

The effect of regulation on timeliness of corporate financial reporting: Evidence from Bangladesh

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Abstract

In this study, we examine whether timeliness of corporate financial reporting has improved in Bangladesh following the creation of the Securities and Exchange Commission (SEC) in 1993, the enactment of the Companies Act in 1994 and the amendment of the SEC Rules in 1997. Using more than 1200 firm-year observations over a period of 10 years, we find that regulatory changes have not improved timeliness in reporting, as measured by audit lag, issue lag and total lag. Although we find that large firms take shorter time to publish their annual reports compared with small firms, the lags, on average, have deteriorated significantly following the passage of legislation in Bangladesh.

Key words: timeliness, Bangladesh, audit lag, total lag

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Introduction

Timeliness has long been recognised as one of the qualitative attributes of general purpose financial reports (AICPA, 1973; APB, 1970; FASB, 1979). Empirical research on timeliness of financial reporting provides evidence that the degree of timeliness of information release has information content (Beaver 1968) and affects firm value (Chambers & Penman, 1984; Givoly & Palmon, 1982; Kross & Schroeder, 1984; Schwartz & Soo, 1996). Recognising the theoretical and practical importance of timely release of financial information, regulatory agencies around the world have set statutory maximum time limits within which public companies are required to issue audited financial statements to shareholders and other external users and file them with concerned regulatory bodies (for a summary of maximum allowable reporting lags in different countries, see Alford et al. 1993, pp 188-190). Most organised stock exchanges have similar or more stringent reporting and filing requirements.

In emerging economies, the provision of timely information in corporate report assumes more importance since other non-financial statement sources such as media releases, news conferences and financial analysts forecasts are not well developed and the regulatory bodies are not as effective as in Western developed countries (Wallace, 1993). The motivation of this study is derived from a long-standing problem of a lack of timely provision of corporate financial information in Bangladesh. A survey of 650 financial statement users and preparers of financial reports in Bangladesh reveals that an overwhelming majority of respondents – both preparers and users (93.8%) – believe that the observed time lag in publishing corporate annual reports is too long and should be reduced substantially (Karim, 1995). While approximately 10% of listed companies do not publish annual reports even three years after fiscal year-end dates, considerable delays are observed among those who publish their annual reports.

The long audit delay normally leads to an even longer publication delay as companies in Bangladesh are reluctant in calling the annual general meetings (AGM) of shareholders in years with poor financial performance and/or low or no dividend announcement prospects. Although the Companies Act requires all companies, listed and unlisted, to furnish their annual accounts before the AGM within nine months of expiry of their respective financial years, a significant portion of these companies do not comply with this requirement. Many companies do not

submit their annual accounts with the Registrar of Joint Stock Companies for several years. Some companies are found to take up to seven years to present audited financial statements before the AGM of shareholders. Although it is generally believed that audit delay is '[T]he single most important determinant of the timeliness of earnings announcement' (Givoly & Palmon, 1982, p 491), the case in Bangladesh is not necessarily so. Even after completion of the audit process, a few companies are found to have taken few more years to release the audited financial statements to outsiders including shareholders. Together with this post-audit delay, the total delay in releasing audited information to external users can be ridiculously long, potentially ruining the whole purpose of external financial reporting. A few companies were seen to present four to five years' annual reports in one annual general meeting. One such company, Kohinoor Chemical Co. (BD) Ltd held its 8th, 9th, 10th, 11th, 12th, and 13th AGMs corresponding to financial years 1994-95 through 1999-00 on the same day on 8th of June, 2001. The same company held its 4th, 5th, 6th, and 7th AGMs – all on the same day on 27 February, 1995. Another such company, Orion Infusion Ltd held its 14th, 15th, 16th, and 17th AGMs corresponding to 1996-97 through 1999-2000 financial years on 27 July 2000. Similar examples can be found in MAQ Enterprise Ltd (combined 4 AGMs), MAQ Paper Industries Ltd (combined 3 AGMs), and Mark Bangladesh Shilpa and Engineering Ltd (combined 3 AGMs) etc. In the backdrop of this grim picture there were some bright spots too. The auditors of two of the largest multinationals operating in Bangladesh – Bangladesh Oxygen Ltd (presently BOC) and Glaxo Wellcome Ltd (presently Glaxo SmithKline) took only 41 days (1992) and 45 days (1996) respectively to complete their respective audits. Auditors of a domestic listed company, Tallu Spinning Mills, completed their 1995 audit in just 27 days.

Until the enactment of the Companies Act 1994, the unusually long audit and publication delays were normally attributed to outdated legislative provisions, weak enforcement mechanism and a less than sound regulatory framework governing corporate reporting and disclosure (Parry & Groves, 1990). It was argued that the Companies Act of 1913, the main component of the financial reporting regulatory framework, was long outdated and there was a lack of adequate oversight on securities markets and on companies listed on the stock exchanges.

Five major developments, directly or indirectly relevant to corporate financial reporting, took place in Bangladesh between 1993 and 1997. First, a Securities and Exchange Commission (SEC) was established with effect from 3 May 1993 under the SEC Act of 1993. The SEC Act, in its preamble, states that the SEC was established 'for the purpose of protection of

interest of investors in securities, for the development of (securities) markets and for matters connected therewith or incidental thereto' (GOB 1993). One of the functions of the Commission, as specified by the SEC Act, is to call for information from issuers of securities. Although the SEC Act does not directly deal with the issue of timeliness of financial reporting, it empowers the Commission to issue new rules or amend existing rules, as it considers appropriate to improve the capital market and to ensure its smooth functioning.

Second, a new Companies Act was enacted in 1994 that came into force on 1 October 1995, replacing the Companies Act of 1913. The Companies Act 1994 preserved the provisions of the 1913 Act with regard to the 9-month time limit within which companies were required to furnish their financial statements before an AGM of shareholders. However, the new Act increases the penalty for non-compliance with this provision by ten times the penalty imposed by the old Act. The new Act provides for a penalty of up to Tk 5,000 (A\$200) on each director of the company for failure to comply with relevant provision.

A third development took place in October 1997 when the SEC amended the Securities and Exchange Rules (SER) of 1987 that required a listed company to prepare half-yearly financial statements within one month of the close of the first half-year of its accounting year and issue those statements to the stock exchange(s) in which its securities are listed, to holders of its securities, and to the Commission.

Fourth, the country's capital market saw an unprecedented boom and a subsequent collapse in stock prices during 1996-97. One of the reasons contributing to the unusual rise and fall in securities prices was due to artificial manipulation of securities prices by a number of securities dealers and issuers in the absence of timely provision of reliable financial information in the market.

Finally, after the stock market crash in 1996, the SEC has been insisting listed companies on holding regular AGMs and publishing up to date annual reports. The fact that some companies were found to hold up to 5 AGMs and publish financial statements of up to 5 consecutive years on the same day is most likely to be in response to the SEC pressure.

In the context of the above developments taking place in Bangladesh over the period 1993 – 1997, it is considered to be an ideal setting to study the impact of regulatory changes on timeliness of corporate financial reporting. In view of the above developments, it is expected

that companies would provide more timely information for the following reasons:

- I. The creation of the SEC in 1993 would mean listed companies would come under the SEC oversight leading to improvement in all aspects of corporate financial reporting including timeliness;
- II. The increase in penalty for non-compliance to the time limit for holding the AGMs under the Companies Act 1994 could be expected to improve the overall timeliness in corporate financial reporting following enactment of the Act;
- III. The amendment of the SER in 1997 requiring publication of half-yearly financial statements within one month of the first half of the year should make it easy for companies to prepare annual financial statements sooner as they would already have prepared half-yearly financial statements;
- IV. In the aftermath of the biggest stock market crash in 1996-97, listed companies could be expected to be extra careful in maintaining and increasing shareholder confidence in the company and its management. They could also be expected to install internal audit and/or improve existing internal audits to improve accountability within the organization. Timely provision of financial information and regular holding of AGMs could be two of the ways management might want to signal their commitment to the shareholders.

In addition to the above, the steady increases in foreign investment into the country and greater degree of financial liberalisation are expected to improve the timeliness of financial reporting in the country over time. This study focuses on one aspect of corporate financial reporting – timeliness. The study aims to see whether the above-mentioned developments in the financial reporting regulatory environment has been successful in significantly reducing the time lag in publishing financial statements by companies in Bangladesh. The paper is organised as follows: the next section provides a brief review of relevant literature while Section III outlines the methodology of the study. Section IV presents an analysis of results followed by concluding remarks in Section V.

Prior Research

Dyer and McHugh (1975) pioneers in research on audit delay, find that audit delay is inversely related to client size, directly related to busy season (June 30) year-ends, and not related to

relative profitability. Whittred (1980b) replicates Dyer and McHugh (1975) and finds that the average reporting lag of Australian listed companies have not significantly changed after the revision of a listing requirement allowing companies four months to complete audits and submit audited accounts to the stock exchange. Whittred (1980a) finds that the incidence of qualified report delays the release of financial statements and that the delay increases with seriousness of the qualification. Davies and Whittred (1980) extend Dyer and McHugh (1975) and Whittred (1980b) by adding three new variables, namely, audit firm size, auditor change, and the presence of extraordinary items to the conventional auditee attributes of size, profitability and year-end dates. They find that 'small' and 'large' companies are significantly more timely reporters than 'moderate' sized companies. Contrary to Dyer and McHugh (1975), they find that financial year-end have little impact on the total reporting lag while their finding that relative profitability does not significantly explain audit delay is consistent with Dyer and McHugh (1975). Among the new variables, auditor size and extraordinary items are found to explain little variation in any of the defined lags while auditor change significantly increases preliminary reporting lag with little influence on other lags measured in the study. In another Australian study, Whittred and Zimmer (1984) investigate the predictive ability of financial reporting delays in predicting financial distress. Contrasting lags of failed and non-failed firms for each of the five years prior to failure using 37 matched pairs of firms, they find that companies entering financial distress experience longer auditors' signature lags at least three years prior to failure. In a more recent Australian study, Simnett (1995) reports a steady increase in mean audit delay in Australia over the study period of 1981 – 1989 and find that prior year's audit delay is the major explanatory variable explaining audit delay. They also find that audit delay is inversely related to profit (six of the eight years) and audit complexity but directly related to qualified opinion (three latest years) and busy season year-ends (four of the eight years). They don't find firm size, leverage (except for just one year), extraordinary items, and audit structure in explaining audit delay.

Courtis (1976) finds no significant association between reporting delay and corporate size, age, number of shareholders, and length of annual report in New Zealand. However, he finds an inverse relationship between absolute profit and reporting delay. He also observes that fuel and energy and finance companies were faster reporters than companies in service industries and in mining and exploration. In response to Courtis's (1976) suggestion that slow reporters tend to be less profitable, Gilling (1977) suggests that as the lag in question is 'essentially an auditing

lag' (p 34), 'it would be more appropriate to examine the auditors' activity and attributes, rather than corporate attributes' (p 34). Gilling (1977) finds that seven leading audit firms with links with (the then) international Big-eight firms complete their audits more quickly than their small counterparts. His results suggest that leading New Zealand audit firms consciously schedule their work in the following order: overseas companies, large public companies, and smaller public companies. In another survey of audit delay of New Zealand companies, Gilling (1983) finds that as corporate size and profits increase audit delay decrease up to a certain point before starting to increase again. He also finds that, in general, big audit firms have shorter audit lag than non-big firms and within big firm clients, larger clients show shorter lags than do smaller clients. Based on this Gilling (1983) reiterates his earlier suggestion (in Gilling, 1977) that the leading audit firms consciously schedule their work in an order whereby overseas companies and large public companies get priority over smaller public companies. In a latter study of New Zealand, Carslaw and Kaplan (1991) examine the effect of nine variables on audit delay using data from 245 and 246 listed firms for 1987 and 1988 respectively. The results show that total assets and net profit sign were significant in both years while client industry, extraordinary items, company ownership, and leverage were significant for a single year.

In the first US study on audit delay Garsombke (1981) finds inconclusive evidence that firms with January to March fiscal year-ends are less timely than other firms, that there is no significant difference among major CPA firms' audit timeliness, that firms with different listing statuses vary in timeliness, that current ratio is negatively associated with timeliness while debt ratio is positively associated with it, and that good news is not reported more quickly than bad news. Givoly and Palmon (1982) analyse timeliness and information content of annual reports and examine their relationship with certain corporate attributes. They test Beaver's (1968) suggestion that good news is released promptly while the release of bad news is systematically delayed using relative measure of profitability and both absolute and relative measures of timeliness. They find that size (inversely) and complexity (directly) are related to reporting delay, bad news is systematically delayed, early and late announcements have differential degrees of market reaction, and unusually long reporting delays are associated with significant reductions in the information content of annual reports.

Following Givoly and Palmon (1982), Zeghal (1984) attempts to determine the effect of timeliness on the information content of interim and annual reports using Beaver's (1968) definitions of information – relative stock return variability and relative volume of transactions.

Results show that accounting reports with shorter delay have higher information content than those with longer delay. He also finds that the effect of delay on information content is higher in the case of interim rather than annual reports.

Ashton et al. (1987) examine possible association between audit delay and fourteen client specific variables. They find total revenue, audit complexity, internal control quality, mix of interim and final work, and company's listing status are significantly associated with audit lag. In a Canadian study, Ashton et al. (1989) use eight auditor and client specific variables to explain audit delay. They find that companies from non-financial services industry, reporting extraordinary items and losses and those receiving qualified audit opinions had significantly longer delays. On the other hand, company size, busy season (December-January) year-ends, and auditor size – all inversely related to audit delays.

Ng and Tai (1994) and Jaggi and Tsui (1999) examine the impact of company specific characteristics on audit delay in Hong Kong. Drawing on, mainly, Ashton et al. (1989) and Carslaw and Kaplan (1991), Ng and Tai (1994) find company size and the degree of diversification are significantly associated with audit delay in both 1991 and 1992 and extraordinary items and financial year-end in one year only. Jaggi and Tsui (1999) extend Ng and Tai (1994) by incorporating firm's financial condition, ownership control and audit firm technology. They obtain data from 393 firms listed on the Hong Kong Stock Exchange over a period of three years from 1991. Their results show that firm size, firm's financial condition, audit approach (degree of structure), degree of diversification, and audit opinion are significant explanatory variables for audit delay in Hong Kong.

Only four studies on audit delay have been undertaken in emerging audit markets, these being Abdulla (1996), Owusu-Ansah (2000), Imam et al. (2001), and Ahmed (2003). Abdulla (1996) finds a significant relationship between timeliness and firm size, profitability, and distributed dividends. Owusu-Ansah (2000) employs a two-stage least square regression model and finds size, profitability and company age as significant determinants of reporting lags of Zimbabwean listed companies. Imam et al. (2001) focus on possible association between audit delay and audit firms' international links – a proxy for auditor quality. They find that auditors with international links take longer to complete than their unaffiliated peers.

Ahmed (2003) reports long delays in reporting to shareholders in three South Asian countries namely India, Pakistan and Bangladesh. Using a large sample of 558 company annual reports

for the year 1997-1998 comprising 115 reports from Bangladesh, 226 reports from India and 217 reports from Pakistan, Ahmed finds that the total lag between the financial year end and holding the annual general meeting is, on average, 220 days, 164 days and 179 days in Bangladesh, India and Pakistan, respectively. In Bangladesh, Ahmed did not find any association between corporate characteristics and timely reporting.

Research Design

The major regulatory change took place in 1994 via the enactment of the Companies Act. However, the changes taking place in 1993 and in 1997 via creation of the SEC and amendment of the SER requiring half-yearly financial statements respectively are also noteworthy. This study examines the impact (if any) of the following on timeliness of financial reporting:

- I. enactment of the new Companies Act;
- II. 1996 stock market crash; and
- III. amendment of the SER in 1997

It measures such impact by comparing the audit and publication delays of a sample of companies, both prior to and after these events. Three categorical variables, labelled prepost, 1996 dummy, and 1997 dummy are created to differentiate firm years before and after each of the three events respectively. For example, the variable prepost separates the firm years before enactment of the Companies Act from those after enactment of the Act. If the events under study, e.g., the regulatory change in 1994, market crash of 1996, or SER amendment in 1997 are effective in improving timeliness in corporate financial reporting, then the observed audit and publication delays in the post-event years should be significantly less than those in the pre-event years. The first of the three dummy variables, prepost, captures regulatory change by separating the firm-years belonging to the 1990-1994 period from those belonging to the 1995-1999 period. The variable is coded '1' if it belongs to the 1995 - 1999 sub-sample and '0' if it represents the 1990 - 1994 sub-sample. Similarly, the second dummy variable, 1996 dummy, captures possible effect of stock market crash by separating firm-years for the period 1990 to 1996 from those for the period 1997 to 1999. Likewise the third dummy variable, 1997 dummy, splits the sample into two parts one representing firm-years from 1990 to 1997 and the other representing firm-years 1998 and 1999.

Data Collection

Two samples of firms are used in the study. The first comprising all firms whose annual reports are available at the Dhaka Stock Exchange (DSE) for the period 1990-99 and the second comprising only those firms whose annual reports are available for each of the 10 years under study. The first sample is called the 'combined sample' and the second sample is called the 'matched-pair sample'. As of 30 December 1999, there were a total of 232 securities listed on the DSE including 211 equity, 9 mutual funds, and 12 debt securities. The number of securities on 31 December 1990 was 131. Many companies listed in 1990 were delisted in later years while many new companies got their securities listed on the DSE since 1990. Annual reports of many companies listed throughout the period were either not published or not available. Therefore, the matched pair sample for this study was developed using the following criteria: (i) the company was a non-financial company; (ii) the company was listed in the DSE during the whole period from 1990 to 1999; (iii) the annual reports of each year was available; and (iv) the company held separate AGMs for each accounting year under the present study. This exercise produced a total of 57 companies for each of the 10 years. Among the sample companies, seven are local subsidiaries of multinational enterprises, four were state owned enterprises (SOEs) and the remaining 45 are domestic private sector companies.

Measuring Timeliness

Three measures of timeliness are defined: (1) audit delay, (2) financial statement issue delay, and (3) AGM (total) delay. Audit delay represents the number of days elapsed between the balance sheet date and the date auditor(s) sign(s) the financial statements. Financial statement issue delay represents the number of days elapsed between the balance sheet date and the date on which notice for the AGM along with a copy of the annual report is issued. Finally, AGM delay (total delay) represents the number of days elapsed between the fiscal year-end date and the day on which the AGM is actually held.

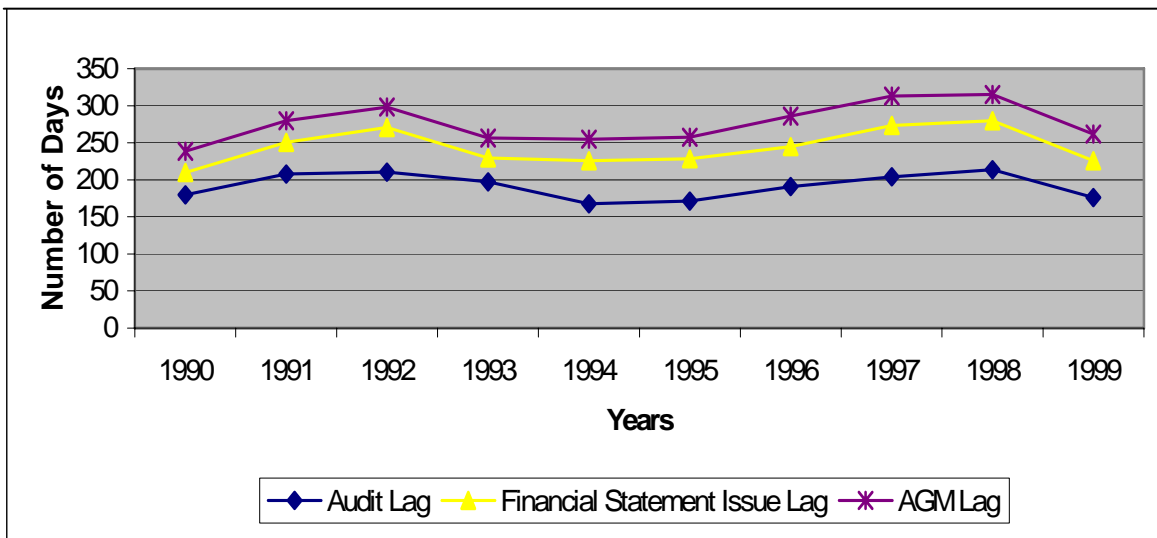
Results

Trend in Audit and Reporting Delays (1990 – 1999):

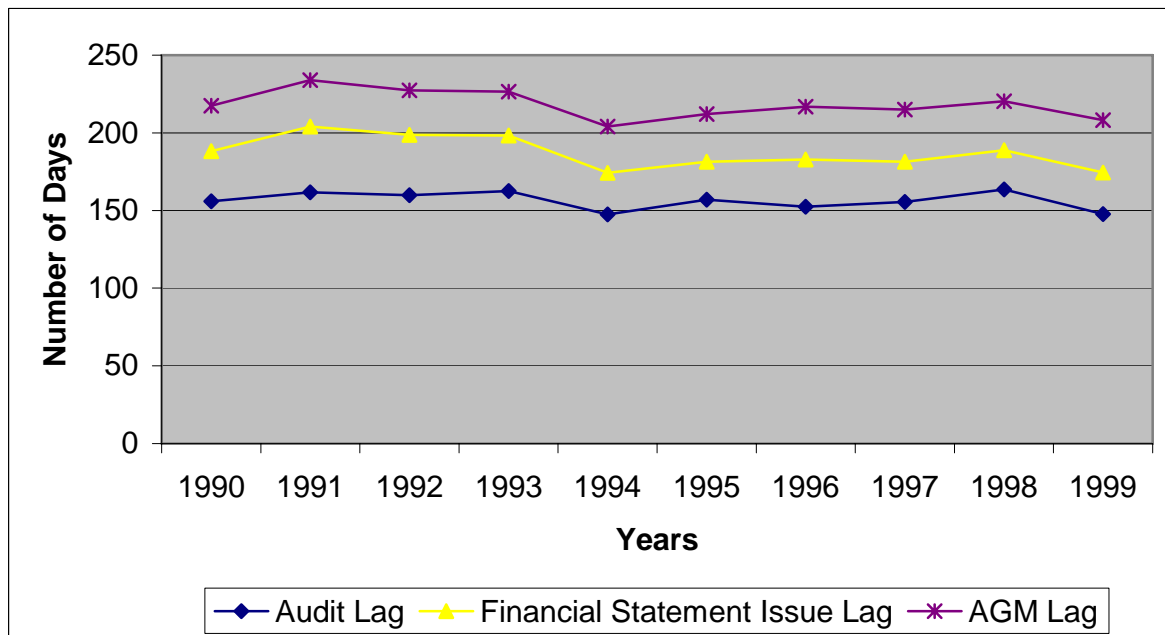
This section highlights the secular trend in audit and reporting delays of corporate annual reports in Bangladesh over the 10-year period. To draw a reasonably comprehensive picture of the audit and reporting lag situation, we report the summary statistics in two levels. First, we report the results based on the whole population of non-financial companies whose annual

reports were available. Second, we concentrate on the lag pattern of the matched pair sample of only 57 companies throughout the period. Graphs 1 (whole sample) and 2 (matched-pair) show the trends in mean values of all the lags for the whole study period. Both the graphs show somewhat similar trends. The lags steadily increased for two to three years after 1990, then dropped for two to three years before rising again for four years and finally dropped to their 1990 levels by the end of the decade.

Graph 1. Trend in Financial Reporting Lags (Based on Whole Population)



Graph 2. Financial Reporting Lags (Based on the Matched Pair – Sample of 57 observations)



The lag situation was in its 1990 level when the Act was passed in 1994. Upon enactment of the 1994 Act, instead of declining, the lags actually increased for four years reaching its peak in 1998. In the last year of the study, the lags declined.

Table 1 presents the summary statistics of the lags for the ten years under study using all listed firms. Panel A of the table shows that the mean audit lag over the 10-year period ranges from 180 days in 1990 to 214 days in 1998 with a mean delay of 192 days for the entire population. The median ranges from 145 days in 1999 to 171 days in 1998 with a median of 153 days for the whole

Table 1. Distribution of Audit Lag, Issue Lag and Total Lag for the Whole Sample

Panel A: Audit Lag						
Year	N	Minimum	Maximum	Mean	Std. Deviation	Median
1990	92	51	693	180	103	155
1991	99	48	1068	208	151	161
1992	102	41	993	211	166	163
1993	103	46	782	197	124	158
1994	115	36	877	168	99	149
1995	133	27	775	171	119	148
1996	144	41	1065	191	140	157
1997	158	43	1054	204	155	158
1998	163	47	870	214	145	171
1999	161	41	515	176	95	145
Total	1270	27	1068	192	133	153
Panel B: Issue Lag						
Year	N	Minimum	Maximum	Mean	Std. Deviation	Median
1990	92	47	890	210	120	166
1991	90	55	1299	250	194	182
1992	99	56	1357	271	234	199
1993	100	47	635	229	134	181
1994	115	39	2079	226	225	168
1995	133	31	2138	228	243	167
1996	143	47	1772	245	233	205
1997	154	45	1492	273	258	218
1998	163	53	1127	280	221	211
1999	160	65	762	226	136	162
Total	1249	31	2138	246	209	183
Panel C: Total Lag						
Year	N	Minimum	Maximum	Mean	Std. Deviation	Median
1990	92	67	915	239	119	186
1991	90	90	1338	280	193	216
1992	99	89	1394	298	234	226
1993	100	86	666	256	133	215
1994	116	79	2104	255	223	198
1995	133	62	2170	257	243	184
1996	144	71	1887	286	267	240
1997	155	69	1522	313	276	249
1998	164	73	1157	315	230	252
1999	161	87	792	261	141	187
Total	1254	62	2170	279	218	218

population. The medians are considerably lower than the means for all ten years suggesting a non-normal, positively skewed leptokurtic distribution. Panel B of the table suggests that companies take a further average period of 56 days to issue the notice of the AGM and a further average period of 30 days to hold the AGM. Companies take an average of 210 days (in 1990) to 280 days (1998) with a population average of 246 days to issue the AGM notice. The median distribution shows that except in 1991 and 1998, 75% of the companies issued the AGM notice between 240 days and 304 days after the fiscal year-end. Therefore, more than 25% of the companies in a number of years would have failed to hold their respective AGMs within the statutory maximum of 270 days. Nevertheless, in the years 1994, 1995, 1996, and 1999, 75% of all companies would have held their AGMs within the nine-month period allowed by the Act.

Thus, the average time taken to hold the AGM exceeds the statutory maximum of 9 months. The unusually long audit delays of some companies can be observed from the maximum audit delay statistic in Panel A of Table 1. Companies are found to have taken more than a thousand days to complete an audit. These companies are clearly well outside any reasonable limit allowable. These are companies who are mostly non-functional, non-operating and violate the securities and company regulations.

Panel C of Table 1 shows the total lags – time between financial year-end and holding of the AGM. This lag could be compared with the statutory maximum of 270 days allowed by the Companies Act. As the panel shows, the mean total delay is 279 days for the entire population. Extreme mean delays can be observed in 1992 (298 days), 1997 (313 days), and 1998 (315 days). The medians show that although mean total delays are higher than the maximum nine months, 50% of the companies hold their AGM well within that period and 75% of the companies held AGMs within that period in at least five of the ten years under study. In the years 1993 to 1996 and in 1999, 75% of the companies held AGMs approximately within the statutory maximum period allowed by the Act.

Further analysis shows that, approximately 25% of the companies did not hold AGMs within nine months of their respective fiscal year-ends. Many of these companies actually were forced to hold AGMs by the Securities and Exchange Commission and many were found to hold up to five years AGMs at a time in one meeting. It must be borne in mind, the above population

includes only those companies who have (albeit late) published annual reports and held AGMs. There are few companies (between ten and twenty) whose annual reports were not available for this study. The reason for non-availability, in most cases, was non-publication of their annual reports. Taking them into account, the audit and reporting lag situation is far worse.

Table 2 presents summary statistics on the matched pair sample of 57 companies whose annual reports were available for each of the sample years and who held an AGM every year, i.e., companies that had never doubled-up AGMs during the study period. Since they never held two AGMs on one date, these companies are unlikely to have unusually long audit or reporting delays.

Panel A of Table 2 shows that the mean and median audit delays for the whole sample are 156 days and 147 days respectively. The lowest average audit delay (148 days) is observed in 1999, the year with the lowest median audit delay (136 days) as well. At the beginning of the study period, the average audit delay was 156 days, rose by a few days for three years until dropping to 147 days

Table 2. Distribution of Audit Lag, Issue Lag and Total Lag for Matched -Pair Sample

Panel A: Audit Lag						
Year	N	Minimum	Maximum	Mean	Std. Deviation	Median
1990	57	57	408	156	73	147
1991	57	48	338	162	77	146
1992	57	41	319	160	66	153
1993	57	48	422	162	75	153
1994	57	51	305	147	60	138
1995	57	27	394	157	69	149
1996	57	41	401	152	72	146
1997	57	43	281	155	58	149
1998	57	49	321	163	70	155
1999	57	48	258	148	54	136
Total	570	27	422	156	67	147
Panel B: Issue Lag						
Year	N	Minimum	Maximum	Mean	Std. Deviation	Median
1990	57	47	423	188	87	161
1991	57	55	589	204	104	162
1992	57	56	434	199	84	182
1993	57	47	431	198	91	165
1994	57	62	334	174	67	154
1995	57	31	425	181	69	172
1996	57	49	403	183	75	180
1997	57	45	300	181	62	166
1998	57	62	339	189	72	190
1999	57	65	310	174	62	154
Total	570	31	589	187	78	163

Panel C: Total Lag						
Year	N	Minimum	Maximum	Mean	Std. Deviation	Median
1990	57	67	445	217	83	184
1991	57	103	614	234	100	191
1992	57	89	456	227	83	217
1993	57	86	450	226	88	199
1994	57	101	358	204	64	184
1995	57	62	440	212	68	197
1996	57	71	420	217	74	205
1997	57	69	358	215	64	206
1998	57	108	361	220	71	221
1999	57	114	356	208	56	182
Total	570	62	614	218	76	188

in 1994, rose again to 157 days in 1995, then dropped by a couple of days for two years until rising again to 163 days in 1998. It dropped significantly to 148 days in 1999. The median audit delay was the highest in 1998 but had drooped by almost twenty days in 1999. Given a maximum of 270 days to hold the AGM, this delay is within reasonable limits that allow them further 50 or so days to convene and hold the AGM. However, the maximum delay figures indicate that there were a few companies (four firm years) that took more than one year to complete the audit.

Panel B of Table 2 summarizes the financial statements issue lags, which show that the average financial statement issue lag for the entire sample is slightly over six months, with the median being 243 days. The total delay is summarised in Panel C of Table 2 shows that the mean total delay for the entire sample was 218 days with a median of 188 days. The highest average delay is recorded in 1991 (234 days) while the shortest is in 1994. The average delay decreased by twelve days in 1999 from its 1998 level. The third quartile total lags are all around the nine-month period. Therefore, it is clear that 25% of the companies, who are reasonably regular in publishing annual reports and holding AGMs, fail to do it within the statutory maximum period allowed by the Companies Act 1994.

Differences in Timeliness between Pre-Act and Post-Act Periods

In order to test whether there have been significant change in the three financial reporting lags, we split all observations into two sub-samples, one representing the five years (1990 – 1994) prior to the enactment of the Act and the other representing the five years (1995 – 1999) after its enactment. We show results of the analyses on two data sets, one representing the whole population and the other representing the matched pair sample of 57 companies. The mean and standard deviation values of all the lag measures prior to and after the act are

summarised in Table 3.

Table 3. Descriptive Statistics - Pre and Post Companies Act 1994

	Based on the whole population				Based on the matched pair sample			
	Pre Companies Act Sub-sample (1990-1994)		Post Companies Act Sub-sample (1995-1999)		Pre Companies Act Sub-sample (1990-1994)		Post Companies Act Sub-sample (1995-1999)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Audit delay	192	131	192	133	157	70	155	65
Issue delay	249	190	252	221	192	87	182	68
Total delay	277	189	283	235	221	84	215	66

The mean values calculated for different kinds of lags before and after the enactment of the Companies Act suggest that there is no material improvement in any of the lag measures. If we consider the whole population of companies, the mean audit lags across the two sub-periods remain virtually unchanged while the financial statements issue lag and total lag have increased after the 1994 Act. In much the same way, if we consider the matched pair sample of 57 observations, we find no significant change in the main delay measures of audit, financial statement issue and total delays.

Differences in Timeliness between Pre and Post-Stock Market Crash Periods

We examine whether the 1996 stock market crash had induced improvement in financial reporting timeliness. The crash might have had two opposite effects of financial reporting timeliness. On the one hand, it is expected to make the market more demanding whereby management is likely to be under greater pressure to report in a more timely fashion than they used to do before the crash. On the other hand, it might have encouraged the companies to hold pending AGMs all at a time. Therefore, for those long outstanding AGMs, the financial reporting delays will be considerably longer than that for regular AGMs. As a matter of fact, the growth in the number of firm-years in the combined sample (as shown in Table 2) appears to be linear. Therefore, there appears to be no influx of AGMs (and correspondingly, published annual reports) in the years following the 1996 crash. Table 3a shows that all the three timeliness measures in the combined sample for the post-1996 period were longer than those of pre-1996 period, but the difference is statistically significant.

Table 3a. Descriptive Statistics - Pre and Post Stock Market Crash of 1996

	Based on the whole population				Based on the matched pair sample			
	Pre Stock Market Crash Sub-sample (1990-1996)		Post Stock Market Crash Sub-sample (1997-1999)		Pre Stock Market Crash Sub-sample (1990-1996)		Post Stock Market Crash Sub-sample (1997-1999)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Audit delay	188.41	130.97	197.95	134.94	156.63	70.00	155.56	60.85
Issue delay	236.97	207.86	259.48	211.55	189.73	83.17	181.60	65.57
Total delay	267.73	215.01	296.39	222.72	219.73	80.64	214.54	63.74

Differences in Timeliness between Pre and Post SER Amendment Periods

The final event was the amendment of the SER 1987 in 1997 requiring publication of half-yearly financial statements by listed companies. Therefore, in the post-amendment period, i.e., for the years after 1997, one would expect a shorter audit delay, as part of the financial information would be updated to issue half-yearly financial statements. The effect of the 1996 crash and subsequent scrutiny of management and auditors should compound the pressure resulting in shorter financial reporting delays. Average number of days for each of the three delay measures is reported in Table 3b. The pre and post-SER amendment delay figures for the combined sample reveals a dismal picture as each of the delay measures have actually increased rather than decreased. However, the matched-pair sample shows some improvement, similar to what we saw in the pre and post-market crash periods. The differences in average delay figures are not found to be statistically significant.

We tested the lag measures for before and after each of the events. Periods before and after enactment of the Companies Act 1994, stock market crash of 1996, and SER amendment in 1997 were separated and average delay measures tested for significant differences between prior and after the events. Results of the t-test and the Mann Whitney U test are presented in Table 4, which show no significant improvement in the main lag measures. The results, not reported, of the two other events failed to show any significance as well.

Table 3b. Descriptive Statistics - Pre and Post Amendment of SER 1997

	Based on the whole population				Based on the matched pair sample			
	Pre SER Amendment Sub-sample (1990-1997)		Post SER Amendment Sub-sample (1998-1999)		Pre SER Amendment Sub-sample (1990-1997)		Post SER Amendment Sub-sample (1998-1999)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Audit delay	191.00	135.39	195.04	195.04	156.49	68.56	155.60	62.48
Issue delay	243.01	217.28	252.91	252.91	188.70	80.86	181.66	67.37
Total delay	275.29	226.77	288.44	288.44	219.14	78.68	214.28	64.02

This implies that none of these events caused significant improvement in financial reporting timeliness in Bangladesh. Rather, as Tables 3 to 3b suggest, there have been a steady deterioration in the timeliness situation in the second half of the study period. For the pre and post-Companies Act tests, results based on the whole population suggest a deteriorating situation in the meeting lag. On the other hand, results based on the matched pair sample show an improvement in notice lag but deterioration in the AGM lag. The statistical significance of the slight improvement in the total lag from 221 days to 215 days appears to be weak (significant only at 10%).

Table 4. Test Statistics

	Based on the whole population		Based on the matched pair sample	
	t-statistic (P-value)	M-W Z statistic (sig level)	t-statistic (P-value)	M-W Z statistic (sig level)
Audit delay	0.027 (0.978)	-0.574 (0.566)	0.393 (0.694)	-0.211 (0.833)
Issue Delay	-1.151 (0.250)	-0.103 (0.918)	1.666 (0.096)	-1.149 (0.251)
Total delay	-1.771 (0.077)	-0.159 (0.874)	1.143 (0.254)	-0.725 (0.469)

Further sensitivity tests

Empirically it is found that client firm size generally affects financial reporting delay. The same is true in the present study, both for the combined sample as well as for the matched-pair sample. In order to isolate the effect of firm size on the relationship between regulatory change and timeliness, we split both the samples into small and big sub-samples using three partitioning variables - the medians of market capitalisation, total assets, and sales. First we check whether large firms have shorter financial reporting delays than smaller firms. We find that in each of the three partitioning events, the difference is significant at the 5% level when the sample is split by median market capitalisation or median sales for both samples, combined and matched pair. However, within the large versus small company sub-groups we find that timeliness has not improved, rather than deteriorated in case of large firms⁴.

Summary and Conclusion

This study reports the results of an empirical examination of the association between financial reporting timeliness and regulatory change. Three measures of timeliness are used. One, in terms of the number of days it takes a company to have the audit completed, the second the

number of days it takes to issue company annual report to shareholders, and finally, the number of days it takes a company to hold its AGM since the date of its fiscal year-end. Two levels of analyses are carried out. First, an analysis of the trend in the three lags and second, a test of the statistical significance of the change in mean delays between the two sub-periods of before and after the regulatory change had taken place. Results show that audit, financial statement issue, and total delays are not associated with regulatory change, i.e., there has been no significant improvement in corporate timeliness in reporting following regulatory changes in Bangladesh during 1994 and onwards. However, when the sample is slit into large versus small firms based on firm size, we find that large firms have shorter reporting lags than small firms. However, during the post-regulatory period and post-SER amendment period, timeliness has deteriorated significantly which suggests that regulatory changes have failed to bring about improvement in the quality of financial reporting in Bangladesh with respect to timeliness.

The findings of this study can be used in the debate on the efficacy of regulatory pressure on financial reporting. The regulatory and institutional changes brought about in Bangladesh throughout the study period have been substantial in that the SEC was established in 1993 and the new Companies Act 1994 was promulgated replacing the Companies Act 1913. It was expected that the two changes would improve the age-old problem of chronic publication delay in corporate financial reporting in the country. While the average publication delays have reduced by a few days, as the results show, it could not be attributed to the regulatory or institutional change. However, regulatory changes have some beneficial effects on large listed firms, even though the overall sample does not show improvement in timeliness in financial reporting in Bangladesh.

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⁴ Detailed results will be made available upon request by the corresponding author.

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