

# Determinants of Voluntary Disclosure of Financial Information by Ethiopian Tax Payers: In Case of Eastern Ethiopia

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## Abstract

Voluntary financial information disclosures are the focus of an increasing amount of attention by accounting researchers, regulatory agencies, Creditors, Investors, employees and others. The Income Tax Law of Ethiopia requires taxable income of businesses to be determined on the basis of financial statements prepared according to 'generally accepted accounting standards' now it tends to change according to international financial reporting standards. This study examines the voluntary disclosure of annual financial report made by Ethiopian taxpayers especially category 'A' and category 'B' and factors influence financial information disclosure. To examine the relationship of theoretical factors that might affect the financial information disclosure the paper used logistic regression and cross tabulation. As logistic regression result indicates that the only significant but weak variable is debt to equity-ratio. To keep pace with the world changing environment, Ethiopian firms should disclose their financial information to users.

**Keywords:** Voluntary financial information disclosures

## 1. Introduction

Voluntary disclosures are the focus of an increasing amount of attention by accounting researchers, the Ethiopian Revenue and Customs Authority, Creditors, Investors, employees and others. The Income Tax Law of Ethiopia requires taxable income of businesses to be determined on the basis of financial statements prepared according to 'generally accepted accounting standards'. The Income Tax Proclamation No. 286/2002 states that taxable business income shall be determined per tax period on the basis of the profit and loss account or income statement, which shall be drawn in compliance with generally accepted accounting standards (Federal Negarita Gazeta, 2002). Understanding why taxpayers voluntarily disclose information is potentially useful for preparers ( or category 'A' and category 'B' who are responsible to prepare financial statement) and users of such information and for policy making bodies involved in specifying the form and content of accounting and reporting by tax payers. Finally, policymaking bodies such as the Ethiopian Revenue and Customs Authority (ERCA) and Ethiopian Audit General are deliberating disclosure regulations.

Accounting and reporting are influenced by a diverse and complex set of supply and demand forces. Employees, researchers, customers and regulatory agencies demand information in addition to what is demanded by investors. Supply is affected by existing regulations and by the costs associated with disclosure, such as information collections and processing costs, litigation costs, and proprietary that is competitive disadvantage. The latter appear to be particularly important in decisions about voluntary disclosures. Proprietary costs arise when information revealed potentially damages the firm, such as if it results in increased competition or government regulation (Foster, 1986).

Some research has examined factors influencing the voluntary disclosure of annual report in Multinational Corporations (MNC) from the U.S, U.K and Continental Europe (Gary K., Clare B. and Sidney J.1995 *eta.l*). These studies investigated, significant reflect experience from developed regions like the United States and Western European countries, thereby limiting its comparability to surveys that may be carried out in some developing countries like Ethiopia due to factors that differ between the two regions; as the environment, culture, socio-economic and political norms. In contrast, there is a lack of knowledge and experience concerning the factors influence disclosing of financial information in developing countries like Ethiopia. As a result there is an increasing need to describe the current situation of the annual financial reporting disclosure to users in Ethiopia. The purpose of this study is to examine the determinants of voluntary disclosures of financial report by Ethiopian tax payers especially in eastern Ethiopia.

## 2. Research Methodology

To achieve the research objectives, both primary and secondary data were used. The study was empirically examining the association between some variables that influence financial report disclosure. The data to be collected are related to the following variables that represent the main interest of this study: The study has only one dependent variable that is voluntary annual report disclosure. The independent variables used in the study

are: Firm Size: In this study, two variables were used as a proxy for firm size; total assets and sales turnover. Leverage: The relationship between leverage and voluntary disclosure of annual report for users were tested in this study (only for category B) under ratio of Debt-asset ratio, Long-term debt - equity ratio and Debt - equity ratio. Profitability: The profitability indexes that were used under this study are Gross profit margin, Operating profit margin, Net Profit Margin, and Return on Investment. Industry: In examining the effect of the industry type on voluntary annual report disclosure in Ethiopia, the firms under study will be categorized as per classification made by ERCA.

This study was based on probability sampling technique that is each individual firm in the population has an equal probability of being selected. The data collected from the companies in the category of ‘A’ and category ‘B’ in eastern Ethiopia. The financial statement of the Companies was obtained from ERCA that was reported for tax purpose. The sample selection was based on probability sampling techniques. This was done by the list of Companies which is listed in ERCA in the year 2015. According to the list there are 413 companies were registered in this specific area. From the list we used systematic sampling from the list. From the sample companies, the secondary data or their financial statement obtained from ERCA with their specific addresses. After we obtain their statement based on their addresses the remaining information were collected directly from the Companies. In an attempt to meet the research purposes, a binary logistic model will be used to analyze the collected data. The reason for selecting this method is that the dependent variable has limited distribution in which Ordinary Least Squares (OLS) method is not appropriate or parameter estimates are not efficient.

$$p_i = \frac{e^{z_i}}{1+e^{z_i}}$$

Where

- $p_i$ = probability the company disclosing its annual reports
- $z_i$ = factors influencing the company annual report disclosure
- $e$ = natural exponential factor

In addition to this model, descriptive statistics and cross tabulation were used to analyze the data.

### 3. Data Analysis and Interpretation

Questionnaires were filled out to 80 business firms randomly selected that is around 20% of the total business firms that were registered in Ethiopian Revenue and Customs Authority in 2007 Ethiopian Calendar that is 413. A total of 48 usable responses were received, that represents a response rate of 60% of the total sample size. The usable response is firms that prepare the financial statement or submitted their financial statement and give response to the questionnaire.

The table below shows forms of business entity that were used in the sample. From the table around 42% of which were selected are share companies. Sole proprietorship and Private Limited Company were 18.8 and 27.1 respectively.

Type of business	Frequency	Percent
Sole Proprietorship	9	18.8
Partnership	3	6.2
Corporation	3	6.2
PLC	13	27.1
Share company	20	41.7
Total	48	100.0

Table 1: business entity is the firm

As indicated from the table below the industry classification based on their operation; from the sample about 38 percent of them were merchandise enterprise which they operate purchasing finished goods and sold to their customers without any further process. The others are manufacturing, services consultancy.

Type of business	Frequency	Percent
Merchandise	20	41.7
Manufacturing	7	14.6
Construction	3	6.2
Consultancy	4	8.3
Service	3	6.2
Other	11	22.9
Total	48	100.0
<b>Classification according to ERCA</b>		
A	32	66.7
B	16	31.2
Total	48	100.0

Table 2: Industry Classification based on ERCA and based on their operation

The table below shows profile of employees in the sample companies. According to the data, collected most of the companies have less than fifty employees or they have sixty nine percent. Most of the companies have less than three accountants in other word they seventy-one percent. On the other hand, the educational background the accountants of the companies were around fifty six percent of them have bachelor degree and the remaining 4, 6 and 27 percent of them have masters, certificate and diploma respectively. According to the data collected, the companies have certified accountant.

Number of employees	Frequency	Percent
Less than 50	33	68.8
50-100	8	16.7
Above 100	7	14.6
Total	48	100.0
<b>Education Background of Accountant</b>		
certificate	3	6.3
diploma	13	27.1
BA/BSC	27	56.2
MSc/MA	2	4.2
Total	45	93.8
Missing System	3	6.2
Total	48	100.0
<b>Number of Accountants</b>		
Less than 3	34	70.8
4-6 years	11	22.9
Greater than 6 years	3	6.3
Total	48	100.0
<b>Certified Accountant</b>		
Yes	25	52.1
No	23	47.9
Total	48	100.0

Table 3: profile of employees

Below the table shows type of user's financial information. According to the data, collected 56 percent of users are mainly government and owners. This shows that the financial information that prepared by companies is to government and owners. However, the financial information not disclosed to other parties including the researcher because of different reasons. According to the data the companies does not disclose any financial to

outsiders except to government authorities.

Type of user		Frequency	Percent
	Insiders	15	31.2
	Owners	3	6.2
	Government agencies	3	6.2
	Government & owner	27	56.2
	Total	48	100.0
Willingness to give statement to users			
	Yes	6	12.5
	No	42	87.5
	Total	48	100.0

Table 4: Information disclosure

**Regression result**

The results from the logistic regression with the first test result as the dependent variable are presented in Table 5. As shown in Table 5, the only significant but weak predictor of the result on the first test occasion is Debt to equity, which is spectral similarity ( $p < 0.05$ ). Thus, with every unit increase of the spectral difference between financial information disclosure and debt to equity, the odds that the information disclosure answer will be correct increase by a factor of 23.419

Table 5: Logistic Regression Analysis of determinants of financial information disclosure

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Total asset	-.723	1.055	.470	1	.493	.485
	Sales turnover	-.864	.992	.760	1	.383	.421
	Debt to equity	3.154	1.996	2.497	1	.114	23.419
	Long term debt to equity	-1.606	1.926	.696	1	.404	.201
	Debt to asset	-2.931	1.978	2.195	1	.138	.053
	Gross profit	-.809	.858	.888	1	.346	.445
	Net profit	1.281	1.037	1.526	1	.217	3.601
	Return on investment	.555	1.518	.134	1	.715	1.742
	Category ERCA	-1.865	1.185	2.476	1	.116	.155
	Constant	8.583	4.180	4.215	1	.040	5.339E3

a. Variable(s) entered on step 1: Total asset, Sales turnover, Debt to equity, Long term debt to equity, Debt to asset, Gross profit, Net profit, Return on investment, Category ERCA.

The model evaluation that SPSS generates is performed by measures of log likelihood presented in Table 6. Both Peng et al, 2002 and Spicer, 2004 warn against relying on log likelihood measures in logistic regressions, but Spicer suggests that the two different  $R^2$  measures might be viewed as tentative indicators of the range within which the actual influence of the independent variables on the dependent variable lies. For this data, the independent variables would thus explain somewhere between 20.2% and 38.1% of the variation in results. But, Spicer, 2004 still advises cautious use of these “pseudo statistics”; they are best treated with caution if not actually avoided.

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	25.354 <sup>a</sup>	.202	.381

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Table 6: Model Summary of the logistic regression analysis of determinants of financial information disclosure by tax payers

The goodness of fit tests indicates the appropriateness of the model, how well it fits with the actual outcomes. This can be estimated with the Hoesmer and Lemeshow test, where the insignificance of the  $\chi^2$ -value is an indicator of goodness of fit  $p > 0.05$  indicates that the model fits the data well.

	Chi-square	df	Sig.
Step 1	10.816	9	.289

Table 7: Hosmer and Lemeshow Test of goodness-of-fit of the logistic regression analysis of financial information disclosure of Ethiopian tax payers

The classification table (Table 8) displays the agreement between predicted and actual results. This table reveals that the incorrect answer is never predicted. This would be the same as the intercept-only model, without independent variables, where the probability of a correct answer is equal to  $\frac{\text{the number of correct answers}}{\text{the total number of answers}}$ , which in this case is 87.5% of the companies not disclose their statement and 12.5% percent of them disclose to users. The Omnibus tests of Model Coefficients, present significant p-values, indicating that the model containing the independent variables is significantly different from the intercept only model (Garson, 2009). However, as the coefficients are generally very small, their influence on the dependent variable is weak. So weak that the changes in the predicted p-values are not reflected in the Classification table. Predictions of events with the actual outcome 1 might have come closer to 1, and predictions of events with the actual outcome 0 might have come closer to 0 – but still without falling below the cutoff value of 0.5.

Observed	Predicted			
	statement is disclosed		Percentage Correct	
	yes	no		
Step 1 statement is disclosed	yes	2	4	33.3
	no	2	40	95.2
Overall Percentage				87.5

Table 8: Classification Table(a) of the logistic regression analysis of financial information disclosure

**Cross tabulation of firm size and financial statement disclosure**

The variable most consistently reported as significant in studies examining differences across firms in their disclosure policy is firm size (Foster, 1986). Accordingly Firth, 1979 used sales turnover and capital employed to measure the firm size. In this study, two variables were used as a proxy for firm size; total assets and sales turnover. Accordingly based on the cross tabulation result the firms which their total asset greater than 2 million not disclose their statement were 18. The other variable was sales turnover firm which has annual sales turnover greater than 10 million not disclose their financial to their users.

Table 9: Cross tabulation of firm size and financial statement disclosure NB numbers are in 100,000

Range of total asset and sales turnover		Total asset				Sales turnover		
		<2	2-5	5-20	>20	<5	5-100	>100
Disclosure of financial information	Yes	0	0	3	3	1	0	5
	No	10	9	5	18	19	4	19

**Cross tabulation of leverage and financial information disclosure**

Some studies suggest that leverage has impact on annual financial information disclosure. For firms which have more debt in their capital structures, voluntary disclosure can reduce the agency costs by facilitating debt supplier's assessment of a firm's ability to meet its debts (Jensen and Meckling 1976); and Mitchell *et al.* 1995, found a positive relationship between voluntary disclosure and the amount of leverage in a firm's capital structure. So, the relationship between leverage and voluntary disclosure of annual report for users will be tested in this study under ratio of Debt-asset ratio, Long-term debt - equity ratio and Debt - equity ratio. Below the table shows the cross tabulation result of leverage and financial information disclosure. Based on the result firms who has less than 0.5 long term debt to equity not disclose their statement to users are 37. The second leverage measurement is debt to equity ratio; firm who has ratio of between 0.5 to 1 not disclose their statement to users are 18. Thirdly, debt to asset firms which has less than 0.5 not disclose their statement to users are 30.

Table 10: Cross tabulation of leverage and financial information disclosure

Ratio		LTD to equity		Debt to equity			Debt to asset		
		<0.5	0.5-1	<0.5	0.5-1	>1	<0.5	0.5-1	>1
Disclosure of financial information	Yes	5	1	3	3	2	4	1	1
	No	37	5	5	18	12	30	9	4

### Cross tabulation of profitability and financial information disclosure

A firm who has more profitable tends to disclose annual report than who has less profit or rerun on equity (Singhvi and Desai, 1971). So, this study was test profitability impact on voluntary annual report for companies operate in Ethiopia. The profitability indexes that will be used under this study are Gross profit margin, Operating profit margin, Net Profit Margin, and Return on Investment. Based on the result firms which their returns on investment ratio of less than 0.05 not disclose their statements to users are 31. The other profitability measurement is net profit; based on this ratio firms which has less than Br.200,000 net profit not disclose their statement to users are 32.

Range of GP, NP and ROI		Gross profit			Net profit			Return on investment	
		<5	5-10	>10	<2	2-5	>5	<0.05	>0.05
Disclosure of financial information	Yes	3	1	2	5	1	0	5	1
	No	26	5	11	32	4	6	31	11

Table 11: Cross tabulation of profitability and financial information disclosure

### Cross tabulation of industry classification and financial information disclosure

In examining the effect of the industry type on voluntary annual report disclosure in Ethiopia, the firms under study were categorized as per classification made by ERCA. Based on the result below category A or firms who must submit their balance sheet and income statement to ERCA not disclose their statement to users are 30.

		Category ERCA	
		A	B
Disclosure of financial information	Yes	2	4
	No	30	12

Table 12: Cross tabulation of industry classification and financial information disclosure

## 4. Conclusion and Recommendation

The objectives of the study were to examine the voluntary disclosure of annual financial report made by Ethiopian taxpayers especially category 'A' and category 'B' and to examine company size, industry, leverage and profitability as additional variables for observed voluntary disclosure by Ethiopian tax payers in their annual report. The findings of this study indicate most of the companies disclose their statements to government and owners this indicate that the companies are limited to outsiders like researcher and others who need the financial statement of business firms. The regression result shows that the only significant but week predictor of the result on the first test occasion is debt to equity. Thus, with every unit increase of the spectral difference between financial information disclosure and debt to equity, the odds that the information disclosure answer will be increase. From the result two variables were used as a proxy for firm size; total assets and sales turnover. Accordingly based on the cross tabulation result the firms which their total asset increases the companies not disclose their statements were increased as compared to the companies which have less total asset. The other variable was sales turnover, firms which has high and low annual sales turnover in range used in this study were highest not disclose to the users.

The second factor which has impact on annual financial information disclosure is leverage. In this study ratios which are used are Debt-asset ratio, Long-term debt - equity ratio and Debt - equity ratio. Based on the result firms who has less long term debt to equity ratio not disclose their statement to users are more than which has high long term debt to equity ratio. The second leverage measurement is debt to equity ratio; firm who has large and medium ratio of debt to equity not disclose their statement to users high in number. Thirdly, debt to asset firms which has less ratio not disclose their statement to users are also big in number. This indicated that leverage has impact for firms not disclose their financial statements to users.

The other factors that influence financial information disclosure used in this study were profitability. The profitability indexes that will be used under this study are Gross profit margin, Operating profit margin, Net Profit Margin, and Return on Investment. Based on the result firms which their returns on investment ratio of less not disclose their statements to users are high in number.

Based on the literature and the findings of this research, the researchers recommended that:

- The researchers recommend that the government and responsible bodies like auditors general should do how the firms disclose their annual financial information to users by issuing different standards and proclamation.
- Country to have secondary stock market one of the criteria is companies should disclose their financial statement to investors or users, so the government or responsible authorities should do with this by giving different ways of appreciation to the companies that disclose their statement to users.
- Based on the findings debt to equity ratio has significantly influence not disclose their statement to users, so the firms should do to improve their debt to equity ratio.
- Disclosure of financial information based on their categories according to classification of ERCA, firms

- under category A not disclose their statements to users are high. So, these firms should disclose their balance sheet and income statement to users as the proclamation suggest.
- Finally, the researcher invites other interested researcher to precede the detail study of factors influencing the annual financial information disclosure.

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