Do Insiders Who Pledge Their Shares Manipulate Reported Earnings?
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1. What is a Share Pledge Loan?

A share pledge loan is a loan that promoters obtain by pledging their company’s shares as collateral. Promoters pledge shares to raise capital for their company, fund projects of group companies, or for personal reasons. Typically, lenders are non-banking finance companies.

Figure 1 depicts the recent trend in the proportion of promoter shareholdings that have been pledged in NSE-listed companies. This proportion increased from 32% in December 2010 to 42% in March 2014. According to a recent report by Prime Database (a database provider), the market value of shares pledged has increased from ₹127,807 Crores in December 2009 to ₹202,969 Crores in December 2015 (reported in LiveMint, January 22nd, 2016). Thus, share pledge activity is an economically important phenomenon worthy of more detailed research and analysis.

2. Share Pledge Disclosure Regulation

While share pledge loans have been used by promoters for several years in India, they entered the public limelight in January 2009 after Mr. Ramalinga Raju, the former chairman of Satyam Computer Services Limited, a leading information technology firm, admitted to falsifying the firm’s financial statements. In the week preceding the revelation of the fraud, lenders liquidated Mr. Raju’s pledged shares precipitating a significant decline in Satyam’s stock prices. Quickly thereafter, on January 28th 2009, SEBI responded by announcing new disclosure requirements related to share pledge loans. The concern was that share pledge loans increase the risk of sudden price declines when lenders liquidate pledged shares. By requiring prompt disclosure, SEBI intended that investors would become aware of this potential risk in a timely manner.

The pledging disclosure regulations have three parts. First, insiders who borrow against their company’s shares should disclose this fact to their company within seven days of the
borrowing. Second, the company in turn, should inform the exchanges of the share pledge loan within seven days of being informed by the insider. Third, every quarter, companies should, along with their shareholding pattern disclosure, provide information on the number and proportion of shares pledged by all promoters as a group.

3. **Share Pledge Loans and Share Prices**

One interesting feature of share pledge loan agreements are that they involve margin agreements where loan amounts are pegged to the stock price. Typical loan amounts against pledged shares range from fifty to seventy percent of the value of the shares pledged at the pledging date (Shetty (2011)). That is, margin balances range from thirty to fifty percent. Subsequently, if the share price declines, lenders can through a “margin call,” either require the lender to repay the entire loan, repay an amount such that the original margin balance is preserved, or increase the collateral by requiring the promoter to pledge more shares. In the event of the promoter being unable to comply with the lenders requirement, lenders could potentially sell the pledged shares, triggering further stock declines.

By tying loan amounts as well as loan default to the company’s share price, share pledge loans raise interesting questions about ownership and control and investor behaviour. Sharp price declines can cause promoter ownership stake to decline and simultaneously lead to lenders gaining control over the firm if they buy the promoters shares. Potentially, these price declines can result in promoter shares being sold to investors who are actively seeking to take-over the firm. Additionally, liquidation of shares by lenders can lead to a downward spiral in stock prices driven by price pressure, as opposed to changes in fundamentals. Clearly, these are costly outcomes from the point of view of the top management as well as shareholders. The question then becomes, how do promoters and firms mitigate these risks?

4. **Incentives to Manipulate Reported Profits**

In this study, we examine whether firms attempt to reduce the likelihood of stock price declines by manipulating reported net profits. Net profit is a very important signal that influences resource allocation in capital markets. In theory, the share price is approximately the present value of future net profit. An increase in profits, generally leads to increases in share price and decrease in earnings leads to decrease in share price.
Given the importance of profits, promoters and other members of the top management have a vital interest in the number that is reported. In a recent academic study by Graham, Harvey, and Rajgopal (2005), 401 Fortune 500 Executives were surveyed about financial reporting strategy and the conclusion was that, managers are interested in meeting or beating earnings benchmarks primarily to influence stock prices. Thus, we expect that firms will manipulate profits upward to prevent share price declines.

While share pledge loans create incentives for upward profit manipulation, we expect that the ready availability of daily collateral values will also increase the intensity of monitoring by lenders. Share prices are salient and directly related to loan payoffs. Consequently, pledging can have the opposite effect of deterring earnings management. Thus, it becomes an empirical issue as to whether pledging increases or reduces incentives to manage earnings.

5. Findings

To evaluate whether pledging increases or deters earnings management we correlate the proportion of promoter shareholdings that are pledged with a widely-used metric of earnings manipulation called discretionary accruals. To understand this measure, we begin with the fact the bottom-line profits has two parts: cash from operations and non-cash accruals. Whereas cash from operations is fairly objective, the measurement of non-cash accruals involves several subjective assumptions by management and accountants. For example, accountants have to subjectively decide the amount of bad debt expense or the amount of warranty provision every year. To isolate the subjective component of accruals, academics employ statistical methods whereby they remove the normal level of accruals caused by growth in operations from accruals. The remaining accruals are termed discretionary accruals. Thus, discretionary accruals measure management’s subjectivity in estimating accruals and profits.

Our statistical analysis show that discretionary accruals are negatively related to pledging activity. For example, while firms with share pledge loans record mean discretionary accruals of -0.4%; by comparison non-pledgers record mean discretionary accruals of 0.6%, contributing to a one percent differential in return on assets between the two groups. The
evidence suggests that the deterring monitoring effect of share pledge loans dominate the incentives to increase the short-run price.

To obtain deeper insights into the effect of pledging on earnings management, we compare sub-samples where we expect the incentive to manage earnings to differ. Specifically, we compare firms whose promoters are pledging for the first time during the sample period with firms whose promoters have pledged shares at the beginning of the year and continue to pledge shares throughout the year. We also compare pledgers that are individuals and corporate pledgers.

Our supplemental analyses provide the following insights. First, pledging promoters manage discretionary accruals upward in the first year of the pledge. However, either because of the reversing nature of accruals and / or increasing monitoring in subsequent years, pledgers engage in lower levels of earnings manipulation in subsequent years. To illustrate, the mean discretionary accruals in the first year of the pledge is 1.03%; in contrast, the mean discretionary accruals in subsequent years is -0.62%. Second, the negative relation between pledging and discretionary accruals is observed for both individual and corporate promoters.

6. Implications

Share pledge loans expose firms and their promoters to potential costs. In particular, declines in share prices can precipitate costly margin calls and further share price declines, akin to a torpedo effect. To minimize these risks, firms and their promoters are incentivized to manipulate earnings upward. However, lenders being aware of the incentive to manipulate earnings are likely to scrutinize financial statements more carefully.

We find that the deterrent effect of lender monitoring dominates the incentive to manipulate profits upward. That is, in general, pledging firms have lower levels of earnings management than non-pledging firms. However, in the first year of the pledge, pledging firms tend to manage earnings upward. Because earnings manipulation tends to reverse over time, investors should avoid investing in stocks whose promoters are pledging stocks for the first time.

Figure 1

Mean Proportion of Shares Pledged by Indian Promoters (2009-2014)
Source of Data: CMIE Prowess Database