CHAPTER 5
DATA ANALYSIS

This chapter focuses on the data analysis and the results of the analysis as per the hypothesis detailed out in the chapter four. The results are formulated as per the hypothesis and explain the significant of the analysis according to the hypothesis.

5.1 Analysis of Measures/Testing of Hypotheses

WITHIN AND ACROSS GRADES

UPGRADES

Hypothesis Ho: Upgrades rating announcements provide no significant abnormal returns within and across classes of rating

Hypothesis H1: Upgrades rating announcements provide significant abnormal returns within and across classes of rating.

Analyzing the data for upgrades category within the investment grade and the speculative grades tests this hypothesis.

The total number of companies under the upgrade category is 21 companies of which involves 14 upgrades within the investment grades and 2 within the speculative grade and the remaining 5 were across the class that is from the speculative grade to the investment grade.

This analysis will be explained based on the changes, which take place within the grades and across the grades. The results will be focused on the changes of notches within the grade and across the grades. The notch will range from 1 notch to 15 notches and for each category, the analysis will be explained based on the significant of the abnormal returns.

In term of the 1 notch there were 9 companies, which was upgraded to 1 notch higher. The CARnn on the day 0 was 0.9783 with the t value of 0.5256. At 95% confidence level (t value is 2.228) the observed t-value of 0.5256 is statistically insignificant. The pre and post announcement days records CAARnn 's ranging from a minimum positive value of 0.14055(t-value of –0.0257) on the day +2 to a maximum CAARnn of 1.0960(t-value 0.4515). on the +4 day. Whereas on the maximum negative value for CAARnn is –0.1443(t-value of –0.0521) on the day - 5 and the minimum negative value is –0.1544 (t-value of –0.1065) on the +3 day. Looking at the individual companies the highest positive t-value/CAARnn is 3.2788/6.2314 from MRCB. In the case of MRCB the abnormal returns were highly significant. Whereas the lowest positive t-value/CAARnn, is from UMW with a 1.8518/3.24155, which again is not significant. Based on the statistically significant value at the 95% confidence level, which is 2.228, except for MRCB none of the above value brings any kind of significant on the abnormal returns under the category of 1 notch investment grade. The summary of all the companies under the 1 notch investment grade produce a t- value of 0.01008 and the CAARnn is 0.0279, which again does not create any significant impact on the abnormal returns. As such the result show that in terms of upgrade, there is no impact on abnormal returns where the share is upgraded 1 notch higher. The investor does not react differently to such changes.

Looking on the 2-notch investment grade, there are 5 companies listed under this group. There are positive as well as negative values in the CAARnn of the companies. The CAARnn value on the announcement day is 2.0077 (t – value of 0.4223). Again based on the significant statistically, the value does not show any major significant on the abnormal returns on the 0 day. Looking at the maximum positive value on the CAARnn is 9.638727 (t –value 5.2927) for Apex and the minimum value is 6.1798(t value 1.1565) for Sunway company. No significant news was reported during the 11-day period

to explain the changes other than the upgrades announcement. Whereas the maximum negative value is –4.989 (t-value –-1.4452) for ACID 2 and the minimum value is –0.8980 (t-value is –0.4497) for PIHP. In terms of significance, if we look on an individual basis, then there is an impact for Apex only. However the overall summary for 2 notches in investment grades reveals that there is no strong impact of the changes as the t- value is only 0.08637 with the CAARnn 0.2722. Again under the 2 notches the investor 's reaction is not significance to determine the effect of these changes, if any.

The analysis continues with the changes in speculative group for upgrades. There were no changes took place for 1 notch speculative group. The focus is on the 2 notch speculative group has only one sample to be analyses as there were no other companies went through any changes during the research period. The result, which produces, has the t-value of 0.4578 and the CAARnn value of 0.07296. Again it did not produce any significant impact.

The next analysis is on the 4 notches in speculative group. Due to the sample limitation there was only one sample to analyse in this category. This category produces a t-value of 0.0468 with a CAARnn of 0.1442. As such based on its statically significance, the t-value show that there is no significant impact due to the changes.

Apart from analyzing the impacts of upgrades on investment and speculative group, upgrades across groups are also analyzed. The firststone is the 1 notch across the group. There were 3 companies under this category, with the higher positive t-value of 2.7209 (CAARnn-8.1438) (PALMCO) to the lowest t-value of –2.6087(CAARnn –8.6188)(ILB). The overall results recorded a t-value of – 0.402599 with CAARnn of-1.14498, which is not statistically significant.

The 2 notches and the 3 notches recorded the t- value of – 0.07184 (CAARnn –0.1576) and 0.34865(CAARnn 1.1797). The

overall results for the both categories under the across group did not produce a statically significant result. As such in the investment grade the highest CAARnn value is in 0.27226(t value 0.08633) in 2 notches and the highest in speculative grade is 0.14424(t value 0.0468) in 4 notches .

Hence this concurs with the earlier research, which indicates that upgrades announcement has a little effect on the abnormal returns (Robert W Holthausen 1985).

This brings us to the hypothesis that the results from the analysis concludes by accepting the null hypothesis, that within and across the classes rating changes are not statistically significant.

Downgrades

Hypothesis Ho: Downgrades rating announcements provide no significant abnormal returns within and across classes of rating.

Hypothesis H2: Downgrades rating announcements provide significant abnormal returns within and across classes of ratings.

Both positive and negative values were observed in $CAAR_{Nn}$ among the companies. The analysis again will run from I notch to 15 notches and fro rating in the investment as well as speculative group. A total of 40 companies were listed for downgrades of which 17 were in the investment grade bonds; 9 were in speculative and the remaining 14 relating to bonds downgraded from investment to speculative grades.

The investment grade with 1 notch downgraded involves 6 companies. The highest positive CAARnn value is recorded by Bolton with 17.0993 (t-value 4.233) and the lowest was by Gopeng 1 with 0.2890(t-value 0.108). On the negative value, the highest was –7.8493(t-value –1.412)by CAHB and the lowest was –5.5585(t-value –

2.074) by YEE CHIU. Except for Bolton, all the other values are statistically insignificant. The overall result under 1 notch investment grade provide a CAARnn of 0.2500(t-value 0.0592) . As such, though the individual company show some significance but the overall result is statistically insignificant.

The 2 notches investment grade has 4 companies, with the highest positive value ranging from 3.2163 (t value 0.588) to the lowest of 0.6222(t value 0.092) . Whereas the highest negative value recorded is –2.9691 (t value –1.129). The summary represent a CAARnn of 0.2120 (t value 0.0414) . The figures are again insignificant based on the 95% confidence level. As such though the bonds were downgraded by 2 notches, there were no significant fall on the share values.

The 3 notches investment grades records a highest positive CAARnn value of 8.6443 (t value 2.727) and the lowest as 2.2098(t value 0.732). Other than the company AMMB with a t- value of 2.727 the rest of the companies' values are insignificant statistically. The summary shows that the CAARnn is –0.1714(t value –0.0364) which again is insignificant.

The 4/6 notches investment grade also produces insignificant results. There are 3 companies in this category. The CAARnn in summary is –0.0260(t value –0.0260). As such within the investment grade changes in the bond rating between 1 to 6 notches does not have any impact. The investors do not view this as a serious devaluation of the bonds.

In term of the speculative group, the notch ranges from 1 notch to 8 notches. During the research period there were only two companies that were downgraded 1 notch in speculative category. Out of the two, Renong has the highest CAARnn of 134.5297(t value 29.502) which is very significant. However the summary only produce a CAARnn of 1.8452 (t value 0.3865), which is still under the significant

level. As such though individually Renong was able to produce impact on the downgrade announcement but the overall sub-sample has failed to create any major reaction among investors.

The 2 notch downgrade within the speculative grade has a CAARnn value of 1.3989(t value of –0.0599), which again is not significant . Whereas the 3 notches has more negatives value than a positive values. The highest recorded value is 0.4178(t value 0.092) and the highest negative value is –4.9236(t value –2.069). The summary display a CAARnn of –0.0847 (t value –0.0255).

The last notches are from 5/8 which displays a CAARnn of –1.1353(t value –0.0041) with the highest value is 4.3445(t value 1.333) from RHB CAP. These values again are not statistically significant.

Now the analyses will be on the across category. The 1 notch category records a positive CAARnn value for the individual company ranging from the highest of 55.2892(t value 8.493) to 0.0909(t value 0.031). The summary in this category shows the CAARnn is 0.3577(t value 0.1100). As such even across category, the result is insignificant.

The 2 notches category has 4 companies in which PRIME 2 recorded the highest CAARnn value of 1.1019(t value 0.357). However, the overall sample shows a CAARnn of –0.1134(t value -0.0195).This figures is not significant as well. In the case of 3 notches it does have any impact in individual share that is ILB, which records a CAARnn of 15.93 (t value 3.251). But the overall results conclude that the CAARnn is –0.0910(t value –0.0157). Which is insignificant statistically.

The 4 notches across has PILECON with a CAARnn of 18.7524 (t value 6.108) which is significant. But again the summary obtains a CAARnn of 0.5899(t value 0.1532) which is insignificant.

The last analysis in term of rating announcement is the 11/15 notches, which also failed to display any significant results. Though there were big changes but the reaction from investors did not create a major changes in the abnormal returns. The summary showed the CAARnn is 0.1149 (t value 0.0353) . The value was mostly positive.

To summarize, within the investment group the highest CAARnn is found in the 1 notch where CAAR is 0.2500(t value 0.0592). In the speculative group the highest CAARnn value is in 1 notch with a CAARnn of 1.8452 (t value 0.3865). Both result were insignificant.

Again the hypothesis on the downgrades within and across the category proved to be insignificant. This result concurs with UTPAL BHATTACHARYA (2000) where he concludes that an event is not a event due to different scenario. Though the rating is changed but the information is already been adjusted as the information are already publicly available and the price reflects the new information. As such the null hypothesis is accepted in this analysis.

REASONS

UPGRADES

Hypothesis Ho: Rating upgrades announcements provide no significant abnormal returns for changes in financial prospects and for changes in company leverage.

Hypothesis H3: Rating upgrades announcements provide significant abnormal returns for changes in financial prospects and for changes in company leverage.

Under this analysis there were three main reason determine which of 1: financial prospect; 2: company leverage; 3: others. In this research the result will be discussed for the first two reasons only as the third reason comprise other reasons apart from above. Since the data available are not sufficient to determine the exact reason, the third reason would not give an accurate result.

The CAARnn with the both positive and negative values were found in the summary sample of the downgrading under the financial prospect reason consisting of all the 21 companies. However, most of the CAARnn were not statistically significant though some sample were significant. The highest positive CAARnn value was form APEX with 9.6387(t value 5.2927) and the lowest is 0.4781 (t value 0.3000) of CHHB. On the negative values the highest is –8.1438(t value –2.7209) of RHB and the lowest is –0.6427(t value –0.2637) of CMSB. The overall summary displays a CAARnn of 0.09657(t value 0.031027) which is statistically insignificant. Hence the reason for upgrades under financial prospect does not play an important element in determining the changes of the share price.

The second reason, which is the company leverage, produces a mixture of positive as well as negative values. The highest positive

CAARnn is 6.2314(t value 3.2788) of MRCB which means the investors reaction on this share is very significant. Whereas the rest of the values in the individual share ranges from a positive value of 6.2314(t value 3.2788) to a negative value of -.0.1534(t value 0.0647). The summary records a CAARnn of –1.54857(t value of –0.0515) which again is not significant. Hence the upgrades due to the company leverage have less impact on the abnormal returns.

This is result did not produce a statistically significant result as such the null hypothesis is accepted.

DOWNGRADES

Hypothesis Ho: Downgrades rating announcements provide no significant abnormal returns for deteriorating financial prospects and for changes in company leverage

Hypothesis H4: Downgrades rating announcement provide significant abnormal returns for deteriorating financial prospects and changes in company leverage

In the first reason that is financial prospects, there were positive as well as negative values. There were a total of 9 companies fall into this category. In terms of financial prospects the highest recorded positive value of CAARnn is 4.29607(t value 1.302) and the highest negative value is –4.9236(t value –2.052). The summary shows that there was no impact where a bond is downgraded due to the deteriorating financial prospect as the CAARnn is 0.0412(t value 0.008179) As such the investors do not react to this information or this information was not a surprise information.

In the second group, in which the reason is company leverage, there are a total number of 18 companies in this category. The highest

positive value is recorded by BOLTON with a CAARnn of 17.099(t value 4.275) which is significant individually followed by AMMB with 8.6442 (t value 2.701) . Other than these two shares, the rest of the values are not statistically significant. The summary displays a CAARnn of 0.0319(t value of 0.00649) which again is not statistically significant.

Based on the two reasons under the downgrades group, any changes which occurs due to any of the two reasons does not create any significant result. As such the null hypothesis is accepted in this area of analysis.

CHAPTER 6
CONCLUSION AND RECOMMENDATIONS

6.1 Summary and Conclusions

To summarise, rating announcements based on the analysis on the within and across and on the reasons for the announcements did not produce any significant impact on stock returns. As explained earlier, in the Malaysian scenario the market is considered efficient in the sense that the market adapts fast to any kind of information that if already available as such it did not show any abnormal returns on announcement day and during its pre and post announcement periods. The investing public realising that the rating agency announcement is already known fact as such no new information dissemination upon the rating announcements and hence no reaction was produced. Even the total average impact for the 11- day event window period failed to create any significant abnormal returns at 95% confidence level, implying a matured market.

6.2 Suggestions for Additional Research

As a follow up to this study, further research could be undertaken by taking in a longer time frame and adding in bigger sample sizes to determine the impacts if any, in the results. Another area worth focusing is the impact of bond ratings in different economic situations. For example, the impact of bond ratings during political events, inflationary and deflationary periods would be a good subject for further study. Relating to rating announcements, research has also been carried out on intra-industry effects. This area could also be carried out here along the same lines.

3 Implications

The absence of abnormal returns on announcements day and during pre/post announcement day implies that investors would not be able to profit by making investment decisions based on reports of rating agencies alone. Ratings carried out by agencies are based on several factors of a company such as profitability, short term, long term profitability and liquidity ration and many other factors. Most of these factors would have filtered out to the investing public through interim/final reports, annual reports, internal bulletins, company announcements or even reports in the media way before RAM makes its periodic announcements on ratings. As such the new would be already at the accessible all investors. Unless RAM's rating announcement contains new information, which is not otherwise available to public the before announcement day, RAM's rating announcement will only be historical news and not significantly important. RAM reports made available to the investing public would not be taken seriously by the investing public if it contains no new information. RAM has a greater role in this if it is to be counted among the investing public.