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Market reactions to financial distress announcements: Does the market react differently to different outcomes?

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Abstract

We examine market reactions to the financial distress announcements of listed firms in Malaysia. The sample consists of 236 financially distressed companies between 2001 and 2014. We investigate whether the market differentiates between the subsequently re-emerged and subsequently delisted firms at the time of financial distress announcements. The results suggest that there is evidence of differing reactions to distress announcements according to firms' outcomes. These results suggest that, at the time of financial distress announcements, the capital market differentiates firms based on the expected outcomes of the distress, showing that the market has insights into the expected outcomes of the financial distress.

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1. Introduction

Studies of market reaction to bankruptcy filings are well documented in empirical studies (Beneish and Press, 1995, Dawkins and Bamber, 1998, and Lang and Stulz, 1992). These studies reported significant negative abnormal returns surrounding the days of bankruptcy announcement, since it is considered bad news. The price decline is associated with the investor's prior assessment of the firm's probability of bankruptcy. Nevertheless, there is evidence to suggest that the magnitude of the reaction could be due to the expected resolution of bankruptcy and recovery in the event of financial distress (Beneish and Press, 1995, Chen and Church, 1996, Kennedy and Shaw, 1991, and Rose-Green and Dawkins, 2000). Therefore, it is likely that market participants perceive outcomes as valuable, possibly causing different reactions by investors.

The present study contributes to the literature by examining whether the capital market reacts differently according to the outcomes of financial distress for delisted and re-emerged companies at the time firms announce their distress condition, a matter that appears to be of considerable interest to both academics and business professionals. In this sense, it is expected that capital market participants will make prior assessments of the outcomes of financial distress from the sufficient publicly available information. In other words, the severity of the financial distress condition might have been detectable even before the announcement of financial distress. Accordingly, it is argued that if a market is efficient, it will be able to distinguish between failing companies which are able to restructure and resume business (good news) and those that have failed. These different outcomes carry different values for the shareholders, and the market may have a certain insight or foresight into companies' future prospects, which may cause different stock price reactions. In this sense, it would be interesting to know whether the Malaysian equity market is efficient enough to distinguish between the companies that have successfully restructured and those that have failed. If the market is able to differentiate between firms that are subsequently delisted and those that have re-emerged, the re-emerged firms should experience smaller price declines than the delisted firms. Hence, this investigation has led to the following research questions: How does the stock market react to financial distress announcements for delisted and re-emerged companies?

There are several motivations for conducting this study. First, exploring market reactions to bad news events should be of interest since most of the previous empirical studies were almost exclusively based on United States failure cases, which are regulated under the United States bankruptcy legislation. In this sense, empirical evidence on the United States companies may not hold and should not be generalized since the legal settings are different. The United States is in fact the most debtor-friendly bankruptcy regime in the Western world (Altman and Hotchkiss, 2006). As has been stressed by Altman and Hotchkiss (2006, pp. 55-78) and Lee *et al*. (2011), bankruptcy law varies significantly across countries although each country's law is similar in nature. As such, it would be interesting to extend the findings uncovered in the previous empirical studies on market reaction to the announcement of financial distress in Malaysia, where the law is more creditor-oriented, to determine whether the market reacts differently. The significant difference in terms of the legal set-up may enhance and yield new insight into whether investors react differently in a debtor-friendly versus creditor-oriented environment and whether such reaction is caused by the bad news announcement alone or by other factors. In addition, Claessens *et al*. (2005) stressed that the different structure of bankruptcy laws across countries is due to the institutional differences. Therefore, it would be interesting to discover whether the market reacts differently to the announcement of distress in countries that are more creditor-friendly, particularly Malaysia.

Another motivation concerns the differences between the United States and Malaysia in terms of governance and institutional settings. Malaysia has a high concentration of ownership where the mean shareholdings of the single largest shareholder are 31 per cent and those of the five largest shareholders of companies are 62 per cent (Haniffa and Hudaib, 2006). Therefore, using Malaysia as a context of study could provide us with an ideal setting and help us uncover further evidence about the behaviour of high ownership among the large shareholders as compared to the dispersed ownership structure in the US. Furthermore, Malaysia has a diverse ethnic background which is unique in its own sense. Previous work carried out by Sim (2009) highlighted the role of cultural and ethnic background in the Malaysian context, and how it contributed to turnaround strategies and processes. This has led to studies of corporate failure which tend to be country-specific since the causes of corporate failure and the strategies undertaken during restructuring may differ according to the country context. Recently, Wang (2012) undertook a comparative study to examine the role of institutional factors (bankruptcy codes and judicial efficiency) in the decision to resolve bankruptcy through reorganization and liquidation. Wang (2012) found that the legal origin of the bankruptcy code is important for determining the choice of either reorganization or liquidation.

The outline of the paper is as follows. Section 2 outlines the data and the methods. Section 3 discusses the empirical results and Section 4 concludes.

2. Methodology

The standard approach of an event-study methodology is to utilize a market-adjusted returns procedure to examine the response in stock prices to announcements of financial distress. The usage of a market model procedure as an alternative return-generating model may not be appropriate given the fact that it is difficult to identify a non-event estimation period for bankrupt firms (Dawkins *et al*., 2007, and Hubbard and Stephenson, 1997). Furthermore, McEnally and Todd (1993) also argue that the beta for bankrupt firms decreases prior to bankruptcy, which makes it unreliable. The EMAS Index is used as a proxy for market portfolio, which provides a better match for our financially distressed firms.[1] In event time, the first day on which a company is declared under Practice Note 4/Practice Note 17/Guidance Note 3 classification is numbered event day 0.[2] The daily share prices data are collected from the Thomson Reuters Datastream. The total sample consists of 236 financially distressed companies (excluding finance-related companies and firms with missing data) listed on the Bursa Malaysia, starting from 2001, when Practice Note 4 was established, until 2014.

[1] The use of the EMAS Index is based on the argument provided by Dawkins *et al*. (2007). They utilized CSRP equally-weighted return as the market index, arguing that their bankrupt firms sample is smaller than the median CRSP firm. In general, financially distressed companies will have a decreasing market capitalization. Thus, the KLCI Index may not the suitable benchmark and may produce downward-biased estimation results. Nevertheless, the estimation using KLCI Index does not affect the main findings (results are available upon request).

[2] The dates on which the firms were declared financially distressed are hand-collected from the website of Bursa Malaysia.

3. Empirical Results

The results in Table 1 show the daily average abnormal returns (AARs) over -10 and +10 periods, with day 0 being the the financial distress announcement day. Consistent with prior studies, the findings suggest that the price reactions of both groups of delisted and re-emerged firms are negative and statistically significant surrounding the announcement.[3] Consistent with our expection, the results from the AARs show that there are different stock market reactions to the outcomes of the financial distress. The financially distressed companies that were subsequently delisted experienced a greater negative stock price effect as compared to the re-emerged companies, which suggests that the market anticipates the outcomes of the financially distressed condition. The delisted firms experience negative AARs for 19 days of the 21-day test period, with the greatest price decline occuring on day +1 (23.57%, $p \leq 0.01$) and day +2 (16.03%, $p \leq 0.01$). Significant declines also occur on day 0 (5.10%, $p \leq 0.01$). The subsequent re-emerged firms experience negative AARs for 16 days of the 21-day test period, with the greatest price decline occuring on day +1 (13.02%, $p \leq 0.01$). Significant price decline also occurs on days +2 (6.96%, $p \leq 0.01$) and -1 (2.36%, $p \leq 0.05$). Nevertheless, the AAR is not significant on day 0.

Table 1. Daily average abnormal returns (AARs) around financial distress announcement day

Event days	AARs (%)			*t*-statistics		
	Overall	Outcomes		Overall	Outcomes	
		Re-emerged	Delisted		Re-emerged	Delisted
-10	-1.0181	-0.6489	-1.4066	-2.5431***	-1.7270*	-1.9523**
-9	-0.5646	-0.7698	-0.3486	-1.6437*	-2.6363***	-0.5486
-8	0.0688	0.0081	0.1326	0.1540	0.0160	0.1772
-7	0.1228	0.6949	-0.4790	0.2631	1.3865	-0.6000
-6	-0.4392	-0.4837	-0.3924	-0.7299	-0.9393	-0.3527
-5	-1.4947	-0.7203	-2.3094	-3.0103***	-1.2791	-2.7999***
-4	-0.9520	-1.1807	-0.7113	-2.4249**	-2.8089***	-1.0542
-3	-0.0015	0.2753	-0.2926	-0.0027	0.8346	-0.2835
-2	-0.9523	-0.8350	-1.0756	-2.0713**	-1.8737*	-1.3103
-1	-1.3830	-2.3617	-0.3532	-1.8255*	-2.0356**	-0.3684
0	-2.8546	-0.7250	-5.0953	-3.7226***	-1.0422	-3.7303***
1	-18.1626	-13.0229	-23.5705	-12.9363***	-8.4856***	-10.3066***
2	-11.3813	-6.9649	-16.0282	-8.7619***	-4.9150***	-7.5187***
3	-2.5762	-2.2107	-2.9609	-2.8105***	-2.7916***	-1.7516*
4	-2.7189	-2.6843	-2.7553	-3.0353***	-3.9998***	-1.6192
5	-2.4952	-2.0687	-2.9440	-3.0608***	-2.7626***	-1.9908**
6	-0.1444	0.4432	-0.7627	-0.2218	0.6493	-0.6764
7	-0.0810	0.2498	-0.4291	-0.1447	0.4596	-0.4299
8	-1.2486	-0.6551	-1.8732	-2.5456***	-1.3977	-2.1377**
9	-0.3462	-1.0721	0.4174	-0.4450	-1.1312	0.3346
10	-1.2375	-0.8493	-1.6460	-2.2937**	-1.6717*	-1.6952*

AAR = Average abnormal return. The *t*-statistcs test the null hypothesis that the average abnormal returns are equal to zero. *, **, *** indicate statistical significance at 10%, 5% and 1% levels, respectively.

The cumulative average abnormal returns (CAARs) in Table 5.11 also suggest that re-emerged firms experience lower negative stock price declines compared to the delisted firms

[3] We estimate AARs over -60 and +60 period but only AARs for the -10 and +10 periods are reported. They are available upon request.

in all windows. For example, during the (-30, -1), (-1, +1), (+1, +30) and (-60, +60) periods, the CAARs are -10.53, -16.11, -23.36 and -33.13% respectively for re-emerged firms and -10.62, -29.02, -57.04 and -84.77% respectively for delisted firms. All event windows show significant price declines for both groups at the 1% level. Furthermore, differences in CAARs between the re-emerged and delisted firms are tested using *t* tests (parametric) and Wilcoxon rank-sum tests (non-parametric). The CAARs between the re-emerged and delisted firms differ in magnitude ranging from 12.91% to 51.64%, and the differences are significant at the 1% level in the (-1, +1), (+1, +30) and (-60, +60) windows using the parametric test. Furthermore, the Wilcoxon rank-sum test confirms the differences in median announcement effect between the re-emerged and delisted firms. These results suggest that, at the time of the financial distress announcement, the capital market differentiates firms based on the expected outcomes of the distress. In this sense, at the time of firms' announcements of financial distress condition, the market is able to anticipate the expected outcomes of the financial distress. This concurs with the findings of Rose-Green and Dawkins (2000) who suggest that firms that were subsequently liquidated have greater stock price declines as compared to the reorganized firms in the event of bankruptcy filings, showing that the market has a high degree of insight into the subsequent resolution of bankruptcy. Rose-Green and Dawkins (2000) report subsequently liquidated firms' cumulative abnormal returns of -43.75% and -24.76% for subsequently reorganized event windows (-1, +1).

There are cases of companies re-entering the financial distress classification, which may distort the main findings. In such cases, these are referred to as "second-time entry" companies.[4] The second-time entry companies are companies that have entered financial distress classification and have been re-listed in the Bursa Malaysia after undergoing a restructuring process. After certain periods, the companies have again been classified as financially distressed since they have triggered one of the criteria outlined by the Bursa Malaysia. In this sense, the inclusion of second-time entry companies may produce a downward bias in the average abnormal return. Therefore, to provide further insight into the main findings, the second-time entry companies were excluded from the sample of re-emerged firms.[5] The results suggest that there is little, if any, evidence of difference in abnormal returns between the full sample of re-emerged companies and the sample excluding second-time entry companies. This confirms that the initial findings are not driven by those firms that enter financial distress for the second time. Figure 1 shows the difference in the price effect between the re-emerged and delisted firms.

[4] Altman and Branch (2015) highlight the recidivism problem where firms that have successfully undergone Chapter 11 reorganization and emerged as continuing entities or are acquired as part of the bankruptcy process refile for bankruptcy protection.

[5] The estimation results are available upon request.

Fig. 1: Cumulative average abnormal returns (CAARs) surrounding the announcement day of financial distress outcomes (delisted and re-emerged)

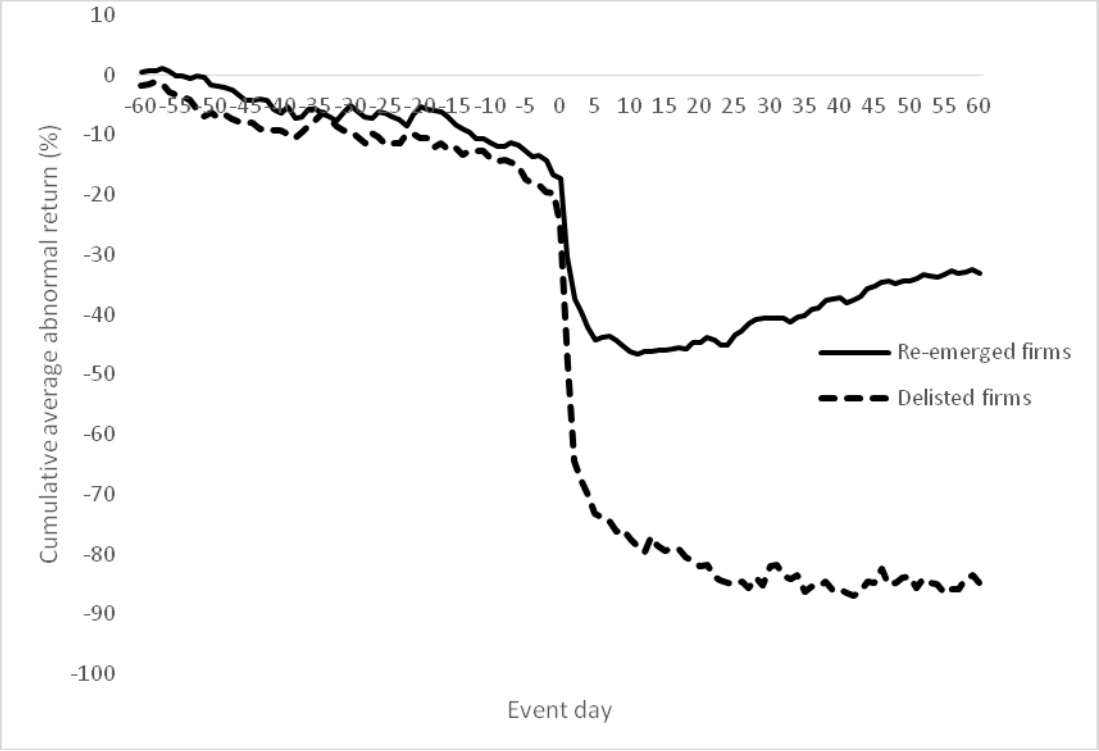

Table 2. Cumulative average abnormal returns (CAARs) surrounding the announcement day by outcomes

Subsample	(-30, -1)		(-1, +1)		(+1, +30)		(-60, +60)	
	CAARs (%)	***t*-statistics**	**CAARs (%)**	***t*-statistics**	**CAARs (%)**	***t*-statistics**	**CAARs (%)**	***t*-statistics**
Full sample (n=236)	-10.58	-5.8758***	-22.40	-13.7096***	-39.77	-14.9902***	-58.29	-14.0522***
Outcomes								
Re-emerged (n = 121)	-10.53	-5.6718***	-16.11	-8.3293***	-23.36	-7.2595***	-33.13	-7.1326***
Delisted (n = 115)	-10.62	-3.3779***	-29.02	-11.4699***	-57.04	-15.6943***	-84.77	-13.9529***
Mean difference (*t*-stat.)[a]	0.09 (0.024)		12.91 (4.054)***		33.68 (6.939)***		51.64 (6.753)***	
Wilcoxon *z*-value[b]	-0.214		-4.339***		-6.173***		-6.194***	

The *t*-statistcs test the null hypothesis that the cumulative average abnormal returns are equal to zero. *, **, *** denote statistical significance at 10%, 5% and 1% levels, respectively. [a]To compare the mean difference, *t*-statistics under the assumption of unequal variances and two-tailed test are utilized. [b]The Wilcoxon rank–sum test for the difference in medians.

4. Conclusion

This paper examines whether the market differentiates the outcomes at the time when firms announce their distress condition. Based on a sample of 236 financially distressed companies listed on the Bursa Malaysia over the period of 2001-2014, the study examines the announcement effect on stock prices using an event-study design. Overall, the results suggest that announcements of financial distress are associated with negative abnormal returns. Furthermore, the results indicate that the market differentiates the outcomes of the firms around the financial distress announcement. Re-emerged firms experience significantly less negative abnormal returns compared to delisted firms. Of further interest would be studies to identify the characteristics of the re-emerged firms to determine which ones might possibly represent stock investment opportunities.

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