The Implementation of E-Catalogue of BPJS Kesehatan: Are Pharmaceutical Companies in Indonesia Fit Enough?

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Abstract: This research aims at making analysis by using two financial distress predictive methods, namely Altman's and Grover's. The calculative outcomes of those two methods are then paired and compared with the condition of the increase of decrease in profit of the company and the condition of other companies throughout the research. The objects of research are all pharmaceutical companies registered to Bursa Efek Indonesia (Indonesia Stock Exchange) in 2014-2017. The research use data acquired from then pharmaceutical companies. The findings show that a number of companies are categorized within a grey and distress zone based on Altman's method. The Grover method, however, predicts that the majority of companies are in the category of distress during the period of research. This indicates that it is necessary for the BPJS to review the E-Catalogue program to keep pharmaceutical companies in Indonesia to survive and participate in the field of healthcare in the country.

1 INTRODUCTION

National Health Insurance (JKN, Jaminan Kesehatan Nasional) is still a hot topic in Indonesia. A number of policies by the National Social Security for Healthcare(BPJS Kesehatan, Badan Penyelenggara Jaminan Sosial Kesehatan) as the in-charge institution are still inviting pros and cons. Policies such as tiered reference (effective since September 22, 2018), Primary care physician (DLP, Dokter Layanan Primer), additional fees (Permenkes 51, 2018), and the E-Catalogue that put medicines in 'similar' price and other policies are still in question. Some of them are not well-run, and yet the BPJS keeps conducting them. The E-Catalogue is one of the policies that have a big impact on the field of healthcare in Indonesia due to the fact that patients, besides being dependent on doctors, rely strongly on the medicines themselves for their medication.

E-Catalogue is a program of medical supply for the people and is a system of electronic information related to available medicines from all pharmaceutical factories in Indonesia, along with their smallest price units. The medical supply is based on the number of consumers' demands (Nurdin, 2014). The prices offered in the E-Catalogue are also within the lowest or smallest

units, which is intended for the government to help patients who are in the membership of the BPJS. This policy may sound good for the patients, and the institution in charge of the JKN, but is it 'fit' enough for pharmaceutical companies in Indonesia?

In 2018 the committee of Indonesian Association of Pharmaceutical Companies (GP-Farmasi, Komite Gabungan Farmasi Indonesia) stated that the national industry was facing a slowdown. As relayed from Fauzia (2018), the Head of GP-Farmasi, it is known that the pharmaceutical industry growth in the last two years was even less than 5 percent. This is thought to be the impact of the implementation of E-Catalogue by the BPJS Kesehatan in 2013. The medical consumption of people showed growth; however, it was not followed by sales of pharmaceutical products, which, on the contrary, was decreasing. The low fixed rate of the price is considered to be a major factor that caused the declining sales.

Moreover, the Head of the GP-Farmasi in Indonesia suggested that 300 out of 900 medical supplies available in the E-Catalogue cannot be offered to the people due to their too low prices. The Government of Procurement Goods/Services (LKPP) is considered to have made a mistake in calculating the cost of medical production by pharmaceutical companies. This statement is backed

by the data coming from multiple pharmaceutical companies in Indonesia, such as PT Kalbe Farma, Tbk, and PT. Kimia Farma, Tbk showing that they had experienced a slowdown of their business growth in the year of 2015 – 2017 (Fauzia, 2018).

This is a serious issue considering that pharmaceutical companies in Indonesia were able to supply as many as 70 percents of domestic medical demands in 2017 (Ministry of Industry of the Republic of Indonesia, 2017). If the E-Catalogue is continued with disregard of the pharmaceutical companies' financial condition, it is possible for these companies to face bankruptcy. It is not difficult to imagine the bitter consequence if medical supplies for patients in Indonesia are declining or, for worse, disappearing. It is not impossible for the patent medicines that are not produced as generics to vanish from the Indonesian market. The case could get worse if all the medical supplies are put in the E-Catalogue with prices decided by the LKPP (The Government of Procurement Goods/Services) that are too cheap to the pharmaceutical companies. If this scenario happens, the patients are put at high risk of losing proper medical healthcare.

This research intends to analyze the financial distress prediction of pharmaceutical companies in Indonesia. The bankruptcy of a company in general often begins with financial distress within the company and an unpredictable profit rate in the future.

The bankruptcy of a company is often marked with financial distress in it and the uncertainty of profit in the future. The financial distress predictive analysis will be done by looking up through financial reports of all pharmaceutical companies registered to the Indonesia Stock Exchange within the year of 2014 – 2017 by using four prediction methods of company bankruptcy. The selection of the year will be based on the ongoing year of the government's E-Catalogue program.

2 THEORETICAL FRAMEWORKS

Altman and Hotchkiss (2010) state that there are four general terms used to describe the inability of a company in resolving its problems, namely failure, insolvency, default, and bankruptcy. Failure is a condition where the return rate made by the company from its investment is significantly and consistently lower than the general return rate. Insolvency is a situation where the company's

performances are declining showed by their inability to pay their liabilities or debts – which in return indicates the lack of liquidity within the company. Default is a condition where the company fails to pay the debt and the interest within the deadline that can be caused by the contract failure between the company and the investor. Bankruptcy occurs when the company is facing the uncertainty of survival caused by its ongoing financial performance decline.

The financial distress of a company begins when they fail to execute their scheduled payment or if there is a cash-flow prediction that the same situation will repeat in the future (Brigham and Ehrhardt, 2005). Two things, namely economic and financial aspects, can cause this condition. The economic problem includes things such as the company's weakness and improper location, whereas the financial problem is where the company owes too much debt or insufficient capital. Financial distress conditions can be seen through the calculation and ratio analysis of the company's financial condition, and the stakeholders can use them to predict the probability of the company's future bankruptcy.

3 RESEARCH METHOD

This is descriptive research, which, according to Nazir in Bimawiratma (2016), is a research aim at making a description, or systematic projection of the truth, characteristics, and relationship among the researched objects. This research employs two methods, namely the Altman and Grover financial distress methods, and provides a description of bankruptcy predictive analysis of pharmaceutical companies registered to Bursa Efek Indonesia (Indonesia Stock Exchange) within 2014 – 2017. These two methods are selected due to the emphasis on a company's profit and sales that match the condition of pharmaceutical companies after the implementation of the E-Catalogue. Each calculation of the analysis is provided in Table 1.

Table 1: The Altman & Grover's Analysis Formula of Calculation

Method of Analysis	
Altman Z-Score	**Formula** Z-Score Altman = 1,2 X1A + 1,4 X2A + 3,3 X3A + 0,6 X4A + 1,0 X5A **Information** X1A=Working Capital (Current Assets – Current Liabilities) / Total Assets X2A=Retained Earnings / Total Assets X3A=Earnings before Interest and Taxes / Total Assets X4A=Market Capital and Preferred Stock X5A = Sales / Total Assets **Criteria of Calculation Result of Categorization** a. Z-Score > 2,99 : fit company b. 1,81 < Z-Score < 2,99 : vulnerable situation c. Z-Score < 1,81 : unfit company and bankruptcy potential
Grover	**Formula** Z-Score Grover = 1,650X1G + 3,404X2G + 0,016ROA + 0,057 **Information** X1G = Working Capital / Total Assets X2G = Earnings before Interest and Taxes (EBIT) / Total Assets ROA = Return on Assets / Total Assets **Criteria of Calculation Result of Categorization** a. Z-Score ≥ 0,01: bankruptcy category and unfit company b. Z-Score ≤ -0,02: fit company and bankruptcy potential

4 RESEARCH FINDINGS

4.1 General Description of Research Object

The objects of the research are companies working in the pharmaceutical field and are registered to the Indonesia Stock Exchange during the period of 2014 – 2017 and fit in with the criteria set in sample collection. Based on the criteria of sampling, 10 companies were finally included as the objects of the research namely PT Darya Varia Laboratoria Tbk, PT Indofarma (Persero) Tbk, PT Kimia Farma (Persero) Tbk, PT Kalbe Farma Tbk, PT Merck Indonesia Tbk, PT Pyridam Farma Tbk, PT Merck Sharp Dohme Pharma Tbk, PT Industri Jamu & Farmasi SidoMuncul Tbk, PT Taisho Pharmaceutical Indonesia Tbk, and PT Tempo Scan Pacific Tbk.

4.2 The Findings of Altman Analysis

The result of data calculation and tabulation by using Altman's bankruptcy predictive analysis is shown in table 2.

Table 2 The Result of Altman's Analysis Method

		Altman							
No	Kode	2014		2015		2016		2017	
		Z-Score	Ket	Z-Score	Ket	Z-Score	Ket	Z-Score	Ket
1	DVLA	3.13	S	2.95	G	2.97	G	2.91	G
2	INAF	1.59	D	1.65	D	1.75	D	1.28	D
3	KAEF	2.72	G	2.57	G	2.07	G	1.67	D
4	KLBF	3.78	S	3.63	S	3.65	S	3.59	S
5	MERK	4.02	S	4.20	S	4.07	S	3.71	S
6	PYFA	2.33	G	2.67	G	2.69	G	3.11	S
7	SCPI	1.12	D	2.18	G	3.22	S	2.58	G
8	SIDO	6.96	S	6.89	S	6.33	S	5.71	S
9	SQBB	4.57	S	4.06	S	4.24	S	4.22	S
10	TSPC	3.22	S	3.04	S	3.14	S	2.95	G

Source: Tabulated Data (2018)
Information (Ket): S: *Safe Zone*; G: *Grey Zone*; D: *Distress*

In the year of 2014, there are two companies that were indicated to have financial distress and two others that were in the grey area, and meanwhile, the other six were falling into the category of fit and not being indicated to have financial distress. The indicated to be financially distressed companies were Indofarma (Persero) Tbk with a ratio of 1,59 and Merck Sharp Dohme PharmaTbk with a ration of 1,12 while the grey area companies are Kalbe Farma with 2,72 ratio and Pyridam FarmaTbk with a ratio of 2,33.

In 2015 the number of companies within the financial distress fell into one company, and the grey area went up to four. Indofarma (Persero) Tbk with 1,65 ratio became the only company in 2015 with financial distress prediction, and the other grey area four are Darya Varia Laboratoria Tbk, Kalbe Farma Tbk, Merck Sharp Dohme Pharma Tbk, and Pyridam Farma Tbk.

In 2016 Indofarma (Persero) Tbk still became a financial distress indicated company with 1,75 ratios, and there were three companies inside the grey area, namely Darya Varia Laboratoria Tbk with 2,97 ratio, Kalbe Farma Tbk with 2,07, ratio and Pyridam Farma Tbk with a ratio of 2,69.

In 2017, there were two companies within the financial distress category. Besides Indofarma (Persero) Tbk, Kalbe Farma was also indicated to be financially distressed with a ratio of 1,67 and those in the grey area were Darya Varia Laboratoria Tbk with 2,91 ratio, Merck Sharp Dohme Pharma Tbk with 2,58 ratio and Tempo Scan Pacific Tbk with as many as 2,95 ratios.

4.3 The Findings of Grover Analysis

The result of data calculation and tabulation by using Grover's bankruptcy predictive analysis is illustrated in table 3.

Table 3: Result of Grover's Formula of Data Calculation

No	Kode	Grover							
		2014		2015		2016		2017	
		Z-Score	Ket	Z-Score	Ket	Z-Score	Ket	Z-Score	Ket
1	DVLA	1.33	D	1.31	D	1.28	D	1.27	D
2	INAF	0.32	D	0.33	D	0.19	D	-0.03	S
3	KAEF	1.10	D	0.93	D	0.77	D	0.66	D
4	KLBF	1.58	D	1.50	D	1.54	D	1.50	D
5	MERK	2.13	D	1.99	D	1.90	D	1.64	D
6	PYFA	0.43	D	0.53	D	0.65	D	0.84	D
7	SCPI	0.65	D	0.80	D	1.71	D	0.82	D
8	SIDO	1.70	D	1.64	D	1.64	D	1.51	D
9	SQBB	2.71	D	2.46	D	2.61	D	2.60	D
10	TSPC	1.24	D	1.13	D	1.14	D	1.09	D

Source: Tabulated Data (2018)
Information (Ket) : S *: Safe Zone*; D: *Distress*

In 2014, 2015, and 2016 Grover method's analysis indicated that all companies that became the objects of research were in financial distress condition. All ten companies had a ratio of ≥ 0,01. The category fit in with Grover analysis with ≥ 0,01 ratio is an unfit or bankrupt company. In 2017 there was only one company categorized to be fit, namely Indofarma (Persero) Tbk, with a ratio of -0,03.

4.4 Are Pharmaceutical Companies in Indonesia Fit Enough?

The calculation result of the four financial distress analyses is presented in Table 4 as follows.

Table 4: The Comparison of Four Analyses Result

	2014		2015		2016		2017	
	A	Gr	A	Gr	A	Gr	A	Gr
DVLA	S	D	G	D	G	D	G	D
INAF	D	D	D	D	D	D	D	S
KAEF	G	D	G	D	G	D	D	D
KLBF	S	D	S	D	S	D	S	D
MERK	S	D	S	D	S	D	S	D
PYFA	G	D	G	D	G	D	S	D
SCPI	D	D	G	D	S	D	G	D
SIDO	S	D	S	D	S	D	S	D
SQBB	S	D	S	D	S	D	S	D
TSPC	S	D	S	D	S	D	G	D

Source: Tabulated Data (2018)
Information: A: *Altman*; Gr: *Grover*; S: *Safe Zone*; G: *Grey Zone*; D: *Distress*

In deciding the congruency of financial distress predictive method, this research applies the comparison of the annual profit of all sample companies and observes their differences. The comparison can be seen in Table 5.

Table 5 Annual Profit Comparison (in Millions of Rupiah)

	2013	2014	2015	2016	2017
DVLA	125.796	80.929	107.894	152.083	162.249
INAF	(54.222)	1.440	6.565	(17.367)	(46.284)
KAEF	215.642	236.531	265.549	271.597	331.707
KLBF	1.970.452	2.121.090	2.057.694	2.350.884	2.453.251
MERK	175.444	182.147	142.545	153.842	144.677
PYFA	6.195	2.657	3.087	5.146	7.127
SCPI	(12.167)	(62.461)	139.321	134.727	122.515
SIDO	405.943	415.193	437.475	480.525	533.799
SQBB	149.521	164.808	150.207	165.195	17.896
TSPC	638.535	584.293	529.218	545.493	557.339

Source: Tabulated Data (2018)

The gap between the increase and the decrease of company profit within the period of 2014 – 2017 is also summed up to determine if the increase or the decrease of profit happened significantly or if it happened in more than one period of the year. The finding of the comparison can be observed in Table 6.

Table 6: The Annual Profit Gap (in Thousands of Rupiah)

	Profit Gap			
	2014	2015	2016	2017
DVLA	(44.866)	26.964.954	44.188	10.165.893
INAF	55.662	5.125.369	(23.933)	(28.917.360)
KAEF	20.888	29.018	6.048	60.109.969
KLBF	150.638	(63.396)	293.190	102.366.477
MERK	6.702	(39.601)	11.297	(9.165.553)
PYFA	(3.538)	429	2.059	1.981.085
SCPI	(50.293)	201.783	(4.594)	(12.212.261)
SIDO	9.250	22.282	43.050	53.274.000
SQBB	15.286	(14.600)	14.988	(147.299.368)
TSPC	(54.242)	(55.074)	16.274	11.846.045

Source: Tabulated Data (2018)

From the summary of companies', the profit gap in Table 6 indicates that a number of companies had significant profit declines and occurred in more than one period of the year. Therefore, the researcher here described each one of the pharmaceutical companies.

4.4.1 PT Darya Varia Laboratoria Tbk (DVLA)

PT Darya Varia Laboratoria Tbk (DVLA) was inside a safe zone in 2014. However, it went through a decline and was positioned under the grey zone from 2015 – 2017 according to the Altman calculation method. This was different from the result from the Grover method, which predicted distress on the company from 2014 until 2017. Based on the company profit gap, DVLA experienced a significant increase in profit in 2015 and 2016 after having a loss many years before. The profit increase then declined in 2017. Moreover, the company closed two of its subsidiaries in 2014 and 2016, indicating an unfit (grey zone) situation that might lead to distress.

4.4.2 PT Indofarma (Persero) Tbk (INAF)

PT Indofarma (Persero) Tbk (INAF) went through a distress situation during the research period based on Altman and Grover's analysis. This prediction is backed by a significant profit downfall and the company loss in 2016 and 2017. The company suffered more losses up to 166,5% in 2017. The company profit gap showed a significant decrease indicated by the loss of profit for as much as IDR

23.933.106.631 from 2015 to 2016 and made another one with the amount of IDR 256.216.197.879 and then another IDR 28.917.360.089 from 2016 to 2017. The 2017 loss was even 166,5 % higher than the one in 2016. The profit decline of the company was also backed by the record of sale decrease of medical supplies made by the company. In 2015, the sale plummeted to as much as 256.216.197.879 in another IDR 105.460.436.781 in 2017. Aside from that, the company's liability was also increasing in that year.

4.4.3 PT Kimia Farma (Persero) Tbk (KAEF)

PT Kimia Farma (Persero) Tbk (KAEF) was in the grey zone category based on Altman analysis from 2014 to 2016 and was in distress in 2017. On the other hand, the Grover suggested that the company was in distress from 2014 to 2017. Considering the profit gap in 2016 that was far lower than before and after that, there was a certain condition in the company that despite making more profit, it was still suggested to be in distress by Altman and Grover.

4.4.4 PT Kalbe Farma Tbk (KLBF)

PT Kalbe Farma Tbk (KLBF) was in a grey zone during the research period, according to Altman analysis from 2014 to 2016, before moving to the safe zone in 2017. The company suffered a significant profit decrease from 2014 to 2015 at the time of the E-Catalogue began to take place.

4.4.5 PT Merck Indonesia Tbk (MERK)

PT Merck Indonesia Tbk (MERK) Based on the Altman analysis calculation, the company was in the category of the safe zone during the period of research. Different from the three analyses, Grover predicted that the company was in distress from 2014 to 2017. Considering the profit and other conditions of the company, PT MERK went through an unstable profit rate. During the period of research, there was a closure on a company subunit and the relocation of an employee due to a special agreement with Merck KgaA in Germany.

4.4.6 PT Pyridam Farma Tbk (PYFA)

PT Pyridam Farma Tbk (PYFA) was classified as the grey zone category by Altman's analysis from 2014 to 2016 before moving to the safe zone in 2017. Grover's Method suggested that the company was in distress during the research period. From

2014 to 2017, this company suffered quite a significant decrease in profit and made improvement the years after.

4.4.7 PT Merck Sharp Dohme Pharma Tbk (SCPI)

PT Merck Sharp Dohme PharmaTbk (SCPI) was categorized as inside distress in 2014 by Altman, Grey zone in 2015 and 2017 and safe zone in 2016. Grover's method also predicted that the company was in distress during the time of the research. The company suffered a loss in 2013 and 2014 but was able to make a profit in the next three years. However, the profit of the company kept down falling from 2015 to 2017. This condition was a subsequent impact of domestic decrease of the sale in 2015. The company made a decline in domestic sales for as much as 71.791.597.000 but made improvement of export to more than 2 trillion rupiah and therefore made a profit in 2015. Despite making 201.783.091.000 profit gain in 2015, the company suffered a significant decline in two consecutive years. The company was also unable to meet the minimum requirement of free float set by the Indonesia Stock Exchange (Bursa Efek Indonesia). The company's request for delisting from the stock market (BEI) also reflected its unfit condition.

4.4.8 Industri Jamu dan Farmasi Sido Muncul Tbk (SIDO)

Industri Jamu dan Farmasi Sido Muncul Tbk (SIDO) was in fit condition according to Altman analysis. The finding of the calculation method is supported by the stable and even increasing profit gain of the company from 2014 to 2017. However, the Grover method suggested that the company was in distress from 2014 to 2017. It is probably due to the fact that Altman's method still calculates stock market price and sales, whereas Grover only calculates profit and Return on Assets. Grover methods signal the companies to keep themselves away from distress possibility. The discrepancy within the company is probably caused by the fact that many of their products on the market are not even listed in the E-Catalogue.

4.4.9 PT Taisho Pharmaceutical Indonesia Tbk (SQBB)

PT Taisho Pharmaceutical Indonesia Tbk (SQBB) was categorized to be in the safe zone by Altman's

method, while Grover's suggested the opposite by stating that the company was in distress during the research period. Taisho Pharmaceutical Indonesia Tbk also suffered a profit decline in 2017 as much as 147.299.368.000. The decline in 2017 was not equivalent to the profit gain in 2014 and 2016. The increase in the profit was only around 14 – 15 billion Rupiah, whereas the loss in 2017 was as much as 100 billion rupiah. Besides that, the company also requests delisting from the Indonesia Stock Exchange.

4.4.10 PT Tempo Scan Pacific Tbk (TSPC)

PT Tempo Scan Pacific Tbk (TSPC) also received the safe zone from three Altman's methods from 2014 to 2016 and became in the grey zone in 2017. The finding of the Grover method suggested that the company was in distress during the research period. The profit gained by the company declined significantly in 2014 and 2015 and increased in 2016. The profit gain in 2017 was still lower than in 2016. The efficiency and layoff were done in 2014.

5 CONCLUSIONS

The pharmaceutical companies in Indonesia went through turbulence after the E-Catalogue took place by the BPJS in 2013. The prediction on pharmaceutical companies suggested that they are in financial distress category. Grover's method predicted that the majority of the pharmaceutical companies in Indonesia were in distress financially. This means that from the Return on Assets standpoint, these companies are financially unfit.

The research focuses on the E-Catalogue policy launched by the BPJS since 2013. The period after the implementation of E-Catalogue (2014- 2017) indicates that E-Catalogue affected the financial condition of pharmaceutical companies in Indonesia. From a profit and Return on Assets standpoint, the conclusion is that almost all pharmaceutical companies in Indonesia are classified to be unfit. Studies on E-Catalogue policy need to be done in order for the pharmaceutical companies to survive considering that the field of healthcare strongly depends on pharmaceutical companies in terms of medical supplies

This research only predicts pharmaceutical companies within the fit or unfit category. Considering the fact that none of the companies suffered from bankruptcy during the time of the

research, this research does not compare which methods work better in predicting the bankruptcy and only takes the profit gain and calculation method into the equation.

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