



Contents lists available at ScienceDirect

## Journal of Financial Markets

journal homepage: [www.elsevier.com/locate/finmar](http://www.elsevier.com/locate/finmar)



# Investor ignorance in markets for worthless stocks<sup>☆</sup>

Palani-Rajan Kadapakkam<sup>\*</sup>, Hongxian Zhang<sup>1</sup>

Department of Finance, University of Texas at San Antonio, One UTSA Circle, San Antonio, TX 78249-0637, USA

### ARTICLE INFO

#### Article history:

Received 31 July 2013

Received in revised form

6 January 2014

Accepted 7 January 2014

Available online 23 January 2014

#### JEL classification:

G14

G33

#### Keywords:

Investor irrationality

Worthless stocks

Bankrupt firm stocks

### ABSTRACT

We examine stocks of bankrupt firms after the court confirms they will receive nothing. While trading volume is negligible for most worthless stocks, some have sizable trading volume, indicating investor ignorance of their zero intrinsic value. Prices respond irrationally to news in several instances, and they are higher for more liquid worthless stocks, which are more likely to attract uninformed investors. Our analysis includes the first empirical examination of short-selling in bankrupt firms. Short-covering cannot account for the anomalous price and trading volume. Short-sellers are active in these stocks and play a useful role in pushing prices down toward intrinsic value.

© 2014 Elsevier B.V. All rights reserved.

“GM management strongly believes that any recovery for the common stockholders in the chapter 11 bankruptcy process is highly unlikely, even under the most optimistic of scenarios.”

Corporate statement regarding GMGMQ stock on June 10, 2009

GMGMQ Stock Price: \$1.29; Shares Traded: 73,666,000

Market data for June 11, 2009

<sup>☆</sup> We are grateful for comments received from Onur Bayar, Natasha Burns, Karan Bhanot, Kathy Clark, Tim Krause, Srinivas Krishnamurthy, Lalatendu Misra, Gideon Saar (the editor), John Wald, Stefan Zeisberger, an anonymous reviewer, and participants in the seminar series at UT – San Antonio. The first author was supported by a summer research grant from the College of Business, UT – San Antonio.

<sup>\*</sup> Corresponding author. Tel.: +1 210 458 5830; fax: +1 210 458 6320.

E-mail addresses: [PKadapakkam@utsa.edu](mailto:PKadapakkam@utsa.edu) (P.-R. Kadapakkam), [Hongxian.Zhang@utsa.edu](mailto:Hongxian.Zhang@utsa.edu) (H. Zhang).

<sup>1</sup> Tel.: +1 210 458 7392; fax: +1 210 458 6320.

## 1. Introduction

Stocks of bankrupt firms trade at surprisingly high prices relative to underlying value. Moreover, trading volumes for some of these firms are pretty robust. The behavior of Motors Liquidation Company's (formerly General Motors Corporation) stock price after the firm declared bankruptcy best exemplifies this phenomenon. In addition to the protestations of the corporate management quoted above, there were multiple media stories, warnings on the U.S. Securities and Exchange Commission's (SEC's) website, and the ticker symbol was changed to MTLQQ on July 15, 2009 in an effort to remove investor confusion about the security's disassociation from the "new GM." Astoundingly, over the 22 months following the bankruptcy filing, the daily trading volume for the "worthless" GMGMQ/MTLQQ stock averaged \$7.08 million, with a maximum value of \$259.14 million.

During bankruptcy proceedings, shares represent deep-out-of-the-money call options on the firm's assets and can have positive values in rational markets. French (2010) suggests that most likely irrational investors drove the GM stock price above its true value, since short-selling costs weaken disciplining by arbitrageurs. In this study, we seek clear evidence of investor irrationality in bankrupt firm stocks and assess whether such irrationality is pervasive. To obtain such clear evidence, we restrict our attention to stocks that did not receive any payoffs under the final bankruptcy reorganization plan. We identify 264 such stocks during the 2000–2011 period. After court confirmation of the reorganization plans, these securities exhibit a very rare characteristic for stocks: a precisely identified intrinsic value of zero. The market for bankrupt firm stocks is dominated by individual investors.<sup>2</sup> It is interesting to examine whether such a market correctly values these stocks. Of course, this is hardly a stringent test, since valuation of these worthless stocks is quite easy.

If the markets are rational, worthless stocks should cease trading. Surprisingly, they continue to be traded until they are officially deleted from the OTC market. The window between the reorganization plan confirmation date and the last trading date is, on average, 25 trading days, with a median value of 13 trading days. While most of the sample stocks have negligible price and dollar trading volume, some of these worthless stocks defy predictions based on investor rationality. The observed discrepancies between prices and the zero intrinsic value for these stocks are meaningful in economic terms. Based on the maximum price observed after plan confirmation, market capitalization exceeds \$2 million for 66 of the 264 worthless stocks in the sample; it exceeds \$5 million for 35 stocks. Daily trading volume after the confirmation date exceeds \$1 million in 54 instances; it is as high as \$15.8 million in one case.

In a rational market, higher liquidity should lead to greater market efficiency and prices should be closer to the intrinsic value. However, market capitalizations and stock prices are higher for worthless stocks with higher liquidity, consistent with more popular stocks being more prone to investor ignorance and irrationality. We buttress the evidence on market irrationality by documenting irrational stock price increases in response to news. The evidence is consistent with investors confusing the worthless stock in the bankrupt firm with newly issued shares in the reorganized firm.

We fail to find evidence supporting alternative explanations for why traders buy worthless shares.<sup>3</sup> The observed trading volume of the worthless shares cannot be attributed to "dollar for the lot" trading, wherein a broker buys all of a customer's worthless shares for a nominal amount of \$1, so that the customer has a confirmed trade record for tax purposes. Covering by short-sellers cannot account for the trading volume either. In virtually all cases, the stock's cumulative trading volume after the confirmation date is far greater than its short-interest level around the confirmation date. Furthermore, contradicting the short-covering hypothesis, there is evidence of increased short-interest levels after the confirmation date for at least half the sample. Supplementing this evidence,

<sup>2</sup> Institutional investors exit after the bankruptcy filing. Coelho, John, and Taffler (2011) and Li and Zhong (2013) estimate institutional ownership immediately after bankruptcy filing to be 10% or less.

<sup>3</sup> Potential litigation payoffs also cannot explain the anomalous behavior of worthless stocks. Typically, litigation settlements in the context of managerial malfeasance and misreporting are allotted to pre-bankruptcy shareholders in proportion to the price they paid and the losses suffered. Investors who buy a stock after the bankruptcy filing cannot claim to be misled by the managers and are excluded. Thus, the potential for litigation settlements cannot explain positive prices for worthless shares.

Download English Version:

<https://daneshyari.com/en/article/961002>

Download Persian Version:

<https://daneshyari.com/article/961002>

[Daneshyari.com](https://daneshyari.com)