

## Debt Contracting and Conditional Accounting Conservatism

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### Abstract

This study examines the effects of debt on accounting conservatism in the conglomerate sector. The author proxy debt in the form of total debt (long term plus short term). Conditional accounting conservatism was measured using asymmetric accrual to cash flow conservatism model. Data for the study were obtained from the Nigerian Stock Exchange Fact Book and the companies' annual report from the period 2003 to 2010. The extent of the influence of debt was estimated using pooled regression method of analysis utilising SPSS 17 statistical package. Consistent with debt-equity hypothesis under positive accounting theory that managers of firms tend to overestimate their earnings so as not to violate debt covenants, our result reveals a significant negative influence of total debt on conservative reporting. Therefore, the author recommends that regulatory authorities' e.g., SEC should ensure food and beverages firms have optimal level of debt to improve realization of accounting numbers.

**Keywords:** Conditional accounting conservatism; Debt earnings management

### Introduction

Debt contract is among the most important sources of conditional conservatism. The demand for conservative reporting flows from the agency cost of resolving uncertainty in the principal-agent setting. According to Watts, conservatism is an important mechanism that resolves agency cost. Managers have incentive to inflate accounting numbers in the statements of accounts where their performance is measured by earnings declared. Researchers who study accounting conservatism argue that conservative accounting limits a manager's incentive and ability to manipulate earnings thus yielding a more efficient contract. Watts argues that the contracting explanations for the existence of conservatism stem from the fact that the parties to the firm have asymmetric information, asymmetric payoffs, limited liability, and different time horizons [1].

According to Watts and Zimmerman, Positive Accounting Theory (PAT) suggests that the agency cost related to debt represent a specific setting that highlights the ambiguity about the role of conservatism. Agency conflicts exist between managers and creditors which give rise to concerns for creditors. These concerns are actions by firms that increase the risk or probability that the creditors will not see their investment returned.

However, this earnings management behaviour can be mitigated by employing conservative reporting. Accounting conservatism is the differential verifiability required for the recognition of accounting gains versus losses that generates an understatement of net assets [2]. Lafond and Watts suggest that conservative financial reporting act as a governance mechanism that reduces the managers' ability to manipulate and overstate financial performance and increases the firm's cash flows and value [3].

Conservative accounting reduces the tendency of managers to invest in negative NPV projects, making managers aware that they will not be able to defer the recognition of losses to the future and imposing greater costs to biasing financial reports upwards [4]. Thus, conservative accounting can be used as mechanism to motivate managers to cut losses earlier and abandon poorly performing projects. In addition, conservative accounting improves monitoring of debt contracts that can be written based on conservative numbers, triggering violations of debt covenants faster [1,4].

This paper investigates whether debt holders employs accounting conservatism in debt agreements with firm. Because of the benefits of accounting conservatism to debt holders, the author can expect negative relations between amount of debt and extent of conservative accounting practice. Also because management of the firm have possible short term tenure, adoption of income increasing accounting practice might be of detriment to the firm.

Another explanation for possible negative relation between debt and accounting conservatism is due to costs associated with violation of debt contracts. Managers tend to overstate profits so as not to violate debt agreements. Therefore increase in declared earnings serves as an assurance to debt holders on firms ability to pay interest and others costs associated with the debt agreements.

### Literature Review

There exist empirical studies which investigates the relation between debt capital and the demand for conservative accounting numbers. The extant literature mostly focuses on the managerial incentive effects of equity-based compensation and establishes a large body of evidence on whether managerial stock and stock option ownership impacts firm performance, shareholder and debt holder value, and specific corporate decisions and policies. Several recent studies, however, begin to examine managerial ownership of debt. Based on the voluntary disclosure of a sample of Fortune 500 companies from 1996 to 2002, Sundaram and Yermack conduct the first empirical investigation of inside debt by studying CEO pension plans. They document that for many CEOs the annual increase in the actuarial value of pension benefits represents a significant portion of their total compensation. In particular, for CEOs aged between 61 and 65, the pension-related compensation is on average 40% larger than the base salary and 23% of the size of equity-

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based pay. They also find that CEOs with larger pension values take less risk as captured by a distance-to-default measure [5].

More research follows after the SEC adopted in 2006, enhanced disclosure requirements that made systematic data on executive pensions and deferred compensation available. Wei and Yermack investigate stockholder and bondholder reactions to initial disclosures of CEO inside debt holdings in early 2007. They find that upon revelation of large inside debt positions, bond prices increase, stock prices decrease, and the volatility of both types of securities declines [5].

Tung and Wang focus on banks and find that inside debt holdings by bank CEOs are negatively related to bank risk taking during the Global Financial Crisis [6]. Wang, Xie and Xin study the effects of inside debt on terms of syndicated loans. They show that loans made to firms with larger CEO inside debt positions are associated with lower yield spreads, smaller lending syndicates, fewer covenant restrictions, and less collateral requirement, especially when the expected agency costs of debt are high. Overall, the empirical evidence on inside debt supports the view that managerial debt holdings align the incentives of managers and debt holders and alleviate debt holder concerns about expropriation, thereby reducing agency costs of debt [7].

Sanjay empirically test the framework for the agency cost related to debt contracts as a specific setting that isolates the demand for conservatism in financial reporting. That is, if demand for conservatism for debt contracts indeed increases with the agency cost related to debt, does this suggest that the preference for neutrality leads to less effective contracting? It was argued that debt holders can engage in firm specific contract, and therefore may not require firms to be conservative with respect to the recognition of good news relative to bad news. From the empirical examination of Positive Accounting Theory their results do not support the notions that conservatism is an undesired characteristic of financial reporting. Results show that high agency cost related to debt contracts result in higher demand for conservative accounting. This results hold after controlling for other incentives for conservatism like litigation, regulation and taxation. Results suggest that conservatism is a cost-effective contracting mechanism.

Wang, Xie and Xin investigate the relation between accounting conservatism and managerial ownership of debt in the form of deferred compensation and pension benefits [7]. They argue that since accounting conservatism arises as an important mechanism to address the agency conflicts between shareholders and debt holders and reduce agency costs of debt, debt holders tend to demand more conservative financial reporting at firms with more serious shareholder-debt holder conflicts. Also, managerial ownership of debt, on the other hand, aligns managers "incentives more closely with those of debt holders and reduces their incentives to expropriate debt holders on shareholders" behalf. That is, facing lower expropriation risk, debt holders demand less accounting conservatism. Consistent with the study hypothesis, they found significant evidence of less conservative financial reporting at firms where CEOs have accumulated more deferred compensation and pension benefits. The negative relation is more pronounced in firms with higher leverage, less tangible assets, higher bankruptcy risk, and more growth options, i.e., firms characterized by higher expected agency costs of debt. Their result is robust to correcting for potential endogeneity of managerial ownership of debt and to using a number of alternative accounting conservatism measures. The results also show that debt holdings by a firm's CFO and its top management team reduce accounting conservatism as well.

## Research Methodology

The purpose of this study is to examine the effects of debt on conservative accounting. This study therefore employs a descriptive and correlational research design using panel data. The data for this study are purely secondary data derived from the annual reports of sampled firms obtained online. The author utilizes the multiple regression analysis in estimating the hypothesis of the study.

## Population and sampling

The population of this study comprises of all food and beverages firms listed on the Nigerian stock exchange as at 31st of December 2011 which are sixteen. For the purpose of this study, census strategy is adopted. In view of the objectives of this study, certain criteria have been satisfied by firms included for the final analyses. Four firms were eliminated for not being listed on the Nigerian stock exchange prior to or as at 31<sup>st</sup> December 2003. Firms that its shares were not constantly traded are six and were eliminated. In line with Ahmed and Duellman, a firm was eliminated for inadequate information on directors leaving a sample of five firms for the study [8].

**Variables measurement:** The dependent and independent variables of this study is measured as follows:

### Asymmetric Timeliness (AT) Measure of Accounting Conservatism:

Accounting Conservatism Basu is the first to operationalise accounting conservatism in the form of asymmetric timeliness of earnings of earnings. Basu used a regression of annual earnings on returns, which is based on differential reaction of good and bad news in earnings. He used stock prices as a proxy for good and bad news [2]. Since the sensitivity of bad news in earnings is reflected timelier than good news, he predicted a higher association between earnings and returns when returns are negative than when returns are positive. The Basu asymmetric timeliness of earnings is thus:

$$E_{it}/P_{it-1} = \beta_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 R_{it} * D_{it} + \epsilon_{it} \quad (1)$$

However, the Basu is based on the assumption of efficient market hypothesis using change in stock market prices as proxies for good news and bad news, respectively. Following the shortcomings of the Basu model, Ball and Shivakumar developed asymmetric accrual to cash flow measure (AACF) which is based on purely accounting data [2,4].

This measure is given as:

$$ACC_{it} = \alpha_0 + \beta_0 DCFO_{it} + \beta_1 CFO_{it} + \beta_2 DCFO_{it} CFO_{it} + \epsilon_{it} \quad (2)$$

The difference between the two models above is that while Basu's model uses stock return as proxy for economic news, the AACF model uses operating cash flow. As regards the response variable, Basu's model uses total earnings while Ball and Shivakumar opines that conservatism only affects the accrual component of earnings [4].

In relation to the AACF model, Cong, Fei and Xiangang observed that firms may not report negative cash flows within the period of the study. Their study utilized cash flow changes as a proxy for economic news with positive (negative) cash flows changes representing good (bad) news, respectively [9].

This study therefore estimates the augmented Ball and Shivakumar (2006) in line with Cong, Fei and Xiangang (2010) as:

$$ACC_{it} = \alpha_0 + \beta_0 \Delta CFO_{it} + 1 DCFO_{it} + 2 \Delta CFO_{it} DCFO_{it} + \epsilon_{it} \quad (3)$$

**DEBT:** This is measured as the ratio of the total debt (long term and short term) to total assets [8].

Variables	Coefficients	T values	Sig
CONSTANT	0.143	1.335	0.193
DCF	-1.094	-1.216	0.234
DUM	.078	0.534	0.598
DCFDUM	2.938	2.340	0.027
DEBT	-.206	-1.060	0.298
DEBTDCF	0.921	0.789	0.437
DEBTDUM	-.083	-.320	0.751
DEBTDCFDUM	-3.870	-2.280	0.031
Adjusted R-Square	0.298		
F-Statistics	3.059		0.017
Durbin-Watson	0.971		

**Table 1:** Regression of Ball and Shivakumar Model for DEBT and Accounting Conservatism.

This study therefore incorporate debt into stage three of the augmented Ball and Shivakumar model in line with Cong, Fei and Xiangang [9], the author have;

$$ACC_{it} = \alpha_0 + \beta_1 \Delta CFO_{it} + \beta_2 DCFO_{it} + \beta_3 \Delta CFODCF_{it} + \beta_4 DEBT_{it} + \beta_5 DEBT \Delta CFO_{it} + \beta_6 DEBTDCFO_{it} + \beta_7 DEBT \Delta CFODCF_{it} \quad (4)$$

In the model above,  $\beta_1$  and  $\beta_2$  represents the coefficient for good and bad news respectively.  $\beta_3$  measures the asymmetric timeliness of bad news (losses) being reflected in accruals relative to good news (gains). The higher  $\beta_3$  is, the higher the degree of conservatism and the coefficient  $\beta_7$  captures the effect on accounting conservatism of debt. All other variables are defined below

$ACC_{it}$  = total accruals estimated as earnings before extraordinary items plus depreciation minus cash flows from operations scaled by total assets

$\Delta CFO_{it}$  = change in cash flow from operations at year end scaled by total assets.

$DCFO_{it}$  = Dummy variable equals to one if  $\Delta CFO_{it}$  is negative and zero otherwise.

$DEBT$  = Ratio of total debt to total assets

## Results Discussion

The table below shows the result of our regression of the

model relating board characteristics and Accrual measurement of conservatism (Table 1).

Our result shows that the coefficient for asymmetric timeliness of earnings represented by DCFDUM is positive (0.2938) which is statistically significant at 5%. This implies accounting practice in Nigeria listed food and beverages firms is conditionally conservative. That is management of listed food and beverages firms in Nigeria incorporate bad news into earnings than good news.

Our variable of concern is the coefficient of responsiveness of debt to conditional accounting conservative practice represented by DEBTDCFDUM. The coefficient is negative and statistically significant, which implies that the higher the debt, the less conditionally conservative the accounting practice listed food and beverages firms in Nigeria. That means that with lower debt values, managers incorporate bad news more into earnings than good news. Debt and bond holders demand that all possible future losses with higher probability values of occurrence are incorporated into earnings than possible future losses. Therefore, the more debt holders influence firms' financial decision, the more the account becomes conservative.

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