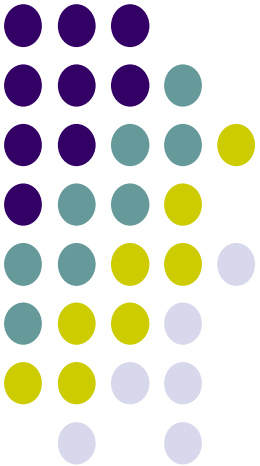
Research Colloquium

on

Financial Disclosure Practices by the Listed Companies in Bangladesh

Saturday, February 02, 2013
Conference Hall, Faculty of Business Studies
The University of Dhaka, Dhaka-1000



Keynote Presentation

by

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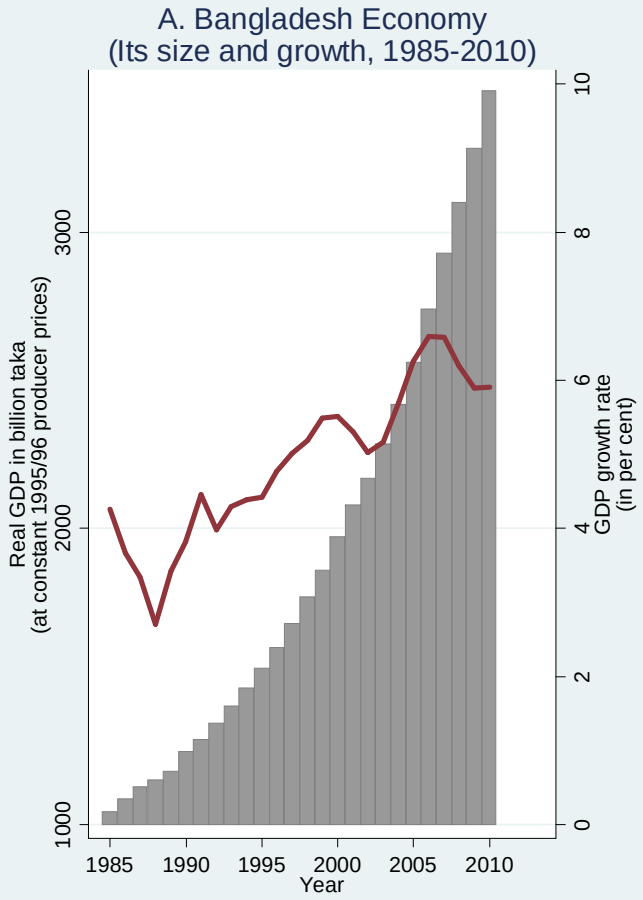
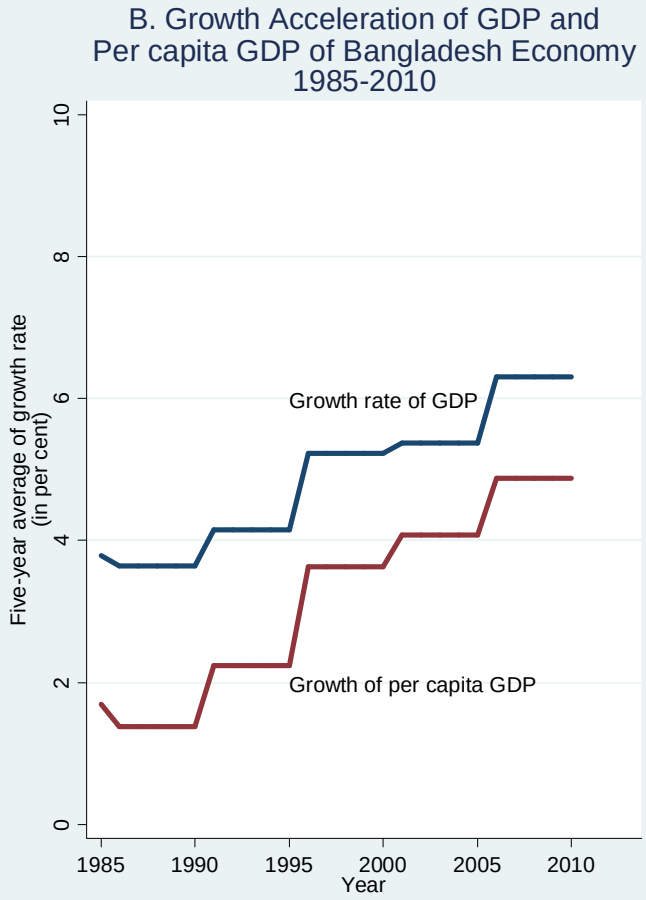
Accounting for Capital Market Development (ACMD)

Key Messages

- Corporate financial reports are often non-compliant with the mandatory disclosure requirements as per acts, rules, regulations and the international accounting standards (IASs) that are made mandatory for observance by a SEC notification.
- Decision relevance of published annual reports for investment, credit, lending, and other economic decisions is seriously compromised by substantial non-compliance by the listed companies.
- A substantial variability in disclosure levels across various parts of annual reports and within the same industry is indicative of a practice of *de jure* compliance only.
- Disclosure probability of 38 major financial elements is measured and the findings indicate relatively less likelihood of disclosure of price sensitive information.
- Corporate attributes such as age and size of the company do significantly explain levels of corporate disclosure; but attributes such as financial leverage, shareholding concentration, multinational affiliation and type of audit firm do not statistically account for variability in the levels of disclosure.
- Potential political costs of being ***too large and old*** appear to be an explanation of relatively more disclosure in corporate annual reports.
- SEC and stock exchanges are though (pseudo) regulators, financial disclosure practice in Bangladesh is *de facto* little regulated.

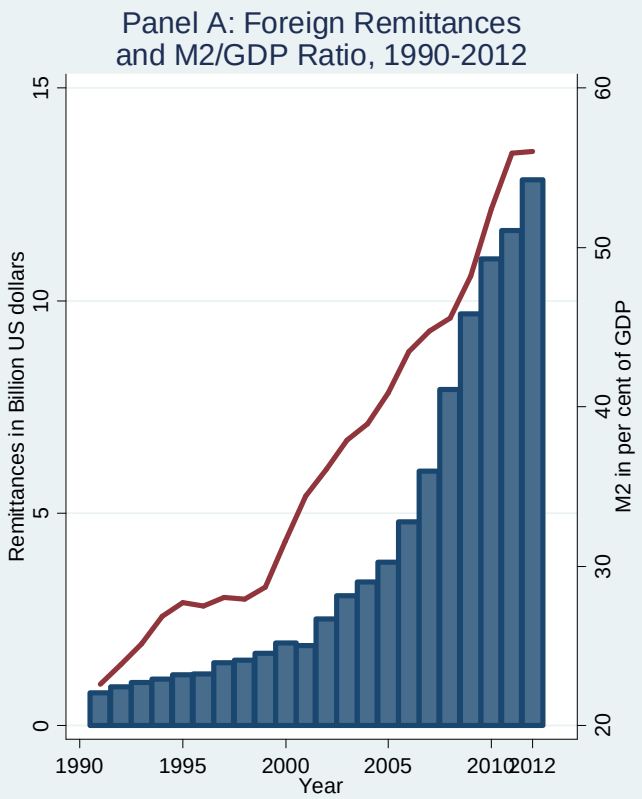
Bangladesh Economy: Its Size and Pattern of Growth Acceleration

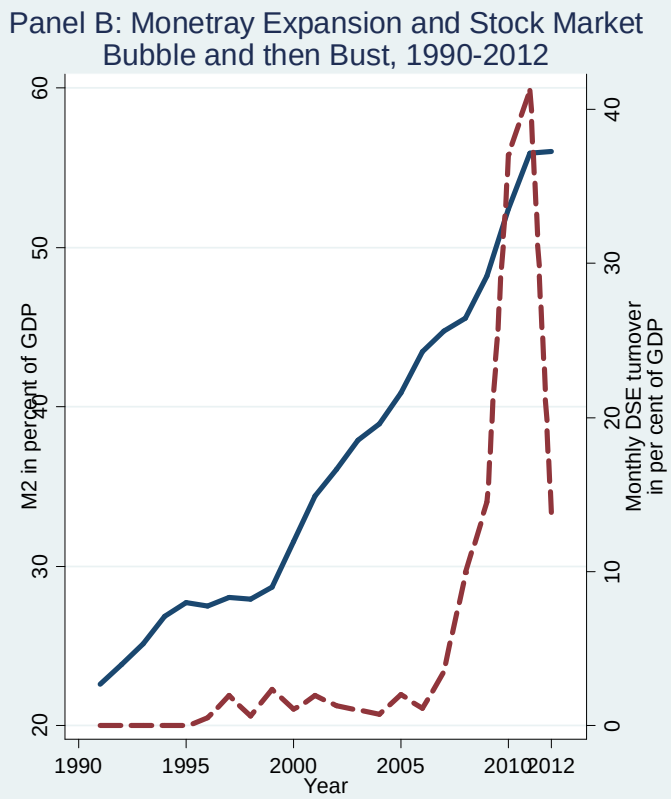




Source: BBS (2000, Table 4), BBS (2001, Table 1) and BBS (2011).

Remittances, Monetary Expansion, and Asset (Stock) Market Bubble & Bust in Bangladesh



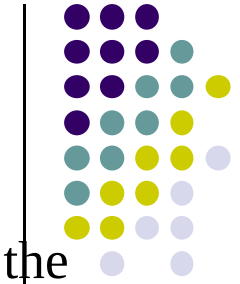


Panel A shows remittances and expansion on monetary aggregates in Bangladesh. The vertical bars represent inward foreign emittances in billion US dollars and shall be read on the left scale. The line shows m2 in percent of GDP on the right scale. Panel B depicts an association between cheap money and surge in the stock market turnover in the Dhaka Stock Exchange (DSE), which then followed by a bust in 2011. Sources: Dhaka Stock Exchange (2012), Bangladesh Bank (2012).

Research Objectives

- To critically review prevailing financial reporting regulations in Bangladesh and develop a disclosure checklist for the listed non-financial companies. Previous literature and expert judgment would guide the development of a usable checklist.
- To measure disclosure levels (meaning the extent of compliance with mandatory disclosure requirements) in the corporate annual reports and across various parts of the annual reports.
- To define disclosure requirements that serve various economic decisions and so to measure decision relevance of published annual reports for (i) investors, (ii) lenders, (iii) employees, (iv) suppliers, (v) customers, (vi) tax authority, (vii) assessing quality of corporate governance and (viii) assessing corporate social responsibility.
- To measure disclosure probability of major financial elements (38 items) (under which all the disclosure requirements are in fact embedded) in the corporate annual reports .
- To identify determinants that explain the present practice of financial disclosure in the corporate annual reports and to draw policy implications for public policy in areas of accounting and financial reporting in Bangladesh.

Disclosure Checklist for Listed Non-Financial Companies



- The principal task is to prepare a usable disclosure checklist for the non-financial companies.
- In order to do it, we first reviewed detailed disclosure regulations as they included in the Companies Act, 1994; the Securities and Exchange Rules, 1987; Listing Regulations of the Stock Exchanges, SEC Corporate Governance Guidelines, 2006; the International Accounting Standards (IASs) that are adopted by the ICAB and observance with which is now mandated by the BSEC; and other relevant pronouncements.
- The review ended up with a list of more than 500 disclosure items.
- We then reviewed several studies on user information needs and disclosure practice at home and abroad (e.g., Shingvi, 1967 & 1971; Chandra, 1975; Wallace, 1988; Cook, 1989; Karim, 1995; and Akhtaruddin, 2005).
- Previous literature and expert judgment are combined and corroborated with Akhtaruddin (2005) to define a usable checklist for the sample of non-financial companies.

Completion of Disclosure Checklist

- To conclude whether a disclosure item is disclosed involves a two-stage process. First, an enumerator must judge if the item is relevant for disclosure in the corporate annual report. In the case the item is judged irrelevant, a score of 9 would discard the item for the annual report in question. Second, he/she would search for the item and score 1 if disclosed and 0 if not disclosed.
- We provided intensive training to graduate students and then monitored this process to complete the checklist instruments. Two-stage validation checks of data are done. First, an independent enumerator would verify if scoring is correct. The second validation check involved expert review of 9s and 0s only, as they are likely to be incorrect.

Distribution of Disclosure Items by Parts of Annual Reports

Sl.No.	Parts of Annual Reports	Items of Financial Disclosure	Distribution
1	Disclosure of Corporate Information	19	10.0
2	Balance Sheet or Notes thereto	66	34.7
3	Income Statement or Notes thereto	44	23.2
4	Cash Flow Statement	30	15.8
5	Accounting Policies	23	12.1
6	Board of Directors' Report	8	4.2
	Total	190	100

Source: Accounting for Capital Market Development (ACMD, 2013)

Distribution of Disclosure Items by Major Financial Elements in Corporate Annual Reports

Sl. No.	Financial elements	Items of Disclosure	Percentage Distribution
1001	Accounting policy	13	6.8
1002	Accounts payables	1	0.5
1003	Accounts receivables	2	1.1
1004	Administrative expenses	2	1.1
1005	Advances, deposits and prepayments	3	1.6
1006	Audit costs	1	0.5
1007	Audit opinion	2	1.1
1008	Cash and cash equivalents	5	2.6
1009	Cash flow from financing activities	11	5.8
1010	Cash flow from investing activities	7	3.7
1011	Cash flow from operating activities	7	3.7
1012	Contingent liabilities	1	0.5
1013	Corporate information	12	6.3
1014	Cost of goods sold	1	0.5
1015	CSR cost	1	0.5
1016	Deferred tax liabilities	2	1.1
1017	Depreciation and amortization	3	1.6
1018	Dividend	4	2.1
1019	Earnings	12	6.3
1020	Employment cost	8	4.2

Distribution of Disclosure Items by Major Financial Elements in Corporate Annual Reports

Sl. No.	Financial elements	Items of Disclosure	Percentage Distribution
1021	Finance costs	1	0.5
1022	Foreign currency payments	2	1.1
1023	Intangibles	5	2.6
1024	Inventories	5	2.6
1025	Investment income	2	1.1
1026	Investments	9	4.7
1027	Long-term loans	4	2.1
1028	Presentation of financial statements	9	4.7
1029	Production and output	1	0.5
1030	Property, plant and equipment	17	8.9
1031	Provisions	9	4.7
1032	Research and development cost	3	1.6
1033	Reserves	2	1.1
1034	Revenue	5	2.6
1035	Selling and distribution expenses	2	1.1
1036	Share capital	11	5.8
1037	Short-term loans	2	1.1
1038	Tax expense	3	1.6
	Total	190	100.0

Source: Accounting for Capital Market Development (ACMD, 2013)

Data and Methods (1)

- A disclosure index for a company i is defined below:

$$I_i = \frac{\sum_{j=1}^{m} \bar{d}_{ij}}{\sum_{j=1}^{n} d_{ij}} \qquad (1)$$

- Here d_{ij} represents a mandatory disclosure requirement j for company i and it is an indicator variable taking 9 if the item is judged to be irrelevant, 1 if the disclosure is made and 0 if the relevant disclosure is not made. Thus the numerator $\sum_{i=1}^{m} \bar{d}_{ij}$ represents the number of actual disclosure and the denominator $\sum_{j=1}^{n} d_{ij}$ represents the number of relevant disclosure requirements for the company. Since $m \le n$, $0 \le I_i \le 1.0$ implying that the disclosure score has the lower bound of zero and the upper bound of unity.
- The same approach is followed to measure disclosure levels across various parts of annual reports and major financial elements disclosed in the annual reports.

Data and Methods (2)

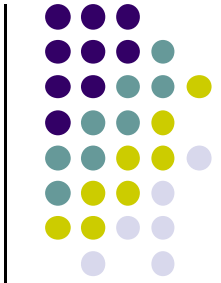
- In order to measure decision relevance of published annual reports, we define 8 criteria of decision relevance including (i) Investment Decisions, (ii) Lending Decisions, (iii) Credit Decisions of Suppliers, (iv) Employment Decisions of Current and Prospective Employees, (v) Buying Decisions of Customers, (vi) Assessment of Tax Liability by Tax Authority, (vii) Assessment of Corporate Governance, and (viii) Assessment of Corporate Social Responsibility.
- An assessment of the 190 disclosure requirements is made as to their relevance to the above 8 decision relevance. Empirical studies on users' information needs provide us guidance to this process.

No.	Criteria of Decision Relevance	No. of Disclosure Items
1	Investors' decision to buy, hold or sell shares	170
2	Employment decisions for employees	99
3	Lending decisions as to liquidity and solvency	169
4	Suppliers' decisions as to short-term liquidity	127
5	Customers' decisions as to business continuance	60
6	Assessment of tax liability by tax authority	140
7	Assessing quality of corporate governance	55
8	Assessing corporate social responsibility	51

Source: Accounting for Capital Market Development (ACMD, 2013)

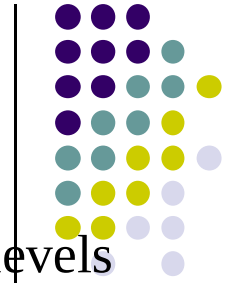
- Indexes are obtained as described in Eq. (1) for measuring decisions relevance of published annual reports for each of the eight criteria.

Data and Methods (3)



- Disclosure probability of a major financial element represents likelihood of the element to be disclosed by the sample firms. For each financial element, it is measured by a ratio between (i) the cumulative frequency of actual disclosure of the element over the sample firms and (ii) the cumulative frequency by which the element was judged *relevant to be disclosed* over the sample firms.
- The probability measures indicate observed likelihood of management to make required disclosure in corporate annual reports.

Data and Methods (4)



- In order to estimate effects of corporate attributes on disclosure levels and decision relevance of published annual reports, we estimate a linear regression without constant term and including the following covariates:
- Size of company is measured by log of turnover, age represents number of years since incorporation, profitability represents return on common equity, financial leverage represents financial obligations relative to common stock equity, concentration index of shareholding represents a monotonic transformation of average shareholding by shareholders exercising control over financial and operating policies, and other controls including industry dummies.
- Variance-covariance estimator is robust and/or bootstrapped and intra-industry correlation, if any, is controlled by clustering standard errors by industry types. Robust standard errors are reported.

Findings (Table 1)
Disclosure Levels in Corporate Annual Reports of Non-Financial Companies

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	18	0.834	0.688	0.917
Pharmaceuticals	16	0.815	0.521	0.896
Ceramics	3	0.868	0.815	0.932
Cement	4	0.921	0.885	0.952
Engineering	18	0.775	0.549	0.947
Fuel and Energy	8	0.865	0.743	0.969
Food	13	0.814	0.637	0.944
IT and Telecommunications	8	0.830	0.729	0.910
Services	6	0.866	0.760	0.929
Total	94	0.826	0.521	0.969

The cell values represent descriptive statistics of disclosure levels by industries.
Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 2)
Decision Relevance of Published Annual Reports for Investors

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	18	0.851	0.695	0.944
Pharmaceuticals	16	0.824	0.523	0.910
Ceramics	3	0.892	0.839	0.967
Cement	4	0.923	0.906	0.947
Engineering	18	0.786	0.545	0.956
Fuel and Energy	8	0.878	0.752	0.965
Food	13	0.823	0.618	0.938
IT and Telecommunications	8	0.830	0.714	0.900
Services	6	0.869	0.750	0.943
Total	94	0.836	0.523	0.967

A number of 170 disclosure items across parts of annual report constitute the checklist of financial disclosure for assessing decision relevance for investors. Cell values represent scores indicating decision relevance for investors.
Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 3)
Decision Relevance of Published Annual Reports for Lenders

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	18	0.841	0.717	0.936
Pharmaceuticals	16	0.816	0.536	0.903
Ceramics	3	0.875	0.838	0.926
Cement	4	0.917	0.882	0.946
Engineering	18	0.784	0.554	0.949
Fuel and Energy	8	0.872	0.760	0.967
Food	13	0.829	0.656	0.939
IT and Telecommunications	8	0.827	0.723	0.900
Services	6	0.866	0.742	0.943
Total	94	0.832	0.536	0.967

A number of 169 disclosure items across parts of annual report constitute the checklist of financial disclosure for assessing decision relevance for investors. Cell values represent scores indicating decision relevance for lenders.
Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 4)
Decision Relevance of Published Annual Reports for Employees

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	18	0.841	0.698	0.947
Pharmaceuticals	16	0.819	0.557	0.931
Ceramics	3	0.902	0.842	0.980
Cement	4	0.919	0.897	0.955
Engineering	18	0.810	0.598	0.985
Fuel and Energy	8	0.879	0.681	0.964
Food	13	0.835	0.671	0.949
IT and Telecommunications	8	0.841	0.710	0.943
Services	6	0.865	0.758	0.980
Total	94	0.840	0.557	0.985

A number of 99 disclosure items across parts of annual report constitute the checklist of financial disclosure for assessing decision relevance for employees. Cell values represent scores indicating decision relevance for employees.
Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 5)
Decision Relevance of Published Annual Reports for Suppliers

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	18	0.859	0.718	0.955
Pharmaceuticals	16	0.836	0.593	0.930
Ceramics	3	0.903	0.869	0.960
Cement	4	0.911	0.870	0.944
Engineering	18	0.819	0.608	0.967
Fuel and Energy	8	0.883	0.761	0.972
Food	13	0.867	0.703	0.973
IT and Telecommunications	8	0.846	0.786	0.893
Services	6	0.878	0.734	0.957
Total	94	0.854	0.593	0.973

A number of 127 disclosure items across parts of annual report constitute the checklist of financial disclosure for assessing decision relevance for suppliers. Cell values represent scores indicating decision relevance for suppliers.

Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 6)
Decision Relevance of Published Annual Reports for Customers

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	18	0.846	0.684	0.975
Pharmaceuticals	16	0.828	0.582	0.936
Ceramics	3	0.894	0.854	0.919
Cement	4	0.917	0.857	0.970
Engineering	18	0.831	0.686	0.954
Fuel and Energy	8	0.872	0.674	0.946
Food	13	0.857	0.710	0.972
IT and Telecommunications	8	0.872	0.806	0.947
Services	6	0.889	0.833	0.971
Total	94	0.853	0.582	0.975

A number of 60 disclosure items across parts of annual report constitute the checklist of financial disclosure for assessing decision relevance for customers. Cell values represent scores indicating decision relevance for customers.

Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 7)
Decision Relevance of Published Annual Reports for Tax Authority

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	18	0.864	0.753	0.967
Pharmaceuticals	16	0.849	0.559	0.947
Ceramics	3	0.887	0.842	0.962
Cement	4	0.931	0.888	0.969
Engineering	18	0.799	0.549	0.979
Fuel and Energy	8	0.893	0.798	0.972
Food	13	0.844	0.618	0.959
IT and Telecommunications	8	0.831	0.712	0.921
Services	6	0.884	0.768	0.963
Total	94	0.851	0.549	0.979

A number of 140 disclosure items across parts of annual report constitute the checklist of financial disclosure for assessing decision relevance for tax authority. Cell values represent scores indicating decision relevance for tax authority.

Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 8)
Decision Relevance of Published Annual Reports for Assessing Corporate Governance

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	18	0.818	0.667	0.932
Pharmaceuticals	16	0.812	0.482	0.919
Ceramics	3	0.885	0.872	0.903
Cement	4	0.893	0.861	0.919
Engineering	18	0.797	0.553	0.971
Fuel and Energy	8	0.863	0.711	0.971
Food	13	0.804	0.675	0.936
IT and Telecommunications	8	0.866	0.724	0.968
Services	6	0.886	0.875	0.900
Total	94	0.829	0.482	0.971

A number of 55 disclosure items across parts of annual report constitute the checklist of financial disclosure for assessing quality of corporate governance. Cell values represent scores indicating decision relevance.

Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 9)
Decision Relevance of Published Annual Reports for Assessing Corporate Social Responsibility

Industry Code	Descriptive Statistics			
	No. of firms	mean	min	max
Textile	17	0.869	0.778	0.983
Pharmaceuticals	16	0.849	0.565	0.953
Ceramics	3	0.879	0.803	0.932
Cement	3	0.900	0.746	0.984
Engineering	18	0.832	0.597	0.984
Fuel and Energy	8	0.862	0.791	0.948
Food	12	0.833	0.391	0.965
IT and Telecommunications	7	0.872	0.811	0.951
Services	6	0.908	0.855	0.946
Total	90	0.857	0.391	0.984

A number of 55 disclosure items across parts of annual report constitute the checklist of financial disclosure for assessing quality of corporate governance. Cell values represent scores indicating decision relevance.

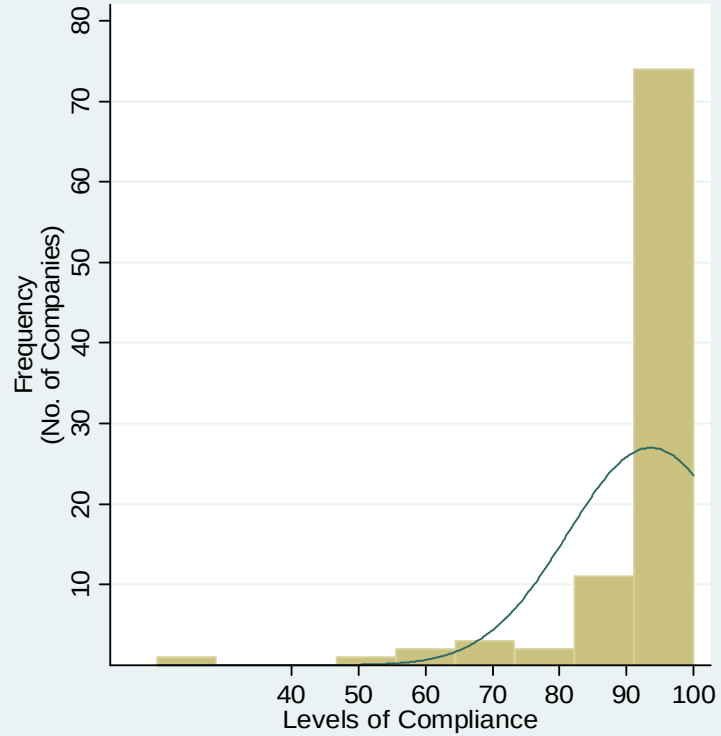
Source: Accounting for Capital Market Development (ACMD, 2013)

Findings (Table 10)
Disclosure Probability of Major Financial Elements in the Corporate Annual Reports

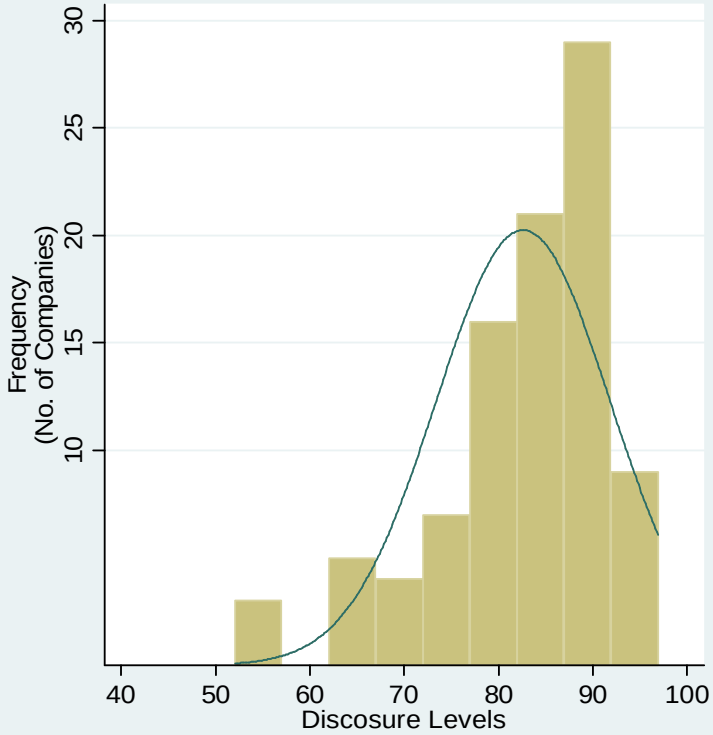
Sl. No.	Financial elements	Items of Financial Disclosure	Disclosure probability
1001	Accounting policy	13	0.647
1002	Accounts payables	1	0.947
1003	Accounts receivables	2	0.919
1004	Administrative expenses	2	0.708
1005	Advances, deposits and prepayments	3	0.784
1006	Audit expense	1	0.947
1007	Audit opinion	2	0.938
1008	Cash and cash equivalents	5	0.992
1009	Cash flow from financing activities	11	0.852
1010	Cash flow from investing activities	7	0.915
1011	Cash flow from operating activities	7	0.929
1012	Contingent liabilities	1	0.860
1013	Corporate information	12	0.839
1014	Cost of goods sold	1	0.922
1015	CSR cost	1	0.393
1016	Deferred tax liabilities	2	0.833
1017	Depreciation and amortization	3	0.840
1018	Dividend	4	0.870
1019	Earnings	12	0.835
1020	Employment cost	8	0.597

(De jure) compliance with SEC corporate governance guidelines and disclosure levels in corporate annual reports

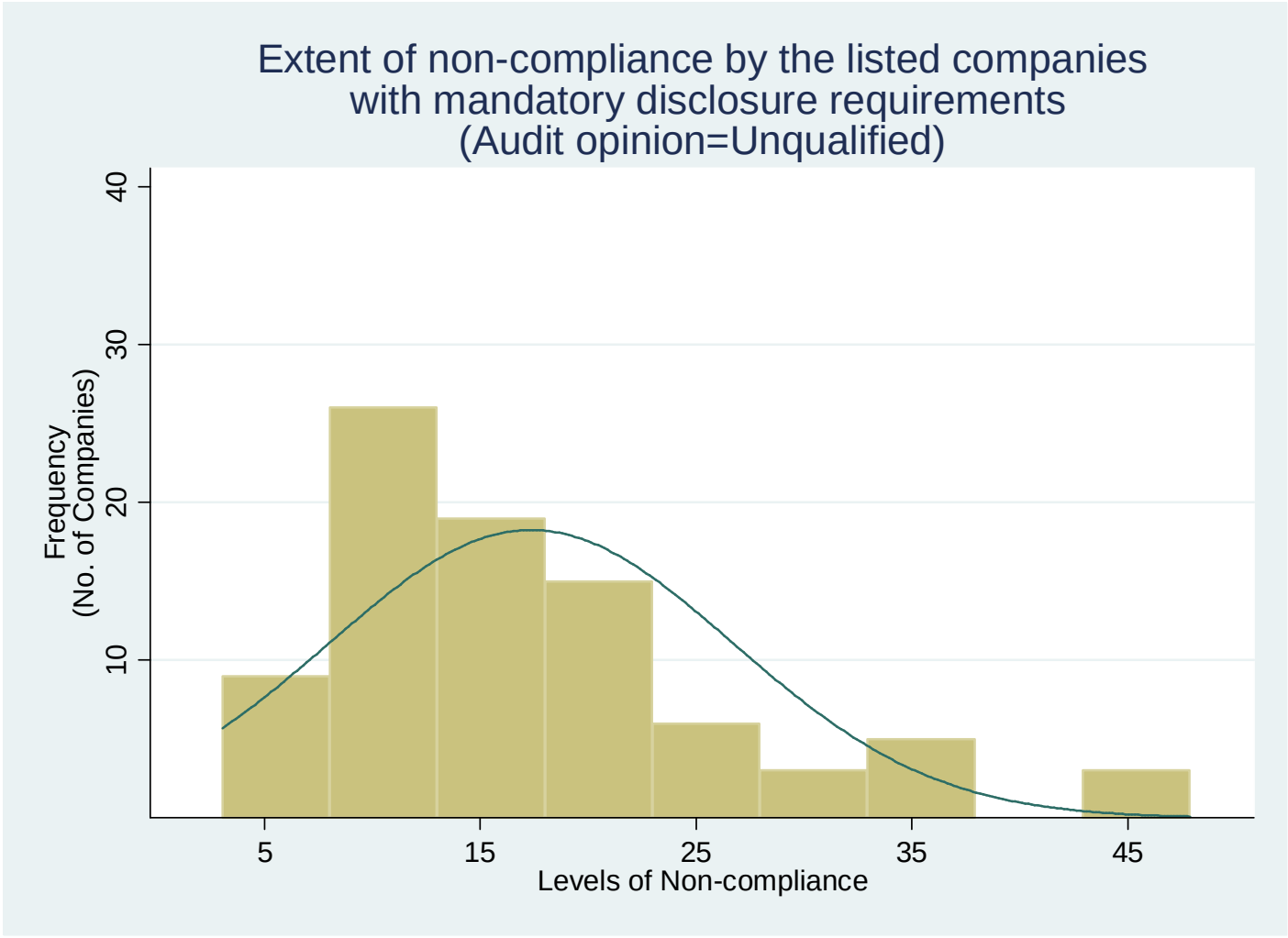
(a)(De jure) Compliance with SEC corporate governance guidelines



(b)Disclosure levels in corporate annual reports



Source: (c)Accounting for Capital Market Development (ACMD)


Extent of non-compliance by the listed companies
with mandatory disclosure requirements
(Audit opinion=Unqualified)
Frequency
(No. of Companies)
10
20
30
40
5
15
25
35
45
Levels of Non-compliance

Findings (Table 10 Contd.)
Disclosure Probability of Major Financial Elements in the Corporate Annual Reports

Sl. No.	Financial elements	Items of Financial Disclosure	Disclosure probability
1021	Finance costs	1	0.967
1022	Foreign currency payments	2	0.720
1023	Intangibles	5	0.598
1024	Inventories	5	0.869
1025	Investment income	2	0.551
1026	Investments	9	0.765
1027	Long-term loans	4	0.737
1028	Presentation of financial statements	9	0.947
1029	Production and output	1	0.583
1030	Property, plant and equipment	17	0.843
1031	Provisions	9	0.701
1032	Research and development cost	3	0.470
1033	Reserves	2	0.673
1034	Revenue	5	0.843
1035	Selling and distribution expenses	2	0.786
1036	Share capital	11	0.887
1037	Short-term loans	2	0.617
1038	Tax expense	3	0.732
	Total Disclosure Items	**190**	

Disclosure probability of a major financial element represents likelihood of the element to be disclosed by the sample firms. For each financial element, it is measured by a ratio between (i) the cumulative frequency of actual disclosure of the element over the sample firms and (ii) the cumulative frequency by which the element was judged *relevant to be disclosed* over the sample firms.

Source: Accounting for Capital Market Development (ACMD, 2013).

Findings (Table 11)
Determinants of Financial Disclosure in Corporate Annual Reports
(Dependent Variable: Levels of Financial Disclosure)

Independent Variables	*1*	*2*	*3*	*4*
Age	0.347*	0.571	0.356*	0.390**
	(0.185)	(0.406)	(0.190)	(0.157)
Size	7.348**		7.253**	7.933**
	(2.834)		(2.871)	(2.874)
Return on Common Equity		0.083*	0.026	0.038
		(0.044)	(0.047)	(0.050)
Financial Leverage	0.674	-0.383	0.655	0.745
	(0.670)	(0.405)	(0.689)	(0.882)
Shareholding Concentration Index	-0.02	2.564	0.006	-0.049
	(0.417)	(2.236)	(0.448)	(0.518)
Investment in Associates				-3.336
				(6.061)
Parent Company Status				-8.022
				(5.310)
Foreign Affiliation				-9.198‡
				(5.602)
Audit Firm	-2.205	3.475	-2.424	0.347
	(5.464)	(5.102)	(5.398)	(5.238)
Number of Observations	87	89	87	87
R-Squared	0.966	0.943	0.967	0.970

Robust standard errors are reported and they are adjusted for intragroup correlation. Significance test: *** p<0.01, ** p<0.05, * p<0.1, ‡p<0.15.

Findings (Table 12)
Determinants of Decision Relevance for Investors
(Dependent Variable: Relevance Scores of Published Annual Reports for Investors)

Independent Variables	*1*	*2*	*3*	*4*
Age	0.343‡	0.574	0.353‡	0.388**
	(0.187)	(0.408)	(0.193)	(0.160)
Size	7.470**		7.361**	8.036**
	(2.803)		(2.841)	(2.855)
Return on Common Equity		0.088*	0.030	0.042
		(0.044)	(0.046)	(0.049)
Financial Leverage	0.694	-0.397	0.671	0.767
	(0.674)	(0.423)	(0.694)	(0.895)
Shareholding Concentration Index	-0.045	2.577	-0.018	-0.072
	(0.416)	(2.240)	(0.445)	(0.513)
Investment in Associates				-3.073
				(6.028)
Parent Company Status				-7.960
				(5.638)
Foreign Affiliation				-9.453‡
				(5.728)
Audit Firm	-2.514	3.245	-2.765	0.042
	(5.269)	(4.803)	(5.169)	(4.945)
Number of Observations	87	89	87	87
R-Squared	0.967	0.944	0.967	0.970

Robust standard errors are reported and they are adjusted for intragroup correlation.
Significance test: *** p<0.01, ** p<0.05, * p<0.1, ‡p<0.15.

Findings (Table 13)
Determinants of Decision Relevance for Lenders
(Dependent Variable: Relevance Scores of Published Annual Reports for Lenders)

Independent Variables	*1*	*2*	*3*	*4*
Age	0.366*	0.588	0.372*	0.406**
	(0.184)	(0.407)	(0.190)	(0.154)
Size	7.333**		7.263**	7.969**
	(2.851)		(2.884)	(2.867)
Return on Common Equity		0.075‡	0.019	0.031
		(0.044)	(0.044)	(0.047)
Financial Leverage	0.663	-0.391	0.649	0.735
	(0.644)	(0.397)	(0.657)	(0.847)
Shareholding Concentration Index	-0.017	2.563	0.000	-0.057
	(0.428)	(2.220)	(0.457)	(0.527)
Investment in Associates				-3.834
				(5.782)
Parent Company Status				-8.197
				(5.427)
Foreign Affiliation				-9.227‡
				(5.165)
Audit Firm	-2.757	2.981	-2.917	-0.086
	(5.375)	(4.958)	(5.320)	(5.314)
Number of Observations	87	89	87	87
R-Squared	0.968	0.945	0.968	0.971

Robust standard errors are reported and they are adjusted for intragroup correlation. Significance test: *** p<0.01, ** p<0.05, * p<0.1, ‡p<0.15.

Findings (Table 14)
Determinants of Decision Relevance for Suppliers
(Dependent Variable: Relevance Scores of Published Annual Reports for Suppliers)

Independent Variables	*1*	*2*	*3*	*4*
Age	0.399*	0.623	0.406*	0.439**
	(0.184)	(0.407)	(0.191)	(0.153)
Size	7.463**		7.388**	8.090**
	(2.868)		(2.907)	(2.899)
Return on Common Equity		0.077‡	0.020	0.033
		(0.043)	(0.045)	(0.047)
Financial Leverage	0.617	-0.439	0.602	0.684
	(0.619)	(0.343)	(0.636)	(0.820)
Shareholding Concentration Index	-0.059	2.567	-0.041	-0.098
	(0.434)	(2.222)	(0.463)	(0.528)
Investment in Associates				-4.076
				(5.445)
Parent Company Status				-7.992
				(5.257)
Foreign Affiliation				-9.149*
				(4.665)
Audit Firm	-3.349	2.468	-3.521	-0.691
	(5.131)	(4.604)	(5.064)	(5.213)
Number of Observations	87	89	87	87
R-Squared	0.971	0.949	0.972	0.974

Robust standard errors are reported and they are adjusted for intragroup correlation.
Significance test: *** p<0.01, ** p<0.05, * p<0.1, ‡p<0.15.

Findings (Table 15):
Determinants of Decision Relevance for Tax Authority
(Dependent Variable: Relevance Scores of Published Annual Reports for Assessing Tax Liability)

Independent Variables	*1*	*2*	*3*	*4*
Age	0.353‡	0.581	0.359‡	0.390*
	(0.194)	(0.413)	(0.201)	(0.169)
Size	7.365**		7.306**	7.990**
	(2.882)		(2.917)	(2.935)
Return on Common Equity		0.075‡	0.016	0.027
		(0.045)	(0.048)	(0.051)
Financial Leverage	0.748	-0.344	0.736	0.825
	(0.682)	(0.399)	(0.692)	(0.884)
Shareholding Concentration Index	0.118	2.706	0.133	0.080
	(0.439)	(2.280)	(0.467)	(0.537)
Investment in Associates				-2.983
				(6.319)
Parent Company Status				-8.520
				(5.799)
Foreign Affiliation				-8.724
				(5.751)
Audit Firm	-2.200	3.654	-2.337	0.299
	(5.399)	(5.080)	(5.338)	(5.042)
Number of Observations	87	89	87	87
R-Squared	0.966	0.944	0.966	0.969

Robust standard errors are reported and they are adjusted for intragroup correlation.
Significance test: *** p<0.01, ** p<0.05, * p<0.1, ‡p<0.15.

Findings and Interpretation

- The extent of compliance with mandatory disclosure requirements is varying between 52.1 percent and 96.9 percent across the sample companies (Table 1). The extent of non-compliance is pervasive.
- The fact that the **Board of Directors' Reports** of the sample companies often reflects a *de jure 100 percent* compliance with corporate governance disclosure requirements implies that the observed indices of disclosure adequacy is not indicative of disclosure quality.
- Decision relevance of published annual reports, which is measured by a varying set of user-specific disclosure checklist, indicates a substantial varying pattern of relevance scores for published annual reports. Tables 2 through 9 show that the indexes are often lower than 0.50 meaning that 50 percent of disclosure items that constitute decision relevance for a user-group go unpublished in annual reports.
- Table 10 shows disclosure probability of 38 major financial elements around which 190 specific disclosure requirements are organized. The findings indicate that the elements that have less than 75 percent probability to be fully disclosed include (i) intangibles, (ii) investment income, (iii) production & output, (iv) provisions, (v) reserves, (vi) financial obligations, (vii) R&D costs, (viii) CSR costs, (ix) employment costs, (x) accounting policies.
- The results indicate management's unwillingness to fully disclose many price sensitive items to external users.

Findings and Interpretation

- Table 11 shows the effects of corporate attributes on disclosure levels of the sample firms. Of the four specifications , the most parsimonious one (Spec. 4) indicates that the size of firm significantly increases levels of disclosure. A similar positive association is observed between age of firm and disclosure adequacy.
- The findings further show that profitability, financial leverage and shareholding concentration index (which represents average shareholding by controlling shareholders) do not affect the extent of compliance with disclosure requirements. One explanation may be that both leverage and profitability are highly correlated with turnover and thus its inclusion significantly affects information matrix and so coefficient vectors.
- A finding contrary to common perception is that foreign affiliation dummy is negatively associated with disclosure levels. A possible explanation is that when a sample firm is a foreign affiliate its relevant set of disclosure requirements rises faster than its actual level of disclosure and thus its disclosure level decreases.
- Tables 12 through 15 show empirical estimates on the determinants of decision relevance of published annual reports.

Policy Implications

- Pervasive non-compliance with reporting regulations is causing non-disclosure of ***useful disclosure*** for investment and credit decisions. Decision relevance of published annual reports is thus poor. Overpricing of IPOs and right shares is related to this poor quality of financial disclosure.
- Since disclosure probability of useful information is discretionary on the part of management and effective regulation is missing, access to price sensitive information is asymmetric. Information asymmetry is one principal reason of insider trading and other stock market manipulations.
- Given that non-compliance with ***relevant disclosure requirements*** is common, audit opinion goes unsubstantiated. A finding that audit opinions are often ***unqualified*** indicates a divorce between disclosure practice and quality disclosure.
- Regulators including the stock exchanges require both physical and human capital to (a) validate offer price of new issues, (b) ensure compliance with full disclosure requirements; and (c) assess quality of audit opinion and financial disclosure.
- New financial reporting regulations require harmonization of local accounting and auditing practices and convergence to international standards on auditing and accounting.