Corporate Restructuring: Firm Characteristics and Performance

Fauzias Mat Nor
Norazlan Alias
Mohd Hasimi Yaacob

ABSTRACT

Theoretically, corporate restructuring is meant to remove firms’ operating and financial constraints and improve firm performance. However, corporate restructuring announcements might be interpreted differently by the market. Using event-study method, this study examines the impact of corporate restructuring announcements made by selected firms on their stock prices. Overall, the effect of the restructuring announcements made by these companies on stock prices was significant while the average two years of return on total assets and return on operating cash flow in the post restructuring period were mixed. Evidence also indicates that debt reduction, refocusing and alignment of interest between management and shareholders through board of directors’ ownership do not constitute the main focus for some firms in the post restructuring period.

STUDY BACKGROUND

The financial crisis in 1997 had largely affected the current economic scenario that caused many firms in Malaysia to experience difficult time in
their business operations and financial position due to rising interest rates, depreciating Ringgit against foreign currencies and declining share values. Following the financial crisis, the number of firms that defaulted or undergoing restructuring and the amount of debt involved in debt restructuring increased sharply. However, it can be argued that firms restructure for several reasons such as poor corporate governance, overdiversification and overleveraging. In Malaysia, some firms had undertaken debt restructuring before the financial crisis but the financial crisis in July 1997 escalated the amount of restructured debt and number of firms involved in debt restructuring. Previous studies argue that corporate restructuring is meant to correct firm specific characteristics due to overdiversification, poor corporate governance and overleveraging. In other words, the firm’s characteristics such as ownership structure, level of diversification and debt ratio affect the firm’s decision to undergo corporate restructuring. Rationally, corporate restructuring will give meaning when firms make adjustments or corrections on specific characteristics that exhibit weak governance, over diversification and high leveraging to improve performance. Therefore do characteristics of the firm such as ownership structure, level of diversification and debt ratio differ before and after corporate restructuring to reflect the corporate restructuring motive? Does corporate restructuring announcement affect stock price and motivate the firm towards improved accounting performance?

**REVIEW OF PAST STUDIES**

**CORPORATE RESTRUCTURING PERFORMANCE**

Corporate restructuring performance is measured in the form of market performance and accounting performance (Bowman et al. 1999). In the strand of literature that uses market performance, Markides (1992) examined whether the market value of firms that had refocused increases surrounding their refocusing announcement. He found that over diversified firms that made refocusing announcements consistently created statistically significant positive abnormal returns. His study also implies that there is a limit to how much a firm can diversify and firms that go beyond this limit will suffer value decline. John and Ofek (1995) found that sell-offs’ CAR are larger if the parent is selling a division that is unrelated to the core industry of the parent and are driven by a desire for parent firms to increase focus.

In another strand of literature that uses accounting ratios, Markides (1995) investigated why firms reduce their diversification by refocusing on their core businesses and found that refocusing is associated ex post with profitability improvements. Lai and Sudarsanam (1997) find that both profitability and cash flows of 297 UK firms which adopted different restructuring strategies decline significantly in the decline year while Daley,
Mehorotra and Siva Kumar (1997) showed that the announcement period return of asset sales and the post issue operating performance of spin-offs are higher when the parent and subsidiary have different SIC code. Zhao (1998) finds that refocused firms experience higher post-period performance than non-refocused firms for all performance measures. Sell-off aimed at increasing focus is also followed by improvements in profitability for the remaining business of the parent.

CORPORATE RESTRUCTURING AND OWNERSHIP STRUCTURE

Ownership structure may involve the distribution of the firm’s shares to the managers or directors of the firm. Shareholders depend on managers to maximize their wealth. However, maximization of managers’ wealth rather than shareholders’ wealth will likely dominate the firm’s management actions at the expense of shareholders. The agency costs arise when managers act as the agent rather than owner. The problem of agency cost associated with the divergence of interest between shareholders and managers has been researched numerously (Jensen & Meckling 1976; Morck et al. 1988). In other words, lack of managerial incentives and divergence of interest between managers and ownership tends to lead to poor governance.

Board of directors’ ownership is a result of the alignment of interest between existing management and existing shareholders as board of director turn to act as the owner-manager of the firm. If agency theory predicts that corporate restructuring is partially to improve corporate governance, board of directors’ ownership presence is expected to align the interest of managers and shareholders following debt restructuring, thus reducing the agency problem. Therefore, firms with board of directors’ ownership are less likely to restructure because they have been efficiently configured. With regards to the relationship between ownership structure and corporate restructuring, Gibbs (1993) found that firms with strong board powers are less likely to restructure, or at least, restructure less. Meanwhile, Bethel and Liebeskind (1993) studied the effects of ownership structure on corporate restructuring on a sample of 93 surviving public Fortune 500 firms during the period of 1981-1987. They find no evidence of either insider owners or institutional investors except for block share ownership on the association with the corporate restructuring. Lai and Sudarsanam (1997) finds that the dominated manager-owner firms are more likely to choose capital expenditure and less interested to pursue operational restructuring, acquisitions and managerial restructuring.

CORPORATE RESTRUCTURING AND DIVERSIFICATION

According to agency theory argument, the conflict of interest between managers and shareholders exist when managers link personal incentives
such as power and job security with firm size. The managerial incentives become higher as the firm becomes larger. Another argument is that managers with excess cash view diversification as a means for firm to grow beyond limited opportunities in their core businesses. Thus, the manager chooses to diversify to enlarge firm size though this diversification strategy destroys shareholder value when firms are diversified beyond optimal limit (Markides 1992).

Amihud and Lev (1999) also relate the potentially detrimental effect of agency problems on corporate strategy to generally result in corporate diversification and value loss while focusing is value increasing. Mitton (2002) suggests that the lower transparency of diversified firms in emerging markets results in a higher level of asymmetric information that may allow managers or controlling shareholders to more easily take advantage of minority shareholders.

As a result of the diminishing effect of past diversification strategy on firm value, a firm chooses to undergo corporate restructuring to correct past mistake in the diversification strategy. Among the methods used to correct the negative effect of diversification is by divesting unrelated business and refocus on a firm's business portfolio around it's core capabilities (see Gibbs 1993; Markides 1990). Weston et al. (2001) also argued that refocusing will make it easier for the managers to monitor and make better decisions when the firm's business is more narrowly positioned.

CORPORATE RESTRUCTURING AND LEVERAGE

Previous studies on the relation between a firm’s capital structure and corporate restructuring have documented mixed evidence. Jensen (1989) examined the link between a firm’s capital structure and restructuring. The author finds that highly leveraged firms are more likely to restructure their debt as firm value falls. Ofek (1993) tested the relation between capital structure and a firm’s response to short-term financial distress. He finds that high leverage also significantly increases the probability of debt restructuring following a short period of distress.

Consistent with Jensen (1989), Ofek (1993) also found that higher leverage also significantly increases the probability that some operational actions such as asset restructuring and employee lay-off will be taken in the year of distress. However, Gilson, John and Lang (1990) find no relation between leverage and debt restructuring following a long period of distress. The rate of filing for bankruptcy is higher for firms experiencing along period of distress than a short period of distress and leverage has no effect on management turnover for firm in a short period of distress but has an effect in along period of distress; highly pre-distressed leveraged firms react faster to a decline in performance than do less pre-distressed leveraged firms.
that experience short periods of distress. Thus, the presence of debt allows firms to some extent to avoid along period of losses with no response and provide positive elements through a disciplining and monitoring action. In a similar study, they also find that firms with a high ratio of bank debt are more likely to successfully restructure their debt. Other studies (Denis & Shome 2005; Lang et al. 1995; Markides & Singh 1997; Steiner 1997) that discussed on the association between leverage and corporate restructuring.

Theoretically, when the debt level is beyond its optimal ratio, the benefits of using debt (in particular tax-shield) are offset by the rising bankruptcy related costs. In the worst scenario due to the constraints imposed by the bankruptcy costs, the firms will be forced to liquidate. Therefore, the firms would restructure their debts when they are experiencing debt servicing problem due to escalating debt amount and interest commitment.

**METHODOLOGY**

Four cases of involuntary corporate restructuring of Bursa Malaysia listed firms namely, Malaysian Resources Corporation Berhad (MRCB) Group, UEM-Renong Group, Lion Group and Time Engineering constitute our interest in this study.

These four group of companies are selected on the basis of:

1. Their corporate restructuring scheme announcements are viewed to be comprehensive involving organisational restructuring, portfolio or asset restructuring and financial restructuring. It is documented that different types of restructuring may give a different impact on firm’s performance. Thus, a study having all firms with a comprehensive restructuring scheme will be unbiased in relation to the restructuring outcomes.

2. They are among major listed firms in the Kuala Lumpur Composite Index (KLCI) and their restructuring involved a considerably large amount of financial outlay.

We follow the two different measurements discussed in Bowman et al. (1999) to measure the corporate restructuring outcome. We calculate the abnormal movements in the firm’s stock price in the days after a restructuring announcement to measure the market performance. The abnormal returns reflect changes in a company’s share price, adjusted for market trends that can be attributed to the restructuring event.

Data for the daily prices and KLCI (Kuala Lumpur Composite Index) price index for the event windows for the period of 2000-2003 are downloaded from the Datastream. This study uses the daily stock return of the 13 companies for the period of 30 days before announcement (-30,0), during announcement (-1,+1) and 30 days after announcement (0,+30).
To determine whether the announcements convey information to the market, cumulative abnormal returns (CARS) are calculated based on the simplified market model which constraints alpha and beta to 0 and 1.

In determining the CARS we follow the standard market model event study which constrains \( \alpha \) and \( \beta \) to equal to 0 and 1, respectively such that \( R_{M,t} \) (the KLCI) is company \( i \)th’s expected return. Thus, the abnormal return (AR\(_{i,t}\)) for company \( i \) is the difference between the actual return on day \( t \) and its expected return (\( R_{M,t} \)).

\[
AR_{i,t} = R_{i,t} - (R_{M,t})
\]

where the daily returns of stock \( i \) is calculated as follows;

\[
R_{i,t} = \frac{P_{t} - P_{t-1}}{P_{t-1}} \times 100
\]

where \( P_{t} \) is the price of stock \( i \) on trading day \( t \) and \( P_{t-1} \) is its price one trading day before that. Similarly, the market return equals to;

\[
R_{M,t} = \frac{KLCI_{t} - KLCI_{t-1}}{KLCI_{t-1}} \times 100
\]

The cumulative abnormal returns (CAR) for company \( i \) is calculated as:

\[
CAR_{i} = \sum_{t=1}^{N} AR_{i,t}
\]

It is important to determine if the announcements convey information to the market at all. Following Baek et al. (2001), t-statistics is used to test the hypothesis that the average CARS are significantly different from zero at each event windows. Results of the t-tests are presented in Table 3.

We also identify the changes in the company’s accounting performance such as return on total assets (ROA) calculated as net income available to shareholders divided by the total assets, return on operating cashflow (RCF) calculated as operating cashflow divided by total assets and debt ratio calculated as calculated as long term debt plus short term debt divided by the total assets. ROA provides a measure of the efficiency of asset utilization (see Lai & Sudarsanam 1997; Zhao 1998) while RCF is useful alternative measure of operating performance because operating cash flows are a primary component in net – present value (NPV) calculations used to value a firm (see Kim et al. 2004).

Debt ratio has been widely used to measure financial leverage (see Demsetz & Villalonga 2001; Gosh & Jain 2000). Changes in other firm’s characteristics such as board of directors’ ownership and level of diversification
are also measured to examine whether corporate restructuring does motivate firms towards enhancing their corporate governance mechanism through board ownership and refocusing. The board of directors’ ownership represents insider or managerial shareholding in the firm. The influence of board of directors’ ownership in corporate policy setting and performance has been widely debated and documented (see Bethel & Liebeskind 1993; Gibbs 1993; Jensen & Meckling 1976; Kim et al. 2004; McConnell & Servaes 1990). The firm’s level of diversification is measured by revenue-based Herfindahl Index computed as the sum of the squares of each segment as a proportion of total assets (see Comment & Jarrell 1995) as follows:

\[ F_H = \sum_{i=1}^{N_F} \left( \frac{X_{ij}}{\sum_{i=1}^{N_F} X_{ij}} \right)^2 \]

Value of one for Herfindahl index corresponds to very focus or non diversified business activities. These changes are normally calculated over a several-year window surrounding the restructuring event, therefore allowing comparisons of post-restructuring accounting performance with the pre-restructuring performance. In this study, we took an average of two years of board of directors’ ownership, revenue-based Herfindahl index, debt ratio, ROA and RCF before and after the year of restructuring announcement of each firm.

RESULTS AND DISCUSSION

As shown in Table 1, for Renong Group, both UEM and Renong experienced a decrease in ROA and RCF in the post restructuring announcement. For Lion Group, Chocolate Product (CP) and Lion Corporation Berhad (LCB) experienced an increase in ROA and RCF all performance measures while Lion Industries Corporation Berhad (LICB) and SCB experienced a decrease in ROA and RCF. However, ACB experienced an increase in ROA but a decrease in RCF while Lion Forest Industries (LFI) experienced a decrease in ROA but an increase in RCF. For MRCB Group, all companies experienced an increase in ROA but a decrease in RCF. Meanwhile, Time experienced a decrease in both ROA and RCF. In other words, not all firms have shown an improvement in average ROA and RCF in the post restructuring announcement.

The restructuring announcements of UEM-Renong Group, Time Engineering, MRCB Group and Lion Group were not conveyed to the market as shown by insignificant price impacts for all event windows except for LICB and LFI of the Lion Group which showed a negatively significant price impact during the announcement.
<table>
<thead>
<tr>
<th>Group</th>
<th>Companies</th>
<th>Sector</th>
<th>Pre to Post</th>
<th>Wealth Effect on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ROA</td>
<td>RCF</td>
</tr>
<tr>
<td>Renong Group</td>
<td>UEM</td>
<td>Construction</td>
<td>Decreased</td>
<td>Decreased</td>
</tr>
<tr>
<td></td>
<td>Renong</td>
<td>Construction</td>
<td>Decreased</td>
<td>Decreased</td>
</tr>
<tr>
<td>MRCB Group</td>
<td>MRCB</td>
<td>Construction</td>
<td>Increased</td>
<td>Decreased</td>
</tr>
<tr>
<td></td>
<td>TV3</td>
<td>Trading and service</td>
<td>Increased</td>
<td>Decreased</td>
</tr>
<tr>
<td></td>
<td>NSTP</td>
<td>Trading and service</td>
<td>Increased</td>
<td>Decreased</td>
</tr>
<tr>
<td>Time</td>
<td>LCB</td>
<td>Trading and service</td>
<td>Decreased</td>
<td>Decreased</td>
</tr>
<tr>
<td>Lion Group</td>
<td>LCB</td>
<td>Industrial Product</td>
<td>Increased</td>
<td>Increased</td>
</tr>
<tr>
<td></td>
<td>ACB</td>
<td>Industrial Product</td>
<td>Increased</td>
<td>Decreased</td>
</tr>
<tr>
<td></td>
<td>LICB</td>
<td>Industrial Product</td>
<td>Decreased</td>
<td>Decreased</td>
</tr>
<tr>
<td></td>
<td>SCB</td>
<td>Consumer Product</td>
<td>Decreased</td>
<td>Decreased</td>
</tr>
<tr>
<td></td>
<td>LFI</td>
<td>Trading and service</td>
<td>Decreased</td>
<td>Increased</td>
</tr>
<tr>
<td></td>
<td>CP</td>
<td>Consumer Product</td>
<td>Increased</td>
<td>Increased</td>
</tr>
</tbody>
</table>

Ann= announcement, Before Ann = event window (-30,0), During Ann = event window (-1,+1), After Ann = event window (0,+30).
As shown in Table 2, we compared pre- and post-restructuring's debt ratio. UEM and Renong experienced higher debt ratios in post restructuring as compared with the pre-restructuring period. Time Engineering also experienced a higher debt ratio in the post-restructuring period. For the MRCB Group, MRCB and TV3 experienced higher debt ratio in the post-period while NSTP experienced a lower debt ratio in the post-restructuring period. For the Lion Group, LCB, LICB, ACB, SCB and CP experienced higher debt ratios while LFI experienced a lower debt ratio in the post-restructuring period. This indicates that overall, the corporate restructuring does not motivate the firms towards reducing their debt two years after the announcement was made.

<table>
<thead>
<tr>
<th>Group</th>
<th>Company</th>
<th>Sector</th>
<th>Debt ratio (Pre)%</th>
<th>Debt ratio (Post)%</th>
</tr>
</thead>
<tbody>
<tr>
<td>UEM-Renong</td>
<td>Renong</td>
<td>Construction</td>
<td>61.87</td>
<td>87.10</td>
</tr>
<tr>
<td></td>
<td>UEM</td>
<td>Construction</td>
<td>72.54</td>
<td>85.36</td>
</tr>
<tr>
<td>MRCB</td>
<td>MRCB</td>
<td>Construction</td>
<td>62.66</td>
<td>172.72</td>
</tr>
<tr>
<td></td>
<td>TV3</td>
<td>Trading and service</td>
<td>149.11</td>
<td>73.47</td>
</tr>
<tr>
<td></td>
<td>NSTP</td>
<td>Trading and service</td>
<td>66.93</td>
<td>45.60</td>
</tr>
<tr>
<td>Time Engineering</td>
<td>Time Engineering</td>
<td>Trading and service</td>
<td>60.17</td>
<td>95.26</td>
</tr>
<tr>
<td>Lion Group</td>
<td>LCB</td>
<td>Industrial Product</td>
<td>82.96</td>
<td>97.78</td>
</tr>
<tr>
<td></td>
<td>LICB</td>
<td>Industrial Product</td>
<td>60.43</td>
<td>82.39</td>
</tr>
<tr>
<td></td>
<td>ACB</td>
<td>Industrial Product</td>
<td>73.97</td>
<td>87.08</td>
</tr>
<tr>
<td></td>
<td>SCB</td>
<td>Consumer Product</td>
<td>76.52</td>
<td>97.26</td>
</tr>
<tr>
<td></td>
<td>LFI</td>
<td>Trading and service</td>
<td>12.63</td>
<td>6.85</td>
</tr>
<tr>
<td></td>
<td>CP</td>
<td>Consumer Product</td>
<td>49.79</td>
<td>52.35</td>
</tr>
</tbody>
</table>

As shown in Table 3, we compared pre- and post-restructuring's levels of diversification based on revenue based Herfindahl index. The evidence shows that most of the firms' revenues are more concentrated into few business segments, which implies that the corporate restructuring does motivate the firms towards refocusing.

As shown in Table 4, we compared pre- and post-restructuring's ownership structure represented by board of directors' ownership (BOD). The results show that there are no significant changes in board of directors' ownership before and after corporate restructuring for most of the firms. In fact, the BOD became smaller. This indicates that the corporate restructuring does not motivate the firms towards enhancing their corporate governance mechanism through board of directors' ownership.
Overall, the stock price reactions on the restructuring announcements made by the firms were not significant. The fact that these firms were actually facing debt restructuring to enable them to reduce their financial

commitment might not be attractive to the market. Most of the firms were characterised by considerably high average debt ratio prior to restructuring. The firms also exhibit different levels of efficiency with respect to generating profit and cash flow when measured in ROA and RCF respectively. Some firms consistently showed a decrease in both ROA and RCF such as UEM, Renong, Time, LICB and SCB while some firms consistently showed an increase in both ROA and RCF such as LCB and CB. Other firms such as MRCB, TV3, NSTP, ACB and LFI showed mixed results two years after the restructuring announcement was made.

Surprisingly, all firms except for LICB and LFI experienced a higher debt ratio in the post-restructuring period though these firms were forced to restructure due to higher debt. In other words, theoretically we should expect the leverage ratios of these firms to be reduced in the post-restructuring period. There are two possible reasons for the increase in debt. First, equity issuance may not be an attractive way to raise funds since these firms were perceived to be troubled firms. Second, some firms became part of the vehicle to raise debt to enable survival of other firms who were not able to raise debt for their excessive current debt obligations. As a result, the 'vehicle' firm(s) experienced a higher debt ratio in the post-restructuring period.

Refocusing or reducing diversification is argued to be one of the reasons for firms to restructure. Surprisingly, UEM, Renong, NSTP, ACB and SCB did not show a drastic turnaround strategy to be less diversified in the post-restructuring period while MRCB and Time Engineering showed more effort to become less diversified. LCB and LICB appeared to be more focused while TV3 remained focused in the post-restructuring period.

In the context of ownership structure, only UEM showed an increase in board of directors' ownership percentage. If an increase in board of directors' ownership percentage is expected to bring greater monitoring effect and a reduction in agency cost as argued in the literature, we should expect all firms to consider increasing their board of directors' ownership two years after the restructuring announcement. This indicates that aligning the interest of management to shareholders was viewed to be insignificant in ensuring these troubled firms improve their performance.

CONCLUSION

In conclusion, the stock price reactions on the restructuring announcements made by the firms were not significant and mixed results on accounting performance measured in ROA and RCF. These firms have also shown some changes in firm specific characteristics in terms of financial leverage measured in debt ratio, level of diversification measured in revenue based
Herfindahl Index and corporate governance mechanism via board of directors' ownership following to the corporate restructuring announcement. The motives for corporate restructuring were inconclusive for all firms since not all post restructuring outcomes were consistent with the argument that corporate restructuring should result in more focus, improved corporate governance through insider ownership and better debt management ratio. The implication of these findings is that corporate restructuring framework in Malaysia does not really focus to further strengthening the role of board of directors through board of directors' ownership, emphasizing corporate refocusing and reducing debt in the post restructuring period. Since this paper revealed the descriptive and event study results, further research is recommended to test on the relationships between firm's characteristics and the likelihood of corporate restructuring and the relationship between post firm characteristics and post restructuring performance.

REFERENCES


Fauzias Mat Nor, Norazlan Alias, Mohd Hasimi Yaacob  
School of Business Management  
Faculty of Economics and Business  
Universiti Kebangsaan Malaysia  
43600 UKM Bangi, Selangor D.E  
Malaysia  
Email: norazlan@ukm.my