

Descriptive Analysis Stock Price with Zmijewski Bankruptcy Model to Total Assets on Stock Prices

Amir Indrabudiman

Doctoral Student at Universitas Padjadjaran, Lecturer at Universitas Budi Luhur, Indonesia

ABSTRACT

The purpose of this study is to see how Descriptive Analysis Stock Price With Zmijewski Bankruptcy Model Total Assets on stock prices. The research was conducted on companies in the ceramics, glass and porcelain sector whose shares are in Indonesia Stock Exchange (IDX) for 2010-2014 period. The method used in this research is descriptive analysis. From the results of research that has been done concluded that the test results showed that there is no strong relationship between Stock Price by using Zmijewski Bankruptcy Model against Total Assets on stock prices.

Keywords: Analysis of Bankruptcy, Model Zmijewski, Share Price, The Company Ceramics.

I. INTRODUCTION

This case study took a sample of companies ceramics, glass and porcelain. Under these conditions, the study titled: Descriptive Analysis Stock Price With Zmijewski Bankruptcy Model Total Assets on stock prices

Research purposes

The purpose of this study to find out:

Descriptive Analysis Stock Price With Zmijewski Bankruptcy Model Total Assets on stock prices

II. LITERATURE REVIEW

Basu (1997), (Biddle et al., 2011). Ahmed and Duellman (2002), Lara et al. (2011), (Ball, 2004) and Li (2010) define conservatism as "differential verifiability required for the recognition of profits versus losses, in the sense of underestimating profits and assets." Seeing the above definition makes conservatism a conditional one. In a study done by some of the authors above, conservatism has been divided into two kinds: 1, unconditional conservatism (pre-event) that is independent of a news. The pre-event conservatism is based on accounting standards that take into consideration the advantages independent of current economic news. An example can

be seen from the direct identification of advertising spending, research and development, even if future cash flows are expected to be positive, is the first type of conservatism. 2 ie the kind of post-event conservatism, which also relies on conservatism news, conditional conservatism and timely getting asymmetric. Post-event conservatism means timely recognition of bad news better news related to profit. Examples for this conservatism are the principle of minimum cost or market value, the abolition of ownership after carrying out a value reduction test, and asymmetric identification of possible losses versus possible profits, are both types of conservatism. Existing evidence suggests that accounting conservatism, increasing cash available by increasing cash flow and reducing cash out firmly argues that conservatism lowers capital costs by limiting radical investments and improving cash flow operations, leading to facilitate inter-finance organizations and accelerating access to Cash resources. That's a glimpse of conservatism in accounting.

Zmijewski Model

The formula used in this method is the result of the development or expansion in bankruptcy prediction studies, conducted by Zmijewski in 1983. By adding some validity financial ratios as detection tools

bankruptcy of the company, then Zmijewski develop the model becomes:

$$X\text{-score} = -4.3$$

Source: R Rulick Setyahadi (2012: 27)

Where:

X-Score = Overall Index or Score

= Earnings After Tax / Total Assets

= Total Debt / Total Assets

= Current Assets / Current Liabilities

Zmijewski (1984) stating that the company would face bankruptcy if the probability is if it is greater than 0.5, in other words, its value X is 0 therefore, the cut off values that apply in this model is 0. This means that a company that values X is larger than or equal to 0 is predicted to experience bankruptcy in the future. Conversely, a company that has a value of X is less than 0 is predicted not to be bankrupt.

III. RESEARCH METHODS

Data collection is done by reading books, journals and reports related to the issues discussed in this study. In this study, a public sector company selected ceramics, glass and porcelain listed on the Indonesia Stock Exchange in Jakarta.

Time, Object and Data Research

The research was done on time in June 2017. The data used in this study is secondary data, obtained from the Indonesia Stock Exchange period 2010 to 2014, and published on the Website Indonesia Stock Exchange through www.idx.co.id. Which became the object of the research is as follows: PT. Asahimas Flat Glass Tbk, PT. Arwana Citra Mulia Tbk, PT. Ceramic core Alamasri Industry Tbk, PT. Keramika Indonesia Tbk Association, PT. Mulia Industrindo Tbk, PT. Surya Toto Indonesia Tbk

Analysis Method

This study uses a descriptive analysis process data using Package Eviews version 8. Method.

IV. RESULTS AND DISCUSSION

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data.

Result for statistic descriptive analysis

Descriptive Statistics are used to present quantitative descriptions in a manageable form. In a research study we may have lots of measures. Or we may measure a large number of people on any measure. Descriptive statistics help us to simplify large amounts of data in a sensible way. Each descriptive statistic reduces lots of data into a simpler summary. For instance, consider a simple number used to summarize how well a batter is performing in baseball, the batting average.

Table 1 : Result Statistic Descriptive Analysis

	X1	X2	X3	Y
Mean	0.095210	0.454100	2.267633	5013.167
Median	0.103500	0.420500	1.554000	435.0000
Maximum	0.670000	1.107000	5.861000	50000.00
Minimum	-0.092000	0.079000	0.565000	75.00000
Std. Dev.	0.142814	0.256434	1.698924	11220.37
Skewness	2.020616	0.628828	1.022256	3.186983
Kurtosis	9.822321	2.831642	2.598956	12.24323
Jarque-Bera	78.59454	2.012552	5.426083	157.5809
Probability	0.000000	0.365578	0.066335	0.000000
Sum	2.856300	13.62300	68.02900	150395.0
Sum Sq. Dev.	0.591482	1.906997	83.70389	3.65E+09
Observations	30	30	30	30

Source : Proceed by author

Distributions may also be displayed using percentages. For example, you could use percentages to describe the :

1. Percentage of Stock Price With Zmijewski Bankruptcy Model different Total Assets on stock prices levels

2. Percentage of Stock Price With Zmijewski Bankruptcy Model different Total Assets on stock prices range

3. Percentage of Stock Price With Zmijewski Bankruptcy Model different Total Assets on stock prices of standardized test scores

Result Covariance statistic descriptive analysys

The sample covariance is a measure of the association between a pair of variables:

$s_{jk} = 0$ implies that the two variables are uncorrelated. (Note that this does not necessarily imply independence, we'll get back to this later.)

$s_{jk} > 0$ implies that the two variables are positively correlated; i.e., values of variable j tend to increase with increasing values of variable k . The larger the covariance, the stronger the positive association between the two variables.

$s_{jk} < 0$ implies that the two variables are negatively correlated; i.e., values of variable j tend to decrease with increasing values of variable k . The smaller the covariance, the stronger the negative association between the two variables.

Table 2 : Result covariance statistic descriptive analysys

Covariance Analysis: Ordinary				
Covariance				
Correlation				
t-Statistic				
Probability				
Observations	X1	X2	X3	Y
X1	0.019716			
	1.000000			

	30			
X2	0.007832	0.063567		
	0.221223	1.000000		
	1.200341	-----		
	0.2401	-----		
	30	30		
X3	0.018160	-0.289357	2.790130	

	0.077428	-0.687080	1.000000	
	0.410944	-5.003819	-----	
	0.6842	0.0000	-----	
	30	30	30	
Y	288.1544	-388.8161	1401.640	1.22E+08
	0.186024	-0.139793	0.076064	1.000000
	1.001835	-0.747049	0.403662	-----
	0.3250	0.4613	0.6895	-----
	30	30	30	30

Source : Proceed by author

Since this matrix is a function of our random data, this means that the elements of this matrix are also going to be random, and the matrix on the whole is random as well. When I say that this quantity is unbiased, what this means is that the mean of each element of that matrix is equal to the corresponding elements of the population.

The thing to note here is the correlation must lie between -1 and 1.

$$-1 \leq r_{jk} \leq 1$$

Therefore :

$r_{jk} = 0$ indicates, as you might expect, that the two variables are uncorrelated.

r_{jk} close to +1 will indicate a strong positive dependence

r_{jk} close to -1 indicates a strong negative dependence

V. CONCLUSION

Based on the findings of the data analysis the study now recommends the following: (1) the percentage value for the x to y variable is very small and the standard deviation value between the x-to-y variables is very small. (2) the value of the covariance for the variable x to y very is in the range of 0 to -1, so it can be concluded that there is no strong relationship between Stock Price With Zmijewski Bankruptcy Model Total Assets on stock prices.

VI. REFERENCES

- [1]. Ball, R. (2004). Daimler-Benz AG: Evolution of corporate governance from a code-law “stakeholder” to a common-law “shareholder value” system. In: Hopwood, A
- [2]. Biddle. Gary C, Mary L. Z. Ma, Frank M. Song (2011). Accounting Conservatism and Bankruptcy Risk. Faculty of Business and Economics The University of Hong Kong
- [3]. Callen, J. L., Chen, F., Dou, Y. and Xin, B., 2010b. Information Asymmetry and the Debt Contracting Demand for Accounting Conservatism. Working paper, University of Toronto.
- [4]. Givoly, D. and Hayn, C., 2000. The Changing Time-Series Properties Of Earnings, Cash Flows and Accruals: Has Financial Reporting Become More Conservative? *Journal of Accounting and Economics* 29, 287-320
- [5]. Hui, K. W., Morse, D. and Matsunaga, S., 2009a. The Impact of Conservatism on Management Quantitative Earnings Forecasts. *Journal of Accounting and Economics* 47, 192-207.
- [6]. Hutton, A.P., Marcus, A.J., Tehranian, H., 2009. Opaque financial reports, R2, and crash risk. *Journal of Financial Economics* 94, 67-86.
- [7]. Jin, L., Myers, C.S., 2006. R2 around the world: New theory and new tests. *Journal of Financial Economics* 79, 257-292.
- [8]. Kothari, S. P., Ramanna, K. and Skinner, D. J., 2010. Implications for GAAP from an Analysis of Positive Research in Accounting. *Journal of Accounting and Economics* 50, 246-248.
- [9]. Lara, J. M. G., Osma, B. G. and Penalva, F., 2010a. Conditional Conservatism and Cost of Capital. *Review of Accounting Studies*, forthcoming.
- [10]. Li, X., 2010. Accounting Conservatism and the Cost of Capital: International Analysis. Working paper, London Business School.
- [11]. Rezazadeh & Azad, (2008). The relationship between information asymmetry and conservatism in financial reporting, *Quarterly Survey of Accounting and Auditing*, Vol. 54.
- [12]. Soleymani, Gholamreza, (2010). Evaluate the efficiency of financial distress prediction models for Iranian companies, *Journal of Accounting*, Vol. 1, No. 2.
- [13]. Srivastava, A., Tse, S.Y., 2009. Timely Loss Recognition and the Early Termination of Unprofitable Projects. SSRN eLibrary.
- [14]. Watts, R., 2003. Conservatism in Accounting Part I: Explanations and Implications. *Accounting Horizons* 17, 207-21.

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