Innovations

Transparency and disclosures of Commercial banks in Ethiopia

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Abstract
This paper evaluated the transparency and disclosures of Ethiopian commercial banks by applying the Standard and Poor's transparency and disclosure index to measure the disclosure levels between 2010- 2020. The determinants of disclosures were estimated using the panel data GMM estimation method. The results have revealed that Ethiopian commercial banks were disclosing information at a moderate level. The profitability and age of the bank positively significantly affected the levels of disclosure, while bank size negatively significantly influenced the levels of disclosures. The results have implied that competition between banks in terms of information disclosure was weak in Ethiopia. Finally, banks managers are suggested to use their financial capability to disclose more information and take advantages that will accrue in association with more disclosures. The regulatory authorities are also suggested to apply and enforce the policy that pushes the banks to disclose more information in the larger interests of the investors.

Keywords: *1.Commercial banks, 2 disclosure, 3.transparency, 4.GMM estimation, 5.Ethiopia*

1. Introduction

The role of banking sector is very significant in the economy of countries by operating as financial intermediaries and primary source of financing. The theory of financial intermediaries states that banks play an important role by reducing the transaction costs and resolve information asymmetries between lenders and borrowers. Banks intermediate by accepting money from depositors (savers) and transferring it to the borrowers (investors) (Diamond, 1984; Saunders and Cornett, 2012; Tsolas and Charles 2015). Among various types of financial institutions, commercial banks play an intermediary role that provides monitoring services, producers of information and provide liquidity insurance (Santos, 2000).

Effective information provision system is very important for establishing strong banking institutions. The stakeholders use information provided by the institutions to make investment decisions. Putu et el., (2012) states that all stakeholders need financial information in order to make informed decisions. Qu and Leung (2006) explain that transparency practiced by using the corporate disclosure is one of the important elements of corporate governance principles. Financial disclosure is the way to release financial information to the public, in which the disclosure is categorized as mandatory or voluntary (Glautier and Underdown, 1986). Disclosure can be explained as the communication of economic information which includes financial or nonfinancial, quantitative or qualitative information relating to the organizations financial position and performance (Owusu-Ansah, 1998). Annual report is the most important tool to disclose financial information because it is the only report that is produced regularly and is used to comply with mandatory disclosure requirements. It is used as the important means that organizations construct its own external image (Gray et al., 1995). Annual report is recognized as the very important means for communication of firm's information (Lee and Tweedie, 1975).

Corporate disclosures can be measured using methods such as, disclosure index, content analysis and transparency and disclosure (see for example; Marston and Shrives, 1996; Jones and Shoemaker, 1994; Patel et al., 2002 and Khanna, et al., 2004). However, the transparency and disclosure method of the standard and poor's is recognized in the literature as the better method because it avoids subjectivity of the measurement, provides standardized scores of disclosures and the result can be comparable in the literature as the method is applied in different countries around the world. Patel and Dallas (2002) and Khanna, et al., (2004), stated that the standard and poor's in 2002 conducted surveys on transparency and disclosure from different countries around the world. Their survey used rankings of the evaluation of the public disclosures of companies in various markets of different countries.

Tsolas and Charles (2015) and Svitalkova (2014) have stated that strong banking industry plays the essential role in the economic development of the countries. As a result of it the industry becomes the focus of various studies. However, Ethiopian banking system is underdeveloped which is similar to many other developing countries. The Ethiopian financial services coverage is low (African development bank, 2011). Ethiopian banking industry claims a total capital of USD 800 million only, which is under financing itself (Giorgis Abay, 2009). Moreover, the Ethiopian banking system is dominated by a single public commercial bank in terms of national coverage, capital loans and deposits (National bank of Ethiopia (NBE), 2018; Geda et al., 2017). However, according to the recent evidence the Ethiopian banking sector has grown fast, which leads to significant domestic resource mobilization and provision of loans and advances (Geda et al., 2017). Therefore the aim of this study is to evaluate the transparency and disclosures level and to examine the determinants of transparency and disclosure of Ethiopian commercial banks.

There are a limited number of studies on Ethiopian commercial banks transparency and disclosures and only three published papers by (Rao and Desta 2016; Bitew and Yitayew, 2015; Khan and Abera, 2015) are found. Moreover, it has been found that the results of these studies lack consistency. Therefore, this study fill the existing study gaps as it used Standard and Poor's transparency and disclosure index, analyzed the recent and eleven years data of all Ethiopian commercial banks, and this study estimated the determinants of the disclosure levels by using the panel data GMM estimation method.

The remaining parts of this paper have been organized as follows: Section 2 provides a brief literature review. Section 3 presents the methodology and data. Section 4 presents the panel data GMM estimation result and section 5 concludes the paper.

2. Literature review

The accounting environment is both complex and challenging. The environment is complex because the output of accounting is information. Information is characterized as the most powerful and very important product. Since individuals are not unanimous when react to it this causes the information to become complex. For the same information some users of information might react positively, some others might react less positively and while the rest might react quite negatively (Scott, 2015). All stakeholders need financial information in order to make an informed judgment and decision. Information disclosure forms an integral part of financial reporting. Conceptually, the accounting process to present the needed financial information in the form of a full set of financial statements ends with disclosure of information (Putu et el., 2012). Several studies provide evidences on the importance of the disclosure of information. For instance; well disclosure policy positive significantly affects bank loan contract (Hasan and Song, 2014). Disclosure improves financial performances (Quayes, and Hasan 2014). More information disclosure is related with lower market expected risk (Zer, 2015). Banks that disclose more key items of information are likely to have lower stock volatility than other banks that disclose less key items of information (Baumann and

Nier, 2004). Voluntary disclosure is associated high accuracy of analyst forecasts and less market uncertainty (Lakhal, 2009).

Several definitions and classifications have been given for disclosure by different authors (see for instance; Agca and Onder, 2007; Putu et el., 2012; Papo, 2008; Huiyun and Peng, 2012; Kohler, 1975 and Chandra, 1974). However, the broader definition was given by Chandra (1974) stated that disclosure is the process by which an entity communicates with the outside world".

Investors require timely and accurate business information to make informed investment decisions. This type of information can be obtained through many ways; one of the common sources is the firms' annual reports. Annual report plays an important role by providing relevant, useful and reliable financial information to shareholders, investors and other interested people about the financial condition and performance of the business and its future prospects to help users in decision making (Yeun et al., 2009). Management communicates the performance of a firm to outside investors by the use of important tools, financial reporting and disclosures (Healy and Palepu, 2001). In a modern financial sector, effective and full disclosure is regarded as a necessary condition for the discipline of the market (Spiegel and Yamori, 2004). Huang (2006) explains reasons why accounting disclosure is more important in banking sector than in other sectors; first accounting reports are usually the only source of information for shareholders and other stakeholders; second, earnings presented in figure are not adequate for assessing the valuation of banks, especially for the valuation of risks and provision of liquidity; third balance sheet and income information at an aggregated level is less informative for banks than for other firms. Kang and Pang (2005) states that accounting disclosure is very important in banking sector because banks own less physical assets, thus investors can only assess the banks performance and asset quality from accounting information. These factors are particularly possibly be true in a developing country environment.

Several previous studies have used different measures of disclosures such as the disclosures index and content analysis techniques(see for example; Marston and Shrives, 1996 and Jones and Shoemaker, 1994) and transparency and disclosure(see for example; Patel et al., 2002 and Khanna, et al., 2004).

Mostafa (1994) evaluated the levels of disclosure in annual reports of Kuwait banks using disclosure index consisting of 117 information items and the study found that the levels of disclosure were only 57 percent. Al-Bastaki (1997) evaluated the levels of disclosure of Bahrain banks using 71 item disclosure indexes. The result shows 41 percent levels of disclosure and bank size positive significantly impact levels of disclosure. Hossain(2000), studied the extent of overall disclosures of 25 banking companies in Bangladesh using a disclosure index of 61 items. The results show that the overall disclosure level was 86 percent and both profitability and the size of the banks were statistically significant in determining disclosure levels.

A study conducted in Libyan banks over mandatory and voluntary disclosures depicts that none of the sampled banks disclosed all items in any of the seven year study period. The number of information items disclosed was little more than half the maximum possible throughout the sample, although it increased over the period. There was a high variation on the level of disclosures between individual banks. Most importantly the average figures of disclosure are below the mandatory ones (Kribat, et al., 2013). The voluntary disclosure study on both financial and non-financial 20 firms sample in Bangladesh found that the average voluntary disclosure score of financial and non-financial firms was 70.38 and 62 respectively (Saha and Akter, 2013). Al Mamun and Kamardin (2014) study the extent of banks voluntary disclosure in Bangladesh. The result shows that banks disclosure was increased from 69% in 2005 to 76% in 2008 and improvement of disclosure practices was statistically significant at 5% significant level. Wang, et al., (2013) investigated the impact of disclosure levels on the firm value in the Chinese capital market by using a 714 sample firm's annual reports during 2005-2009. The study found that the Chinese firm's levels of voluntary disclosure have improved during the period.

Empirical literature presents several explanations for the positive association between firm size and disclosure level; first larger banks are better able to cover the costs of transparency (Ashbaugh, et al., 1999; Hassan, et al., 2006), second larger banks can have larger shareholders base which their disclosure used as a tool to reduce agency costs (Jensen and Meckling, 1976). Third smaller companies disclosing more information may enter into a position of competitive disadvantage with their larger counterparts in the industry, thus smaller companies might choose not to disclose more information than larger companies (Hassan, et al., 2006).

Several prior studies provide empirical evidence for the positive effect of profitability, firm size, age of the firm, and asset on place on the firm disclosure levels(see for instance; Lang and Lundholm (1993); Hassan, et al.,(2006); Bokpin (2013); Kribat, et al., (2013); Aly, et al., (2018); Owusu-Ansah, 1998; and Hassan, et al., 2006; Hanifa and Rashid (2005), Boubaker et al. (2012) and Arsov & Bucevska (2017); Hussain and Husain (2017) and Haniffa and Cooke (2002)). Makarov and Ozaralin (2012), Hussain and Husain, (2017), Saha and Akter (2013) and Qu, et al., (2013) applied in their study the board size proxy by number directors in the board as the explanatory variable for the level of disclosure, but their studies have found that board size does not have a significant effect on the disclosure of banks. To the contrary, total number of directors has a negative and significant effect on the disclosure score of the banks (Makarov and Ozaralin, 2012). On the other hand, Hossain (2008) and Haniffa and Cooke (2002) used board composition as the explanatory variable for the levels of disclosure that board composition used proxy by the ratio of non-executive directors to total number of directors in the board. But they found different results. Agency theory explains the existence of the strong association between leverage and disclosure (Jensen and Meckling, 1976). There is high demand and supply of information from firms having high leverage. Highly levered creditors themselves can produce information about the borrowers. Eng and Mak(2003) and Arsov and Bucevska (2017) found a negative impact of leverage on the firms' disclosure. Arsov and Bucevska (2017) and Aksu and Kosedag(2006) have used the ratio of total liabilities to total assets as the proxy for the leverage. Following Arsov and Bucevska (2017) and Aksu and Kosedag(2006).

Based on the above reviewed literature the following hypotheses are formulated:
Ho1: Bank profitability has positive significant impact on their disclosure and transparency.
Ho2: Bank size has positive significant impact on their disclosure and transparency.
Ho3: Leverage of the bank has positive significant impact on their disclosure and transparency.
Ho4: Age of the bank has positive significant impact on their disclosure and transparency.
Ho4: Board size of the bank has positive significant impact on their disclosure and transparency
Ho5: Asset in place of the bank has negative significant impact on their disclosure and transparency.

2.1 Conceptual framework

Though, there are several definitions for the disclosure in the literature, for this study purpose the broader definition of disclosure given by Chandra (1974) is used. He defined that disclosure is the process by which an entity communicates with the outside world. Several previous studies have used different measures of disclosures such as the disclosures index, content analysis techniques and transparency and disclosure. Because of different reasons this study used the standardized score of transparency and disclosures set provided by Standard and Poor’s. Numerous previous studies suggested several variables which determines the firm’s disclosure, including: performance of the firm, size, leverage, age, board size and assets in place (Hassan, et al., 2006; Hossain, 2008; Saha and Akter, 2013; Kribat, et al., 2013; Arsov and Bucevska, 2017; Hussain and Husain, 2017 and Aly, et al., 2018). Based on these presented previous studies evidences the following conceptual framework is developed for this study purpose.

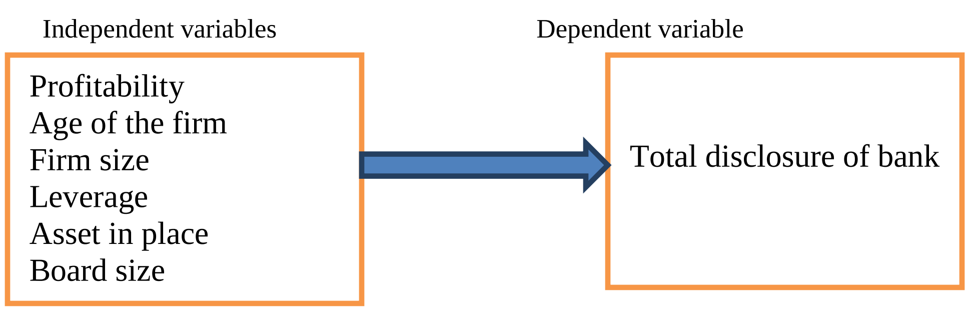

Figure 1: Conceptual framework

Source: developed based on the literature

3. Methodology and Data

This study measures the level of disclosure and examines the factors affecting information disclosure of the Ethiopian commercial banks. To provide empirical evidence on the set objectives and formulated hypotheses, data for the information disclosures were obtained from the review of annual reports of the commercial banks, annual reports of national bank of Ethiopia and IMF reports about Ethiopia.

3.1 Model specification

In order to test the role of determinant variables in explaining the disclosure level of the banking industry in Ethiopia, the general equation developed is the following:

$y_{it} = \alpha + \beta_r ROAE_{it} + \beta_t LTA_{it} + \beta a AGE_{it} + \beta_1 LEV_{it} + \beta_b BS_{it} + \beta_f FTA_{it} + \varepsilon_{it}$ ....(1)

$\varepsilon_{it} = v_i + u_{it}$

Where, y_{it} is the total disclosure of bank i in a period of t, i.e i=1, ……, N, t=1,…..T, α is the constant term, β is the estimated coefficient for the explanatory variables, $ROAE_{it}$, LTA_{it}, $AGE_{it,}$ $LEV_{it,}$ BS_{it} and FTA_{it} are the explanatory variables and ε_{it} the disturbance (i.e v_i the unobserved bank specific effect and u_{it} the idiosyncratic error).

3.2 Measurement method of disclosure

This study measures the disclosure levels of Ethiopian commercial banks using the standardized score of transparency and disclosures set provided by Standard and Poor’s. This transparency and disclosure set provides standardized scores of disclosures for a large number of firms in USA and outside USA using implicitly the USA disclosure as a benchmark (Patel and Dallas, 2002 and Khanna, et al., 2004).

The Standard and Poor’s in 2002 published the findings from companies’ survey on transparency and disclosure from different countries around the world. This survey used rankings for the evaluation of the public disclosures of companies in various markets of different countries (Patel and Dallas, 2002 and Khanna, et al., 2004). The Standard and Poor’s disclosure index is used only to measure only the availability of individual items.

The Standard and Poor’s use annual reports as the primary sources of corporate disclosure information to measure whether the individual items are disclosed or not (Patel and Dallas, 2002 and Khanna, et al., 2004). Standard and poor’s evaluated disclosure score of 98 specific items. While doing so, unweighted evaluation method was used that gave one when the item was disclosed and zero when the item was not disclosed (Patel and Dallas, 2002; Khanna, et al., 2004; Utama and Utama, 2012; Sharif and Lai, 2015). The standard and poor’s 98 disclosure items are divided into three broad categories; Ownership structure and investor rights (28 items), financial transparency and information disclosure (35 items) and board and management structure and process (35 items). Following this, the current study also uses annual report as a source of data, used 91 items out of the total 98 items of transparency and disclosure and unweighted evaluation method used to measure the disclosure level of Ethiopian commercial banks. Only 91 items are used because 7 transparency and disclosure items are not applicable in Ethiopian commercial banks.

For the purpose of this study, an unweighted index has been employed, for two reasons. First, unweighted scores avoid the subjectivity inherent in assessing the relative importance of each disclosure item across all potential user groups of information (Firth, 1979). Second, the unweighted scoring approach has been used and supported in several prior studies (see for instances; Patel, 2002; Khanna, et al., 2004; Utama and Utama, 2012; Sharif and Lai 2015). The weighted approach creates the problem of subjectivity because the level of usefulness which is assigned to each disclosure item varies depending on the country, the industry, the user and the time of the study (Hassan and Marston, 2008). As per unweighted method used in this study if a company discloses the item it scores 1, otherwise the score is 0. Moreover, the result of previous studies reveals that the use of either weighted or unweighted method for the evaluation of disclosure has little or no difference on disclosure evaluation results (Coombs and Tayib, 1998). Accordingly, the unweighted disclosure scoring method measures the total disclosure (TD) score of a banking firm as summative (Cooke, 1992) as follows:

n

$$TD = \sum_{i=1} d_i$$

Where,
d = 1 if the item d_i is disclosed
d = 0 if the item d_i is not disclosed
n = number of items

3.3 Determinants of bank's disclosure

A number of previous studies suggest several variables determining the firm's disclosure level, including: performance of the firm, size, leverage, age, board size and assets in place (Hassan, et al., 2006; Hossain, 2008; Saha and Akter, 2013; Kribat, et al., 2013; Arsov and Bucevska, 2017; Hussain and Husain, 2017 and Aly, et al., 2018). Thus, this study follows the variables selected and used in the previous studies to evaluate their association with Ethiopian commercial bank's disclosure. The variables used in this study are presented as follows:

Table 1.1 Variable description

Variable	Proxy	Notation	Expected effect
Dependent variable			
Disclosure score	Total disclosure score of the bank as summative	TD	
Independent variables			
Profitability	Net profit after tax/Average total equity of the bank	ROAE	+ve
Bank size	Log of total Assets	LTA	+ve
Leverage	Total liabilities/Total assets	LEV	+ve
Age of the bank	Number years since the establishment of the firm	AGE	+ve
Board size	Number of directors in the board of directors	BS	+ve
Asset in place	Book value of net fixed assets to book value of total assets	FTA	-ve

Note: Average assets is calculated as beginning bal. plus ending bal. divided by 2
Source: adopted from the literature

3.4 Econometric Methodology

This study has used an unbalanced panel data of Ethiopian commercial banks from 2010-2020. The dataset of 17 commercial banks estimation was made based on the model developed for the purpose. The empirical literature evidence shows that the least square methods on fixed effects (FE) or random effects (RE) models are applied in static relationships. Baltagi(2005) suggests that in dynamic relationships, least square methods on FE or RE models generate inconsistent and biased(especially as the time dimension T gets smaller) results. By considering the nature of the dataset, this study has applied three step approaches in econometric model analysis of panel data for the disclosure level determinants that include the following steps: (1) testing for stationarity of the panel data set using a test for unbalanced panel; (2) Compares FE and RE models (Athanasoglou, et al., 2008; Flamini, et al., 2009); (3) transformation of the static disclosure model in to panel GMM estimation order, to solve for the biasedness and inconsistency of the estimates.

Following (Athanasoglou, et al., 2008; Bucevska and Misheva, 2017), non stationarity was tested by using the Fisher test. Accordingly, the null hypothesis of unit root test was rejected for all variables at the 5% significant level, except age. χ^2 values are TD=57.7, ROAE=68.85, LTA=78.6, LEVER=53.8, FTA=79.2, BS=45.3, AGE=7.8. Moreover, when N>T, stationarity is not necessary. This study has conducted on 17 firms on a data set of 11 years.

Therefore, we continued with the model without excluding these variables, and it is less likely to get spurious results as the dependent variable is stationary.

The second issue is the comparison of FE and RE models to make a choice from the two. The Hausman test result for the disclosure model shows χ^2 value of 66.7 and p value of 1 percent (0.00). This evidence is in favor of FE model. Furthermore, the estimation result showed that there was individual effect because the F-statistic value was 27.4 and was significant at the 1% level. Moreover, Bucervska and Misheva (2017) suggests that FE model is more appropriate model while working with unbalanced panel data because RE model might suffer from heteroscedasticity problem and from omitted variable bias due to unobservable factors. But, the least square (within) estimator of the FE model is both inconsistent and biased. Endogenous problem also affects the FE model estimation. Consequently, the study transforms the estimation of the model by using GMM estimator.

4. Results and discussions

4.1 Disclosure levels of banking industry

The data collected from Ethiopian commercial banks annual reports showed that the disclosure levels of some banks have been fluctuating from year to year during the study period. Table 1.2 depicts the aggregate disclosure level of Ethiopian banking industry during the study period 2010 to 2020.

Table 1. 2 Levels of disclosure of Ethiopian banking industry (2010-2020)

Disclosure	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
No. of banks	8	8	14	15	16	17	17	17	17	17	17
Total disclosure Score	47.89%	49.13%	50.9%	51.2%	51.6%	51.9%	52.8%	53.6%	54.0%	54.3%	54.3%

Note: Total disclosure score is based on standard and poor's 91 items

Source: Computed from annual reports

As shown in table 1.2, the disclosure level of the Ethiopian banking industry has been increasing during the study period. The recent year's result shows a high level of disclosure as compared to earlier years of the study period.

4.1.1 Disclosure levels by categories of disclosure

There are three major categories of transparency and disclosure items according to the standard and poor's. These categories include ownership structure and investor rights, financial transparency and information disclosure and board structure and process. The average disclosure score of these categories has been presented in table 1.3 below.

Table 1. 3 Descriptive statistics of disclosure by categories

		Categories of disclosure		
Year	No. of banks	Ownership Structure and Investor Rights	Financial Transparency and Information Disclosure	Board Structure and Process
2010	8	40.8%	74.3%	26.2%
2011	9	41.1%	75.9%	27.5%
2012	15	47.2%	77.1%	27.0%
2013	15	47.6%	76.8%	27.9%

2014	16	46.7%	77.7%	28.3%
2015	17	45.9%	78.5%	28.9%
2016	17	46.8%	78.7%	30.5%
2017	17	47.1%	79.2%	32.1%
2018	17	47.6%	79.4%	32.3%
2019	17	48.1%	79.6%	32.3%
2020	17	48.1%	79.5%	32.3%
Mean		46.1%	77.9%	29.6%
Max		48.1%	79.6%	32.3%
Min		40.8%	74.3%	26.2%
STDEV		2.6%	1.7%	2.4%

Source: Computed from annual reports

The result presented in table 1.3 above shows increasing trend during the study period, though there were fluctuations in some years. In all the years, the score of financial transparency and information disclosure was above 70 percent, which indicate that the Ethiopian commercial banks were good in disclosing financial information.

4.2 Descriptive result of dependent and independent variables

Table 1.4 presents the descriptive result namely the mean, maximum, minimum and standard deviation of the dependent and explanatory variables.

Table 1. 4 Descriptive analysis of dependent and explanatory variables (2010-2020)

Variable	Mean	Max	Min	STDEV
TD	51.95	54.3	47.88	2.12
ROAE	0.23	0.78	-0.06	0.13
LTA	3.92	5.69	2.58	0.59
LEVER	0.46	1.02	0.29	0.09
FTA	0.04	0.73	0.01	0.09
BS	10	17	6	1.77
AGE	14.78	75	1	15.85

Source: Computed from annual report of the banks

The variables presented in the table 1.4 have been used in the analysis of the determinants of total disclosure score model. The mean, maximum, minimum and standard deviation of the variables showed that there were less differences among banks for most of the variables and over the period. Mean, maximum, minimum and standard deviation of total disclosure, profitability, bank size, leverages, asset in place and board size showed low differences. However, there was a large difference between the average ages of the banks.

4.3 The Panel GMM Estimation results

This section presents the empirical results for the relationship between disclosure level of the banks and selected explanatory variables. In this analysis a total of six explanatory variables have been used. The normality test using kurtosis and skeweness of standardized residual provided Z-values which showed that the data was normally distributed. In addition the Shapiro-Wilk test provide a p value of greater than 5 percent which meant the data was normally distributed. Table 1.5 depicted the panel data GMM estimation results. The explanatory power of the model that examined the determinants of the disclosure level was considerably good based on adjust ed R^2 was 82 percent. This means, the applied explanatory variables explained 82 percent of the changes in disclosure level of the model. Durbin Watson test is 1.57, which evaluates the autocorrelation of the variables. Thus, Durbin Watson 1.57 means there is no autocorrelation problem between the variables.

Table 1.5 Panel data GMM estimation result **Dependent variable: TD**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROAE	3.899009	1.631357	2.39004	0.0186*
LTA	-2.553903	1.089945	-2.343148	0.0210*
LEVER	-2.195431	1.352479	-1.623264	0.1075
FTA	0.968815	1.246312	0.777346	0.4387
BS	0.1026	0.109441	0.937497	0.3506
AGE	1.032815	0.148804	6.940791	0.0000**
Adjusted R-Squared	82%			
Durbin-Watson test	1.57			

Source: Panel GMM estimation result

Note: *p<5%, **p<1%

As shown in table 1.5, the significant coefficient and P value of the profitability (ROAE) variable indicates the role of profitability in determining the level of disclosure of banks. Accordingly ROAE is found to have positive significant (significant at 5%, β=3.89) impact on the total disclosure level of the banks. The coefficients of 3.89 meant the disclosure level was significantly changed by changes in the profitability of banks. Therefore, it was accepted that the null hypothesis of profitability of the banks had a positive significant impact on the information disclosure levels. This result is consistent with the previous studies results by Lang and Lundholm (1993); Hassan, et al., (2006); Bokpin (2013); Kribat, et al., (2013) and Aly, et al., (2018). Accordingly Aly, et al., (2018) found that profitability has a positive significant impact on the levels of disclosure of Egyptian companies and Egyptian companies have a tendency to disclose more good news than the bad news. Similarly Kribat, et al., (2013) found that profitability had positive and statistically significant impact on the levels of disclosure in Libyan banks. Bokpin (2013) also found similar results that profitability had a positive significant impact on the disclosure levels of firms in Ghana. This study result was found consistent with the classic signaling theory which that stated the managers of the successful firms had incentives to disclose high information in their annual reports to distinguish their organization and to justify their remuneration (Wallace et al., 1994). On the other hand, more profitable firms will be able to assume the cost of production and dissemination and hence will be able to disclose more information (Inchausti, 1997). The result of this study confirmed the result of Rao and Desta (2016) who found that profitability had a positive, statistically significant impact on the disclosure levels of Ethiopian commercial banks. However, this study result was different with the study result of Habtamu and Khan (2015) which found that profitability had insignificant impact on the disclosure levels of Ethiopian commercial banks.

The GMM estimation result showed that bank size had negative significant (p=5%, β=-2.55) impact on the disclosure level of commercial banks in Ethiopia. Therefore, it was rejected that the null hypothesis of the Bank size had a positive significant impact on the financial disclosure of commercial banks in Ethiopia. This implied that bank size proxy to total assets of the bank had negative significantly influenced the disclosure level of the banks. The result was consistent with the study result of Hassan, et al., (2006) and Kribat, et al., (2013), but it was against the result of the Jensen and Meckling's (1976) disclosing more information was less costly for larger companies, Watts and Zimmerman (1990) stated that political costs theory was in favor of the positive association of size of the firm with the disclosures levels and Stigler (1961) explained from the economic theory point of view that larger firms were likely to disclose more information because of possible scale of production and storage of information. Obtaining the firm size and levels of disclosure against these all theories was somewhat surprising. But the other point view which was the rational for the negative relationship between the firm size and level of disclosure can be justified as firms with relatively few resources (smaller firms) are less able to resist (external and peer) pressure to disclose detail information about performance and operations (DiMaggio and Powell, 1983). The result of this study was against the study result of Habtamu and Khan (2015) and Rao and Desta (2016), who found that bank size had positive and statistically significant impact on the disclosure level of Ethiopian commercial banks.

Regarding the age of the bank, the study found that age of the bank had positive and statistically significant (p value significant at 1%, $\beta = -1.03$) impact on the banks disclosure levels. Therefore, it was accepted that the null hypothesis of age of the bank had a positive significant impact on the level of financial disclosure. This means older banks were likely to disclose more information than younger banks. This can be associated with the cost of disclosure and other capacity limitations of the smaller banks. This result is consistent with the study result by (Hussain and Husain, 2017) and Bokpin(2013). Hussain and Husain (2017) also found that age had a positive significant effect on the disclosure level of commercial banks in Pakistan. Further, Bokpin(2013) study result also showed that age positively significantly influence corporate disclosure in Ghana. However, Hossain (2008), Kribat et al., (2013) and Makarov and Ozaralin, (2012) found that age of the banks had no significant impact on disclosures. Therefore, the result of this study is supported by the previous empirical result and is justifiable with the view that the older banks can easily assume the cost of disclosure.

Leverage, bank size and assets in place have been found to have insignificant impact on the disclosure levels of the banks. Therefore, it was not possible to accept the null hypotheses of leverage, board size and assets in place. The result of how bank size, assets in place and board size is related to the disclosure level implies that competition between banks in terms of information disclosure is weak in Ethiopia. This means that the benefits obtained from disclosures of more information may not be attractive or impressive.

5. Conclusions and Recommendations

The disclosure levels of Ethiopian commercial banks were investigated into by using the transparency and disclosure index by the Standard and Poor's. The unweighted method of disclosure measurement was used. The result revealed that the disclosures level of the Ethiopian commercial banks were at a moderate level. There were some differences between the disclosure levels of public banks and private banks, but the differences between the two were not significant. This indicated that there was no strong competition between Ethiopian commercial banks regarding disclosure of more information. Regarding the determinants of disclosures, profitability, size and age of the bank are the significant determinants of the disclosure level of the banks.

The results revealed that information disclosures level of Ethiopian commercial banks were moderate during the study period. There was no significant difference between the disclosures level of many banks and between the disclosures level of public and private banks. Therefore, bank managers are suggested to increase the level of their bank disclosures, so that the stakeholders are able to get adequate information which can help them to make sound investment decisions. The size of the bank, which proxy by total assets has negative influence on the disclosure levels of Ethiopian commercial banks. However, the size of the bank is expected to have positive association with the disclosure levels because larger banks can easily cover costs of disclosures and also use it as a means of attraction of investors to their banks which ultimately increase their profitability. Therefore, bank managers are suggested to use their financial capability to disclose more information and use the advantages that will accrue in association with more information disclosures.

The disclosure level of Ethiopian commercial banks can be considered as moderate. However, the benefits of more information disclosures are known to promote and preserve the interests of many stakeholders; the firms themselves and contribute for the development of the banking sector. Therefore, the regulatory authorities are suggested to apply and enforce the policy that pushes the banks to disclose more information in the larger interests of the investors.

Finally this paper focused only on the transparency and disclosure of Ethiopian banking sector during the study period of 2010-2020. Therefore, this paper suggests for further studies to focus on the non-banking sector.

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