

Determining Performance Differences between Bidders that Acquire Listed Targets and Non-Listed Targets in Bursa Malaysia

Mariathy Karim

*Faculty of Information Technology and Quantitative Science,
Universiti Teknologi MARA Pahang, Malaysia
Email: mariathy@pahang.uitm.edu.my.*

Saiful Hafizah Jaaman

*Faculty of Science and Technology,
Universiti Kebangsaan Malaysia, Selangor, Malaysia
Email: shj@ukm.my*

Azlida Muhamad

*Sekolah Menengah Kebangsaan Tatau, Bintulu, Sarawak
Email: azlida06@yahoo.com.*

ABSTRACT

The purpose of this paper is to measure the relative performance between bidders that acquire listed targets and non-listed targets in Bursa Malaysia. The performance is evaluated by using Sharpe performance measure for the year 1995 until 2003 which consists of 870 bidders with its targets on the announced date. The finding shows that the performances of bidders that acquire non-listed target in Bursa Malaysia are better than the performance of bidders that acquire listed target in Bursa Malaysia. The involvements of risk are also considered in this study. Excel software is used to estimate the parameters and to analyse the performance values.

Keywords: *bidders, economic crisis, listed and non listed targets, Sharpe Performance*

Introduction

Performance measure is a wide field and offers extensive applications in other fields of research. This study used performance measure in Merger and Acquisition field. Merger and Acquisition (M&A) needs a deep securitization of company's information. This research only considers M&A between companies in Malaysia for all forms of payment either cash or non-cash. This research been carried out on bidders that acquired listed targets and non-listed targets in Bursa Malaysia.

The company's performance measure does not only consider the company's profit but also its risks. These two elements are very important to picture the company's performance. This research may assist the board members of the bidder company to know its rank after acquiring the targets, whether or not such activity brings more profit. At the same time the risk measure of the company can be also known. The risk value above 1.0 shows a higher risk to the company and vice-versa.

Two types of risk have been considered in this study. Risk means that the share holder might face loss because there are elements of uncertainty related to market share. The considered risks in this study are divided into two types which are systematic risk and the non-systematic risk.

Performance measure in M&A was identified to find the performance differences between bidders that acquired listed targets and non-listed targets in Bursa Malaysia from 1 January 1995 until 31 December 2003. The data were acquired from *Investors' Digest*. According to the analysis of M&A performed on the data, there were 1419 announcements of M&A. Thus, it means that there were 1419 bidders in this study. Then the close-price data for each of the bidders involved, according to the announcement date were considered monthly a year before the announcement date. The market index, KLCI close-price was also considered monthly a year before the announcement date. The risk-free rate data, which is the Treasury Bill Rate, were taken from the National Bank Monthly Statistical Bulletin from January 1995 until December 2003. As known during 9-years period, there were 1419 bidders involved in M&A but, there were only 867 bidders that had a complete data and whose performance can be evaluated. Another 552 bidders did not have a complete monthly data for one year which was before the announcement date of the M&A. These makes the bidder's return cannot be counted.

This study focuses on the evaluation of the performance measure based on the bidder's return and risk. The performance measure essential to bidders as it can assist the board members in its management. A bidder's performance moreover, symbolized its rank in the market and can decide the bidder's potential to expand in the future.

The main objective of this study was to identify the performance difference between the bidders that acquired listed targets and non-listed targets in Bursa Malaysia. This output can help the management of the company to improve their performance level and to consider whether the company should or should not merge with the listed targets or non-listed targets. The study also compared the number of bidders that acquired listed targets and bidders that acquire non-listed targets in Bursa Malaysia. Special consideration was also given to differentiate the output taken from the Sharpe performance measures before, during and after economic crisis. The result shows the risks considered in each bidder.

Literature Review

Many studies have been carried out on the performance measure such as Treynor (1965), Sharpe (1966) and Jensen (1968). Sharpe (1966) explained the performance measure of 34 mutual funds in United State from 1944 to 1963. He developed risk-adjusted performance measure on Treynor performance measure that concludes the return and the risk of each mutual fund. The result shows that only 11 out of 34 mutual funds were excellent. The result was acquired after making a comparison with the performance of the market portfolio which was represented by the *Dow Jones Industrial Average Index* (DJIA). Edwards and Samant (2003) applied Treynor's (1965), Sharpe's (1966) and Jensen's (1968) performance measure in their research that evaluate the risk-adjusted performance of socially responsible mutual funds. Edwards and Samant (2003) used *S&P 500 Index* as the market index and found out that Sharpe performance measure gives better result. It is understood that Sharpe performance measure is the best to measure the relative performance between bidders that acquire listed targets and non-listed targets in Bursa Malaysia.

Sharpe performance measure had been used by Johnson and Soenen (2003) in their research that considers the measurement on 478 companies from 1982 until 1998. The research tested the best benchmark from ten

benchmarks that will increase the company's performance. The researchers has highlight of measurement based on company. Result shows that the large company size has performed excellently. A research on trust fund performance in Malaysia from 1991 until 2001 was done by Fauziah and Mansor (2007). This research used seven different performance measures such as gross return, market adjusted return, Jensen-alfa, adjusted-Jensen alfa, Sharpe Index, adjusted Sharpe Index and Treynor Index. The result of the research shows that the trust fund was not well managed within the studied period.

Fauzias and Shamsubaridah (1995) took the data for each of the firms in her research, five years before and five years after the acquisition date. The firm's performance show that the acquisition of the listed targets does not increase the profit. This is because of the liquidity of the acquire performance. Fauzias (2002) also took data the of a firm 200 days before the M&A announcement date from 1 January 1977 until 31 December 1989. Meanwhile, Schlingemann (2004) analysed the relation between bidder's income and the source of funding finance that they have. The decision on finance was seen by considering a yearly finance movement before the acquisition date. This would explain the financial situation of the firm. Studied the economic crisis which begun in July 1997 in Malaysia. From 220 companies, there were 86 had lost. The companies' profit and loss within the first six months of 1999 were observed and it was found that there was an increase in profit-making. This shows that the economic getting better (Ahmadu et al., 1999).

Methodology

The performance measure used in this study was the Sharpe performance measure (S_j). The bidder's close-price data were used to estimate the returns. The bidder's return acted as one of the important parameters to get the bidder's performance measure. Standard deviation was applied to gain the risk value of the bidders. Sharpe Performance measure was chosen from the others' performance measure for this paper because it considered both types of risk that had been discussed in introduction section.

Sharpe Performance Measure (S_i)

William Sharpe (1966) first introduced the Sharpe performance measure. He introduced Sharpe performance measure which is also known as a reward-to-variability ratio (RVAR). Sharpe et al. (1995) shows that RVAR is an adjusted performance measure that operates according to Capital Market Line as a benchmark. The performance measure is computed by dividing the risk premium for the portfolio by its standard deviation. It measures the risk premium earned per unit of risk exposure. The formula for Sharpe performance measure is given by

$$RVAR_p = \frac{ar_p - ar_f}{\sigma_p}$$

where;

a_{rp} = average return on portfolio p ; $p = 1, \dots, N$

a_{rf} = average risk-free rate on portfolio

σ_p = standard deviation of portfolio p ; $p = 1, \dots, N$

Haugen (2001) concluded that RVAR formula can be derived to a simple formula to get a performance measure for each of the bidder by dividing the extra mean return with its risk. It measures the extra mean return for a unit of risk of each bidder. Here is the formula used in this study.

$$S_i = \frac{\bar{r}_i - r_f}{\sigma_i}$$

where;

\bar{r}_i = mean return on bidder i ; $i = 1, \dots, N$

r_f = risk-free rate

σ_i = standard deviation of returns on bidder i ; $i = 1, \dots, N$

Sharpe et al. (1995) said that the Sharpe performance measure can be a positive or negative value in a company performance. The positive value indicates that the manager of company has out-performed the market and negative value indicates under performance. Haugen (2001) said that the higher Sharpe performance measure shows that the bidder has good performance. The lower Sharpe performance measure shows

that the bidder has low or bad performance. In this case, if the bidder has high performance measure so, the bidder can go on with M&A and vice-versa. The produced value of Sharpe performance measure explains that it gives a return for each unit of market risk.

The market beta value is 1.0. If the bidder has larger beta value, he has larger return (premium risk) and vice-versa. It means, the larger the risk is and the larger the expected return is needed. The produced value of Sharpe performance measure, explains that it gives a return for each unit of market risk.

The return that used is taken before twelve months of the announcement date of the bidders. These are because to show the level of performance of the bidders before the companies merge the listed targets or non-listed targets.

Findings and Discussion

The best performance, either bidders listed targets (LT) or bidders non-listed targets (NLT), in Bursa Malaysia from 1 January 1995 until 31 December 2003 is shown in Table 1. Table 1 shows the numbers of all data that were analysed regarding M&A from *Investors' Digest*.

Sharpe performance measure considers the total risk. This is derived as standard deviation in the formula. The result of Sharpe performance measure for bidders listed targets and bidders non listed targets in Bursa

Table 1: Numbers of LT and NLT from 1995-2003

| Year | LT | | NLT | | Total |
|-------|-----------------|---------------|-----------------|---------------|-------|
| | Incomplete Data | Complete Data | Incomplete Data | Complete Data | |
| 1995 | 11 | 17 | 91 | 95 | 214 |
| 1996 | 23 | 23 | 64 | 123 | 233 |
| 1997 | 22 | 11 | 73 | 65 | 171 |
| 1998 | 8 | 7 | 48 | 45 | 108 |
| 1999 | 12 | 7 | 52 | 92 | 163 |
| 2000 | 10 | 19 | 39 | 112 | 180 |
| 2001 | 8 | 10 | 34 | 69 | 121 |
| 2002 | 14 | 17 | 25 | 71 | 127 |
| 2003 | 7 | 15 | 11 | 69 | 102 |
| Total | 115 | 126 | 437 | 741 | 1419 |

Malaysia shown in Tables 2 and 4. The results focused on the data from 1997 to 1998. Here is because of the period is the economic crisis period. All the calculations to get the result were done using the data and formula as discussed earlier.

Performance Measure for Bidders Listed Target

The Sharpe performance measure had been used to get the value of the performance measure. Then, from the output the numbers of bidders listed targets for positive and negative performance are counted. The results are shown in Table 2.

Table 2: Number of LT Using S_i for Positive and Negative Return

| Year | Positive | Negative | Total |
|-------|----------|----------|-------|
| 1995 | 8 | 9 | 17 |
| 1996 | 14 | 9 | 23 |
| 1997 | 5 | 6 | 11 |
| 1998 | 0 | 7 | 7 |
| 1999 | 6 | 1 | 7 |
| 2000 | 10 | 9 | 19 |
| 2001 | 2 | 8 | 10 |
| 2002 | 11 | 6 | 17 |
| 2003 | 13 | 2 | 15 |
| Total | 69 | 57 | 126 |

The numbers of positive performance was bad in 1998. We can consider it is because of the economic crisis that started in July 1997. The positive value of performance shows the excellent performance of each bidder. Table 3 shows that INTI Universal Holdings Bhd with announcement dated 16 October 2003 had the highest performance measure. Its target is Inti Education (International) Ltd. INTI Universal Holdings Bhd got 0.72 percent extra returns for each risk of the company if INTI Universal Holdings Bhd acquire Inti Education (International) Ltd on 16 October 2003. The total risk of the company is lower than the extra returns which explains why INTI Universal Holdings Bhd had positive value in M&A. The impact of bidders performance will show whether the bidders are qualified to takeover its target or not. For this reason, we took return of the bidders for one year before the announcement date of the M&A.

Table 3 shows the lowest performance of the bidder is Dunham-Bush (Malaysia) Bhd. It shows that Dunham-Bush (Malaysia) Bhd had less 0.86 percent return for each risk of the company if Dunham-Bush (Malaysia) Bhd acquired Hartford Compressor Yantai Co Ltd. The total risk was not very high but the bidder would still underperform if the M&A happened between Dunham-Bush (Malaysia) Bhd and Hartford Compressor Yantai Co Ltd. This is due to the previous performance of the bidder's company.

Table 3: Highest and Lowest S_i and Standard Deviation of LT

| Bidder | Target | S_i | σ |
|-----------------------------|------------------------------------|-------|----------|
| INTI Universal Holdings Bhd | Inti Education (International) Ltd | 0.72 | 0.05 |
| Dunham-Bush (Malaysia) Bhd | Hartford Compressor Yantai Co Ltd | -0.86 | 0.08 |

Performance Measure for Bidders Non-listed Targets

The same method was used to find the performance measure for bidders listed target and for bidders non-listed targets. Then, from the output the numbers of bidders' non-listed targets for positive and negative performance are counted. The results are shown in Table 4.

Table 4: Number of NLT Using S_i for Positive and Negative Return

| Year | Positive | Negative | Total |
|-------|----------|----------|-------|
| 1995 | 38 | 57 | 95 |
| 1996 | 88 | 35 | 123 |
| 1997 | 36 | 29 | 65 |
| 1998 | 12 | 33 | 45 |
| 1999 | 85 | 7 | 92 |
| 2000 | 83 | 29 | 112 |
| 2001 | 3 | 66 | 69 |
| 2002 | 60 | 11 | 71 |
| 2003 | 39 | 30 | 69 |
| Total | 444 | 297 | 741 |

From the table, Merger and Acquisition (M&A) numbers dropped in 1998. It started to drop starting in 1997. This is because of the economic crisis. The performance measure result is shown in Table 5.

Table 5: Highest and Lowest S_i and Standard Deviation of NLT

| Bidder | Target | S_i | σ |
|---------------------|--------------------------|-------|----------|
| WCT Engineering Bhd | IWM Construction Pte Ltd | 1.68 | 0.06 |
| PK Resources Bhd | Arus Ikhlas Sdn Bhd | -1.12 | 0.14 |

Table 5 shows the return of S_i for the highest return and lowest return. It also shows the risk that accountable to bidders. We can read it as WCT Engineering Bhd got 1.68 percent extra returns for each risk of the company if WCT Engineering Bhd acquired IWM Construction Pte Ltd on 8 May 2002. The risk shown is less than 1.0, market risk. It shows low risk if WCT Engineering Bhd acquired IWM Construction Pte Ltd. PK Resources Bhd obtained the lowest S_i value. The value shows that PK Resources Bhd's performance was measured as underperformed if it acquired Arus Ikhlas Sdn Bhd.

In this study, Sharpe performance measure for each bidder gives the value either negative or positive. As mentioned earlier, the positive value shows the extra return for each risk of the company and the negative value shows the lower return for each risk of the company. The standard deviation's value shows the amount of risk that the company involved. The lower the value is, the lower the risk of the company for M&A.

Economic Crisis

Economic crisis gave very bad impact to business field. In Malaysia, it started in July 1997 until early 1999. At this peak time of economic crisis, a lot of companies had to close and some of them had gone bankrupt. Based on the results and analyses, this study shows that starting from July 1997, the performance measure of the bidders went down. The numbers of bidders decreased from time to time. The impact of the economic crisis can be seen from the performance measure of the bidders. The economic crisis happened because of the changes of US Dollar. This made Malaysia money dropped from 2.5 in July 1997 to 4.2 in August 1998(Ahmadu et al., 1999). KLCI had a big loss when the market index as 1271.45 on 25 February 1997 dropped to 262.7 on 1 September 1998. It shows the drop of market index was almost 80%. Figure 1 shows the performance measure for the Sharpe performance measure used in this study.

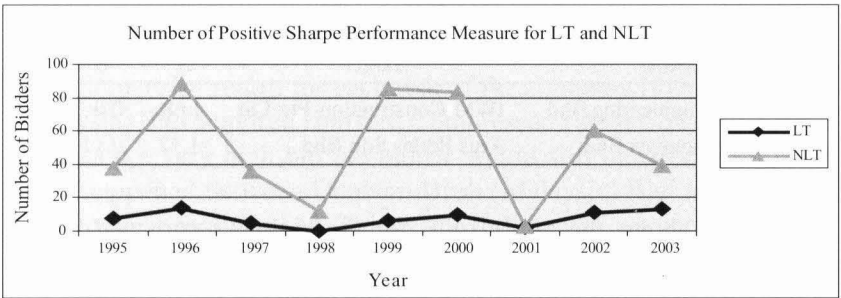


Figure 1: Number of Positive Sharpe Performance Measure for LT and NLT

Conclusion

The chart below shows all the excellent performance in this study. We can see that excellent Sharpe performance measures for NLT are more than LT. The risk that has been considered in this study is a very important parameter. Sharpe performance measure considers systematic risk and non-systematic risk.

Sharpe performance measure gives concrete results because it considers the total risk. The writers conclude that bidders that acquire non-listed targets (NLT) have the best performance than bidders who acquire listed targets (LT). Sharpe only considers the expected performance. The overall result shows that bidders acquire listed targets in Bursa Malaysia did not show the excellent result as in Figure 2. After analysing this result, the writers know that there are a lot of M&A procedures for any bidder to acquire any listed target in Bursa Malaysia. The amount to be paid to acquire listed target also is very high compared to acquire non-listed target.

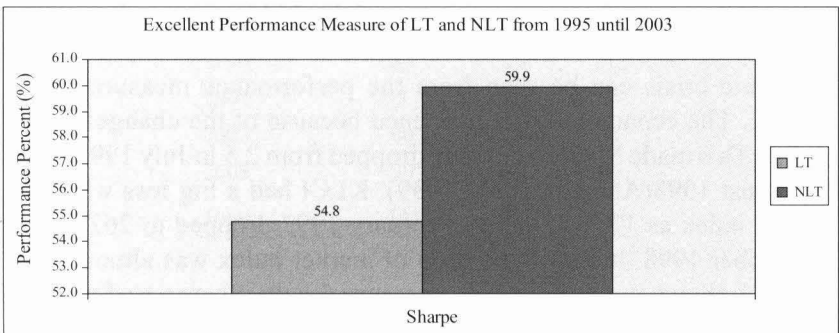


Figure 2: Excellent Performance Measure of LT and NLT from 1995 Until 2003

References

- Ahmadu Umaru Sanda, Ang Jili & Dr Abdul Ghani Shafie (1999). The effects of the economic downturn on the KLSE-listed companies. *Malaysian Management Review*, 34(2), 23-45.
- Edwards, E. & Samant, A. (2003). Investing with a conscience: An evaluation of the risk-adjusted performance of socially responsible mutual funds. *Mid-American Journal of Business*, 18(1), 50-60.
- Fauziah Md. Taib & Mansor Isa (2007). Malaysian unit trust aggregate performance. *Managerial Finance*, 33(2), 102-121.
- Fauzias Mat Nor (2002). The effects of takeover announcements on the security price of bidders: Evidence from Malaysia. *Malaysian Management Review 1995*.
- Fauzias Mat Nor & Shamsubaridah Ramlee (1995). Post performance of Malaysian acquired firms: A preliminary study. *Jurnal Pengurusan*, 14(1), 11-25.
- Haugen, R.A. (2001). *Modern Investment Theory* (5th ed.). New Jersey: Prentice Hall.
- Jensen, M.C. (1968). The performance of mutual funds in the period 1945-1964. *Journal of Finance*, 23, 389-416.
- Johnson, R. & Soenen, L. (2003). Indicators of successful companies. *European Management Journal*, 21(3), 364-369.
- Schlingemann, F.P. (2004). Financing decisions and bidder gains. *Journal of Corporate Finance*, 10, 683-701.
- Sharpe, W.F. (1966). Mutual fund performance. *Journal of Business*, 39(1), 119-138.
- Sharpe, W.F., Alexander, G.J. & Bailey, J.V. (1995). *Investment*. USA: Prentice Hall.
- Treynor, J.L. (1965, Jan-Feb). How to rate management of mutual funds, *Harvard Business Review*, 14, 63-75.