Adoption of IFRS / IAS in Ghana: Impact on the Quality of Corporate Financial Reporting and Related Corporate Tax Burden

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Abstract
The application of IFRSs reflects the combined effects of features of the financial reporting system, including standards interpretation, recognitions and measurement and disclosures in the financial statements. We examine whether application of International Financial Reporting Standards (IFRSs), associated with higher quality of disclosure has any association with corporate taxes burdens. This study adopted the disclosure index approach to examine the financial reports of 22 Ghana Stock Exchange listed company to ascertain the disclosure quality levels of their financial reports before and after adoption of IFRSs. The main standard at the centre of the studies was IAS 12. Using Pearson’s correlation, we observed a significant positive correlation between the disclosure quality (based on the qualitative characteristics of relevance, understandability, comparability and faithful presentation) of listed firms following the adoption of IFRSs. We concluded that the quality of disclosure based on IAS 12 improved significantly following the adoption of IFRSs. Companies wishing make quality disclosure should continue to comply with the IFRSs rigorously.

Keywords: Disclosure Quality Levels, Financial Reports, IFRS / IAS, Corporate Taxes

1. Introduction
The literature on accounting disclosure quality is vast and investigates a broad array of issues. Prominent among the issues which has attracted the attention of researchers includes disclosure quality practices considering either mandatory or voluntary items or both (Bonaime, 2015); determinants of Environmental accounting and disclosure (Omnamasivaya & Prasad, 2016), effect of real-time reporting on disclosure (Tian, 2015), the economic consequences of disclosure (Elbannan and Elbannan, 2014); the use of voluntary disclosure in determining the quality of financial statement (Oluwagbemiga 2014), and earnings non-synchronicity and voluntary disclosure (Gong, Li and Zhou, 2013). Whereas many financial reports disclosure quality studies investigate corporate disclosure for private sector companies, others examine the public sector and not-for profit organisations. The significance of corporate disclosure quality level arises because it serves as a means of communication between management of the business and outside stakeholders or users in general. Demand for corporate disclosure quality arises from the information asymmetry problem and agency conflicts between management and outside users (Healy and Palepu, 2001). Superior corporate disclosure quality is said to moderate these disagreements or tribulations (Healy and Palepu, 2001; Graham, Harvey and Rajgopal, 2005; Lambert, Leuz and Verrecchia, 2007).

The purpose of every financial statement is to present information regarding the financial position, performance and financial compliance of an enterprise that is useful to a wide range of users in making useful financially viable decisions. In its Conceptual Framework, The International Accounting Standards Board's (IASB, 2010) stated that "The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an entity that is useful to a wide range of users in making economic decisions". The financial statements prepared also give one an idea about the results of the management's stewardship as well as the tax obligations to the Government.

Sloan (2001), stated that financial statement is the first source of independent and true communication about the performance of businesses. To be able to satisfy the requirements of the users, the financial statements ought not only to comply with the IFRS, but must be of high quality. The quality of financial information is measured by using the key qualitative characteristics of financial information identified in the IASB’s Framework for the Preparation and Presentation of Financial Statements. The Framework identified two broad categories of attributes namely Fundamental Qualitative Characteristics (comprising of Relevance and Faithful Representation) and Enhancing Qualitative Characteristics (comprising comparability, timeliness, verifiability and understandability). The Framework further argues that the qualitative characteristics are the attributes that make the information provided in financial statements valuable to users.

Compared to private unlisted companies, listed companies are required to make detailed financial statement disclosure for the benefit of external stakeholders particularly investors. Since the accounting scandals of Enron and WorldCom, regulatory bodies around the globe have increased the financial disclosure
requirements of listed companies and intensified monitoring activities. The International Financial Reporting Standards (IFRS) defines the minimum level of disclosure in corporate annual reports expected of users of the standard. In the words of Gibbins, Richardson, and Waterhouse, (1990), financial information disclosure is seen as the release of information concerning the economic performance, position or prospects particularly as measured in monetary terms. Baiman and Verrecchia (1996) have argued that, the provision of quality accounting disclosures would have a propensity to enhance the efficiency of the stock market.

In 1999, The Institute of Chartered Accountants (Ghana) (ICA-(G)) called for business in Ghana to comply with IFRS and International Accounting Standards (IAS); the set of reporting standards issued by the IASB but with name differences indicating the year of period of issue. With the development regarding adoption of IFRS, the year 2007 was set as the deadline for compliance. Fekete (2008) argues that IFRS/IAS disclosure compliance literature can be considered as part of disclosure research in academia. The application of IFRS/IAS reflects the collective effects of features of the financial reporting system, including standards interpretation, recognitions and measurement and disclosures in the financial statements businesses.

Prior to Ghana’s adoption of IFRS/IAS, the Generally Accepted Accounting Principles (GAAP) in use was the Ghana National Accounting Standards (GNAS). The GNAS was partly based on pre-IFRS / IAS and the UK accounting standards called Financial Reporting Standards (FRS). In 2004, a World Bank report on the accounting and auditing practices in Ghana revealed that the GNAS was outmoded and varied significantly with International Accounting Standards. The World Bank therefore recommended that Ghana adopts the IFRS/IAS. On the basis of World Bank report and the ICA (G)’s recommendations, the IFRS/IAS has been adopted. The general expectation of the two bodies behind Ghana’s IFRS/IAS adoption was the enhancement of quality of disclosure and ultimate creation of benefits for stakeholders. However, were those expectations met in the post adoption? How has the adoption affected the quality of financial reports issued by listed companies in Ghana? Has the adoption not created burden rather than benefits for listed companies and the major stakeholder group?

Agyei-Mensah (2012) in a study on “The impact of adopting International Accounting Standards 1 (IAS 1) in Ghana, suggests that most firms listed on the GSE did not overwhelmingly comply with the IAS 1 disclosure requirements. This finding is quite revealing and raised much questions for researchers. If listed companies did not comply with the requirements of the new standards, then by default, the perceived benefits of qualitative disclosure were not realised. This is the purpose of the study. We examine how the adoption of IFRS/IAS has impacted the quality of financial disclosure and tax burden of companies using IAS 12 – Deferred Tax as a reference standard.

1.1 Research Hypotheses

Despite the importance of tax burden as a major factor in investment decisions, we do not find any article on the effect of IAS 12 – Deferred Tax on the tax burden of listed companies in Ghana. We seek to fill this gap by examining the following hypothesis:

H1: There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in current tax assets.

H2: There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in deferred tax assets.

H3: There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in current tax liabilities.

H4: There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in deferred tax liabilities.

H5: There is no relationship between the magnitude of changes in disclosure quality index and the current year tax expense changes.

2. Literature Review

Cerf (1961), examined 527 corporate annual reports against a disclosure index made up of thirty one information items. He found that level of disclosure was positively associated with corporate size and listing status but not with profitability. Following closely after Cerf (1961), Singhvi (1967), as cited in Karim and Ahmed, (2005) also established that disclosure quality was associated with asset size, number of stockholders, rate of return, earnings margin, security price fluctuations, and listing status. Research in disclosure level and compliance with IFRS / IAS began around the turn of the century with research conducted by Tower, Hancock, and Taplin (1999), Cairns (1999), and El-Gazzar, Finn, & Jacob (1999).

Street and Gray (2002), examined the factors influencing IFRS / IAS compliance. Using an international sample of 279 firms, they tested several variables against the level of disclosure such as; listing status, company size, industry, type of auditor, profitability, notes to the accounts, country, and size of home stock market among others. Dumontier and Raffournier (1998), in a study on the use of IFRS/IAS in Switzerland hypothesized that the adoption of IFRS would lead to better information disclosure. Their study found a positive
influence of size, internationality, listing status, auditor type and ownership diffusion on IFRS / IAS usage. Street and Bryant, (2000) on the other hand also found that greater disclosure quality level is associated with accounting policies footnote that specifically states that the financial statements are prepared in accordance with IFRS/IAS and an audit opinion that states that International Standards on Auditing (ISA) were used when conducting the audit. Hope, Jin, and Kang, (2006) in their study also found that countries with weaker investor protection mechanisms are more likely to adopt IFRS/IAS, and therefore concluded that IFRS/IAS represent a vehicle through which countries can advance investor protection and make their capital markets more reachable to foreign investors.

Gibbins, et al., (1990) defined financial disclosure as any purposeful release of financial and non-financial information, whether in figures / amounts or qualitative, required or voluntary, or via formal or informal channels for users who have need of such information. There are different means for businesses to disclose information such as annual reports, analyst presentations, conference calls, investor relations, prospectuses, interim reports, press releases, and websites, among others. The corporate annual report is considered a very vital official disclosure vehicle, although on its own it may not be sufficient for the tax authorities, since other disclosure vehicles such as audit conferences, conference calls and interim reports can provide more timely and insightful disclosure. In addition, there are other sources of disclosure about companies’ performance including, for example, financial analysts’ reports and the press. One possible role of mandatory disclosure is to serve as a commitment tool. Disclosures thus may reduce the firm’s cost of taxes to be paid, but only if they are credible and not self-serving. If they are not self-serving, the entities can avoid penalties or litigations with the tax authorities leading to extra cost. According to Owusu-Ansah (1998) adequate disclosure is the extent to which mandated relevant information is presented in annual reports of entities and the degree of intensity by which a business discloses those items in its annual financial report.

The extent and quality of disclosure in annual financial reports have been examined by writers such as Choi (1973), Cooke (1989, 1992), Wallace (1988), and Zarzeski(1996). Zarzeski(1996) examined annual reports from seven countries to determine whether cultural and market forces had influence with levels of disclosure by the firms. According to Lang and Lundholm (1993); Healy and Palepu (2001) as cited in Iatridis and Valahri (2010), suggest that the factors that appear to influence the quality and detail of accounting disclosure as being: firm size, industry sector, stock ownership, stakeholder interests, international exposure, investors’ expectations and other key financial variables such as profitability, liquidity, financial leverage, and growth. Palmer (2006), observed that there are numerous theoretical frameworks that buttress the disclosure quality level literature. The two major frequent theoretical explanations given in the literature are agency theory and political costs. According to Beattie (2005), as cited in Palmer (2006), positive accounting theorists have sought to move on from explaining accounting policy choices to explaining voluntary disclosure choices, and many of the theoretical explanations for the relationship between the level of disclosure quality level of financial information and corporate characteristics are grounded in positive accounting theory.

Bialek-Jaworskaal and Matusiewicz (2015) evaluated the factors that determine the extent of mandatory and voluntary information disclosure in financial reports of selected Polish listed companies. They used the Polish Corporate Disclosure Index (PCDI), designed by the by Świderska (2010), to assess the disclosure practices of non-financial firms. Key aspects of voluntary disclosure which were of interest to them were mainly items found in financial statements, management reports and corporate social responsibility reports. Based on a panel study of factors determining the scope of information disclosed by 36 Polish public parent companies, they found a negative correlation between the extent of mandatory and voluntary disclosure and the companies’ financial performance (ROE) except for positive relation with disclosure in management reports. For the positive correlation, they argued that management preferred to show off good results in management reports when profit was higher. They again explained that when profit was lower, managers explained the financial standing in more detail (signaling theory).

Contrary to conventional aggregated measure of disclosure, Mangenal, Li, and Tauringana (2014) investigated whether intellectual capital (IC) and financial disclosures jointly affect the cost of equity capital of selected UK firms. Using data for a sample of 125 companies, they also investigate whether IC and financial disclosures have an interaction effect on the cost of equity capital. Three major findings were made. First was the discovery of a negative relationship between the cost of equity capital and IC disclosure. Secondly they found that the relationship between financial disclosure and the cost of equity capital is magnified when combined with IC disclosure. Additionally, they found that IC and financial disclosures interact in shaping their effects on the cost of equity capital. These results provide important insights into the relationship between disclosures and cost of equity capital and have policy implications. The disaggregation of the disclosure components into intellectual capital and financial disclosure enables the impact of different disclosure types on the cost of capital to be well understood.

Elbannan and Elbannan (2014) deviated from authors such as Bialek-Jaworskaal and Matusiewicz (2015) to examine the economic consequences of Bank Disclosure in the financial statement before and during
the financial crisis. This was triggered by their quest to establish whether the extensive disclosure made by financial institutions as required by the various regulators of the sector impacted on operating performance and market valuations. Egyptian banks were used in the study. They measured bank operating performance using balance score card approach and found that higher risk disclosure is associated with higher operating performance and market valuations. The implication is that banks which are accustomed to providing relatively high level of risk disclosures internalize the performance lessons more fully and market participants value these increased disclosures. Using Egypt as the setting for the study is relevant to the study because it is an emerging economy where banks have high-risk exposure due to global and local events that heighten business uncertainties.

Using an experiment with corporate controllers and chief financial officers, Clor-Proell and Maines (2014) studied whether financial managers from publicly traded and privately held companies differentiate between recognition and disclosure when estimating a contingent liability. Drawing on Bernard and Schipper (1994), they argued that participation in the stock market creates pressures for public company managers that can affect the relative reliability of their recognized and disclosed estimates via both the level of care and the amount of strategic bias that they exhibit. They discovered that financial managers of public companies spent more cognitive efforts and exhibited less strategic bias under recognition than under disclosure. They argued that the difference is associated with capital market pressures experienced by public company managers because they found that both cognitive effort and bias exhibited by private company managers are unaffected by placement. As a result, public company managers make higher liability estimates for recognized versus disclosed liabilities. Even though prior research had found that auditors tolerate less misstatement in recognized information (Libby, Nelson and Hunton, 2006), it was unknown as to whether auditors action serve to offset or exacerbate the reliability differences in pre-audit information. This makes their finding much more important.

Henry and Leone 2016 introduced another dimension of disclosure research by assessing the alternative measures of the tone of financial narrative used by financial researchers. They found evidence that word-frequency tone measures based on domain-specific wordlists—compared to general wordlists—better predict the market reaction to earnings announcements, have greater statistical power in short-window event studies, and exhibit more economically consistent post-announcement drift. Further, inverse document frequency weighting, advocated in Loughran and McDonald (2011), provided little improvement to the alternative approach of equal weighting. Overall, although more complex techniques are potentially advantageous in certain contexts, equal-weighted, domain specific, word-frequency tone measures are generally just as powerful in the context of financial disclosure and capital markets

Bonaime (2015) examined the changes in corporate disclosure behavior around the Securities and Exchange Commission Rules which requires enhanced disclosure regarding repurchase transactions. Findings indicate that firms announce significantly fewer and slightly smaller open market repurchase plans in the enhanced disclosure environment. It was noted that completion rates (the amount of stock repurchased as a percentage of the announced amount) significantly increase. More conservative announcement strategies and more aggressive completion rates are consistent with a decline in false signaling. Indeed, open market repurchase announcements are viewed as more credible, on average, in the enhanced disclosure environment; after controlling for firm characteristics, cumulative abnormal announcement returns are significantly greater in the high disclosure period. Closely related to the above is the evaluation of whether the almost Real-Time Reporting demanded by the SEC Deter Strategic Disclosures by Management and Tian (2015). Specifically, the author tested whether real-time reporting deters disclosure bunching around the disclosures of regular and in-play poison pill adoptions to examine whether managers’ ability to time events affects whether real time reporting deters strategic disclosure. Evidence from the theoretical literature suggests that the effect depends on whether managers can time the underlying required reporting event. The results suggest that real-time reporting will deter disclosure bunching only if managers cannot control the underlying required reporting events.

Writing under the topic “Factors Influencing Environmental Accounting and Disclosure Practices in India: Empirical Evidence from NIFTY Companies”, Omnamasivaya and Prasad, (2016) examined the key factors that determine the level of environmental information disclosure. A sample of fifty (50) companies listed on the Indian National Stock Exchange was examined using Environmental Accounting Disclosure Index (EADI). The regression model was used to assess key independent such as profitability, corporate size, age, financial leverage, industry type, legal ownership and foreign operations. They found a positive relationship between EADI and profitability, financial leverage, industry type and legal ownership, and a negative relationship between EADI and corporate size, age and foreign operations. It is however regrettably that the data was selected only for one year.

According to IASB (2010), accounting information has the quality of relevance when it has the capability of making a difference in a business decision thus it provides information that has predictive and confirmatory value. On the part of faithful representation, accounting information has the quality of faithful representation when it truthfully reveals what really happened thus indicating that nothing important has been
omitted (i.e. complete); and is not partial toward one position or another (i.e. neutral) (IASB 2010). An enhancing quality of the information presented in financial statements is that it should be presented in such a way that it is readily understandable by all users, i.e. it should be presented in a clear and concise manner (IASB 2010). One other enhancing quality of accounting information is that of comparability. For comparability, the users must be capable of comparing the financial statements of an enterprise over time to identify trends in its financial position and performance. Equally, the users must also be capable of comparing the financial statements of different enterprises to evaluate their relative financial position, performance and financial compliance. Therefore, Consistency is a requirement (IASB 2010).

The IAS/IFRS identify the least level of disclosure by corporate entities in their corporate annual reports expected by regulatory authorities and they are stated in separate sections of each standard and prescribe what information should be presented in the financial reports. According to Gibbins, et al., (1990), financial information disclosure is defined as the release of information relating to the economic performance, position or projection principally measured in monetary or economic terms. IAS 12.81(c) proscribes that an explanation shall be disclosed of the relationship between tax expenses (income) and accounting profit in a numerical reconciliation between the average effective tax rate and the applicable tax rate as well as disclosing the basis on which the applicable tax rate is computed. IAS 12.81 (c) states further that a numerical settlement between tax expense (income) and the result of accounting profit multiplied by the relevant tax rate(s) and the foundation on which the appropriate tax rate(s) is (are) computed shall be disclosed.

Narrative disclosures are an important part of ‘quality’ corporate reporting as they offer insights and explanations about quantitative measures (Beattie, McInnes & Fearnley, 2004; Beretta & Bozzolan, 2004; Clatworthy & Jones, 2003; Smith & Taffler, 2000). In particular, the ‘front half’ of the corporate annual report provides a tool for management to signal its response to IFRS (Stanton & Stanton, 2002). This study stand in place of the Ghana Revenue Authority (GRA) to examine the possible relationship of IFRS / IAS adoption and corporate income taxes, as reflected in the narrative disclosures in companies’ annual report.

In this study, the corporate tax elements as in value are use as well as the measure for tax liability. Apart from the corporate tax elements, there is also the Effective Tax Rate (ETR). ETR is defined as the actual corporate income tax owed by the company in relation to pre-tax profits. IAS 12.86 determines that the ETR is the tax expense (income) divided by the accounting profit. It is argues that when determining effective corporate tax burdens, effective tax rates are to be used, rather than statutory rates. Indeed, statutory rates do neither estimate the tax burdens truly suffered by companies nor the multiplicity of the elements comprising the tax base and the interrelations of different tax regimes in case of multiple tax regimes or international comparisons. On the other hand, effective tax rates are specifically designed to assess tax burdens as well as the impact of taxes on the economic activity. The effective rate is the product of the statutory rate and the tax base (Giannini & Maggirulli, 2002). ETR however, is not part of the corporate tax elements as used in this study.

Reading the literature above, the researchers have observed that prior studies on the subject matter and the related topics have deepened our understanding of key factors influencing disclosure quality of entities. However, one would also observe that most of the studies related to countries outside. This creates a challenge as to the relevance of those findings to readers in African countries like Ghana with unique characteristics.

3. Research Methodology
Numerous methodologies have over the year been used in IFRS / IAS disclosure and disclosure quality compliance research. Popular among them is the Disclosure Index. Starting from Cerf (1961), other authors such as Cooke (1989), Wallace and Naser (1995) and Sejjaaka (2003) have all used disclosure index to test their study hypotheses. According to Sejjaaka (2003), the index approach combines a number of variables of interest (disclosure measures) into a single gauge. The index is constructed by an accumulation of scores assigned to individual voluntary and mandatory disclosure information items. The creation of an index involves two main stages. The foremost stage involves the collection of items for enclosure in the index. The subsequent stage is the assigning of weights to the items in the disclosure index, that is, a rule for relating disclosure items to the index score. The annual financial reports are then scored using the index score values. A low score implies that disclosure or disclosure quality is inadequate and vice versa. It is noted that the index approach was first used by Cerf (1961) and the method has since been adopted and used by various other researchers (Raffournier, 1995; Owusu-Ansah, 1998, Agyei-Mensah, 2012).

This study, similar to Agyei-Mensah, (2012) used the dichotomous process whereby an item is given a score of one if disclosed and zero if not disclosed (Cooke, 1991, 1998; Ahmed and Nicholls, 1994, Raffournier, 1995). The annual reports of the 22 surveyed listed firms were used (disclosure = 1, non disclosure = 0). The index was constructed after taking into consideration the presentation requirements of IAS 12. It however also took a look at the presentation requirement of IAS 1, IAS 2, IAS 16, and IFRS 1 among others since some of these standards disclosure or non-disclosure equally has some combine effects on corporate income taxes. Based on the requirements of IAS 12 each company must disclose details of the components of the current and deferred
tax charge, a reconciliation of the total tax charge to the profit multiplied by the applicable tax rate, details of the temporary differences forming the deferred tax asset or liability and details of any unprovided deferred tax. Based on the requirements of IAS 1 also each company must prepare income statement, statement of financial position, Statements of cash flow, statements of changes in equity and notes to the accounts.

IFRS 1 on the other hand requires compliance with all of the presentation and disclosure requirements of other Standards and Interpretations, and imposes additional disclosure requirements specific to the first IFRS financial statements. In particular, a first-time adopter is required to provide reconciliations between amounts reported under previous GAAP (GNAS) and the equivalent measures under IFRSs / IASs. These reconciliations must clearly identify the correction of any errors in relation to an entity’s previous GAAP (GNAS) financial reports.

A disclosure quality level index was therefore constructed. This index follows twenty key criteria, first applied by (Beest, Braam, and Boelens, 2009), (see Appendix I) based on IASB commanding pronouncements. This disclosure quality-oriented model comprises four elements of qualitative distinctiveness of the IASB’s framework, which are relevance, faithful representation, understandability and comparability. The Disclosures Quality Index (DQI) of financial and non-financial information measures the disclosure quality level of financial information disclosed using the qualitative characteristics of financial information as strongly pronounced by the IASB's theoretical structure.

Creswell (2003) notes that an advantage of analysing documents (as opposed to performing interviews or other methods of data collection) is that documents represent data that participants have taken care and thought to compile. Thus, the annual report reflects views of the governing body of the listed companies with regard to the type, amount and important of information disclosed (Niskala & Pretes, 1995). Another distinguishing feature is that content analysis is unobtrusive, as the documents can be evaluated without the communicators’ knowledge (Jones & Shoemaker, 1994).

A company is at the start given a number 1 if an item met the characteristic and 0 if an item did not meet the characteristic. The total score of items disclosed by a firm was then divided by the expected total score of disclosure score of (14) and the result was used as the index of disclosure quality. The disclosure quality index can be mathematically shown as follows;

$$TDI = \frac{TDS}{M} = \frac{\sum_{i=1}^{m} d_i}{\sum_{i=1}^{n} d_i}$$

Where:
- $TDI = \text{Total Disclosure Index}$
- $TDS = \text{Total Disclosure Score}$
- $M = \text{Maximum disclosure score for each company}$
- $d_i = \text{Disclosure item i}$
- $m = \text{Actual number of relevant disclosure items (m≤n)}$
- $n = \text{Number of items expected to be disclosed}$

This study focuses on listed entities who have adopted IFRSs / IASs particularly IAS 12 since the effective date for the adoption of IFRS / IAS in Ghana, i.e. 2007. Consistent with Hung & Subramanyam (2007), Stent, Bradbury, and Hooks, (2010) and Mear (2011), this paper adopts two sets of financial statements for all sample entities: the first full-year IFRS/IAS financial statements and the year prior to adoption of IFRS/IAS. Prior year comparative figures, as restated under IFRS, for total income tax, deferred tax liability, deferred tax assets, current tax liability and current tax assets. The equivalent figures reported under old GNAS are extracted from the ‘Pre-IFRS Year’ financial statements. The disclosure quality level of corporate income tax element was then measured as the difference between figures and notes reported under IFRS and those reported under old GNAS (i.e. IFRS differences).

Similar to prior studies by (Goodwin, Ahmed & Heaney, 2008;Humg&Subramanyam, 2007; Kabir, Laswad & Islam, 2010; Stent et al., 2010), the reasons for the above IFRS differences are then investigated by analysing the reconciliations required by IFRS 1 to determine the disclosure quality levels attributable to specific accounting standards. This information is extracted from the notes to the first full-year IFRS financial statements. It is often the case that the IFRS difference for one financial statement element is due to a number of IFRS/IAS adjustments (e.g., requirements of standards relating to income taxes, plant, property and equipments, inventories). The analysis therefore incorporates processes which ensure that totals of adjustments per IAS 12 (as extracted from IFRS reconciliations) agree to IFRS differences for corporate tax elements (as extracted from the ‘IFRS Year’ and ‘Pre-IFRS Year’ financial statements).

The sample selection procedure is presented in table 1. From the 37 listed entities as of 31st December 2014, the researchers deducted six observations that provided invalid search results for the related years under consideration, five observations that did not report previously under GNAS as well as observations that are not in Ghana Cedis, two observations that were not listed at the time and two others that have delisted since 2008
and 2013 respectively and one other company that is under free zone and as a result, has a tax incentive from 2004 to 2014. The available population of twenty two (22) firms was classified into industries sectors. The sample size is therefore a survey of all the remaining 22 listed firms. The sampled 22 companies are listed on appendix II. An analysis of the population and sample is provided in Table 1.

Table 1: Description of sample size

<table>
<thead>
<tr>
<th>Details</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Entities listed as at 31st December 2014</td>
<td>37</td>
</tr>
<tr>
<td>Less: Observation of entities lacking data</td>
<td></td>
</tr>
<tr>
<td>Not in GHȼ, Not previously in GNAS observation</td>
<td>(6)</td>
</tr>
<tr>
<td>Observations that were not listed</td>
<td>(5)</td>
</tr>
<tr>
<td>Observations that delisted after 2008 and 2013</td>
<td>(2)</td>
</tr>
<tr>
<td>Free zone Company</td>
<td>(1)</td>
</tr>
<tr>
<td>Sample size</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Field Survey, December 2014

All the surveyed firms adopted the IFRSs / IASs on the official adoption date. Accounting and financial data were collected from the GSE fact sheets found in Annual Reports website and the firm's website. The empirical analysis concentrates on the pre-official adoption period, i.e. 2006/2007 and the post-adoption period, i.e. 2007/2008.

DISCUSSION OF RESULTS AND ANALYSIS

4.1 Industry Classification of Survey Listed Ghanaian Entities

The firms were classified into industries to investigate the disclosure quality level of pre- and post IFRS / IAS adoption by listed companies in Ghana. This was done because arguably, a disclosure quality was expected to vary with industry, as such; investigation was also done to explore the variations. First, a descriptive statistics analysis of industry classification is presented in table 2. From the data gathered, 45.5% were found to be the Financial / Insurance / Information Technology category; 40.9% were Manufacturing / trading category; 4.5% from Agro-processing and 9.1% from petroleum and Oils categories. They were grouped into these categories because apart from the security and exchange commission been their regulator; they are regulated by other legislation peculiar to their industries. An example is the banking Act 2004 (Act 673), and tax incentives / concession for various industries as stipulated in the Internal Revenue Act 2000 (ACT 592). The industry classification is presented on table 2.

Table 2: Industry classification of survey listed Ghanaian entities

<table>
<thead>
<tr>
<th>Industry</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro-processing</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Financial / Insurance / IT</td>
<td>10</td>
<td>45.5</td>
</tr>
<tr>
<td>Manufacturing / Trading</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>Petroleum/ Oil</td>
<td>2</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, January, 2015

4.2 Compliance Status of Usage of IAS 12 in Transition Year

As part of examining the disclosure quality level of disclosure of IAS 12 following the adoption of IFRS / IAS in Ghana by listed companies, the study made an analysis of the compliance status of usage of IAS 12 at the transition year of IFRS / IAS adoption. From our observation and analysis of the notes and reconciliation notes to the accounts in the financial reports of listed companies in Ghana, it was found that only 4 entities representing about 18.18% had complied and disclosed IAS 12 following the adoption of IFRS / IAS in Ghana. The majority (18) representing about 81.82% of the firms, though had implement many of the other IFRS / IAS standards, did not complied with and disclosed IAS 12 but rather used the GNAS on taxation in the financial statements and reports. It can therefore be stated that the compliance level of IAS 12 at the transition year by listed companies in Ghana was very low compared to compliance level of the other standards like IAS 1, IAS 16, IAS 2, and IFRS 1 among others.

Table 3: Compliance Status of Usage of IAS 12 in Transition Year

<table>
<thead>
<tr>
<th>Compliance Status</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosure of taxes using IFRS/ IAS</td>
<td>4</td>
<td>18.18</td>
</tr>
<tr>
<td>Disclosure of taxes using GNAS</td>
<td>18</td>
<td>81.82</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Annual Reports of Surveyed Entities, 2007/ 2008
To confirm that there is a change in the disclosure quality level of corporate taxes following the adoption of IFRS, the researchers went further to investigate the magnitude of change from the GNAS disclosure quality of corporate taxes. From table 4, the magnitude of change of disclosure quality index from the GNAS as in the IFRS restated amounts saw a mean score of 39.57%, a maximum of 133.33%, a minimum of -23.08% and a standard deviation of 56.76%. The magnitude of change in disclosure quality level implies an improvement of 39.57% in disclosure quality level of sample firms over the pre – IFRS adoption. Notwithstanding this improvement, the maximum and minimum indicate that the effect of IFRS saw some firms not doing well after the adoption of IFRS. For example, the minimum score for the magnitude of change of disclosure quality level is a reduction in quality of 23.08%. Secondly, the range for the pre-IFRS disclosure quality is 49.99% (92.85% – 42.86%) and the post (restated) IFRS disclosure quality is 28.57% (100% - 71.43%).

Table 4: Descriptive Statistics of disclosure quality level of firms

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-DQI</td>
<td>22</td>
<td>.42857</td>
<td>.92857</td>
<td>.7694801</td>
<td>.23836565</td>
</tr>
<tr>
<td>Post-DQI</td>
<td>22</td>
<td>.71429</td>
<td>1.00000</td>
<td>.9512987</td>
<td>.10660029</td>
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<tr>
<td>MoCDQI</td>
<td>22</td>
<td>-.23077</td>
<td>1.33334</td>
<td>.3956887</td>
<td>.56764830</td>
</tr>
<tr>
<td>MoCCYTE</td>
<td>22</td>
<td>-.99942</td>
<td>1.15285</td>
<td>-.0070129</td>
<td>.33901139</td>
</tr>
</tbody>
</table>

Source: Companies 2007/2006 and 2008/2007 annual reports, author’s own calculations

4.4 The Relationships between Disclosure Quality Level and Corporate Tax Elements

It can be agreed that from the magnitude of changes in the disclosure quality index in table 4, there is an increase of 39.5% in the disclosure quality level due to the adoption of IFRS / IAS, but the big question to ask is does the increase necessarily leads to increases in corporate tax elements too as used in this study? To answer this question the researchers carried out a correlation analysis to test the hypotheses stated earlier in this paper. The independent variables in this study were the magnitude of change in disclosure quality index, the absolute change in disclosure quality index for the hypothesis one to hypothesis five.

The dependent variables are the corporate tax element as use in this study. These corporate tax elements as used in this paper include current year tax expenses, current tax assets, and current tax liabilities, deferred tax assets and deferred tax liabilities. This study used reported financial statements in GNAS and restated in IFRS extracted from the 2007 / 2006 and 2008 / 2007 annual reports. These hypotheses were tested for statistically significant relationship between disclosure quality levels and the corporate tax elements of current year tax expenses, current tax assets, current tax liabilities, deferred tax assets and deferred tax liabilities as measured in the magnitude of changes.

Before the hypotheses testing, a Pearson correlation of the GNAS reported amounts and the IFRS/IAS restated amounts in the 2007 / 2006 and 2008 / 2007 annual reports are done to investigate the linearity of these dependent variables among themselves. From table 5, the raw amounts of the various tax elements as used in this paper indicate the following:

- There was a strong, positive correlation between GNAS current tax assets and IFRS / IAS restated current tax assets, r = .585, n = 22, p = .004;
- There was another strong positive correlation between the GNAS current year tax expense and the IFRS / IAS restated deferred tax liabilities, r = .844, n = 22, p = .000;
- Another strong positive association exists between GNAS current tax liabilities and IFRS / IAS restated deferred tax liabilities, r = .680, n = 22, and p = .000;
- Yet again, there is a strong positive correlation between GNAS deferred tax liabilities and IFRS / IAS restated deferred tax liabilities, r = .636, n = 22, p = .001;
- Once more, there is a strong correlation between GNAS deferred tax liabilities and IFRS/IAS current tax assets with r = .504, n = 22, p = .017
- And lastly, there is also a moderate positive correlation between GNAS deferred tax liabilities and IFRS / IAS restated deferred tax liabilities with r = .438, n = 22 and p = .042.

The general positive correlation between these variables indicates that anytime any of them in the GNAS reported amounts increases then the other in the IFRS restated amount also increase. Noteworthy also is that, they showed positive and significant associations implying that their association is larger than zero percents. This tends to support the positions of a paired sample test results, which suggest that there is no significant differences between the GNAS reported amounts and the IFRS / IAS restated amounts (Abedana, 2015).
4.5 Hypothesis Testing and Interpretations

The hypothesis set earlier in the study are tested and interpreted below as follows:

H1: There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in current tax assets.

The first hypothesis states that no relationship would be shown in the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of change in the current tax assets of reported firms. The magnitude of change is measure by the restated year in IFRS divided by the GNAS prior year minus one. It is simply the IFRS restated year current tax assets divided by the GNAS prior year current tax assets minus one. The magnitude of change is to measure the extent of changes, and whether these volumes of changes has any relationship with the size of changes in the amount of current tax assets receivable as restated in IFRS due to the adoption of IFRS / IAS – IAS 12. A weak linear relationship was also observed in this hypothesis with r = .125, n = 22 and p = .578. The first null hypothesis fails to be rejected. The study fails to reject the null hypothesis because the p-value is greater than 0.05.

The correlation coefficient of .125 indicates that there is a weak relationship between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in current tax assets following the adoption of IFRS. The corresponding p-value of .578 implies that the weak correlation observed is due to chance factors since it is not significant and that in reality, a relationship does not exist between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in current tax assets changes following the adoption of IAS 12 of IFRS / IAS.

H2: There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in deferred tax assets.

The second hypothesis states that no relationship would be detected in the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of change in the deferred tax assets of reported firms. Again, the magnitude of change is measure by the restated year in IFRS divided by the GNAs prior year minus one. It is simply the IFRS restated year current tax assets divided by the GNAs prior year current tax assets minus one. The magnitude of change is to measure the extent of changes, and whether these sizes of changes has any relationship with the volume of changes in the amount of deferred tax assets receivable as restated in IFRS due to the adoption of IFRS – IAS 12. The statistical test of significance indicate that high magnitude of change in disclosure quality level were found to have a weak positive correlation with a magnitude of change in deferred
tax assets receivable with \( r = 0.125, n = 22, p = 578 \) just as it did with current tax assets in \( H_1 \). The second null hypothesis also fails to be rejected because the p-value is greater than 0.05.

Once more, the correlation coefficient of .125 indicates that there is a weak relationship between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in deferred tax assets following the adoption of IFRS. The corresponding significance level of .578 as in deferred tax assets implies that the weak correlation observed is due to chance factors since it is not significant and that in reality, a relationship does not exist between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in deferred tax assets follows the adoption of IAS 12 of IFRS.

\( H_5: \) There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in current tax liabilities.

The third hypothesis states that no relationship would be detected in the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of change in the current tax liabilities of reported firms. Once again, the magnitude of change is measure by the restated year in IFRS divided by the GNAS prior year minus one. It is again simply the IFRS restated year current tax assets divided by the GNAS prior year current tax assets minus one. The magnitude of change is to measure the extent of changes, and whether these volumes of changes has any relationship with the size of changes in the amount of current tax liabilities payable as restated in IFRS due to the adoption of IFRS / IAS – IAS 12. The statistical test of significance indicates that high magnitude of change in disclosure quality level were found to have a weak positive correlation with a magnitude of change in current tax liabilities payable with \( r = 0.126, n = 22, p = .578 \). The third null hypothesis also fails to be rejected because its p-value is also greater than 0.05.

The correlation coefficient of .126 indicates that there is a weak relationship between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in current tax liabilities following the adoption of IFRS. The corresponding p-value of .578 implies that the weak correlation observed is due to chance factors since it is not significant and that in reality, a relationship does not exist between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in current tax liabilities changes following the adoption of IFRS / IAS by listed companies in Ghana.

\( H_4: \) There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in deferred tax liabilities.

The fourth hypothesis states that no relationship would be shown in the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of change in the deferred tax liabilities of reported firms. Again, the magnitude of change is measure by the restated year in IFRS divided by the GNAS prior year minus one. It is simply the IFRS restated year current tax assets divided by the GNAS prior year current tax assets minus one. The magnitude of change is to measure the extent of changes, and whether these volumes of changes has any relationship with the size of changes in the amount of deferred tax liabilities payable as restated in IFRS due to the adoption of IFRS – IAS 12. The statistical test of significance here also indicates that high magnitude of change in disclosure quality level were found to have a weak negative correlation with a magnitude of change in deferred tax liabilities payable with \( r = -0.161, n = 22, p = 474 \). The fourth null hypothesis also fails to be rejected because the p-value is greater than 0.05. The correlation coefficient of -.161 indicates that there is a weak negative relationship between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in deferred tax liabilities following the adoption of IFRS. The corresponding significance level of .474 implies that the weak correlation observed is not real but due to chance factors since it is not significant and that in reality, a relationship does not exist between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in deferred tax liabilities changes following the adoption of IFRS / IAS – IAS 12 in Ghana.

\( H_5: \) There is no relationship between the magnitude of changes in disclosure quality index and the current year tax expense changes.

The fifth hypothesis states that no relationship would be detected in the magnitude of changes in disclosure quality level of IAS 12 and the current year tax expense changes of reported firms. Again, the magnitude of change is measure by the restated year in IFRS divided by the GNAS prior year minus one. The current year tax expense changes are measure by the amount of changes of current year tax expense in GNAS financial statement and as restated in IFRS financial statement. The magnitude of change is simply the IFRS restated year current tax assets divided by the GNAS prior year current tax assets minus one. And the current tax expenses change simply the IFRS / IAS restated year current tax expense minus the GNAS prior year current tax expenses. The current year tax expenses are to measure the absolute amount of tax expense change from the GNAS to the IFRS / IAS. While the magnitude of change is to measure the extent of changes, and whether these volumes of changes has any relationship with the size of changes in the amount of current tax assets receivable as restated in IFRS due to the adoption of IFRS – IAS 12. The statistical test done indicates that high magnitude of change in disclosure quality level were found to have a weak positive correlation with the current year tax expense changes with \( r = 0.130, n = 22 \) and \( p = 565 \). The fifth null hypothesis fails to be rejected as well.
because the p-value is greater than 0.05. The correlation coefficient of .130 indicates that there is a weak relationship between the magnitude of changes in disclosure quality level of IAS 12 and the current year tax expense changes following the adoption of IFRS. The corresponding significance level of .565 implies that the weak correlation observed is due to chance factors since it is not significant and that in reality, a relationship does not exist between the magnitude of changes in disclosure quality level of IAS 12 and the current year tax expense changes following the adoption of IFRS / IAS – IAS 12 by listed companies in Ghana.

Overall, there is a positive relationship between the magnitude of disclosure quality of IAS 12 as in IFRS / IAS restated amounts and the corporate tax elements of current year tax expenses, current tax assets, deferred tax assets and current tax liabilities. However, these positive relationships observed are not significant as shown by the data in table 6 and table 7. The only corporate tax element with a negative relationship is the deferred tax liabilities and it is as well not significant in its negative relationship with the magnitude of change in disclosure quality level just as the other elements. Therefore, it can be concluded that an increase in the magnitude of disclosure quality level of IAS 12 does lead to a weak increase in corporate tax elements of current year tax expenses, current tax assets, deferred tax assets and current tax liabilities. Whereas, an increases in the magnitude of disclosure quality level of IAS 12 does lead to a weak decrease in corporate tax elements of deferred tax liabilities.

5. Conclusions and Recommendations
This study was conducted to examine the disclosure quality level of the financial reports before the adoption (2006/2007) and after the adoption (2007/2008) of IFRS in Ghana. It also investigated the extent of disclosure quality level changes and its relationship with corporate taxes information disclosed by these listed entities. The research was conducted through detailed content analysis of the 2006/2007 and 2007/2008 financial reports of the listed firms. Descriptive analysis was performed to present the background statistics of the firms and variables examined. This was followed by correlational analysis which forms the most important data analysis for this paper. From the entities surveyed, the Financial / Insurance / Information Technology industry dominated (with 45.5%) followed by the Manufacturing / trading industry (with 40.9% representation). The least

| Table 6: Pearson correlation (r) coefficient of disclosure quality index |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| MDQI            | .371            | .125            | .126            | -.161           | .983**          | .130            |
| MCYTE           | -.005           | -.048           | .654            | .100            | .339            | .662**          |
| MCTA            | -.048           | 1.00**          | .100            | .100            | -.129           | -.048           |
| MCDTA           | .125            | .654            | .189            | .061            | .061            | .100            |
| MCCTL           | .654            | .006            | .061            | .061            | .100            | .006            |
| MCTL            | .006            | .189            | .061            | .061            | .100            | .189            |
| MDTL            | .100            | .100            | .100            | .100            | .100            | .100            |
| DQIC            | .100            | .100            | .100            | .100            | .100            | .100            |
| CYTEC           | .100            | .100            | .100            | .100            | .100            | .100            |

Source: Sample Companies annual reports, author’s own calculation
** Correlation is significant at the 0.01 level (2-tailed)

| Table 7: Pearson correlation (Sig.) significance of disclosure quality index |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| MDQI            | .090            | .578            | .578            | .474            | .000            | .565            |
| MCYTE           | .833            | .833            | .833            | .978            | .657            | .833            |
| MCTA            | .001            | .01           | .001            | .978            | .657            | .001            |
| MCDTA           | .833            | .978            | .978            | .400            | .567            | .978            |
| MCCTL           | .000            | .400            | .787            | .787            | .567            | .400            |
| MCTL            | .657            | .657            | .567            | .567            | .786            | .657            |
| MDTL            | .567            | .567            | .786            | .786            | .645            | .567            |
| DQIC            | .833            | .833            | .833            | .833            | .833            | .833            |
| CYTEC           | .000            | .000            | .000            | .000            | .000            | .000            |

Source: Sample Companies annual reports, author’s own calculation
** Correlation is significant at the 0.01 level (2-tailed)
The magnitude of change of disclosure quality index from the GNAS as in the IFRS/IAS-IAS 12 restated amounts saw a mean score of 39.57%, a maximum of 133.33%, a minimum of -23.08% and a standard deviation of 56.76%. The magnitude of change in disclosure quality level implies a general improvement of 39.57% in disclosure quality level of sample firms over the pre – IFRS adoption. Notwithstanding this improvement, the maximum and minimum indicate that the effect of IFRS saw some firms not doing well after the adoption of IFRS. It also does not indicate an overwhelming compliance with the IASB's IFRS Framework of relevance, faithful representation, comparability and understandability. The study however also confirms as in the case of Agyei-Mensah, (2013) that the implementation of IFRSs generally reinforce accounting disclosure quality. With the enhancement in the disclosure quality level of the financial reports after adopting IFRSs users are assured of useful information for financial decision-making and investigations.

A Pearson correlation of the GNAS reported amounts and the IFRS/IAS restated amounts in the 2007 / 2006 and 2008 / 2007 annual reports are done to investigate the linearity of the dependent variables among themselves. The results showed a general positive correlation between these variables and this indicates that anytime any of them in the GNAS reported amounts increases then the other in the IFRS restated amount also increase. Noteworthy also is that, they showed positive and significant associations implying that their association is larger than zero percents. Overall, there is a positive relationship between the magnitude of disclosure quality of IAS 12 as in IFRS/IAS restated amounts and the corporate tax elements of current year tax expenses, current tax assets, deferred tax assets and current tax liabilities. However, these positive relationships observed are not significant as shown by the data. The corresponding significance level of all the elements implies that the weak correlation observed is due to chance factors since it is not significant and that in reality, a relationship does not exist between the magnitude of changes in disclosure quality level of IAS 12 and the corporate income tax elements as used in this study following the adoption of IFRS / IAS – IAS 12 by listed companies in Ghana. The only corporate tax element with a negative relationship is the deferred tax liabilities and it is as well not significant in its negative relationship with the magnitude of change in disclosure quality level just as the other elements. Therefore, it can be concluded that an increase in the magnitude of disclosure quality level of IAS 12 as reported in IFRS / IAS financial reports does lead to an increase, though weak, in corporate tax elements of current year tax expenses, current tax assets, deferred tax assets and current tax liabilities. Whereas, an increases in the magnitude of disclosure quality level of IAS 12 as reported in IFRS / IAS financial reports does lead to a weak decrease in corporate tax elements of deferred tax liabilities.

From the evidence gathered by this study, we conclude that the disclosure quality level of annual reports and accounts of listed firms in Ghana following the adoption of IFRS / IAS is seen to be high and improved, taking into consideration the reporting qualities of relevance, understandability, comparability, and faithful representation. Also, we conclude that there is a positive relationship between the extents of disclosure quality level of disclosure of IAS 12 following the adoption of IFRS / IAS with corporate income taxes. Consequently, the study recommends that listed entities should strive to maintain higher reporting disclosure quality (particularly disclosure of IAS 12) of their annual reports and accounts so as to make it easy and possible for the tax authority to assess their corporate income taxes appropriately and effectively. This study contributes to the literature on corporate financial reporting and disclosure quality level practices as well as its relationship with corporate income taxes. The Ghana Stock Exchange is one of the essential investment markets in Africa, south of the Sahara, in which IFRSs / IASs are mandatory. Therefore a study on the disclosure quality level of financial report (particularly IAS 12) disclosure is significant. It also contributes to the literature on whether the company disclosure quality level relates with it corporate incomes taxes burdens or otherwise.

One of the shortcomings of this study is the fact that it was limited to companies listed on the Ghana Stock Exchange. Secondly, it is data from over seven to eight years ago and majority of the firms at the time though implemented IFRS / IAS did not implement IAS 12 which is on income taxes. This makes it very tricky to generalize the results. The researchers therefore, recommend that other researchers consider working with a bigger sample comprising some of the unlisted firms in Ghana. There is also the need to research into not only a trend analysis of the disclosure quality level of disclosing IAS 12 over the years ever since the adoption of IFRS / IAS in Ghana, but also the trend of disclosure quality level and it relationship with corporate income taxes over the years too possibly using effective tax rate as one of the elements.

References
Abedana, V. N., (2015). An Examination of The Tax Implications For the Adoption of International Financial Reporting Standards (IFRS) in Ghana, A Long Essay Submitted to the Pentecost University College (Graduate School) in Partial Fulfillment of the Requirement for the Award of Master of Commerce in
Taxation (unpublished)
Banking Act 2004 (Act 673) of Ghana, Assembly Press, Accra, Ghana


Internal Revenue Act, 2000 (ACT 592), Assembly Press, Accra, Ghana.


Appendix I

OPERATIONAL MEASURES UTILIZED FOR THE QUALITATIVE DISCLOSURE CHARACTERISTICS

[(Adapted and modified from Beest, F.V., Braam, G., and Boelens, S. (2009)).]

Relevance
R1 The Income tax standard / IAS 12 discloses forward-looking information
R2 The company uses fair value as measurement basis
R3 The Income tax standard / IAS 12 provides feedback information on how various market events and significant transactions affected the company?

Relevance total score (3)

Faithful representation
F1 The Income tax standard / IAS 12 report explains the assumptions and estimates made clearly
F2 The Income tax standard / IAS 12 report explains the choice of accounting principles clearly
F3 The Income tax standard / IAS 12 report highlights the positive and negative events in a balanced way when discussing the Income tax standard / IAS 12 results

Faithful representation total score (3)

Understandability
U1 The Income tax standard / IAS 12 report is a well organized
U2 The notes to the Income tax standard / IAS 12 are clear
U3 The use of language and technical jargon is easy to follow in the Income tax standard / IAS 12 report
**Understandability total score (3)**

**Comparability**
C1 The notes to changes in accounting policies (in respect of Income tax standard / IAS 12) explain the implications of the change
C2 The notes to revisions in accounting estimates and judgments (in respect of Income tax standard / IAS 12) explain the implications of the revision
C3 The company’s previous accounting period’s figures are adjusted for the effect of the implementation of a change in accounting policy or revisions in accounting estimates.
C4 The results of current accounting period are compared with results in previous accounting periods
C5 Information in the Income tax standard / IAS 12 report is comparable to information provided by other organizations
**Comparability total score = (5)**

**Appendix II**

**LIST OF COMPANIES LISTED ON THE GHANA STOCK EXCHANGE USED FOR THE STUDY**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>COMPANY NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALW</td>
<td>ALUWORKS LTD</td>
</tr>
<tr>
<td>ARYTN</td>
<td>AYRTON DRUGS MANUFACTURING COMPANY LTD</td>
</tr>
<tr>
<td>CAL</td>
<td>CAL BANK LTD</td>
</tr>
<tr>
<td>CLYD</td>
<td>CLYDESTONE (GAHAN) LIMITED</td>
</tr>
<tr>
<td>EBG</td>
<td>ECOBANK GHANA LIMITED</td>
</tr>
<tr>
<td>EGL</td>
<td>ENTERPRISE GROUP LIMITED</td>
</tr>
<tr>
<td>FML</td>
<td>FAN MILK LIMITED</td>
</tr>
<tr>
<td>GCB</td>
<td>GHANA COMMERCIAL BANK LIMITED</td>
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<tr>
<td>GOIL</td>
<td>GHANA OIL COMPANY LIMITED</td>
</tr>
<tr>
<td>GWEB</td>
<td>GOLDEN WEB LIMITED</td>
</tr>
<tr>
<td>GGBL</td>
<td>GUINNESS GHANA BREWERIES LIMITED</td>
</tr>
<tr>
<td>HFC</td>
<td>HFC BANK LIMITED</td>
</tr>
<tr>
<td>MLC</td>
<td>MECHANICAL LLOYD COMPANY LIMITED</td>
</tr>
<tr>
<td>PBC</td>
<td>PRODUCE BUYING COMPANY LIMITED</td>
</tr>
<tr>
<td>PKL</td>
<td>PIONEER KITCHEN WARE LIMITED</td>
</tr>
<tr>
<td>SOGEGH</td>
<td>SOCIETE GENERAL GHANA LIMITED</td>
</tr>
<tr>
<td>SIC</td>
<td>SIC INSURANCE COMPANY LIMITED</td>
</tr>
<tr>
<td>SCB</td>
<td>STANDARD CHARTERED BANK LIMITED</td>
</tr>
<tr>
<td>SPL</td>
<td>STARWIN PRODUCTS LIMITED</td>
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<tr>
<td>TOTAL</td>
<td>TOTAL PETROLEUM GHANA LIMITED</td>
</tr>
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<td>UNIL</td>
<td>UNILEVER GHANA LIMITED</td>
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<tr>
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