THE WEALTH EFFECT OF CORPORATE DIFFERENT FINANCIAL DISTRESS EVENTS

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Abstract - This study examines the effects of different financially distressful events on corporate stock cumulative abnormal returns. The findings suggest that corporate financial distress events lead to significantly negative wealth effects. In addition, we found that the most acute financial distress events led to significantly more negative wealth effects.

Index Terms - Financial Distress; Wealth Effect

I. INTRODUCTION

Numerous studies have recently been devoted to default risk. Most of these have focused on refining the estimation of the default probabilities of individual firms (e.g.,Reference [4]; Reference [5]; Reference [12]). Despite the impressive results obtained in previous studies, it is questionable that such a default event could provide market investors with additional information content. Previous studies have focused on a firm's bankruptcy event (e.g., Reference [2];Reference [7]; Reference [8];Reference [9]), which is an ex post default event, and the negative information available before the bankruptcy news announcements. This paper analyzes a financial distress sample set of Taiwanese firms that experienced various degrees of credit risk. These events included reorganization, check stop payment, requesting financial support, being taken over, having the Certified Public Accountant (CPA) question the firm's continued operation, showing a negative net worth, and full-cash delivery or delisting. Therefore, we assess whether the intensity of various financial distress events affect the process of conveying valuable information content to stockholders.

II. SAMPLE AND METHODOLOGY

Based on a total of 203 financial distress events between 1998 and 2011, which are classified into seven types, and further categorized into three distress groups, we examine the market responses resulting from the news announcements of the events. We predicted that the wealth effects would be stronger for higher default probability events.

2.1. Distress and bankruptcy

Distressed firms are generally distinguishable from solvent firms along several financial dimensions (Beaver, 1966). In the US, formal bankruptcy proceedings entail a liquidation process (Chapter 7) and a reorganization process (Chapter 11). According to Chapter 7, the firm is shut down by a court-appointed trustee, the firm's assets are sold, and the liquidation proceeds are distributed in accordance with the absolute priority rule (APR). Chapter 11 is intended primarily for the rehabilitation of a financially distressed firm. Despite the results obtained by bankruptcy studies, the factors that contribute to a financially distressed event need not be identical to bankruptcy filing. Reference [1]defined "failure" as the inability of a firm to pay its financial obligations as they mature. A firm is classified as a failure when any of the following events have occurred: bankruptcy, bond default, an overdrawn bank account, or nonpayment of a preferred stock dividend. Reference [6]indicated that a bankruptcy model estimated from a distressed sample performs poorly, suggesting that the resolution of distress is influenced by other non-financial factors. Reference [10]suggested that financial default should be defined as a dynamic process, rather than as bankruptcy, liquidation, or closure of a static form. The existing studies suggest that default or failure is a continuous process that should be phased, and a latter or final stage only provides limited, unexpected information to the market. Hence, this paper substitutes various distress announcements for bankruptcy filing, to explore the influence on stock accumulative abnormal returns during a continuous distress process.

2.2. Financial distress events in Taiwan

The factors that contribute to financial distress need not be the same factors that motivate bankruptcy filing. Therefore, we selected our sample distress-firm from the Taiwan Economic Journal (TEJ) database, which classifies financial distress events into various types. These categories are: reorganization, check stop payment, requesting financial support, being taken over, having the CPA question the firm's continued operation, showing a negative net worth, and full-cash delivery or delisting. In addition, these types of distress are categorized into three groups, according to the severity of default risk by the Taiwan Credit Rating Index (TCRI) of the TEJ database. The first four events are categorized as "Core Default" which is the most likely type of default. The next two events are classified as "Presumed by Specific Financial Events". The last event (full-cash delivery or delisting) belongs to the

"Judged by Experience" group. The sample period of our study was from January 1, 1998 to December 31, 2011. Our sample encompassed 203 distressed firms for which stock prices and financial statement data were available and for which we were able to calculate abnormal returns related to distress-event announcements. Panel A of Table 1 presents the sample distribution by announcement year. Our events occurred mainly in 2004, 2005, and 2008. Panel B of Table 1 provides the number and percentage of sample distribution by distress category. Most of the events in our sample fell under the distress categories of "requesting financial support" (31.5%), "having the CPA question the firm's continued operation" (30.5%), and "check stop payment" (28.6%).

2.3. Event study method

The purpose of this paper is to investigate the market reaction of distressed firms around financial distress. In this subsection we examine the market reaction of distressed firms in a period when the financial distress news is announced. We assessed the wealth-effect by applying the standard-event study method to estimate cumulative abnormal returns (CARs) for distressed firms. First, we define the announcement date as the event date. Then we calculate abnormal returns (ARt) for each distressed firm and counterparty at time t using the market-adjusted return model developed by Reference [3]; Reference [11]. The market index was measured by the TAIEX value-weighted index for Taiwan Stock Exchange Corporation (TWSE) stocks, with parameters estimated over a window ranging from 273 days prior to the event date to 21 days prior to the event date, and adjusted using the GARCH (1, 1) model.

Table 1:Sample distribution by year and distress-event group

Panel A: By calendar year

Year	Number of events	Percentage
1998	4	1.97%
1999	14	6.90%
2000	20	9.85%
2001	16	7.88%
2002	8	3.94%
2003	16	7.88%
2004	22	10.84%
2005	28	13.79%
2006	18	8.87%
2007	15	7.39%
2008	23	11.33%
2009	11	5.42%
2010	6	2.96%
2011	2	0.99%
Total	203	100.00%

Panel B: By distress-event group

Core default		
Requesting financial support	64	31.5%
Check stop payment	58	28.6%
Reorganization	11	5.4%
Being taken over	1	0.5%
Presumed by specific financial events		
Having the CPA question the firm's continued operation	62	30.5%
Showing a negative net worth	2	1.0%
Judged by experience		
Full-cash delivery or delisting	5	2.5%
Total	203	100%

Note: This table presents the sample distribution of financial distress events from 1998 to 2011. The sample is collected from the Taiwan Economic Journal database. We report sample distribution by calendar year in Panel A and by distress-event group in Panel B.

Next, these abnormal returns were averaged across credit distress events, and then cumulative abnormal returns (CAR) were calculated. We focused not only on the (-1, +1), (-2, +2), and (-5, +5) windows, but also reported the results of the (-5, +20) window, for robustness. Finally, t-statistics were calculated from the Newey-West heteroskedasticity and autocorrelation consistent standard errors to account for any possible event clustering. We investigated the impact of the distress announcement on the wealth of the shareholders of distressed firms.

III. EMPIRICAL RESULTS

Table 2 presents the market response of distressed firms to financial-distress news announcements. We calculated the CARs for all the distressed firms and report the results in Panel A. The stock prices of distressed firms consistently exhibited significant and negative responses in all event windows. The cumulative abnormal stock return for the three-day event window was -2.65%, which is statistically significant at the 1% level. Next, we considered the financial distress events by classifying them into two groups (core default and presumed by specific financial events) and show the market response and mean difference test results in Panel B. For core default group, we find the CARs in all event windows are negative and significant at the 1% level, suggesting those most serious distress events harm the firm's stock price. For the presumed by specific financial events group that was associated with lower default probability, we find that the CARs also are significantly negative across all event windows, but the figures are smaller than the core default group.

Furthermore, the test of mean difference between two distress-event groups shows that the average CAR over the interval (-1, +1) of the core default group was significantly less than that of the presumed by specific financial events group. In sum, the results of Table 2 suggest that a firm's financial distress events lead to negative wealth effects for distressed firms, and the intensity of the effect increases with the crisis level. In addition, not all kinds of distress events reveal additional and valuable information to investors. The "Core Default" events are one of the most influential groups that provide additional information for investors to update their assessment of the credit risk.

CONCLUSION

The wealth effects of financial distress news announcements on the distressed firms have received much attention in empirical studies. Most research has focused on the announcement effects of bankruptcy events and, more specifically, examined the stock-price response on the bankruptcy news announcement date. This paper employed a unique and comprehensive corporate distress events database in Taiwan from 1998 to 2011, and classified 203 sample events into three distress-event groups, according to the extent of the probability of default. We investigated whether the intensity of financial distress events resulted in distinct market effects on distressed firms.

Table 2: Wealth effect for distressed firms

Panel A : Full sample			
Windows	CAR (%)	t-stat.	% <0
(-1 , +1)	-2.65***	-8.55	78.5***
(-2 , +2)	-4.06***	-8.27	74.4***
(-5 , +5)	-7.10***	-8.83	77.0***
(-5,+20)	-14.33***	-8.57	76.4***
No. of obs.		203	
Panel B: By distress-event group			
Core Default Events (A)			
Windows	CAR (%)	t-stat.	% <0
(-1 , +1)	-3.54***	-8.86	85.3***
(-2 , +2)	-5.53***	-8.64	83.6***
(-5 , +5)	-9.51***	-8.98	82.8***
(-5,+20)	-18.22***	-8.00	83.6***
No. of obs.		134	
Presumed by Specific Financial Events (B)			
(-1 , +1)	-0.77**	-1.98	62.7**
(-2 , +2)	-0.97*	-1.73	52.9
(-5 , +5)	-1.97**	-2.14	62.3**
(-5,+20)	-6.73***	-3.61	60.4**
No. of obs.		64	
Panel C: Tests in mean difference of CAR			
	CAR (-1,+1) (%)	CAR (-2,+2) (%)	
A vs. B	-4.49***	-4.56***	

Note: This table presents the mean cumulative abnormal returns measured by the market-adjusted return model for distressed firms surrounding distress news announcements. Day 0 represents the announcement date. Panel A shows the estimated results of full sample. Pane B reports the mean difference test results by three various distress-event groups. The "Core Default" group includes reorganization, check stop payment, requesting financial support, and being taken over, the "Presumed by Specific Financial Events" group includes have the CPA question the firm's continued operation, and showing a negative net worth, and the full-cash delivery or delisting is categorized into the "Judged by Experience" group. The t-statistics are derived from Newey-West heteroskedasticity and autocorrelation consistent standard errors. The "% <0" entry represents the percentage of observations with negative values and the significance of statistics was assessed by sign test. The superscripts *, **, and * indicate statistically significance at 1%, 5% and 10% level, respectively. The empirical findings show that credit counterparties are negatively affect by the news announcements of the distress events experienced by corporate firms, and that shareholder wealth experienced a significant negative influence. In addition, when we classified sample distress events into three distress groups according their default probability, we found that the most acute financial distress events led to significantly more negative wealth effects.This study provides a reference for corporate credit decisions, but also recommends that investors should pay attention to the possible negative wealth effects on stockholders resulting from the news announcement of a firm's financial distress.**

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