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Factors Affecting the Accounting Conservatism[1]: An Empirical Study on Listed Companies[2] New York Stock Exchange

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Abstract

The policy of prudence and caution or accounting conservatism is one of the most important accounting policies, which may significantly affect the process of preparing financial reports. Therefore, in this paper, we investigate the relationship between accounting conservatism and some potential variables which include; debt ratio, financial distress, institutional investment and managerial owbership. Dataset on companies from the 21 NYSE listed manufacturing industries between 2018 – 2020 was used to build the empirical model. The analysis results revealed that there is no evidence of positive association between accounting conservatism and financial

[1] There are many factors that affect conservatism, in this study I'm going to concentrate on studying the following factors affecting Conservatism:

- Type Of Audited Report
- Profitability
- Debt Ratio
- Ownership Dispersion
- Institutional Investment
- Ownership Percentage Of Board Members
- Company Size

[2] Firms will be selected based on the availability of data of the previously mentioned influencing factors

distress. However, there is significant positive association between accounting conservatism and debt ratio, institutional investment and mamgerial ownership.

Key words: *Accounting, Conservatism, New York Stock Exchange*

Introduction:

The accounting conservatism concept was controversial[3] at the turn of last century and is still until now .One characteristic of higher quality accounting information is accounting conservatism, which has been a characteristic of accounting information for over 500 years (Ball R. et al., 2008). Today, in the middle of the waves of skepticism regarding financial reports, adherence to this principle became a distinguishing aspect for companies with reference to the transparency of their financial reports and a standard for classifying countries according to adherence to accounting principles (Dietrich, J. et al., 2007).

Beside that; The policy of prudence and caution or accounting conservatism is one of the most important accounting policies, which may significantly affect the process of preparing financial reports. From this point of view, the interest in this concept has increased recently and it has become a basic requirement at the present time. Whether on the part of investors in the market or those based on setting accounting standards as a result of some opportunistic practices carried out by corporate management. Including profit management practices in the so-called unconservative accounting, which It is completely incompatible with the concept of accounting conservatism (Garcia L. et al, 2014).

[3] The debate surrounding accounting conservatism stems in part from confusion over the definitions and measurements of accounting conservatism. A number of literature has discussed this controversy in detail, such as the study of ***Xie, Yuying. (2015). Confusion over Accounting Conservatism: A Critical Review. Australian Accounting Review***.

Therefore, accounting conservatism may increase the effectiveness of contracts concluded between different parties, such as indebtedness contracts and administrative incentive contracts, which leads to a reduction in agency problems between those parties and a reduction in the value of the company. On the work of bias in accounting information, especially the profit on which the control process depends in those contracts, which increases its effectiveness in performing the role.

Accordingly, this limits the company's management's ability to engage in opportunistic behavior through which it achieves its personal interests at the expense of the interests of other parties. This provides protection for investors and ultimately leads to an increase in the additional media content of profits prepared on an accrual basis compared to the net cash flow from businesses. The main problems that this study discusses is represented in the following questions:

- What is the level of accounting conservatism in the financial statements of companies?
- What are the factors that affect the level of accounting conservatism in the financial statements of industrial companies listed in New York Stock Exchange

And to identify those problems, some specific factors will be studied and discussed such as (type of audited report, profitability, debt ratio, ownership dispersion, institutional investment, ownership percentage of board members, and company size)

The importance of the study is that it will contribute significantly to improving financial analysts' predictions of the company's profit. It will also help to identify the motives most affecting the accounting conservatism in the financial statements in New York Stock Exchange; Which may help accounting standard-setters and other

regulators to identify the extent of accounting conservatism practiced by American companies and the degree of change in accounting conservatism over time.

Literature review and hypothesis development

Debts and accounting conservatism

In general, accounting conservatism is the tendency of an accountant to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses. It has a long history of influence on financial reporting (Basu, 1997). Debts have ambiguous effects, such as providing conservatives with leverage.

A long-term debt agreement known as a debt convenant is identified using the debt equity hypothesis, which is part of positive accounting theory. The theory states that the higher a firm's debt to equity ratio, the tighter its loan arrangement is, the more likely it is that it will be breached, and the more expensive it will be if a technical breakdown occurs. Higher debt also forces managers to utilize accounting techniques that boost profitability to win over creditors. According to the agency hypothesis, there will be a conflict of interest because managers and creditors have distinct interests. Creditors typically expect that a business with significant revenues can pay off its debts on schedule. However, if managers boost profits to win over creditors, it will be challenging for the business itself if the business is experiencing financial decline. In terms of the company's ability to pay its debts, it will also be detrimental to the creditors.

Due to the potential threat to the company's survival posed by high debt levels, the company will exercise greater caution. The creditor will also have a stronger right to monitor and know how the company's operations and accounting are being carried out. The expanded rights will lessen the informational disparity between business managers and creditors. This is necessary because the creditor needs to know how much security has been provided for any refunds made to the business. Additionally,

the creditor is interested in seeing net assets distributed rather than higher earnings going to managers and shareholders and asset financing. As a result, the business will practice conservative accounting since managers find it challenging to keep information from creditors. Leverage has a favorable impact on accounting conservatism, according to research by Tosi & Paidar (2015), Geimechi & Khodabakhshi (2015), and Nikolaev (2010).

H_1: Leverage has a positive effect on accounting conservatism.

Financial distress and accounting conservatism

A prudential concept known as conservatism is used when businesses encounter an uncertain environment. This makes businesses more cautious when dealing with challenging financial situations. Due to the volatility of economic activity and business, the conservatism concept that businesses adopt to be careful when dealing with unpredictable economic events will motivate managers to provide prudential reports that will be beneficial to all readers of financial statements. According to the signalling hypothesis, the sharing of information by managers who acknowledge low profitability can lessen disputes between managers and shareholders because managers are believed to provide information honestly and prudently (Kao & Sie, 2016). According to study by Kao & Sie (2016), the degree of financial distress influences accounting conservatism in a favorable way.

H_2: There is relation between the Financial distress and accounting conservatism

Institutional investment and accounting conservatism

Institutional investment proxied by Capital Asset to Book Value of Asset (CAPBVA) is a prevalent element determining the relationship between managerial ownership and asymmetric timing of profit as a proxy for conservatism, according to Lafond & Roychowdhury (2008). According to the agency hypothesis, there is agency conflict because managers and stockholders have conflicting interests. One strategy to lessen the agency conflict that is influenced by investing choices is conservatism. In

an effort to address agency issues between managers and shareholders, the role of managers will change as a result of the differences in how managers define institutional investment. The market to book ratio will be higher as a measure of accounting conservatism the larger the institutional investment. In contrast, as a measure of accounting caution, the market to book ratio will be smaller the smaller institutional investment.

According to the signal theory, this occurs because the market responds favorably to the company's expansion, which serves as a signal to customers and stockholders that stock prices will rise as well. This stock price will raise institutional investment value, which translates to a higher market-to-book ratio—a proxy for accounting conservatism. Institutional investment has an impact on accounting conservatism, according to research by Putra & Subowo (2017), and Murwaningsari & Rachmawati (2017).

H_3: Institutional investment has a positive effect on accounting conservatism

Managerial ownership and accounting conservatism

According to agency theory, conflicts of interest between shareholders as the principals and management as agents lead to agency difficulties. A policy of accounting conservatism might be used to lessen the agency problem inside a corporation. Positive accounting theory's bonus plan assumptions can be explained by managerial ownership. The manager will receive the appropriate bonus if the corporate goal is met.

Due to managers' manipulation of earnings in order to receive a bonus, the corporate financial report will be less cautious as a result. In any case, management has a tendency to disclose more cautious earnings if they own more of the company than other investors. Since managers have a strong sense of ownership in the business,

they are more motivated to grow and expand it than to focus on the bonuses they receive for hitting profit targets. The conservative approach will result in a hidden reserve that is sizable enough to boost business investment. The assets with the lowest value are those whose market value exceeds their book value. It can mean that investors and the market will see this positively. According to La-fond and Roychowdhury (2008), Shuto and Takada (2010), Putra and Subowo (2017), Eersteling (2016), and Dewi & Suryanawa (2014), managerial ownership influences accounting conservatism in a favorable way.

H_4: Managerial ownership has a positive effect on accounting conservatism.

Research Method

For the years 2018 through 2021, an annual report of companies listed on the US Securities Exchange Commission (SEC) served as the secondary data source for this quantitative study.

Measurement of Accounting conservatism and independent variables

Accounting conservatism is the research's dependent variable. According to Ruch & Taylor (2015), accounting conservatism refers to accounting practices or tendencies that cause the accounting net asset value to be skewed lower than the economic net asset value. Conservatism is also a responsible response to uncertainty in order to make sure that the risks and uncertainties present in business situations are properly taken into account. Therefore, conservatism requires using the less optimistic estimate when two estimates of sums to be received or paid in the future are roughly equally likely. Conservatism is defined as reporting the greatest alternative value for obligations while providing the lowest alternative value for assets (Ruch & Taylor, 2015). We select the market to book value ratio as our indicator of accounting conservatism because it reflects market value. Stronger market to book value reflects a company's greater accounting conservatism. Conservatism causes the book value of

stock to be understated in comparison to the equity market value. Market to book value equity ratios will be higher for businesses with a high level of accounting conservatism (Ahmed & Duellman, 2007).

The Independent variable in this research are debts, financial distress, institutional investment and managerial ownership. Table 1 summarizes the proxies used to measure the variables in this paper.

Variables	Measurement	Reference
Accounting conservatism (AC)	$Market\ to\ book\ ratio = \frac{Market\ value\ of\ shares}{Book\ value\ of\ shares}$	Hajawiyah et al. (2020)
Debt (LEV)	$Leverage = \frac{Total\ Debt}{Total\ Asset}$	Hajawiyah et al. (2020)
Financial distress (FD)	$Z = 0.717X_1 + 0.847X_2 + 3.107X_3 + 0.420X_4 + 0.998X_5$ where X1 = Working Capital/Total Assets; X2 = Retained Earnings/Total Assets; X3 = Earnings before Interest and Taxes/Total Assets; X4 = Book value of equity/Book value of total liabilities, X5 = Sales/Total Assets; Z = Overall Index.	Altman et al. (2017)
Institutional Investment (CAPBVA)	Capital Asset to Book Value of Asset (CAPBVA) = Capital Asset / Book Value of Asset	Sugiarto & Fachrurrozie (2018)
Managerial ownership (MO)	MO = Number of shares hold by management / Number of shares outstanding	Hajawiyah et al. (2020)

The final model is given by

$$AC_{it} = \beta_0 + \beta_1 LEV_{it} + \beta_2 FD_{it} + \beta_3 CAPBVA_{it} + \beta_4 MO_{it} + e$$

where AC_{it} is accounting conservatism, β_0 is the overall model intercept, β_1 is the effect of leverage or debt on accounting conservatism, β_2 is the effect of financial distress (FD) on accounting conservatism, β_3 is the effect of institutional investment on accounting conservatism, and β_4 is the effect of managerial ownership on accounting conservatism.

Sample and data

The dataset was extracted from Compustat - WRDS (Fundamental (annula) and Financial Ratios) for the period 2018- 2021. The dataset represents firms listed on the New York Stock Exchange Commission for both industrial companies products and services. The initial samples consists of 46,657 observations over the period. The final sample after cleaning of frims with missing information and restriction to manufacturing industries only reduced the total sample to 16,859. Table 1 summarizes the number of sampled companies across various industries over the studied period.

Results

Table 2 presents the accounting conservatism measures across various industries. The results showed that on average, the least conservative industry of those selected is the Textile Product Mills while the most conservative industry is Beverage and Tobacco product.

Table 3 presents the trend in accounting conservatism over the 4 years reviewed. On average, there is no trend in accounting conservatism as the average revolves around 7 over the years for all industries.

Table 1: Sampled manufacturing industries used in the analysis

NAICS Industry code	NAICS Industry Description	n
311	Food	497
312	Beverage and Tobacco Product	204
313	Textile Mills	48
314	Textile Product Mills	36
315	Apparel	212
316	Leather and Allied Product	108
321	Wood Product	100
322	Paper	217
323	Printing and Related Support Activities	64
324	Petroleum and Coal Products	195
325	Chemical Manufacturing	6824
326	Plastics and Rubber Products	197
327	Nonmetallic Mineral Product	118
331	Primary Metal	278
332	Fabricated Metal Product	556
333	Machinery	1177
334	Computer and Electronic Product	3336
335	Electrical Equipment, Appliance, and Component	524
336	Transportation Equipment	899
337	Furniture and Related Product	214
339	Miscellaneous	1055

Table 2: Descriptive summary of Accounting conservatism across various industries

NAICS Industry Description	Minimu	Mean	SD	Maximu

	m			m
Food	0.59	5.08	13.98	204.20
Beverage and Tobacco Product	0.83	10.68	13.25	90.91
Textile Mills	0.77	1.78	0.95	3.93
Textile Product Mills	0.23	1.26	0.79	2.58
Apparel	0.18	4.12	6.08	37.20
Leather and Allied Product	0.73	4.04	4.34	19.95
Wood Product	1.28	3.83	3.68	17.01
Paper	0.08	4.13	8.76	51.55
Printing and Related Support Activities	0.70	1.55	0.58	3.00
Petroleum and Coal Products	0.44	4.05	20.04	163.79
Chemical Manufacturing	0.05	8.48	30.28	1000.00
Plastics and Rubber Products	0.26	8.22	23.14	166.67
Nonmetallic Mineral Product	0.23	3.44	3.16	17.01
Primary Metal	0.27	1.99	1.81	11.65
Fabricated Metal Product	0.29	5.54	25.64	333.33
Machinery	0.12	4.17	9.64	166.67
Computer and Electronic Product	0.10	7.77	23.72	500.00
Electrical Equipment, Appliance, and Component	0.08	8.94	34.35	414.06
Transportation Equipment	0.27	4.72	9.73	102.27
Furniture and Related Product	0.19	6.60	23.81	200.00
Miscellaneous	0.32	6.55	10.26	126.17

Table 3: Descriptive summary of Accounting conservatism across the years studied

Year	Minimum	Mean	SD	Maximum
2018	0.23	7.19	30.33	500.00
2019	0.05	6.79	19.97	500.00
2020	0.05	7.23	26.13	1000.00
2021	0.05	7.32	25.79	1000.00

Table 4 presents the descriptive summary of each of the variables used in the analysis. Table 5 & 6 presents the summary of the panel regression analysis for the association between accounting conservatism and leverage, financial distress, institutional investment and managerial ownership. Of the four targeted hypotheses, only one is rejected and that is the relationship between financial distress and accounting conservatism. While authorslike Hajawiyah et al. (2020) had found a positive association between between financial distress and accounting conservatism, we unable to found a strong evidence of increase in accounting conservatism as a result of increase in financial distress ($\beta = 0.004$; 95% CI= -0.024, 0.031). On the other we are able to establish a positive association between accounting conservatism and the three other variables (p <.001). For debt ratio and accounting conservatism, we observed a positive association between leverage and accounting conservatism ($\beta = 7.304$; 95% CI= 6.045, 8.558). Similarly, for institutional investment proxied by CAPBVA and accounting conservatism, we observed a positive association between CAPBVA and accounting conservatism ($\beta = 8.999$; 95% CI= 7.307, 10.691). Also, for managerial ownership and accounting conservatism, we observed a positive association between managerial ownership and accounting conservatism ($\beta = 2.368$; 95% CI= 0.637, 4.099).

The overall model significance was presented in the full model analysis showing the year and industry fixed effect in table 7. We observed that the fitted

model is adequate, however the power of the model captured by the R^2 indicated that only 2% of the variation in accounting conservatism was explained by the variables in the model.

Table 4: Descriptive summary of Accounting conservatism (AC), Levrage (LEV), Financial Distress (FD), Capital Asset to Book Value of Asset (CAPBVA), Managerial Ownership (MO) across various industries and years studied.

	n	Minimum	Mean	SD	Maximum
AC	16859	0.05	7.11	24.29	1000.00
LEV	16859	0.00	0.22	0.33	24.30
FD	16859	-1338.94	-0.09	14.47	55.54
CAPBVA	16859	0.00	0.61	0.26	1.00
MO	16859	0.00	0.08	0.22	3.98

Table 5: Regression analysis of Accounting conservatism (AC) on Levrage (LEV), Financial Distress (FD), Capital Asset to Book Value of Asset (CAPBVA), and Managerial Ownership (MO).

	Estimate	Std. Error	t value	Sig.
(Intercept)	0.750	1.591	0.471	0.638
LEV	7.301	0.641	11.391	< .001
FD	0.004	0.014	0.257	0.797
CAPBVA	8.999	0.863	10.427	< .001
MO	2.368	0.883	2.681	0.007

Table 6: Hypothesis testing results of Accounting conservatism (AC) on Levrage (LEV), Financial Distress (FD), Capital Asset to Book Value of Asset (CAPBVA), and Managerial Ownership (MO).

	Hypothesis	β	Sig.	Decision
H_1	Leverage has a positive effect on accounting conservatism.	7.301	< .001	Accepted
H_2	Financial distress positively affects accounting conservatism	0.004	0.797	Rejected
H_3	Institutional investment has a positive effect on accounting conservatism	8.999	< .001	Accepted
H_4	Managerial ownership has a positive effect on accounting conservatism.	2.368	0.007	Accepted

Table 7: Full panel regression analysis of Accounting conservatism (AC) on Levrage (LEV), Financial Distress (FD), Capital Asset to Book Value of Asset (CAPBVA), and Managerial Ownership (MO) correcting for year and industry fixed effects

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	0.750	1.591	0.471	0.638
LEV	7.301	0.641	11.391	< .001
FD	0.004	0.014	0.257	0.797
CAPBVA	8.999	0.863	10.427	< 0.001

MO	2.368	0.883	2.681	0.007
Year Fixed Effects				
2019	-1.035	1.195	-0.866	0.387
2020	-0.827	1.195	-0.692	0.489
2021	-0.693	1.201	-0.577	0.564
Industry Fixed Effects				
Beverage and Tobacco Product	4.162	2.006	2.075	0.038
Textile Mills	-4.969	3.648	-1.362	0.173
Textile Product Mills	-5.451	4.159	-1.311	0.190
Apparel	-3.257	1.988	-1.639	0.101
Leather and Allied Product	-3.293	2.567	-1.283	0.199
Wood Product	-1.734	2.641	-0.657	0.511
Paper	-1.448	1.961	-0.738	0.460
Printing and Related Support Activities	-4.347	3.199	-1.359	0.174
Petroleum and Coal Products	-1.458	2.042	-0.714	0.475
Chemical Manufacturing	0.484	1.167	0.414	0.679
Plastics and Rubber Products	1.966	2.032	0.967	0.333
Nonmetallic Mineral Product	-2.681	2.467	-1.087	0.277
Primary Metal	-4.134	1.808	-2.286	0.022
Fabricated Metal Product	-0.716	1.491	-0.480	0.631
Machinery	-2.447	1.300	-1.882	0.060
Computer and Electronic Product	0.784	1.180	0.664	0.507
Electrical Equipment, Appliance, and Component	1.954	1.523	1.284	0.199
Transportation Equipment	-2.077	1.356	-1.531	0.126
Furniture and Related Product	0.185	1.975	0.093	0.926
Miscellaneous	-0.281	1.326	-0.212	0.832

$\boldsymbol{R^2}$	0.019
Adjusted $\boldsymbol{R^2}$	0.017
$\boldsymbol{F; df = (27, 16831)}$	11.95
Model p-value	<.001

Conclusion

The objective of the paper was to investigate the association between accounting conservatism and some potential variables which include; debt ratio, financial distress, institutional investment and managerial owbership. The panel analysis using the NYSE listed manufacturing industries accounting statement between 2018 – 2020 revealed that there is no evidence of positive association between accounting conservatism and financial distress. However, there is significant positive association between accounting conservatism and debt ratio, institutional investment and mamgerial ownership. The study is limited in terms of model power as the variables contributed low in explaining the variation in accounting conservatism. Thus, future study should include control variables while building similar model for explaining accounting conservatism.

1. Using word relationship it is for human not for papers.
2. Table 2- We can see the median to see the number of high accounting conservatism. It is not rational that beverages has higher than electricical.
3. H2- Becarfull to present this hypothsis, when the company in traouble how to
4. If you want to establish causality by state the effect, you need to do difference in difference analysis, but simple regression can only show association (Using effect on the tables is strong and does not fit our test because it needs clarifcations regard the aafect).

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