Notes

Reverse Stock Splits as a Useful Management Tool: The Case of Quasi-Reorganization

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A reverse stock split is an accounting procedure which is used by a corporation to reduce the number of outstanding shares and, simultaneously, increase its par value. Given certain circumstances, a reverse stock split could help corporations achieve certain financial goals. However, compared to the direct stock split, not many corporations seem to take advantage of the reverse split. On the average, during the last decade, only about 5 percent of all splits performed by the companies listed on the New York Stock Exchange were of the reverse type [8]. This is probably due to a lack of familiarity, on the part of the corporate managers and business advisors, with the procedure and its consequences. Many are possibly familiar with the procedure but are not sure how to use it as part of an "action package" of improving the company's financial health.

A survey of related literature reveals that during the last decade most corporations that embarked on a reverse stock split were in some type of financial distress. Many of these corporations implemented the reverse stock split to eliminate the image of penny or low-priced stock, while improving the market for the company's shares by decreasing the transaction costs. Taking the company private, though, has become a principal motive behind some of the more recent splits performed by both financially sound and financially distressed companies. No matter what the underlying objective has been, it is hard to argue that a reverse split on its own could accomplish it. According to the well documented "theory of efficient markets," sophisticated investors would see the reverse stock split for what it is — an accounting transaction with no real substance [2]. In other words, only fundamental variables such as expected earnings, growth rate, and economic conditions should affect stock prices, not a mere "paper shuffling." However, given many success stories, it would also be hard to reject the possibility of synergy between a reverse split and some other actions designed to increase shareholders' wealth ([1], [3], [4], [9], [10]). In other words, if a reverse split is performed as part of a comprehensive "action package" of boosting the profitability and share prices, chances are good for the split to show a synergy rather than a liability.

It is the purpose of this paper to show ways a reverse stock split, in conjunction with the measures to boost profitability, may improve the chance of recovery for a corporation involved in a quasi-reorganization.

In the following sections we will first provide a critical evaluation of the reverse stock split as a means to: (a) boost market demand for a company's shares, and (b) take a company private. We will then, present the details of the case of a reverse stock split combined with a quasi-reorganization. The final section of the paper will be devoted to our concluding remarks.

An Evaluation of the Reverse Stock Split

Basically, the mechanics of a reverse stock split are the same as a direct stock split, except that the stockholders exchange multiple shares of lower value par stock for a single share of higher value par stock, resulting in a decrease in the number of outstanding shares. To illustrate, assume a company has 50,000,000 outstanding shares of one penny par value stock and desires to reduce the number of outstanding shares to 500,000 with one dollar par value. The shareholder would surrender 100 shares of existing stock for one share of the new one dollar par value stock. The company will record the transaction through a memo to its capital account. As with the direct stock split, corporate charters not authorizing the type and the value of par stock that the company desires to issue must be amended.

Maximizing Shareholders' Wealth

Reverse stock splits have been used often by corporations in the hope of stimulating the market for their outstanding shares. As far as the demand side is concerned a reverse split may directly affect the demand by reducing the transaction costs. Given all the revelant variables, a reverse split should always result in an increase in the market price per share by the ratio of the split. The increased price reduces the per share percentage of the stock transaction cost. In the over-the-counter market, for example, the transaction cost is the spread between the asked and bid price. If the spread is 1/8, the transaction cost is 1.2% for a $10 stock, but 12% for a $1 stock. The reduction in transaction cost should increase the rate of return on investors' stock investment. The lower the original price the more apparent is the increase in the rate of return. The increase in the rate of return, in turn, could have a positive effect on the demand for the stock and therefore the price. However, the disadvantage is that investors may perceive the split as a negative signal that may indicate long-term financial difficulty [7]. Earlier empirical studies such as R. Radcliff and W. Gillespie [5] and R. Woolridge and D. Chambers [11] showed a significant decline in the trading price around the announcement date, reflecting investors' concern about the company's future financial security.

A second way that the reverse stock split might help the price per share is through cutting certain corporate expenses. One of the advantages of reducing the number of outstanding shares is that the company might be able to reduce the number of the potential shareholders. This reduction, in turn, could reduce the expenses in reporting to shareholders, registrar's fees, paying dividends and shareholders' meetings. Although these reductions in expenses usually are insignificant to justify the reverse stock split by themselves, they provide some additional benefits when split fulfills other corporate objectives.

Reverse stock splits can also help companies whose stock is trading at an extremely low price per share and eliminate the image of being abnormally risky that is usually associated with penny stocks. Of course, according to the semi-strong form of the efficient market hypothesis, security prices should always reflect all the available public information [2]. In other words there is never an under- or over-valued stock. However, it is a fact that not all segments of the U. S. stock market, at all times, can be charac-

terized as "efficient" [6]. For the market to be completely efficient first all the revelant information should reach all the market participants quickly at the same time; and second the market participants should react to the new information as fast as possible. Certainly relative to many large prestigious corporations with national following the small, newly established companies do not always enjoy an efficient market for their stock.

In a recent study, M. Seyedian [8] tracked the price performance of 45 industrial companies listed on the New York Stock Exchange that experienced a reverse stock split from 1970 to 1987. The closing prices for 20 days before and 20 days after the day a reverse stock split was announced were used. According to the results, companies that embarked on a reverse split experienced an increase in their value beyond the increase associated with the overall market following the announcement date. The study does not offer information on the status of the companies beyond 20 days. However, one could safely guess that over a longer run prices re-adjusted to their original levels unless the split was complemented by positive growth in sales, productivity, and profitability.

Taking a Company Private

The reverse stock split has been used to take companies private. Metropolitan Maintenance Company was purchased by two officers using a reverse stock split. The split was 1 for 3,000, but anyone with less than 3,000 shares received cash. By coincidence only the two officers had more than 3,000 shares.

There are several advantages that a successful reverse stock split may produce for a company. The first is control. Obviously, most public companies were once founded by one or a few entrepreneurs in the pursuit of profit. In the case a company is just a family business, the number of shareholders might increase to the point considered to be a potential threat to the controlling family. A reverse stock split that requires rounding down could force smaller shareholders to sell odd shares. A careful determination of the split ratio is required to determine the effect on all shareholders. Moreover, this procedure may help the corporation qualify as an S corporation if the number of shareholders are reduced to 35 or less.

Smaller publicly traded companies with shareholders numbering just over 500, may use the reverse stock split to reduce the number of shareholders to below 500. This reduction of shareholders to below 500, limits the company's required public disclosure within their SEC filings. This reduces both the information competitors may obtain and the compliance cost.

The benefits described are, obviously, dependent upon the degree of success that the majority stockholders will experience in tneir attempt to privatize their company. The most important obstacle in the way of a successful split is the potential opposition of the minority stockholders to the proposed plan. At times the minority shareholder could be some sizable corporation with the intention of one day acquiring or taking over the company in which it is a minority in terms of the number of votes. In that case, a long and expensive legal battle in the courts is a very probable outcome. This situation is more likely to occur when the price offered to the minority groups for the redemption of their fractional shares is considered unfair. The cash offer price is fundamental to a successful split. Prudent companies contemplating a reverse split should

give a lot of thought to the determination of an appropriate price if they are interested in avoiding a legal battle.

Reverse Stock Split Combined with Quasi-Reorganization

For corporations that have experienced hardship in the past but expect an increasingly profitable future, the use of a reverse stock split combined with a quasi-reorganization may help increase the market value. When management has successfully implemented a comprehensive plan of actions to maximize shareholders' wealth, the use of the split combined with a quasi-reorganization can only augment the chance of total recovery. In such cases the alleged benefits of the reverse split discussed earlier will surely outweigh the associated negative effects.

The quasi-reorganization permits a previously troubled company to realign its capital structure without filing bankruptcy, provided creditors cannot or agree not to force the company into bankruptcy. This capital realignment usually improves the company's financial statement credibility from the creditors' viewpoint and accelerates the time period before the company can legally pay dividends from retained earnings.

The quasi-reorganization, which usually requires shareholder approval, is rather simple to implement. Assets are revalued at their fair market value, and tax benefits arising prior to the quasi-reorganization that will benefit the company after the reorganization should be recorded as an asset (i.e., loss carry forwards). The net results of the asset reevaluation (usually a loss) and any known unrecognized losses are charged to retained earnings. The deficit in retained earnings is charged against contributed capital or additional paid-in capital. If there are no contributed capital or additional paid-in capital, or they are insufficient to absorb the entire retained earnings deficit, then they must be created. The additional capital may be created in one of several ways. First, existing shareholders, without receiving anything in return, may contribute additional capital to the corporation. Second, shareholders could donate a percentage of the stock to the corporation, thereby reducing the amount required in the common stock account. Third, the company could reduce the par value of its outstanding common stock and transfer the difference to additional paid-in capital. Fourth, the corporation could combine number one and/or number two with a reverse stock split.

The primary purpose of the quasi-reorganization is to enhance the corporation's image with creditors and potential new investors. The quasi-reorganization reduces the deficit in retained earnings, but why not at the same time increase the company's stock trading price? This can be accomplished by a disproportionate reverse stock split. That is, the increase in par value is not proportionate to the decrease in outstanding shares. For example, a company has 2,000,000 shares of outstanding $1 par value stock before it implements a reverse stock split. The reverse stock split is 1 for 50, but instead of issuing $50 par value common stock, the company issues $10 par value common stock. The excess in the common stock account is credited to additional paid-in capital.

To fully illustrate the accounting procedures for a quasi-reorganization coupled with a disproportionate reverse stock split, consider the following example. Continuing with the company above that has 2,000,000 shares of outstanding $1 par value stock, assume fur-

ther that the stock is trading for 50 cents a share. The company's balance sheet on December 31, 1989 is as follows:

Assets		
Cash		$ 85,000
Accounts Receivable		825,000
Property, Plant & Equipment	$ 785,000	
Less Accumulated Depreciation	230,000	555,000
Other Assets		120,000
Total Assets		$ 1,585,000
Liabilities and Stockholders' Equity		
Current Liabilities		$ 535,000
Long-term Notes Payable		225,000
Total Liabilities		$ 760,000
Stockholders' Equity		
Common Stock, $1 par value		2,000,000
Retained Earnings (deficit)		(1,175,000)
Total Stockholders' Equity		825,000
Total Liabilities & Stockholders' Equity		$ 1,585,000

Additional facts include:

1. An additional $175,000 of accounts receivable need to be written off.
2. The plant and property have appreciated $85,000 since purchased.
3. Other assets contain $35,000 of goodwill that is to be written off.

The journal entries for quasi-reorganization and the disproportionate stock split are:

	Debit	Credit
A) Retained Earnings	125,000	
Plant and Property	85,000	
Goodwill		35,000
Accounts Receivable		175,000

To write down goodwill and accounts receivable and write up plant property as part of a quasi-reorganization.

	Debit	Credit
B) Common Stock, $1 par value	$ 2,000,000	
Common Stock, $10 par value		400,000
Paid-in Capital in excess of Par		1,600,000

To record disproportionate reverse stock split which exchanges 1 share of $10 par value stock for 50 shares of $1 par value stock.

	Debit	Credit
C) Paid-in Capital in Excess of Par	1,300,000	
Retained Earnings		1,300,000

To eliminate the deficit in retained earnings as part of a quasi-reorganization, ($1,175,000 balance sheet amount plus 125,000 from Journal entry A, above). The bal-

ance sheet should carry the date of the quasi-reorganization in the retained earnings section until it loses its significance (5 to 10 years). For example, assume the company's net income that is closed to retained earnings is $100,000 in 1990, the balance sheet should read:

Retained earnings, since Jan. 1, 1990 $100,000

After the quasi-reorganization the corporation starts fresh and should follow generally accepted accounting principles. Also, the market price of the stock should increase to approximately $17.50 per share immediately after the quasi-reorganization ($400,000 common stock + $300,000 paid-in capital in excess of par)/ 40,000 shares outstanding.

Although quasi-reorganizations are not everyday events, they have been used when specific industries have experienced a recession. Examples during the 1980's include: First Wisconsin Mortgage Trust, Lockheed Corporation, Astrotech International Corporation, and Perception Technology Corporation. The primary benefit to investors is the elimination of the deficit in retained earnings, since most states require dividends to be paid from "positive" retained earnings.

Conclusion

Reverse stock splits and quasi-reorganization are not tools that lend themselves to solving everyday corporate problems and are therefore infrequently seen. However, when the situation arises where they are applicable, they can be beneficial.

Corporations that have been in financial trouble in the past but have turned themselves around so that there are every evidence of a continuing positive growth in profitability, a reverse stock split could enhance the chance of a successful quasi-reorganization. When such companies have negative retained earnings, a disproportionate split can be combined with the quasi-reorganization to restate the balance sheets with retained earnings having zero balance. Under such circumstances it would be safe to expect that the splits' advantages of reducing the stocks trading cost and shareholders administration expenses, and eliminating the "penny stock" image would not hurt the management's primary objective of maximizing the shareholders' wealth.

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