relationship with government and about their control and significant (Table-5).
- Disclose the following information in sufficient detail to enable users of the entity's financial statements to understand the effect of related party transactions on its financial statements:(a) the nature and amount of each individually significant

transactions; have not been disclosed by any selected banks (Table-5).

- (b) For other transactions that are collectively, but not individually, significant, a qualitative or quantitative indication of their extent; did not disclose by any of
- selected banks in annual reports (Table-5).

CONCLUSION AND RECOMMENDATIONS

In Bangladesh, the banking businesses follow the laws, rules, and regulations just to meet the requirement of national regulatory authority. Eventually, due to following these rules, companies do not clearly providing related parties' adequate information and ultimately ignore international standards. Thus, there are needed taking steps for ensuring that the legal and regulatory requirements on accounting and financial reporting fully protect the public interest.

After assessing the prospects of disclosure with IAS-24, Related Party Disclosure for bank in Bangladesh, this study has been developed the following recommendations:

- There is needed to provide guidelines for disclosure with IAS-24, Related Party Disclosure by regulatory authorities, and independence requirements for the auditor reference which should be made to the code of ethics for Professional Accountants as issued by the accounting regulator.
- Banks should follow IAS-24, Related-Party Disclosure to enter into global route.
- Banks should increase their concentration on disclosure of related-party to meet the demand of various stakeholders and other related parties.
- Regulatory authorities have to be active in ensuring the related-party disclosure for maintaining the quality financial reporting by company.
- To define what auditing standards will be utilized in the performance of an audit.
- Company Act should be included publishing of IAS-24, Relate Party Disclosure related information in annual report for members of the public to get a complete picture of the banks' performance in consistent with international standards.

• In addition, the professional bodies' engagement with stakeholders, the ICAB is responsible for accounting standard setting in Bangladesh but does not engage the stakeholders in the setting of standards; there has even been a lack of any published exposure drafts and/or consultation papers on standards.

BIBLIOGRAPHY

- [1] Ahmed, S. & Khan, D. R.,(2007). Service Trade in Developing Asia: A case study of the Banking and Insurance Sector in Bangladesh. *Asia-Pacific Research and Training Network on Trade Working Series*, No. 38.
- [2] Ahmed, J. (2010). 'Global branding of chartered accountancy profession in Bangladesh'. *The Financial Express*, 8 March.
- [3] Akhtaruddin, M.,(2005). 'Corporate mandatory disclosure practices in Bangladesh', *The International Journal of Accounting*', Vol. 40, pp. 399–422.
- [4] Bhuiyan, M. N. U., & Kamal, M. Y., (2003). Standardization of Accounting and Financial Reporting Practices in the Banking Sector in Bangladesh: An Evaluation of the Implementation of IAS 30 by the Banks in the Private Sector. *Journal of Business Studies*, Volxxiv, No. 2.
- [5] Bhattacharya, D. and T. Chowdhury. 2003. "Financial Sector Reforms in Bangladesh: The Next Round (Paper 22)." Centre for Policy Dialogue, Dhaka, p. 06.
- [6] Hasan, T., Karim, W. &Quayes, S. (2008). 'Regulatory change and the quality of compliance to mandatory disclosure requirements: Evidence from Bangladesh'. *Research in Accounting*
- [7] *Regulation*, 20: 193-203.
- [8] Regulatory guide 76 (2011). Related Party Transactions. *Australian Securities and Exchange Commission*. March 2011.
- [9] Samina, Q. S., (2012). Investment portfolio of Insurance Companies in Bangladesh: A Study on Selected Insurance Companies of Bangladesh. *A world Journal of Social Science*, Vol-2. No 7. pp 37-47.
- [10] Siddiqui, J. (2011). 'The auditing profession in Bangladesh: Turning the tide'. *The Financial Express*, 5 August.
- [11] Siddiquee, M. M., K. M. Z Islam. and M. I. Rahman. 2006. "Revisiting SME Financing in Bangladesh." *Daffodil International University Journal of Business and Economics*, 1(1): 15.
- [12] Solaiman, S.M. (2006). 'Recent Reforms and the Development of the Securities Market in

Bangladesh'. Journal of Asian and African Studies, 41(3): 195-228.

Insurance Companies. *The Daily Ittefaq.* Dhaka, Bangladesh.

[13] Uddin, M. J., (2010). Corporate Social Responsibility in Bangladesh: The Case of APPENDIX A:

A checklist compliance with IAS - 24, Related Party Disclosure of listed Banks (Annual Report-2014)

Sl. No.	Disclosure requirements under IAS 24	Para.	ABI	BDBL	JBL	HBL	NBP	PBL	RBL	SCB	SBL	UBL		%
	Disclosure of an entity shall disclose	1.0				_	_	_	_	_	_			1001
1	the name of its parent.	13											10	100%
	An entity shall disclose the name of													
2	its ultimate controlling party if	13											0	0%
	different to its parent.													
	Disclose the name of the next most													
	senior parent (where neither the													
2	entity's parent nor the ultimate	10	_	_	_	_		_	_	_	_	_	0	00/
3	controlling party produces	13											0	0%
	consolidated financial statements													
	available for public use).													
	Disclose key management personnel													
4	compensation for each of the	17												
	following categories:													
4(i)	(i) short-term employee benefits;	17(a)											8	80%
4(ii)	(ii) post-employment benefits	17(b)												60%
	Disclosure of Related Party													
5	Transactions by separate category for	19												
	each of the following:													
5(i)	(a) the parent;	19(a)											0	0%
	(b) entities with joint control or		_	_				_	_	_	_			
5(ii)	significant influence over the entity	19(b)											0	0%
5(iii)	(c) subsidiaries;	19(c)											8	80%
5(iv)	(d) associates;	19(d)											6	60%
5(v)	(e) joint ventures in which the entity is a venturer;	19(e)											1	10%
	(f) key management personnel of the													
5(vi)	entity or its parent; and	19(f)											10	100%
5(vii)	(g) other related parties.	19(g)											5	50%
5(11)	Government-related entity taken	17(5)											5	5070
	exemption where the government-													
6	related entity applies the exemption	25												
Ũ	in paragraph 25 of IAS 24 (2009) it	20												
	shall													
	(a) disclose the name of the													
6(i)	government ;	26(a)											0	0%
	(b) disclose the nature of its													
	relationship with the reporting entity										_			
6(ii)	(i.e. control, joint control or	26(b)											0	0%
	significant influence);													
	(c) disclose the following													
	information in sufficient detail to													
	enable users of the entity's financial													
	1		_	_	_	_	_	_		_	_	_	_	0.5.1
6(iii)	related party transactions on its	26(b)i											0	0%
	financial statements: (i) the nature													
	and amount of each individually													
	significant transaction; and													
	(ii) for other transactions that are	26(b)	_	_	_	_		_		_	_	_		0.01
6(iv)	collectively, but not individually,	ii											0	0%
L	,		I	1			1	1	1	1				

significant, a qualitative or quantitative indication of their exten												
Appendix B		NI	ЗP	National Bank of Pakistan								
Abbreviation	PE	BL	Pubali Bank Limited									
ABL Agrani Bank Limited		RE	BL	Rupali Bank Limited								
BDBL Bangladesh Development Banl	SC	СВ	Standard Chartered Bank									
Limited	Limited		BL	Sonali Bank Limited								
DI Disclosure Index		RF	т	Related party Transaction								
JBL Janata Bank Limited		UI	3L	Uttara Bank Limited								
HBL Habib Bank Ltd.		VA	ΑT									

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