The Business Viability of PT Garuda Indonesia

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Abstract

Through the ability of technology, facilities, infrastructures, and sufficient operational activities, business competition in air transport service is becoming tighter. All airlines are competing to be the best. As one of the most experienced companies, in fact, PT Garuda Indonesia has experienced hard times. By using qualitative and quantitative methods with Altman Z Score method, it is found that in the period of 2003-2007 PT Garuda Indonesia faced a very critical situation. Only in 2007, this company started to recover and improve.

Keywords*: financial statement analysis and potential for bankcruptcy*

Introduction

Nowadays the transport service industry, especially air transport, is one of the most important industry regarding a quick transportation for moving people or goods has become an urgent need and is not a luxury anymore. PT Garuda Indonesia, a State-Owned Enterprise (BUMN) which is of the main airline industry in Indonesia, has been in the business of air transport service for a long time. As a State-Owned Enterprise, PT Garuda Indonesia is required to obtain profit as maximum as possible through its business operation, namely domestic and international air transport service. When the economic crisis is recovering gradually, the airline industry starts to recover, even many new airline companies pop up; such as Air Asia, Batavia Air, Lion Air, and so on, whose number is more than twenty airline companies now. With the more competitors supported by technology, facilities, and infrastructures, and sufficient operational activities, then the tighter and more balanced the competition which leads to a war of low tarif among the airlines companies. They compete for potential passengers by determining low cost for every trip, offering certain domestic flight programs, such as *fly two get one free*, and offering other various programs.

In fact, however, PT Garuda Indonesia is still able to dominantly lead the domestic market with more than 50% market share. It is due to the advantages of facilities, infrastructure, financial support, and experience in air transport business owned by PT Garuda Indonesia. This condition will surely contribute very significantly to its profitability. The profitability of a company will also influence positively to its solvability that will determine the assessment from management, shareholders and consumers on the condidtion of that company. Related to the above explanation, the writer is motivated to make a research on the function of finance management at PT Garuda Indonesia to know the healthiness of this company through measuring the potential of bankruptcy (*Z-Score*). In managing a company, the function of finance management is very important regarding the efficiency of business activity and the quality of corporate policy are reflected in the use of financial resources in the company's financial report.

This research describes and explains the operational and financial performance of PT Garuda Indonesia based on its *core business,* namely domestic and international flight both for passengers and cargo. Then, based on the figures in the financial report, the operational performance and the degree of financial performance achieved by using Altman Z-Score method can be known, and subsequently we can determine the company's level of business viability in the future.

This research uses descriptive method with qualitative approach and quantitative method.

In this research, analysis on the financial performance is carried out using Altman Z-Score method which is a series of calculation to get the Z-Score involving some ratios that have been systematically set up.

Furthermore, the ratios to be discussed are variables which will be used in analyzing the company's financial report in order to detect the company's potential of bankruptcy, i.e. the financial ratios in the Altman Z-Score formula. The description of each variable is as follows:

Liquidity Ratio (X_1)

Working Capital meant in X_1 is the difference between current assets and current liabilities. Basically, the X_1 ratio is one of the liquidity ratios that measures the ability of a company in fulfilling its short term liabilities. The result of this ratio can be negative if the current assets are less than the current liabilities.

Profitability Ratio

Retained Earning ratio compared to the total assets (X_2)

This ratio measures the accumulated profit of a company as long as it operates. The age of a company will influence this ratio because the longer a company has operated the more possible for it to smoothen the accumulation of retained earnings. This generally causes a relative new company have such a low ratio, except it has gained a huge profit in the early time of its establishment.

EBIT Ratio versus Total Assets (X_3)

This ratio measures the ability of a company in making profit from the assets used. This ratio is the most contributing from the Altman Z-Score method.

Activity Ratio

There are two activity ratios used in the Altman Z-Score method, namely:

Equity Value vs Total Liabilities (X_4)

This ratio is frequently used in the form of equation in which *net worth* is compared with *total debt*. This ratio measures the financial ability of a company in giving guarantee for its all liabilities through its own capital. Here, the capital value is the market value of its own capital, i.e. the number of shares times the market price of each share. Toward the companies that does not go public in that year, the researcher uses the second version of Altman Z-Score method: the book value of equity compared with the book value of total liabilities.

Sales vs Total Assets (X_5)

This ratio measures the ability of a company in using its assets to make sales. If the turnover is slow, then the assets owned are much more than the ability in selling.

By using those variables, the result of ratio calculations proves whether the company is healthy or not.

Furthermore, the total calculation can be classified into three criteria, namely healthy, in the grey area, and unhealthy.

Financial Data of PT Garuda Indonesia

PT Garuda Indonesia is a company that operates in the airline service both for passengers and cargo. In order to assess the financial performance of a company, especially those in service business, the main criteria that should be paid attention is the operational activity considering that the result obtained from this activity is an important indicator that can indicate whether the company successfully runs its business or not. One of the indicators is Income Statement as shown in Table 1 below.

Table 1   Resume of Financial Data of PT Garuda Indonesia (Loss and Profit Report) Year 2003 to 2007 (million Rupiah)

Loss and Profit Report	In million Rupiah				
	2003	2004	2005	2006	2007
	Audited	Audited	Audited	Audited	Audited
Operating Income	8.751.582,5	11.011.808,8	12.650.698,5	12.343.167,6	14.213,489.6
Operating Cost	8.721.066.1	11.643.044,5	13.318.770,0	12.721.894,5	14.043.961,3
Operating Loss/Profit	30.516,5	(631.235,7)	(668.071,5)	(126.929,5)	169.528,2
Net Income/other Costs	233.449,1	(117.692,5)	(16.742,1)	251.797,4	131.925,2

Loss/Profit before Tax	263.965,5	(748.928,2)	(684.813,6)	(126.929,5)	301.453,5
Tax cost	(250.539,6)	(61.997.0)	(3.750.420,8)	(69.363,5)	(41.216,7)
Loss/Profit before the Rights of Minority	13.425,9	(811.312,4)	(686.564,0)	(196.293,1)	260.236,7
Right of Minority	(695.548,2)	(387.143,9)	97.615,1	(783.689,6)	(2.176.090,8)
Net Loss/Profit	12.730.366,2	(811.312,4)	(688.466,4)	(197.076,8)	258.060,6

Source: Financial Report of PT Garuda Indonesia 2003-2007
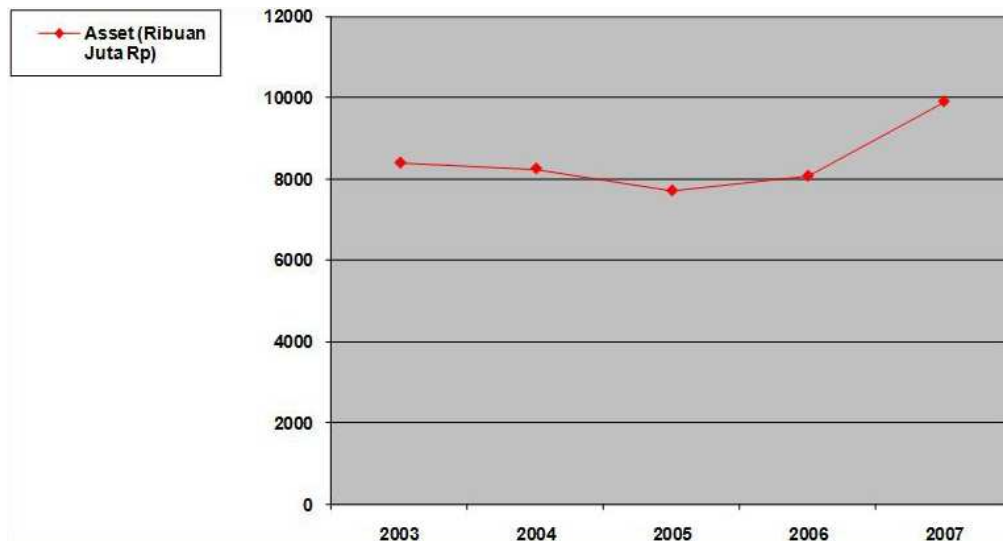

Figure 1   Graphic of PT Garuda Indonesia's Assets, 2003-2007

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As shown in Figure 1, the trend of PT Garuda Indonesia's asset growth during the period of 2003-2007 is fluctuative; there are increase and decrease of asset. The highest amount of asset was in the period of 2007, whereas the lowest was in 2005. Along with the fluctuative (increasing and decreasing) asset, it is also important to know the financial performance of the company (PT Garuda Indonesia) to increase its asset during that period.

As shown in Figure 2, the sale of PT Garuda Indonesia during the period of 2003-2007 indicates an increasing sales trend although it slightly decreased, especially in 2006. Therefore, it is also important to know the ability to increase the sales in the same period. (TABLE 2)

Table 2   Total Asset and Growth Percentage of PT Garuda Indonesia Year 2003 to 2007
(Million Rupiah)

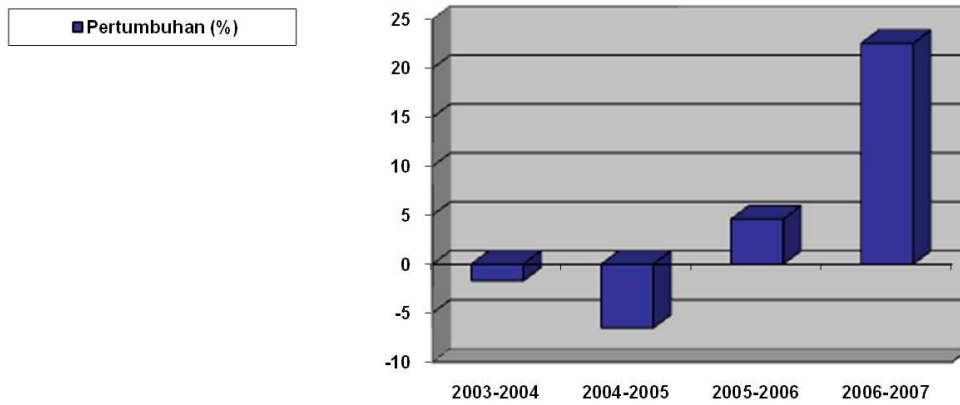| Item Calculated		2003	2004	2005	2006	2007
Total Asset (Million Rupiah)		8.397.237,7	8.255.091,3	7.717.419,3	8.095.577,9	9.897.487,1
Growth of asset	(%)	0	-1,693	-6,513	4,641	22,561

data processed

Figure 2   Graphic of Asset Growth of PT Garuda Indonesia 2003 to 2007 *(Data Processed)*

As shown in Figure 3, the sales growth of PT Garuda Indonesia in the period of 2003-2004 was 25.826%, and it increased 14.883% during 2004-2005, but in the period of 2005-2006 it decreased to become -2.341%. In the period of 2006-2007 it increased again up to 15.153%.

Subsequently, to assess the financial performance of PT Garuda Indonesia in financing its operation, it is necessary to assess its ability based on its working capital by determining the amount of working capital as seen in Table 3 below:

Table 3   Calculation of Sales Growth of PT Garuda Indonesia Year 2003 to 2007
(Million Rupiah)

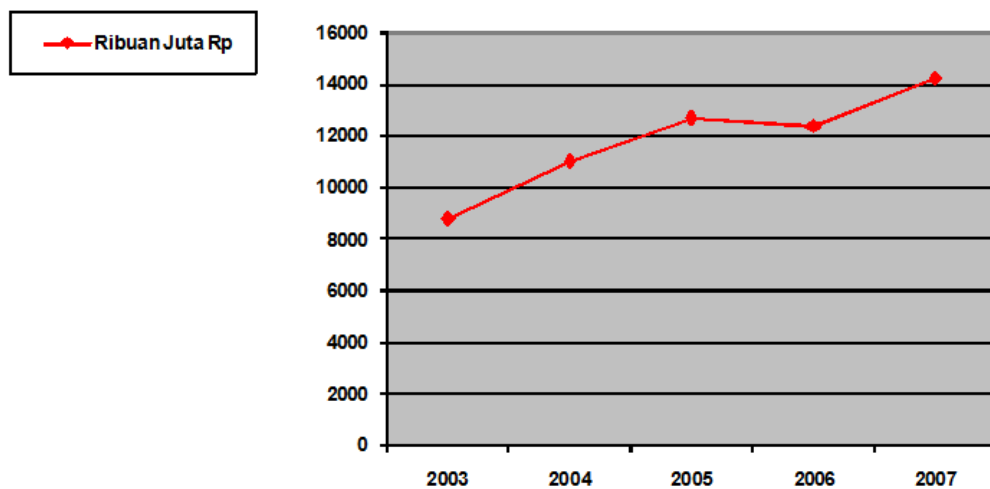| Item Calculated	2003	2004	2005	2006	2007
Sales	8.751.582,5	11.011.808,7	12.650.698,5	12.343.167,6	14.213.489,6
Growth	0	25,826%	14,883%	(2,431%)	15,153%

data processed

Figure 3   Graphic of Sales of PT Garuda Indonesia, 2003-2007 *(data processed)*

The growth of PT Garuda Indonesia's working capital during the period of 2003-2007 shows a decreasing trend. The ability of PT Garuda Indonesia in increasing its working capital which is measured in the percentage of working capital growth can be seen in Tabel 4 as follows:

Table 4   Calculation of Working Capital of PT Garuda Indonesia Year 2003 to 2007
(Million Rupiah)

Calculation of Working Capital	2003	2004	2005	2006	2007
Current Assets	1.105.950	1.610.988	1.700.320	2.246.164	3.687.320
Current Liabilities	798.541	1.166.320	1.331.080	1.850.445	2.231.957
Working Capital	270.125,7	(511.352,9)	-1.425.756,7	-2.667.129,8	115.427,4

data processed

Research Using Altman Z-Score

As we know, the preparation to make an analysis using the method of Altman Z Score, the necessary data for calculating the ratios in this method should be gathered first, i.e. *Total Assets, Working Capital, Retained Earning, EBIT, Equity, Book Value of Debt dan Sales.* Total Assets, Working Capital, Retained Earning, Equity, and Book Value of Debt can be seen in the Financial Report in the Balance Sheet, while the Sales and EBIT can be seen in the Income Statement. Then, in order to know the *Working Capital,* it is necessary to calculate the difference between *Current Assets* and *Current Liabilities* in the Balance Sheet first, as shown in Table 5 below.

Table 5   Necessary Factors for Ratios in Altman Z-Score Method Year 2003 to 2007
(Million Rupiah)

Year	Total	Working	Retained	EBIT	Equity	Liabilities	Sales
Code	TA	WC	RE	EBIT	Eq	BVD	Sales
2003	8.397.237,7	270.125,7	(4.868.401,1)	30.516,4	2.007.345,1	6.391.360,5	8.751.582,5
2004	8.255.091,3	(511.352,9)	(5.686.777,2)	(631.235,7)	1.209.737,3	7.046.595,0	11.011.808,7
2004	8.255.091,3	(511.352,9)	(5.686.777,2)	(631.235,7)	1.209.737,3	7.046.595,0	11.011.808,7
2005	7.717.419,3	(1.425.756,7)	(6.386.433,0)	(668.071,5)	456.597,5	7.262.405,6	12.650.698,5
2006	8.075.577,9	(2.667.129,8)	(6.591.988,5)	(378.725,9)	751.087,8	7.325.402,8	12.343.167,6.
2007	9.897.487,1	115.427,4	(6.340.186,5)	169.528,2	1.829.180,4	8.067.151,0	14.213.489,6

Data Ptrocessed

Based on the data in Table 5, the value of ratios X_1, X_2, X_3, X_4 and X_5 can be calculated and used to determine the value of Z-Score of PT Garuda Indonesia during 2003-2007. After the calculation using this data is done, the ratios X_1 up to X_5 of PT Garuda Indonesia obtained are as follows:

Table 6 Calculation Results for Ratio X1 to X5 of PT Garuda Indonesia Year 2003 to 2007

Name of Company	Year	(WC/TA) X_1	(RE/TA) X_2	(EBIT/TA) X_3	Eq./BVD) X_4	(Sales/TA) X_5
PT. Garuda Indonesia	2003	0.03217	(0.58)	0.00363	0.314	1.042
PT. Garuda Indonesia	2004	(0.06194)	(0.689)	(0.076)	0.172	1.334
PT. Garuda Indonesia	2005	(0.18475)	(0.828)	(0.0866)	0.063	1.64
PT. Garuda Indonesia	2006	(0.33027)	(0.8163)	(0.047)	0.1025	1.528
PT. Garuda Indonesia	2007	0.01166	(0.641)	0.017	0.227	1.436

Data processed

After being calculated and each ratio (X_1 up to X_5) is known, the calculation of Z-Score for 2003-2007 can be done as follows

Table 7 Calculation Results of Z-Score of PT Garuda Indonesia Year 2003-2007

Name of Company	Year	1.2(WC/TA) $1.2X_1$	1.4(RE/TA) $1.4X_2$	3.3(EBIT/TA) $3.3X_3$	0.6(Cap/Liab) $0.6X_4$	0.99(Sales/TA) $0.99X_5$	Z Score
PT. Garuda Indonesia	2003	0.386	(0.818)	(0.012)	0.189	1.032	0.043
PT. Garuda Indonesia	2004	(0.074)	(0.964)	(0.252)	0.103	1.321	0.132
PT. Garuda Indonesia	2005	(0.221)	(1.159)	(0.286)	0.038	1.623	(0.005)
PT. Garuda Indonesia	2006	(0.396)	(1.143)	(0.155)	0.061	1.513	(0.120)
PT. Garuda Indonesia	2007	0.014	(0.897)	0.0565	0.136	1.422	0.731

Data processed

Based on Table 7 it can be known that the value of Z-Score calculated using Altman method for the qualification of PT Garuda Indonesia during 2003-2007 is as follows

Table 8 Qualification of PT Garuda Indonesia based on Z-Score Year 2003-2007

Company	Year	Z – Score	Potential of Bankruptcy	Qualification
PT. Garuda Indonesia	2003	0.043	High	Critical
PT. Garuda Indonesia	2004	0.132	High	Critical
PT. Garuda Indonesia	2005	(0.005)	Very High	Very Critical
PT. Garuda Indonesia	2006	(0.120)	Very High	Very Critical
PT. Garuda Indonesia	2007	0.731	High	Critical

Data Processed

From this table it can be known that based on the Z-Score obtained, the qualification of PT Garuda Indonesia during 2003-2007 has been never in healthy condition. The company has been in the critical condition for three periods with the high potential of bankruptcy, namely in 2003, 2004, and 2007. Meanwhile, in 2005 and 2006 it was in the qualification of very critical with the very high potential of bankruptcy. The worst condition happened in 2006, when the value of Z-Score reached minus 0.120. Thus, in general, the financial performance of PT Garuda Indonesia during the observation period of 2003-2007 can be concluded unhealthy.

Ratio Analysis using Altman Method against PT Garuda Indonesia in 2003-2007

Achievement of Liquidity Ratio X_1

Against the liquidity ratio X_1, observation was done to see the progress or change in achieving this ratio. The following is a graphic indicating the progress of liquidity ratio X_1 during the observation period of 2003-2007. Seeing the equation of trend line calculated using autoregression and the facilities available in SPSS program Version 17.0, it is found out that the value of constant *a* is -0.17, meaning that historically the initial value of X_1 at PT Garuda Indonesia before 2003 is ideally -0.17. Furthermore, it can be known that the value of regression coefficient of that trend is -0.037, meaning that for every year the ideal increasing value is -0.037.
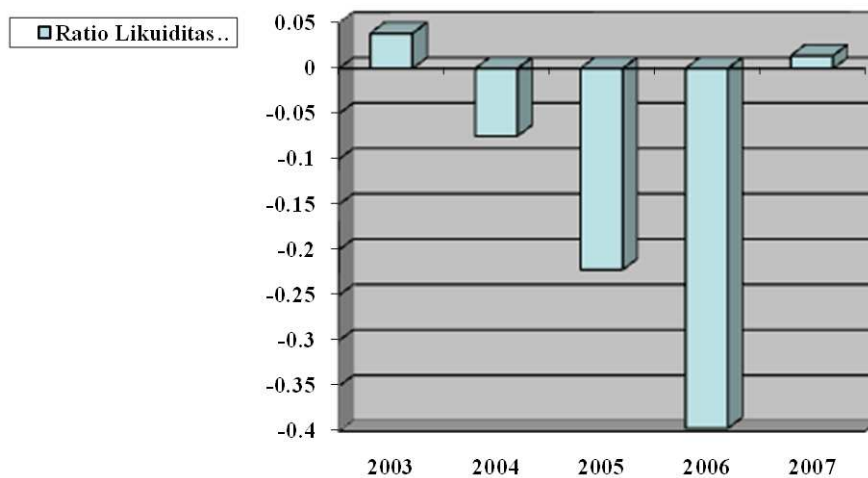

Figure 4   Progress of Liquidity Ratio X1 of PT Garuda Indonesia Year 2003-2007 (data processed)

Achievement of Profitability Ratio X_2

The following is a graphic showing the progress of profitability ratio X_2 during the observation period of 2003-2007. Regarding the above graphic, in a whole it is known that during the observation period of 2003-2007 there was a decreasing—or

even worsening—profitability experienced by the company, especially in 2005 and 2006. The profitability ratio X_2 which is measured based on the ratio of retained earning per total asset during that period, the achievement shows a declining trend line. This condition indicates that PT Garuda Indonesia is not able to accummulate the profit obtained as long as the company
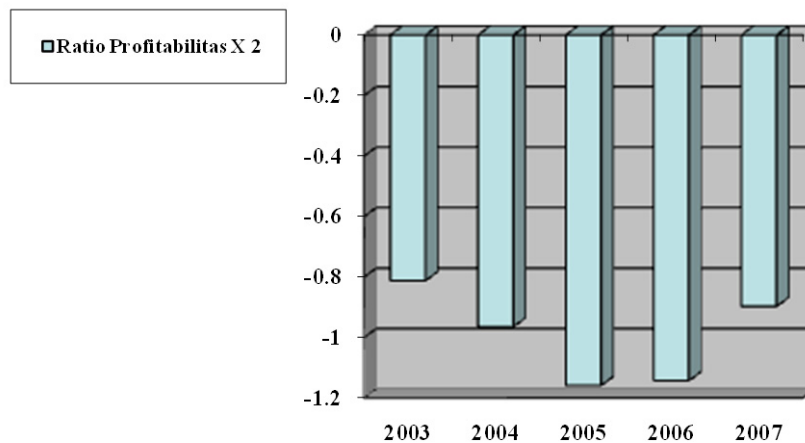
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Figure 5   Progress of Profitability Ratio X 2 of PT Garuda Indonesia 2003-2007 (data processed)

operates. Seeing the equation of trend line calculated using autoregression and the facilities available in SPSS program Version 17.0, it is found out that the value of constant *a* is -0.89, meaning that historically the initial value of X_2 at PT Garuda Indonesia before 2003 is normally -0.89. Furthermore, it can also be known that the value of regression coefficient of that trend is -0.035, meaning that for every year the normal decreasing value is -0.035.

Achievement of Profitability Ratio X_3

Subsequently, the profitability ratio X_3 has also been observed to see the progress or change in the achievement of this ratio. The following is a graphic showing the progress of profitability ratio X_3 during the observation period of 2003-2007. Regarding the above graphic, in general it can be known that during the observation period of 2003-2007 there was a decreasing profitability that is measured based on earning before interest and tax (EBIT) per total asset. Based on this achievement of profitability ratio X_3, it seems that the trend line shows a decline, except in 2007 that was slightly rising. This means that the ability of PT Garuda Indonesia in collecting the EBIT decreased.Seeing the equation of trend line calculated using autoregression and the facilities available in SPSS program Version 17.0, it is found out that the value of constant *a* is -0.17, meaning that historically the initial value of X_1 at PT Garuda Indonesia before 2003 is ideally -0.17. Furthermore, it can be known that the value of regression coefficient of that trend is -0.037, meaning that for every year the ideal increasing value is -0.037.
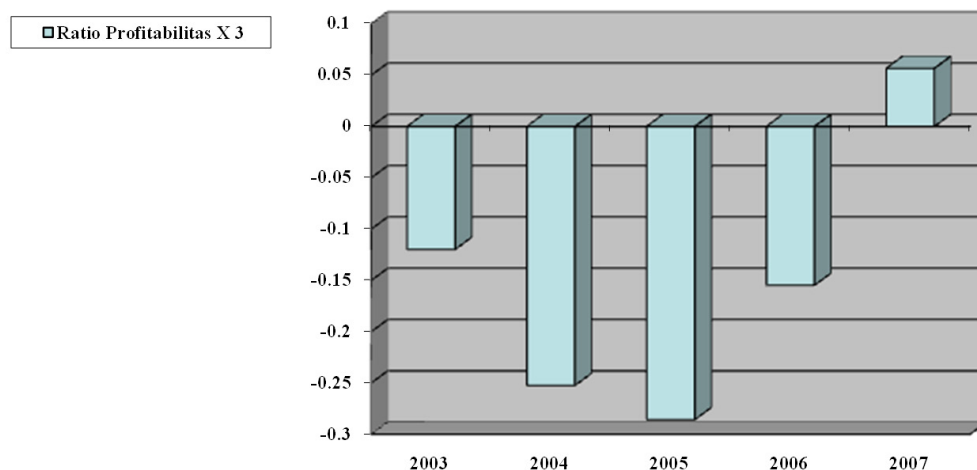

Figure 6   Progress of Profitability Ratio X3 PT Garuda Indonesia 2003-2007 (data processed)

Achievement of Activity Ratio X_4

Subsequently, the activity ratio X_4 has also been observed to see the progress in the achievement of business activity carried out by the company. The following is a graphic showing the progress of activity ratio X_4 during the observation period of 2003-2007. Regarding the above graphic, it is known that during the observation period of 2003-2007 in general there was a decreasing ability to get results related to the activities done by the company or management. The indicator for measuring this ratio is the comparison between total equity and liabilities during that period. Based on the achievement of ratio X_4 in 2004 and 2005, it seems that the trend line declines, meaning that the company was burdened with the debts or liabilities that existed in that time. However, if seen in a more detail way, it is found that in the period of 2003-2005 the company basically had ratio X_4 which tended to decline and started to recover when the management made improvement in 2006 and 2007. Seeing the equation of trend line calculated using autoregression and the facilities available in SPSS program Version 17.0, it is found out that the value of constant *a* is 0.149, meaning that historically the initial value of X_4 at PT Garuda Indonesia before 2003 is normally 0.149. Furthermore, it can be known that the value of regression coefficient of that trend is -0.015, meaning that for every year the ideal increasing value is -0.015.

Achievement of Activity Ratio X_5

Subsequently, the activity ratio X_5 has also been observed to see the progress or change in the achievement of this ratio. The following is a graphic showing the progress of activity ratio X_5 during the observation period of 2003-2007. Regarding the above graphic, it is known that during the observation period of 2003-2007 in general there was a decreasing ability in the selling activity. The indicator for measuring this ratio is the comparison between total sales and assets during that period. Based on the achievement of ratio X_5, the trend is declining during the period of 2003-2007. Seeing the equation of trend line calculated using autoregression and the facilities available in SPSS program Version 17.0, it is found out that the value of constant *a* is 1.090, meaning that historically the initial value of X_5 at PT Garuda Indonesia before 2003 is normally 1.090. Furthermore, it can be known that the value of regression coefficient of that trend is 0.097, meaning that for every year the ideal increasing value is -0.097.

Improvement Strategy at PT Garuda Indonesia

Based on the calculation and analysis that have been carried out, it is clear that there are so many weaknesses that should be improved by the management of PT Garuda Indonesia. During the observation period of 2003-2007, it is found there are three ratios indicating attenuation; namely in terms of achieving profitability of retained earning, per total *assets* (X_2), EBIT, per total *assets* (X_3) and sales activity, per total *assets* (X_5). The weakness of these three ratios indicates that so far the company (PT Garuda Indonesia) is not able to accummulate the profit obtained from its operational activities. Therefore, there is a potential that the operational cost of PT Garuda Indonesia is very high so that it much burdens the company.

Conclusion

Z Score Method can be used for measuring the financial performance and give a description about the healthiness of a company as well as its business viability. From the results of this research, and based on the data mentioned in the financial report of PT Garuda Indonesia during the period of 2003-2007, it is found that the growth of asset, especially increasing asset, has a fluctuative trend. The lowest total asset
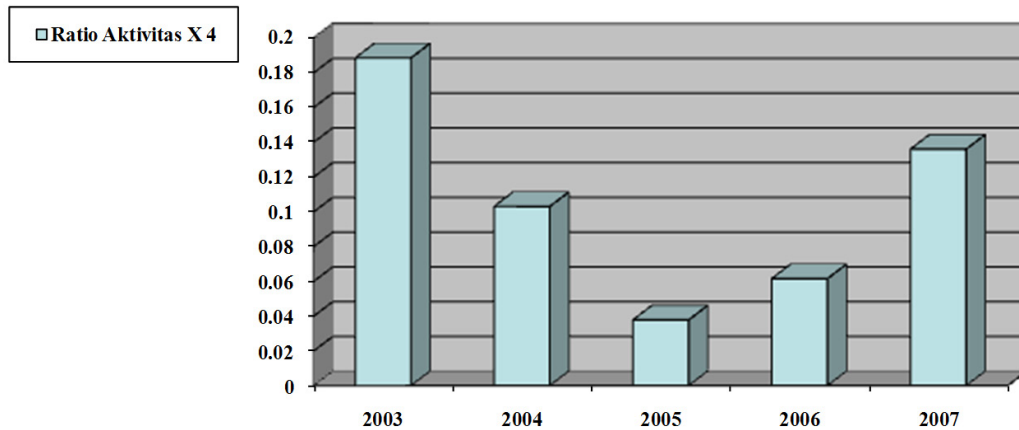
Figure 7   Progress of Activity Ratio X4 PT Garuda Indonesia 2003-2007 (data processed)
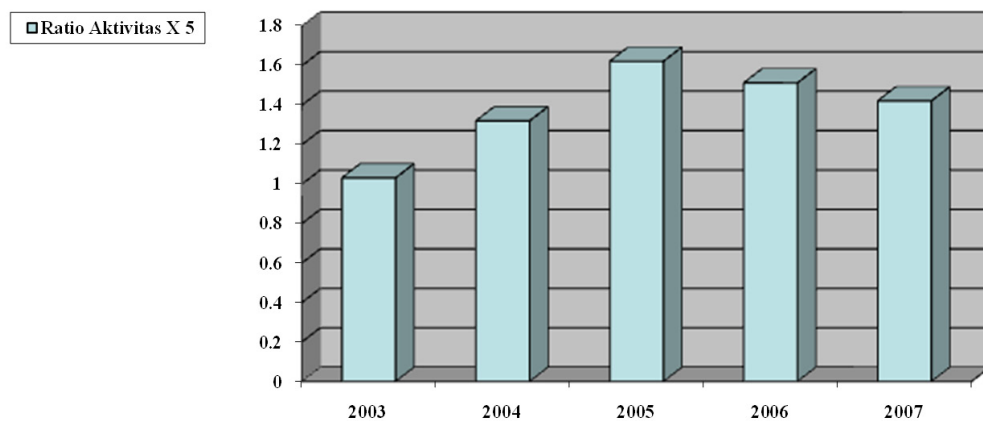

Figure 8   Progress of Activity Ratio X5 PT Garuda Indonesia 2003-2007 (data processed)

happened in 2005, whereas the highest was in 2007. This indicates good business opportunities in the future.

Meanwhile, in term of sales growth, it shows fairly satisfying results due to the increasing trend, except in 2006 in which the sales slightly decreased. The highest sales happened in 2007. Such a condition should be maintained for the sake of better business growth in the future. Subsequently, in the growth of working capital there are some things very worrying, because for several years of research, negative working capital has ever happened. The peak worry happened in 2006. However, there was a little brightness with the working capital that started to become positive in 2007.

Likewise, in the progress of Liquidity Ratio X_1 there were two years making happy, namely 2003 and 2007. Whereas, the most worrying progress of Liquidity Ratio X_1 happened in 2004, 2005, and 2006. The same thing happened to Profitability Ratio X_2 during the observation period of 2003-2007, when the value ratio obtained was minus, as well as to the progress of Profitability Ratio X_3 during 2003-2007. Only in 2007 its positive value was uplifting, while in fact four years before were worrying times with minus results. Nevertheless, although the progress of Activity Ratio X_4 can not influence the value of Z Score in a whole, it has a positive value.

Accordingly, although the progress of Ratio X_5 give positive Z Score, it is still not able to leverage the whole value of Z Score. It can be stated assertively that the achievement of Z Score value by PT Garuda Indonesia during the observation period of 2003-2007 has never been in the healthy condition. For two years, namely 2005 and 2006, the company was in a very critical condition with a very high potential of bankruptcy. While the company was in the critical condition with a high potential of bankruptcy in 2003, 2004, and 2007.

References

Adnan, Muhammad Akhyar and Kurniasih E. 2000. Analisis Tingkat Kesehatan Perusahaan untuk Memprediksi Potensi Kebangkrutan dengan Pendekatan Atlman: Kasus pada Sepuluh Perusahaan di Indonesia. *Jurnal Akuntansi Indonesia*, 4.(2): 131-151.

Agnes, Sawir. 2005. *Analisis Kinerja Keuangan Dan Perencanaan Keuangan Perusahaan.* Jakarta: PT. Gramedia Pustaka Utama.

Altman, Edward I. 1998. Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankcruty. *Journal Of Finance*. 23(4): 589 - 610.

Boedi, Zvi., Alex Kane, and Alan J. Marcus. 2002. *Investment* International Editions. Boston: Irwin Mc Graw - Hill.

Bernstein, Leopold A. 1998. *Financial Statement Analysis: Theory, Applications, and Interpretation* Six Editions. Boston: Irwin McGraw - Hill.

Brigham, Houston. 2006. *Fundamentals of Financial Managements* tenth edition,. Florida: Harcourt Inc.

Garuda Indonesia. PT. Laporan Tahunan 2003-2004. Jakarta.

Garuda Indonesia. PT. Laporan Tahunan 2004-2005. Jakarta.

Garuda Indonesia. PT. Laporan Tahunan 2005-2006. Jakarta.

Garuda Indonesia. PT.Laporan Tahunan 2006-2007. Jakarta.

Golin, Jonathan. 2001. *The Bank Credit Analysis Handbook.* Singapore: John Willey and Son Asia Pte Ltd.

Ikatan Akuntansi Indonesia. 2007. *Standar Akuntansi Keuangan.* Jakarta: Salemba Empat.

Kasmir. 2008. *Analisis Laporan Keuangan* Edisi 1. Jakarta: Rajawali Pers.

Leopold A. Bernstein and John J Wild. 2001. *Financial Statement Analysis, Theory, Application And Interpretation* 7 Editions. Boston: Irwin Mc Graw Hill.

Munawir. 2004. *Analisa Laporan Keuangan.* Yogyakarta: Liberty.

Siegel, Joel G. 1991. *How To Analyze Bussines, Financial Statement, and The Quality Of Earnings* Second Editions, New York: Prentice Hall.