

FINANCIAL DISTRESS ANALYSIS OF FOOD AND BEVERAGE SUB SECTOR AT INDONESIAN STOCK EXCHANGE BASED ON SPRINGATE METHOD

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Abstract

Every company was founded by at least one or more persons. The more people that contribute to the formation of the company surely a lot of opinion will be considered in making a decision. But above all, they have the same thinking that is for profit. And when talking about the profits we can't escaped ourselves of talking about financial performance of the company. Financial performance really essential for the continuance of a company. Any investor who wants to see the performance of a company can look into the financial statement of the company. Investor is essential for every company since they are one way out for companies who want to develop a product or for those company who are experiencing financial problems. There are various ways to analyze the performance and health of a company. And bankruptcy model of Springate method are one of such models. The study used descriptive method and the data used were secondary data derived from the financial report of Manufacturing Companies of Food and Beverage Sub-Sector companies of year 2008 and 2013. The analysis of Springate shows that generally all companies have good financially performance or solvent and financially sound except for 3 companies in 2008, namely: AISA, INDF, and STTP. GGRM, HMSP and WIIM are solvent and does not have financial problems as the score given are below the standard of Springate Model.

Keywords: *Springate, Food and Beverage, Financial Distress*

INTRODUCTION

Every company was founded by at least one or more persons. The more people that contribute to the formation of the company surely a lot of opinion will be considered in making a decision. But above all, they have the same thinking that is for profit. And when talking about the profits we can't escaped ourselves of talking about financial performance of the company. Financial performance really essential for the continuance of a company. Any investor who wants to see the performance of a company can look into the financial statement of the company.

Investor is essential for every company (Tandelilin, 2010) since they are one way out for companies who want to develop a product or for those company who are experiencing financial problems. There are various ways to analyze the performance and health of a company. A company that are in need of a financial predictions are able to know the financial condition of the company through financial statement analysis, since financial statement depicted the performance of the company. The financial statements can indicate the condition of the company's performance. Through this analysis, one can pinpoint whether the company's allocated their funds and resources inappropriately. The effect can cause a decrease of the company financial performance. The condition stated is called financial distress (Sadgrove, 2005; Vickerz, 2006; Beaver, Correia, and McNichols, 2011, Pucsek, 2013). Any companies can experience financial difficulties to the level of financial distress. Even though the economy is stable, still some companies can also experiencing financial

distress problems. (Sadgrove, 2005; Vickerz, 2006; Altman and Hotchins, 2006). Financial distress experienced by the company will give concerns of various parties, both internal sectors such as: managers and employees, as well as external parties such company: investors and creditors (Husnan and Pudjiastuti, 2002; Brigham & Houston, 2010; Harahap, 2015).

Financial distress can be seen as the company have negative performance in their operating income and net income (Sawir, 2004; Brahmana, 2007). Liquidity problem also sign of financial distress (Hanifah, 2013, Fahmi, 2014, Hery, 2015, Ida & Santono, 2011). In year 2015 for instance, in Indonesia, there are companies that experiencing poor financial performance and moreover, almost bankrupt (Khumaini, 2015). In Indonesia Stock Exchange there are various sectors of industry. One of them is a manufacturing Sector which comprises of various sub-sectors. In this study, the research will examine the various sub sectors of manufacturing sector, namely the Food and Beverage sub-sector. There are 11 out 14 companies listed in the Indonesia Stock Exchange as food and beverage companies in the sub-sector for this research.

Table 1. Food and Beverage Companies

Code	Food and Beverage	Code	Food and Beverage
AISA	PT. Tiga Pilar Sejahtera Food, Tbk	PSDN	PT. Prashida Aneka Niaga, Tbk
CEKA	PT. Wilmar Cahaya Indoensia, Tbk	SKBM	PT. Sekar Bumi, Tbk
DLTA	PT. Delta Djakarta, Tbk	SKLT	PT. Sekar Laut, Tbk
INDF	PT. Indofood Sukses Makmur, Tbk	STTP	PT. Siantar Top, Tbk
MLBI	PT. Multi Bintang Indonesia Tbk	ULTJ	PT. Ultrajaya Milk Industry and Trading Company, Tbk
MYOR	PT. Mayora Indah, Tbk		

As Indonesia brimming with various issues and problems, one particular issues arise in terms financial downturn. In 2008, the world has experience world financial crisis that some said has occured in Indonesia. In 2013, there are also analysis on the condition of the nation at the time that have downturn in the ecobomy. It is interesting to look into the condition of the companies especially food and beverage companies that has impact in the day to day consumption of the society especially in Indonesia. Are the company able to cope with the situation or are they in financial distress. Following Altman in 1968, many researcher developed methods or ways to predict the occurrence of financial distress such as Springate in 1978 and Zmijewski in 1984. (Sadgrove, 2005; Vickers, 2006; Pucsek, 2013). Thus, based upon the description given above, this study then will analyze the Financial Distress of Food and Beverage Sub Sectors Companies Listed at Indonesia Stock Exchange using Springate Method.

METHOD OF THE STUDY

The study used descriptive method where the data used collected, analyzed and presented in a descriptive manner. The data used were secondary data derived from the financial report of Manufacturing Companies of Food and Beverage Sub Sector Companies of year 2008 and 2013. The sample used in the study was 11 out of 14 companies that are listed as companies listed at Indonesia Stock Exchange from Food and Beverage Sub Sector. Analysis was done using Springate method of S-Score with four financial ratios: working capital to total asset, earnings before interest and taxes to total assets, profit before tax to total current liabilities, and sales to total assets. The following is Springate method formula:

$$S\text{-Score} = 1.03X1 + 3.07X2 + 0.66X3 + 0.4X4$$

The assessment of Springate formula:

$S < 0.862$ Prediction is that company potentially experiencing financial difficulties and potentially going bankrupt.

$S > 0.862$ Prediction is that the company is solvent thus has sound financial performance

The analysis on the differences of Food and Beverage companies S-Score is done using paired sample t-test.

RESULT OF THE STUDY

PT. Tiga Pilar Sejahtera Food Tbk (AISA)

Food and Beverage sub-sector is one of the industrial sector listed at Indonesian Stock Exchange. There are 11 out of 14 companies listed in the sub sector in the study (see Table 1). The following Table 2 shows AISA Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 2. S-Score AISA

AISA	2008	2013	Springate	2008	2013
Asset	1,016,958	5,020,824	X1	-0.042	0.215
Liability	625,913	2,664,051	X2	0.16	0.275
Working Capital	-41,786	1,048,280	X3	0.205	0.533
EBIT	52,975	449,586	X4	0.192	0.323
EBT	112,976	613,246	S-score	0.515	1.346
Sales	489,172	4,056,735	Interpretation	Bankrupt	Solvent

Table 2 shows the results of S-Score of AISA in year 2008 and 2013. The results shows that in 2008 AISA can't cope with the financial crisis and have the result of analysis of Financial Distress and potentially Bankrupt. However, in year 2013 the result of S-Score is 1.346 above the standard 0.862 that means that the company is financially sound and healthy.

PT. Wilmar Cahaya Indonesia Tbk (CEKA)

The following Table 3 shows CEKA Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 3. S-Score CEKA

CEKA	2008	2013	Springate	2008	2013
Asset	604.642	1,069,627	X1	0.599	0.316
Liability	357.737	541.352	X2	0.214	0.248
Working Capital	351.914	328.084	X3	1,044	1,562
EBIT	42.124	86.553	X4	1,299	0.947
EBT	87.863	90.91	<i>S-score</i>	3,156	3,073
Sales	1,963,638	2,531,881	Interpretation	Solvent	Solvent

Table 3 shows the results of S-Score of CEKA in year 2008 and 2013. The results shows that in 2008 and 2013 CEKA result shows S-Score above the standard 0.862 2008 (3.156), and 2013 (3.073) that means that the company is financially sound and healthy.

PT. Delta Djakarta Tbk (DLTA)

The following Table 4 shows DLTA Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 4. S-Score DLTA

DLTA	2008	2013	Springate	2008	2013
Asset	698,297	867,041	X1	0.591	0.723
Liability	174,316	190,483	X2	0.518	1.269
Working Capital	400,615	608,896	X3	0.46	1.523
EBIT	117,738	358,396	X4	0.674	0.923
EBT	100,039	605,264	<i>S-score</i>	2.243	4.438
Sales	1,177,061	2,001,359	Interpretation	Solvent	Solvent

Table 3 shows the results of S-Score of DLTA in year 2008 and 2013. The results shows that in 2008 and 2013 DLTA result shows S-Score above the standard 0.862 2008 (2.243), and 2013 (4.438) that means that the company is financially sound and healthy.

PT. Indofood Sukses Makmur Tbk (INDF)

The following table 5 shows INDF Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 5. S-Score INDF

INDF	2008	2013	Springate	2008	2013
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Asset	39,594	78,093	X1	-0.043	0.171
Liability	184,486	39,72	X2	0.202	0.264
Working Capital	-1,664	12,993	X3	0.176	0.488
EBIT	2,6	6,718	X4	0.392	0.296
EBT	4,341	14,33	<i>S-score</i>	0.727	1.219
Sales	38,799	57,732	Interpretation	Bankrupt	Solvent

Table 2 shows the results of S-Score of INDF in year 2008 and 2013. The results shows that in 2008 INDF can't cope with the financial crisis and have the result of analysis of Financial Distress and potentially Bankrupt with S-Score of 0.727. However, in year 2013 the result of S-Score is 1.219 above the standard 0.862 that means that the company is financially sound and healthy.

PT. Multi Bintang Indonesia Tbk (MLBI)

The following table 6 shows MLBI Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 6. S-Score MLBI

MLBI	2008	2013	Springate	2008	2013
Asset	941,389	1,782,148	X1	-0.04	-0.009
Liability	597,123	794,615	X2	1.024	2.717
Working Capital	-36,331	-16,29	X3	0.337	1.319
EBIT	313,976	1,576,945	X4	0.563	0.799
EBT	286,286	2,283,604	<i>S-score</i>	1.884	4.826
Sales	1,325,661	3,561,989	Interpretation	Solvent	Solvent

Table 3 shows the results of S-Score of MLBI in year 2008 and 2013. The results shows that in 2008 and 2013 MLBI result shows S-Score above the standard 0.862 2008 (1.884), and 2013 (4.826) that means that the company is financially sound and healthy.

PT. Mayora Indah Tbk (MYOR)

The following table 7 shows MYOR Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 7. S-Score MYOR

MYOR	2008	2013	Springate	2008	2013
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Asset	2,922,998	9,710,223	X1	0.322	0.398
Liability	1,646,322	5,816,323	X2	0.288	0.429
Working Capital	915,052	3,753,153	X3	0.296	0.817
EBIT	274,07	1,356,073	X4	0.535	0.495
EBT	345,42	1,304,809	<i>S-score</i>	1.441	2.139
Sales	3,907,674	12,017,837	Interpretation	Solvent	Solvent

Table 7 shows the results of S-Score of MYOR in year 2008 and 2013. The results shows that in 2008 and 2013 MYOR result shows S-Score above the standard 0.862 2008 (1.441), and 2013 (2.139) that means that the company is financially sound and healthy.

PT. Prashida Aneka Niaga Tbk (PSDN)

The following table 8 shows PSDN Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 8. S-Score PSDN

PSDN	2008	2013	Springate	2008	2013
Asset	286,965	681,832	X1	0.36	0.232
Liability	150,807	264,232	X2	0.669	0.195
Working Capital	100,377	153,663	X3	0.493	1.239
EBIT	62,502	43,238	X4	0.994	0.751
EBT	42,051	56,942	<i>S-score</i>	2.516	2.417
Sales	713,114	1,279,553	Interpretation	Solvent	Solvent

Table 8 shows the results of S-Score of PSDN in year 2008 and 2013. The results shows that in 2008 and 2013 MYOR result shows S-Score above the standard 0.862: 2008 (2.516), and 2013 (2.417) that means that the company is financially sound and healthy.

PT. Sekar Bumi Tbk (SKBM)

The following table 9 shows SKBM Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 9. S-Score SKBM

SKBM	2008	2013	Springate	2008	2013
Asset	189,505	497,653	X1	-0.581	0.139
Liability	217,184	296,528	X2	0.136	0.483
Working Capital	-106,84	67,329	X3	0.203	1.72
EBIT	8,417	78,305	X4	1.19	1.042
EBT	62,383	146,58	<i>S-score</i>	0.948	3.384
Sales	563,956	1,296,618	Interpretation	Solvent	Solvent

Table 9 shows the results of S-Score of SKBM in year 2008 and 2013. The results shows that in 2008 and 2013 SKBM result shows S-Score above the standard 0.862: 2008 (0.948), and 2013 (3.384) that means that the company is financially sound and healthy.

PT. Sekar Laut Tbk (SKLT)

The following table 10 shows SKLT Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 10. S-Score SKLT

SKLT	2008	2013	Springate	2008	2013
Asset	201,003	301,989	X1	0.213	0.1
Liability	100,335	162,339	X2	0.113	0.169
Working Capital	41,626	29,396	X3	0.079	1.239
EBIT	7,367	16,598	X4	0.623	0.751
EBT	7,091	19,691	<i>S-score</i>	1.028	2.259
Sales	313,125	567,049	Interpretation	Solvent	Solvent

Table 9 shows the results of S-Score of SKLT in year 2008 and 2013. The results shows that in 2008 and 2013 SKBM result shows S-Score above the standard 0.862: 2008 (1.028), and 2013 (2.259) that means that the company is financially sound and healthy.

PT. Siantar Top Tbk (STTP)

The following table 11 shows STTP Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 11. S-Score STTP

STTP	2008	2013	Springate	2008	2013
Asset	626,75	1,470,059	X1	0.082	0.06
Liability	263,313	775,931	X2	0.018	0.298
Working Capital	50,142	85,275	X3	0.087	0.761
EBIT	3,678	142,799	X4	0.399	0.461
EBT	29,169	310,019	<i>S-score</i>	0.586	1.580
Sales	624,401	1,694,935	Interpretation	Bankrupt	Solvent

Table 11 shows the results of S-Score of STTP in year 2008 and 2013. The results shows that in 2008 and 2013 SKBM result shows S-Score above the standard 0.862: 2008 (0.586), and 2013 (1.580) that means that the company is financially sound and healthy.

PT. Ultrajaya Milk Industry and Trading Company Tbk (ULTJ)

The following table 12 shows ULTJ Springate Method S-Score that gives the financial condition of the companies. Springate used S-Score standard of 0.862 to differentiate companies that financially sound and companies that are potentially bankrupt.

Table 12. S-Score ULTJ

ULTJ	2008	2013	Springate	2008	2013
Asset	1,718,997	2,811,621	X1	0.228	0.341
Liability	1,135,324	796,476	X2	0.48	0.477
Working Capital	380,774	929,716	X3	0.39	0.812
EBIT	268,782	436,72	X4	0.317	0.492
EBT	250,723	423,195	<i>S-score</i>	1.415	2.122
Sales	624,401	1,694,935	Interpretation	Bankrupt	Solvent

Table 12 shows the results of S-Score of ULTJ in year 2008 and 2013. The results shows that in 2008 and 2013 ULTJ result shows S-Score above the standard 0.862: 2008 (1.415), and 2013 (2.122) that means that the company is financially sound and healthy.

Analysis of Data Differences

The differences of the Food and Beverage companies in their S-Score of year 2008 and 2013 was analyzed using paired-sample t-test. The following table 13 shows the paired results of the companies listed at Food and Beverage sub sector. The results shows that the S-Score of companies in 2013 are all above the standard 0.862 which means they are financially sound or healthy. On the other hand, on 2008, there are three companies that have S-Score below the standard 0.862, they are: AISA (0.515), INDF (0.727), STTP (0.586) which means they have potential to be bankrupt.

Table 13. S-Score ULTJ

Code	2008	2013
AISA	0.515	1.346
CEKA	3.156	3.073
DLTA	2.243	4.438
INDF	0.727	1.219
MLBI	1.884	4.826
MYOR	1.441	2.139
PSDN	2.516	2.417
SKBM	0.948	3.384
SKLT	1.028	2.259
STTP	0.586	1.58

ULTJ	1.415	2.122
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Table 14. Paired Sample t-test

Paired Samples Statistics									
		Mean	N	Std. Deviation	Std. Error Mean				
Pair 1	Year 2008	1.4963	11	.86112	.25964				
	Year 2013	2.6185	11	1.19494	.36029				

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Year 2008 & Year 2013	11	.568	.068

Paired Samples Test									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Year 2008 - Year 2013	-1.12218	.99975	.30144	-1.79382	-.45054	-3.723	10	.004

In analyzing the significant differences of the result of year 2008 and 2013 of Food and Beverage companies, the result shows that there is significant difference between S-Score of Food and Beverage Companies in Year 2008 and 2013 with $p = 0.004$ at $\alpha = 0.05$. The difference is because the difference in average S-Score in 2008 with 1.4963 and in year 2013 with 2.6185 which means the year 2013 has Food and Beverage Companies with better performance.

CONCLUSION

The study concluded that based on the results of the study the Food and Beverage Sub Sector has generally good financial performance in Year 2013. On the other hand, during the world financial crisis on 2008, out of 11 companies studied, only three companies that have performance below the standard given and have potential to be bankrupt, they are: AISA, INDF and STTP based on the S-Score score performance. Thus, Food and Beverage companies are then recommended based on the study for investors to invest. For the company itself, they can further use this method to assess their performance and bankruptcy level. The study also suggest further research using different method or different companies to analyzed.

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