

Corporate Financial Distress and Turnaround Strategies: An Empirical Analysis

Sudi Sudarsanam and Jim Lai*

Cranfield University School of Management, Cranfield, Bedford MK43 0AL, UK and

*Pricewaterhouse Coopers, Kuala Lumpur, Malaysia

email: p.s.sudarsanam@cranfield.ac.uk

Extant research on corporate turnaround from financial distress has prescribed a range of strategies to effect corporate recovery. However, no large sample study has examined the general applicability and effectiveness of these strategies. We set out to test the effectiveness of strategies and identify the underlying factors of effectiveness – the impact of timing, intensity and implementation of strategies on corporate recovery. We examine a sample of 166 potentially bankrupt UK firms drawn from 1985 to 1993 and track their turnaround strategies for a period of three years from distress. These strategies include operational, asset, managerial and financial restructuring. Our results show recovery and non-recovery firms adopt very similar sets of strategies, and managers of non-recovery firms restructure more intensively than recovery firms. Nevertheless, non-recovery firms seem far less effective in strategy implementation than their recovery counterparts. Whereas recovery firms adopt growth-oriented and external-market focused strategies, non-recovery firms engage in fire-fighting strategies.

Introduction

Corporate turnaround has received much attention in the strategy literature and, increasingly, in finance. These two streams have, however, differed in their focus, i.e. type of strategies, in their approach, i.e. whether descriptive or prescriptive and in the definition of performance

decline. A range of strategies has been prescribed for their potency in corporate recovery. Corporate responses to performance decline cover a wide range of restructuring: managerial, asset or strategic, financial, operational and organizational.

Corporate downward spiral to failure, after the onset of performance decline, is attributed by past researchers (e.g. Barker and Mone, 1994; Hambrick and Schecter, 1983; Hofer, 1980; Hoffman, 1989; Schendel, Patton and Riggs, 1976; Weitzel and Jonsson, 1989) to managerial inaction, poor timing and lack of intensity and poor implementation of turnaround strategies. This suggests that success of managerial responses to performance decline is conditioned by their timing, intensity and effective implementation. Analysis of these factors requires a multi-period examination of the turnaround process. Again, empirical evidence on these factors contributing to effectiveness of turnaround strategies, based on large-scale analysis, is limited.

Address for correspondence: Sudi Sudarsanam, Cranfield University School of Management, Cranfield Bedford MK43 0AL, UK. Much of this research was carried out by Jim Lai as part of his PhD thesis at City University Business School in London and was partially funded by a research grant from the Chartered Association of Certified Accountants, UK. The content of this paper does not in any way reflect the views of PwC. We thank Richard Taffler for generously providing us with the Z-score data. The paper has benefited from the perceptive and valuable comments of two anonymous referees and Gerard Hodgkinson.

We aim to fill the empirical gap by investigating the turnaround strategies of firms that suffer performance decline. The questions we ask are:

- Do firms that recover from financial distress adopt different turnaround strategies from those that continue to decline into severe distress?
- Do these two groups differ in the intensity and timing of the strategies they deploy?
- Which of these strategies contribute to corporate turnaround?

We define financial distress in terms of potential bankruptcy risk using an accounting-based index of such risk. For a sample of 166 UK firms which experience financial distress during the period 1983–93, we test the effectiveness of each restructuring strategy. We also test the overall effectiveness of all the identified corporate restructuring strategies in achieving turnaround with logit and linear regressions of recovery on restructuring intensity. Our results show recovery and non-recovery firms adopt very similar sets of strategies following financial distress but their strategic choices diverge over time, with recovery firms choosing investment and acquisition to lead them out of trouble whereas non-recovery firms are more internally focused on operational and financial restructuring.

The paper is organized as follows. The next section reviews the literature on corporate restructuring and turnaround. The third section describes the methodology and data, the fourth presents and interprets the results, and the final section provides a summary and the conclusions.

Corporate turnaround strategies

Fall of a firm from a superior performance position to an extremely poor position on any appropriate performance criterion normally points to fundamental problems with its management and strategies. However, given that the firm is poorly performing, how should management respond? Management may sit tight in hope of an upturn in its fortunes or restructure to recover rapidly from poor performance. However, 'masterly' inaction may lead to further deterioration in firm performance (Schendel, Patton and Riggs, 1976; Weitzel and Jonsson, 1989).

Managers may also refrain from actions that may contribute to turnaround but hurt their own self-interest.

Firms which experience financial distress may choose a variety of methods of restructuring themselves back to financial health (e.g. John, Lang and Netter, 1992). Firms' choice of restructuring strategy is, however, contingent on a range of factors. Ofek (1993) examines the impact of capital structure on the choices made by such firms. Kang and Shivdasani (1997) examine the impact of bank relationship, block shareholders, managerial shareholding and the traditional keiretsu membership of a sample of Japanese firms experiencing performance decline on the restructuring actions they take, and report that the probability of actions such as downsizing is influenced by many of these factors. Kang and Shivdasani (1997) also examine the impact of managerial ownership, block shareholdings and leverage on the responses of a comparative sample of US firms to performance decline, and find no evidence for it. We first map out the range of turnaround strategies identified in the extant literature and then discuss their empirical effectiveness.

Managerial restructuring

Top management change is widely quoted as a precondition for successful turnarounds (Bibeault, 1982; Hofer, 1980; Schendel, Patton and Riggs, 1976; Slatter, 1984). Simply, when old ways of operating need to undergo drastic change, it is difficult for incumbent top management to change their habits and institute radical reforms. Often, banks and creditors will continue financial support only if they are confident that the management team can manage the crisis in hand. A change in top management is tangible evidence to bankers, investors and employees that something positive is being done to improve the firm's performance, even though the cause of poor performance may have been beyond management's control (Slatter, 1984). Grinyer, Mayes and McKiernan (1988, ch. 4) report that one of the most important differences between their sample of firms achieving recovery from poor performance and control firms is that the former make considerably more management changes.

There is empirical evidence of an inverse relation between the probability of management

change and a firm's stock performance (Coughlan and Schmidt, 1985; Warner, Watts and Wruck, 1988). Gilson (1989, 1990) and Murphy and Zimmerman (1993) find significant top-management changes in distressed firms. However, the stock market's reaction to top-management changes in distressed firms is mixed. Announcements of change in senior management in distressed firms are greeted positively (Bonnier and Bruner, 1989), negatively (Khanna and Poulsen, 1995) or neutrally (Warner, Watts and Wruck, 1988; Weisbach, 1988) by the market.

From the above studies it is not clear that management change in financially distressed firms contributes to recovery. If we interpret the stock market reaction as a measure of the perceived effectiveness of that change then the evidence from the above studies is not clear cut. Thus effectiveness of managerial restructuring in turnaround is yet to be conclusively established.

Operational restructuring

The strategic management literature provides empirical support for an overlapping two-stage approach to corporate turnarounds: the efficiency/operating turnaround strategy stage and the entrepreneurial/strategic stage (e.g. Bibeault, 1982; Robbins and Pearce II, 1992; Slatter, 1984). The efficiency/operating turnaround stage aims to stabilize operations and restore profitability by pursuing strict cost and operating-asset reductions. The entrepreneurial/strategic stage aims to achieve profitable long-term growth through restructuring the firm's asset portfolio or product/market refocusing. Our research classifies efficiency/operating measures as operational restructuring and entrepreneurial/strategic measures as asset restructuring.

Operational restructuring comprises cost reduction, revenue generation and operating-asset reduction strategies to improve efficiency and margin by reducing direct costs and slimming overheads in line with volume (Slatter, 1984). Operational restructuring is, generally, the first turnaround strategy implemented by a financially distressed firm, as there is no point in assessing the strategic health if the firm goes bankrupt in the near term (Hofer, 1980). Efficiency measures are directed at both maximizing output (revenue) and minimizing input (resources such as

inventory). Cost reduction may be sufficient where the firm is weak operationally. Kang and Shivdasani (1997) report that their sample of Japanese firms in performance decline carry out lay-offs and improve their operating income to assets significantly.

Next, revenue generating strategies may be pursued focusing on existing lines of products, initiating price-cuts (or raising prices where products are price insensitive) and increasing marketing expenditure to stimulate demand (Hofer, 1980).¹ When the firm is operating well below capacity, asset reduction to improve utilization and productivity of assets is imperative, and also augments the cash flow which is vital to firms in financial distress. Asset-reduction can be operational or strategic in nature. The latter type is discussed in the next subsection.

Operating-asset reduction refers to business-unit level sale, closures and integration of surplus fixed assets such as plant, equipment and offices, and reduction in short-term assets such as inventory and debtors. This is driven by the need to enhance the efficiency of the firm's current operations through improved asset utilization at the operating level (Bibeault, 1982; Hofer, 1980; Schendel, Patton and Riggs, 1976).

Operational restructuring is primarily designed to generate, in the short term, cash flow and profit improvement. It is of a fire-fighting nature and differs from restructuring aimed at the longer-term competitive positioning and performance of the firm. Grinyer, Mayes and McKiernan (1988, ch. 4), in their survey of firms which, after a decline relative to their competitors, achieve a dramatic and sustained improvement in performance (hence characterized as sharpbenders), observe that such firms do not restrict themselves to operational-cost reduction strategies but shift to long-term strategic changes through new product market focus, diversification, acquisition and so on. Thus operational strategies may be a

¹ Due to data availability problems, revenue-generating strategy is not explicitly studied in this research. Potentially, sales growth can be used to proxy for revenue growth but the effect of asset restructuring, such as acquisitions, obscures operational-revenue generating efforts. This limitation precludes analysis of some potentially significant recovery strategies focused on revenue generation from existing operations.

necessary but not a sufficient condition for recovery for many firms.

Operating efficiency strategies have been empirically associated with turnaround success (Finkin, 1985; Hambrick and Schecter, 1983; John, Lang and Netter, 1992; O'Neill, 1986; Pearce II and Robbins, 1993). However, whether operational restructuring leads to recovery from potential bankruptcy remains to be empirically tested.

Asset restructuring

Strategic/portfolio² restructuring covers reorganizing the firm into self-contained strategic business units; divestment of lines of businesses not fitting the core businesses; acquiring companies that relate to and strengthen the core; discontinuing unpromising products; and forming strategic alliances, joint ventures and licensing agreements.³ In addition, distressed firms may merge with other firms, be taken over in a hostile bid or be bought-out by their own management (MBOs). The strategic stage resembles the asset restructuring found in the finance literature, as it refers to the major reconfiguration of the firm's assets. This covers asset divestment and investment.

Asset divestment. Where the firm is in severe distress and/or where strategic health is weak,⁴ asset reduction is deemed imperative for turnaround (Hofer, 1980; Pearce II and Robbins, 1993). Asset reduction at the portfolio (corporate) level covers divestment of subsidiaries/divisions.⁵ The objective at this level may be to divest non-profit generating assets (and halt cash drain), non-core assets or even profitable assets for the purpose of raising cash to alleviate financial distress and fund restructuring. Divestment of subsidiaries is perhaps the most

common turnaround strategy by all but the smallest firms (Slatter, 1984). For a sample of Japanese firms in performance decline, Kang and Shivdasani (1997) find that asset contraction contributes to significant improvement in operating income/assets. In this study we examine whether asset sales such as divestments contribute to turnaround of financially distressed firms.

Asset investment. Asset investment covers business and corporate-level investments and comprises both internal capital expenditure and acquisitions. Capital expenditure is often designed to achieve efficiency/productivity improvement, e.g. building new plants and equipment (Hambrick and Schecter, 1983; Schendel, Patton and Riggs, 1976) or computerized processing and monitoring equipment which speeds up production and market response, improves productivity and reduces costs (Grinyer, Mayes and McKiernan, 1988, p. 88). Such expenditure complements, rather than conflicts with, efficiency-driven operational restructuring described earlier. It may also enhance the firm's competitive advantage, e.g. when the firm achieves economy of scale by expanding its output. Since it involves cash outflow, firms in decline can only undertake such capital expenditure as can ensure their survival and promote their recovery. Thus internal capital expenditure may be a critical component of a firm's turnaround strategy.

Firms may also seek to acquire businesses that fit their core competencies with long-term profit potential. This stage is crucial for turnaround by firms with inappropriate corporate strategy or mature or declining product/markets where a new strategic direction is imperative (Hofer, 1980; Pearce II and Robbins, 1993; Schendel, Patton and Riggs, 1976). Firms with poor financial performance but not yet in severe distress often resort to acquisitions to accelerate growth (Slatter, 1984, p. 96). Acquisitions may thus contribute to successful sharpbend and sustained good performance thereafter but need to be selected and managed carefully (Grinyer, Mayes and McKiernan, 1988, p. 98).

Financial restructuring

Cash generation strategies, e.g. asset divestment and equity issues, are commonly-used strategies

² Term used by Bowman and Singh (1993).

³ Adapted from Business Intelligence Research Report: Corporate Restructuring and Turnaround, 1987.

⁴ For example, where present capacity far exceeds long-term revenue potential or assets are in declining product/markets.

⁵ This type of asset reduction is distinct from operating-asset reduction discussed earlier. We acknowledge that in practice it is sometimes difficult to differentiate between the two types of asset reduction very sharply.

to alleviate financial distress, pay down borrowings, reduce interest cost and improve cash flows (Slatter, 1984). Extant strategy-based research on corporate turnarounds has not identified financial restructuring as an integral component of corporate turnaround strategy, as opposed to the finance-based research (e.g. Brown, James and Mooradian, 1993; DeAngelo and DeAngelo, 1990; Franks and Tourous, 1994; Gilson, 1989; John, Lang and Netter, 1992). Grinyer, Mayes and McKiernan (1988, p. 98) note, however, that their sample of sharpbenders followed debt reduction less frequently than their control firms. Our study incorporates financial restructuring as a key element of the corporate restructuring framework and evaluates its importance.

Financial restructuring is the reworking of a firm's capital structure to relieve the strain of interest and debt repayments and is separated into two strategies: equity-based and debt-based strategies. Equity-based strategies cover dividend cuts or omissions and equity issues, i.e. rights issue, public offer or institutional placing. Firms in financial distress tend to reduce or omit dividends due to liquidity constraints, restrictions imposed by debt covenants, or strategic considerations such as improving firm's bargaining position with trade unions (DeAngelo and DeAngelo, 1990). Empirically, DeAngelo and DeAngelo (1990) and John, Lang and Netter (1992) find large firms respond to financial distress with rapid and aggressive dividend reductions. Distressed companies may also raise equity funds via share issues more than non-distressed firms because of pressure from creditors concerned with the security of their lending.

Debt-based strategies refer to the extensive restructuring of firm debt. Firms restructure their debt either to avoid financial distress or to resolve an existing financial distress. Gilson (1989, 1990) defines debt restructuring as a transaction in which an existing debt is replaced by a new contract, with one or more of the following characteristics: (1) interest or principal reduced; (2) maturity extended; (3) debt-equity swap. Until recently, raising additional finance in the form of equity and new loans was more common than debt restructuring in the UK (Slatter, 1984). We investigate whether debt restructuring is an effective strategy for turnaround.

Selection and implementation of corporate turnaround strategies

Corporate turnaround often requires swift managerial actions to 'stop the bleeding'. Corporate failures, on the other hand, may be caused by managerial inaction or inappropriate actions (Hoffman, 1989; Makridakis, 1991; Schendel, Patton and Riggs, 1976; Slatter, 1984; Weitzel and Jonsson, 1989). Adoption of turnaround strategies itself is no guarantee of recovery. For a strategy to be effective, it may have to be carried out swiftly, intensively and competently. For example, swift and deep, rather than superficial, cost cutting may be instrumental to efficiency improvements and eventual turnaround. Poor implementation of turnaround strategies may exacerbate decline (Cameron, Sutton and Whetten, 1988; Freeman and Cameron, 1993). Barker III and Mone (1994), in their critique of Robbins and Pearce's (1992) study, contend that how managers retrench could be more important than whether managers retrench at all. Similarly, Hoffman (1989) suggests that the difference between successful and failed turnarounds lies more in the strategy implementation process than in its content.

Effectiveness of corporate turnaround strategies

Successful turnaround is return to the same performance level of the firm as before its distress. The chosen strategies may have contributed to such turnaround in different degrees. Some of the strategies are implemented simultaneously and some in sequence. Also, the overlapping and joint effects of complementary strategies may confound the impact of individual strategies. We estimate the joint impact of strategies on our measure of turnaround success over a period of three years from the distress year.

Methodology and data

Definition of financial distress and turnaround

In the turnaround literature in corporate strategy and finance, a range of definitions has been used to define distress, some based on change in either simple or industry-adjusted accounting ratios such as return on assets and some others based on

stock returns. Altman (1968) popularized the Z score as a measure of a firm's bankruptcy likelihood. In the UK, a popular Z-score model used by banks and industrial firms is developed by Taffler (1983, 1984). Firms with a negative Z score are classified as potential failures, as their financial profiles resemble those of previously bankrupt firms.

The model, developed using linear discriminant analysis techniques, takes the following form:

$$Z = c_0 + c_1 X_1 + c_2 X_2 + c_3 X_3 + c_4 X_4$$

where $X_1 \dots X_4$ denote the financial ratios, and $c_1 \dots c_4$ the coefficients that are proprietary. There are two versions. The first is used to analyse listed manufacturing and construction companies and has component ratios (with Mosteller-Wallace percentage contribution measures in brackets): profit before tax/current liabilities (53%), current assets/total liabilities (13%), current liabilities/total assets (18%) and no-credit interval (16%).⁶ The second variant is used to rate listed retail enterprises and has ratios: cash flow/total liabilities (34%), debt/quick assets (10%), current liabilities/total assets (44%) and no-credit interval (12%).

In this paper, we employ the Z scores developed by Taffler to define distress.⁷ A firm is in distress if it has a minimum of one year of negative Z score after two consecutive years of positive Z scores.

Definition of restructuring strategies and control variables

The four generic restructuring strategies studied are operational, asset, managerial and financial strategies. These are defined in Table 1. Operational restructuring covers cost rationalization, lay-offs, closures and integration of business units. Asset sales include divestment of

subsidiaries, management buy-outs, spin-offs, sale and lease-back, and other asset sales. Acquisitions include both full and partial acquisition of businesses. Management restructuring means removal of Chairman or Chief Executive Officer (CEO) or Managing Director (MD). Dividend cut or omission refers to omission or reduction of cash dividends per share from their pre-decline year level. Equity issue covers issue of equity for cash. Debt restructuring is defined as new debt issue and debt refinancing involving maturity extension, debt-equity swap or forgiving of debt and interest.

Intensity of restructuring

Intensity of restructuring is measured by change in accounting and cash-flow variables relative to a measure of their pre-distress size.⁸ Operational restructuring is measured by the cost of restructuring as reported in the company accounts relative to pre-distress total assets. Asset sales, acquisition and capital expenditure are measured by the cash flows raised or expended relative to pre-distress total assets. Dividend change is the change in current year dividends from the pre-distress year's. Equity issue is measured by cash raised by equity issue as a proportion of pre-distress year total assets.⁹

Control variables

The empirical literature (e.g. Robbins and Pearce II, 1992, 1993) also suggests that suitability and effectiveness of turnaround strategies are dependent on certain internal and external factors. These additional variables are included in our regressions

⁶ No credit interval is the ratio of excess of quick assets over current liabilities to the projected daily operating expenditure (see Taffler, 1983 for elaboration of this definition).

⁷ Taffler (1995) tracks the performance of this model from its development. Overall, it has had better than 98% success rate in classifying subsequently bankrupt companies as potentially insolvent ($Z < 0$) based on their last accounts prior to failure, and exhibits true *ex ante* predictive ability in statistical terms.

⁸ The choice of pre-distress value is based on the need to avoid contamination by severity of decline. For example, more-severely distressed firms by construct will have a more severe drop in assets. Thus, asset restructuring may appear artificially more intensive for such firms than for less-severely distressed firms of similar size prior to distress.

⁹ Intensity of management or debt restructuring is not examined. It was not possible to track, during the sample period, the proportion of directors replaced, based on information in company annual reports and accounts, which only provided information on resignation and reelection of directors on rotation each year. Debt restructuring is not examined due to the difficulty in quantifying the value of the restructuring package.

Table 1. Definition of restructuring strategies and control variables

| <i>Panel A. Restructuring strategies</i> | |
|--|---|
| Strategy | Definition |
| <i>Operational restructuring</i> | Cost rationalization, lay-offs, closures and integration of business units |
| <i>Asset restructuring</i> | |
| Asset sales | Divestment of subsidiaries, management buy-outs, spin-offs, sale and leaseback and other asset sales |
| Acquisitions | Full and partial acquisitions of businesses |
| Internal capital expenditure | Capital expenditure on fixed assets such as plant and machinery |
| <i>Managerial restructuring</i> | |
| | Removal of Chairman or Chief Executive Officer/Managing Director (retirement under 65 years age treated as removal) |
| <i>Financial restructuring</i> | |
| Dividend cut/omission | Omission or reduction of dividends from previous year |
| Equity issue | Issue of equity for cash |
| Debt restructuring | Debt refinancing involving extending, converting or forgiving of debt or interest |
| <i>Panel B. Control variables</i> | |
| Factor | Definition |
| Severity of decline | Stock-return ranking of sample firm in the year of decline |
| Internal problems | Reported internal problems such as project failure, bad acquisitions or poor financial control |
| Industry condition | Median Z score of firms in the same Financial Times Actuaries (FTA) sector to which the sample firm belongs |
| Economic condition | Growth rate in Gross Domestic Product (GDP) in post-decline, turnaround years |
| Size | Size of sample firm measured as market capitalization of its equity in the pre-decline year |

Notes: Restructuring strategies selected by financially distressed firms are defined. Information on strategies is from press releases to the London Stock Exchange which are documented by Extel Financial News Summary from 1987 with the exception of capital expenditure. Capital expenditure is defined as significant expenditure in excess of 10% of prior year asset value. The 10% limit is intended to capture expenditure significantly above routine asset replacement which, proxied by sample firms' depreciation charge, amounts to an average of 7% of prior year asset value. Supplementary information is also collected from Hambro/Andersen Corporate Register and Company Guide, Datastream International and company reports and accounts. These alternative sources are also used for cross-checking information reported in the Extel Financial News Summary.

as control variables. Severity of decline dictates both the pace of restructuring and effectiveness of particular actions. For example, asset investment or acquisitions may be unsuitable for more-seriously distressed firms as they consume scarce cash resources.

Economic and industry conditions may also influence effectiveness of strategy. For example, where the industry as a whole is depressed, asset sales and divestments may not raise as much cash as otherwise (Schleifer and Vishny, 1992). During an economic downturn, operational cost-cutting actions could be effective but equity issues may not be appropriate, as the stock market would be depressed. Size of the firm is a proxy for both the flexibility and internal slack available to the declining firm. Certain strategies such as acquisition and divestment are more appropriate for large rather than small firms. A large firm may also be able to negotiate debt restructuring more effectively.

Where the firm's performance decline has been caused by internal, firm-specific factors such as bad acquisitions or poor financial control, any restructuring has to reverse the firm specific causes. Again the effectiveness of restructuring will be dictated by the existence of internal causes of decline. These control variables are defined in Panel B of Table 1.

Effectiveness of turnaround is measured by the return of the distressed firm to the positive Z-score territory over the two-year period following the distress year. Relative recovery is represented by the change in Z score two years post-distress relative to that in the pre-distress year.

Data

Sample firms are those which experience a sharp decline to a negative Z score after having had a positive Z score for at least two consecutive years.

This sampling criterion is called the + + - (plus, plus, minus) rule.¹⁰ The sample covers the period 1983–93, with 1983–91 as the base (plus, plus) years and 1985–93 the distress (minus) years. Z scores are provided by Taffler.

An initial sample of 245 distressed firms satisfying our + + - rule is assembled from a total of 976 Financial Times All-Share Index (FTA) firms listed on the London Stock Exchange in the period 1983–93. The restriction to FTA firms is due to the fact that, at the time of the study, a complete database of Z scores dating back to 1983 was only available for FTA firms. Sampling excludes financials and utilities because of their being regulated.

Data on the sample firms' restructuring activities and on the explanatory variables are collected from Datastream International, company annual reports and Extel Annual News Summaries. Such data are not available for all companies defined as distressed, e.g. small firms with a market capitalization of less than £10m are excluded. The reduced sample consists of 201 financially distressed firms.

Table 2 shows financial characteristics of the sample firms in terms of a range of conventional accounting measures of performance. All the measures testify to a steep and significant decline in performance from the two pre-distress, healthy years to the distress year. Profit margin, return on equity and on assets, cash-flow return to capital employed and cash-flow cover for debt all show precipitous decline. In particular, the largest fall is in PBITD/TD, the cash-flow cover for debt. This fall is an indication of the falling profitability of the sample firms reflected in the profit margin and return ratios, and also of the rapid rise in debt of the sample firms.

Table 3 shows the financial status of sample firms two years after decline.¹¹ Over a third of the distressed firms recover, whilst nearly half the sample firms do not revert to their pre-distress

Table 2. Financial characteristics of distressed firms in pre-distress and distress years

| Financial characteristics | Two pre-distress years Mean (%) | Distress Mean (%) | Test of difference t statistic |
|---------------------------|------------------------------------|----------------------|--------------------------------------|
| PBIT/sales | 9.54 | 4.64 | 6.25 ^a |
| ROE | 24.96 | 5.90 | 7.22 ^a |
| ROA | 18.38 | 8.88 | 7.06 ^a |
| PBITD/CE | 14.20 | 3.37 | 8.14 ^a |
| PBITD/TD | 74.39 | 6.36 | 12.72 ^a |

Notes: This table shows the financial characteristics of distressed firms in the base years and the distress year. PBIT = profit before interest and tax. PBITD = PBIT plus depreciation (a cash-flow proxy). Return on equity (ROE) = profit after tax for ordinary shareholders/ shareholders' funds. Return on assets (ROA) = PBIT/total assets. Capital employed (CE) = total assets less current liabilities. TD = total debt. Differences in means between the two groups are tested using the t statistic. ^a indicates significance at 1% level.

financial health two years post-distress. The remainder of the sample is either taken over (9%) or become insolvent (2.7%).¹² The rate of recovery fluctuates between a low of 32% and a high of 75%. It is clear that distress immediately prior to an economic downturn (i.e. distress years 1988 and 1989) have a much tougher turnaround job than do firms that decline in a boom period (distress years 1986 and 1987). The final sample comprises 166 recovery and non-recovery firms

Results

Table 4 provides descriptive statistics on the distress year and post-distress financial performance of the sample firms divided into recovery and non-recovery firms. Recovery firms are those distressed firms which attain positive Z scores by the end of the second year from distress, whereas non-recovery firms still have negative Z scores. Recovery firms improve their operating performance quite substantially over the post-distress years contributing to their reversion

¹⁰ The + + - (plus, plus, minus) rule means sampling a firm that has a positive Z score in two consecutive years followed by a negative Z score in the third year during the sampling period 1983–93, i.e. a firm that is financially healthy in two consecutive years and then lapses into financial distress in the third year

¹¹ In the distress year the sample size is 201 firms. Since data on restructuring for 13 firms which become distressed in 1993 are not available these are excluded from our analysis of turnaround firms.

¹² It may be argued that insolvency is the ultimate non-recovery and thus merits analysis as to recovery strategies employed by the receiver or liquidator. However, the tiny sample size of this subgroup precludes any meaningful statistical analysis. Once a firm is taken over and becomes a subsidiary of the acquirer or is merged, details of restructuring are generally not publicly available. For these reasons we exclude insolvent and acquired firms.

Table 3. Sample firms and their financial status two years after distress

| Year | Taken over | | Insolvent | | Recovery | | Non-recovery | | Total | |
|-------|------------|------|-----------|------|----------|------|--------------|------|-------|-------|
| | No | % | No | % | No | % | No | % | No | % |
| 1985 | 3 | 20.0 | – | – | 9 | 60.0 | 3 | 20.0 | 15 | 8.0 |
| 1986 | 3 | 20.0 | – | – | 8 | 50.0 | 5 | 31.3 | 16 | 8.5 |
| 1987 | – | – | – | – | 9 | 75.0 | 3 | 25.0 | 12 | 6.4 |
| 1988 | 4 | 26.7 | 3 | 10.7 | 9 | 32.1 | 12 | 42.9 | 28 | 14.9 |
| 1989 | 5 | 33.3 | – | – | 11 | 37.9 | 13 | 44.8 | 29 | 15.4 |
| 1990 | – | – | – | – | 18 | 60.0 | 12 | 40.0 | 30 | 16.0 |
| 1991 | 2 | 13.3 | 1 | 3.0 | 17 | 51.5 | 13 | 39.4 | 33 | 17.6 |
| 1992 | – | – | 1 | 4.0 | 16 | 64.0 | 8 | 32.0 | 25 | 13.3 |
| Total | 17 | 9.0 | 5 | 2.7 | 97 | 51.6 | 69 | 36.7 | 188 | 100.0 |

Notes: This table shows the sample firms and their financial status two years post-distress. Two years after distress, firms may be taken over, become insolvent, recover or remain in distress. Recovery is defined as the reversal to a positive Z score two years after distress. Firms that remain in negative Z-score position are accordingly still in distress. Firms in distress two years after distress are called non-recovery firms.

Sources: Taffler, Extel Financial and Datastream International.

to positive Z scores. Whereas there is little difference in these accounting performance measures between the two groups in the distress year, the recovery group's performance is significantly superior to the non-recovery firms' in the post-distress years in terms of profit margin (PBIT/Sales), return on assets (ROA) and cash-flow cover for debt (PBITD/TD). The cash-flow return measure (PBITD/CE) also strongly suggests such superiority.

Frequency and timing of restructuring

We report, in Table 5, the frequencies of use of various turnaround strategies by the recoverers and non-recoverers. In the distress year, operational restructuring actions are taken by over 50% of firms in both groups. Heavy asset

investment by way of capital expenditure and acquisition characterizes both groups in that year. Over a third of sample firms appear to start reducing their assets in the distress-year. The only weakly significant difference between recovery and non-recovery firms in terms of distress-year strategies lies in debt restructuring. Over 10% of non-recovery firms restructure their debt whereas only 3% of the recoverers do so.

In the first year after distress, restructuring intensifies, especially by non-recovery firms. Acquisition and capital expenditure though subside rapidly, presumably because of liquidity problems, with the exception of an increase in capital expenditure by recovery firms. However, these differences are not statistically significant.

A higher percentage of non-recovery firms than recovery ones carry out operational restructuring,

Table 4. Post-distress financial characteristics of recovery and non-recovery firms (means %)

| Financial characteristic | Distress year | | | Average of two post-distress years | | |
|--------------------------|---------------|--------------|--------------------------------|------------------------------------|--------------|--------------------------------|
| | Recovery | Non-recovery | Test of difference t statistic | Recovery | Non-recovery | Test of difference t statistic |
| PBIT/Sales | 4.09 | 4.48 | 0.24 | 6.58 | 0.40 | 3.73 ^a |
| ROE | 6.87 | 3.22 | 0.66 | 13.32 | 6.13 | 1.01 |
| ROA | 8.81 | 9.47 | 0.20 | 14.04 | 5.81 | 2.61 ^b |
| PBITD/CE | 2.63 | 4.81 | 0.64 | 7.07 | 0.49 | 1.98 ^c |
| PBITD/TD | 7.60 | 9.8 | 0.29 | 33.26 | -1.06 | 3.77 ^a |

Notes: This table shows the financial characteristics of distressed firms in the distress year and two post-distress years partitioned by recovery or non-recovery. PBIT = profit before interest and tax. PBITD = PBIT plus depreciation (a cash-flow proxy). Return on equity (ROE) = profit after tax for ordinary shareholders/ shareholders' funds. Return on assets (ROA) = PBIT/total assets. Capital employed (CE) = total assets less current liabilities. TD = total debt. Differences in means between the two groups are tested using the t statistic. ^{a,b,c} indicate significance at 1%, 5% and 10% levels respectively. Sign of t statistic not shown.

Table 5. Frequency (%) and timing of restructuring strategies by recovery and non-recovery firms in response to financial distress

| Restructuring strategy | Distress year | | | Distress year + 1 | | | Distress year + 2 | | |
|---------------------------|---------------|--------------|------------------|-------------------|--------------|------------------|-------------------|--------------|------------------|
| | Recovery | Non-recovery | z statistic | Recovery | Non-recovery | z statistic | Recovery | Non-recovery | z statistic |
| Operational restructuring | 57.7 | 52.2 | 0.7 | 35.1 | 49.3 | 1.8 ^c | 28.9 | 43.5 | 1.9 ^c |
| Asset sales | 38.1 | 34.8 | 0.4 | 40.2 | 43.5 | 0.4 | 41.2 | 42.0 | 0.1 |
| Acquisition | 46.4 | 53.6 | 0.9 | 34.0 | 30.4 | 0.5 | 32.0 | 27.5 | 0.6 |
| Capital expenditure | 49.5 | 56.5 | 0.9 | 54.6 | 43.5 | 1.4 | 47.4 | 36.2 | 1.4 |
| Managerial restructuring | 21.8 | 30.4 | 0.6 | 27.8 | 31.9 | 0.6 | 22.7 | 30.4 | 1.1 |
| Dividend cut/omission | 26.8 | 33.3 | 1.3 | 30.9 | 52.2 | 2.8 ^a | 28.9 | 63.8 | 4.5 ^a |
| Equity issue | 15.5 | 23.2 | 1.3 | 22.7 | 27.5 | 0.7 | 19.6 | 8.7 | 1.9 ^c |
| Debt restructuring | 3.1 | 10.1 | 1.9 ^c | 3.1 | 14.5 | 2.7 ^a | 2.1 | 13.0 | 2.8 ^a |

Notes: This table shows the frequency (%) of firms adopting specific restructuring strategies in response to financial distress. Operational restructuring covers costs of rationalization. Asset sales refer to divestment of subsidiaries, investments and other assets. Acquisitions include both full and partial acquisition of businesses. Internal capital expenditure refers to capital expenditure on fixed assets such as plant and machinery. Managerial restructuring refers to removal of Chairman or CEO or MD. Dividend cut or omission refers to omission or reduction of cash dividends per share from pre-distress year. Equity issue covers issue of equity for cash. Debt restructuring refers to debt refinancing involving extending, converting or forgiving of debt and interest. Differences in proportions between recovery and non-recovery firms are tested using the non-parametric Mann-Whitney Wilcoxon test. z is test statistic and its significance at 1%, 5% and 10% is denoted by ^{a,b,c} respectively.

Sources: Company Reports and Accounts, Datastream International, Extel Financial News Summary and Hambro Corporate Register and Company Guide.

dividend cut/omission and debt restructuring. The difference is strongly significant for the latter two but only strongly suggestive in the case of operational restructuring. This trend is repeated in year two after distress, with the difference in frequencies becoming more significant or larger. In contrast, investment strategies, acquisition and capital expenditure are employed more frequently by non-recovery firms in the distress year (about 54–7% against 46–50% by recoverers) and by fewer firms in distress year + 2 (28–36% against 32–47% by recoverers). The difference in frequencies between the two groups is not significant in either year. However, it appears that growth strategies like acquisition and capital investment may have become relatively less important to non-recoverers. For this group, the frequency of acquisition falls from 54% to 28% and the frequency of capital expenditure from 57% to 36%. For recoverers, the corresponding frequencies fall from 46% to 32% and from 50% to 47% respectively. Frequency of asset sales is not different between the two groups in any of the three years and there is a marginal increase in frequency (3.1% for recoverers and 7.2% for non-recoverers) between the distress year and distress year + 2.

Temporal shift in strategy preferences

Comparison of the frequencies of various turnaround strategies over the three-year period reveals some interesting shifts in priority between the two groups. For example, while the percentage of non-recovery firms resorting to dividend cut/omission increases from 33% to 64% between distress year and distress year + 2 it increases by only 2% among recovery firms. While the percentage of recovery firms doing operational restructuring decreases by 29%, among non-recovery firms the decline is only 9%. Acquisition frequency falls by 14% for recovery firms but by 26% for non-recoverers. Capital expenditure frequency declines by 2% and 20% respectively. Equity issue frequency rises 4% for recoverers, but falls 15% for non-recoverers.

To assess such large shifts in strategic preferences, we test for the significance of the change in frequencies between the distress year and distress year + 2. For the recoverers, the falls in frequency of operational restructuring and acquisition are both significant at 5% or better. For the other strategies the changes are insignificant. For the non-recoverers, the falls in frequency of acquisitions, capital expenditures

Table 6. Importance of turnaround strategies over time

| Turnaround strategy | Recovery firms (97) | | | Non-recovery firms (69) | | |
|---------------------------|---------------------|-------------------|-------------------|-------------------------|-------------------|-------------------|
| | Distress year | Distress year + 1 | Distress year + 2 | Distress year | Distress year + 1 | Distress year + 2 |
| Operational restructuring | 1 | 3 | 4 | 3 | 2 | 2 |
| Capital expenditure | 2 | 1 | 1 | 1 | 4 | 4 |
| Acquisition | 3 | 4 | 3 | 2 | 6 | 6 |
| Asset sales | 4 | 2 | 2 | 4 | 3 | 3 |
| Dividend cut/omission | 5 | 5 | 5 | 5 | 1 | 1 |
| Management restructuring | 6 | 6 | 6 | 6 | 5 | 5 |
| Equity issue | 7 | 7 | 7 | 7 | 7 | 8 |
| Debt restructuring | 8 | 8 | 8 | 8 | 8 | 7 |

Notes: In this table we rank eight turnaround strategies in the descending order of their importance to recovery firms in their distress year. The ranking is based on the frequency of their use shown in Table 5 for the distress and two post-distress years. The ordering is shown separately for recovery and non-recovery firms. Recovery firms are those which regain positive Z-score values by the end of two years from the distress year. Non-recovery firms are those whose Z scores by that time are still negative. Distress year + 1 = first year after distress year. Distress year + 2 = second year after distress year. Sample size in parentheses.

and equity issues are significant at 2% or better. The increase in frequency of dividend cut/omission is also significant at 1%.¹³ There is no significant change in frequency of other strategies.

To understand the shifting strategic priorities, in Table 6 we rank the strategies in terms of frequency of use in each of the three years for recovery and non-recovery firms separately. Both groups of firms start off with nearly the same order of importance of strategies with operational restructuring, capital expenditure and acquisition the most frequent. The non-recovery firms attach more importance to asset expansion and growth than recovery firms. There is no difference between the two groups as regards the ranking of the remaining strategies in the distress year. Over the following two years, however, the priorities shift. In distress year + 1, the most frequently adopted strategies in non-recovery firms are dividend cut/omission, operational restructuring and asset sales. While capital expenditure falls from the first to fourth place acquisition drops from second to sixth place.

On the other hand with recovery firms, capital expenditure moves up along with asset sales while operational restructuring drops from first to third place. In distress year + 2, operational restructuring recedes further down, whereas capital expenditure, asset sales and acquisition become

the three most important strategies. For recovery firms, asset sales appear less of a fire-fighting exercise than part of a strategic refocusing of their asset and business portfolio. In stark contrast, non-recovery firms, still prefer dividend cut/omission, operational restructuring and asset sales to other strategies. Management restructuring moves up to fifth place ahead of acquisition, and capital expenditure is relegated to fourth place. Debt restructuring has now moved ahead of equity issue. Thus non-recovery firms' strategies are still of a fire-fighting nature, with more focus on their internal organizational and managerial problems than on the growth opportunities.

This shifting pattern of the relative frequencies of different turnaround strategies suggests that recovery firms adopt more forward-looking, expansionary and external market focused strategies than non-recovery firms which seem still preoccupied with internal changes. This preoccupation may have resulted from the ineffectiveness of earlier attempts at similar strategies in non-recovery firms. One cannot argue that persistence with restructuring strategies by non-recovery firms *causes* their non-recovery. Non-recovery in the second or third year may compel firms to persist in or increase the intensity of certain strategies, such as dividend cut or debt restructuring. Non-recovery in such cases occurs not because, but in spite, of persistence with certain strategies. Our analysis shows the pattern of restructuring strategies over

¹³ The test statistics are available from the first author, Sudi Sudarsanam.

time rather than the direction of causality from strategy to recovery.

The external focus of recovery firms is reflected in their considerably-improved profit margins from 4.09% to 6.58% in the post-distress period. By contrast, non-recovery firms experience further decline in profit margins from 4.48% to 0.40% over the same period (see Table 4 above). The shift by recovery firms from short-term operational to long-term strategic actions is consistent with the behaviour of sharpbenders observed by Grinyer, Mayes and McKiernan (1988, ch. 4).

Intensity of restructuring

Table 7 shows the intensity of restructuring by recovery and non-recovery firms in response to financial distress. Intensity is measured by relating the cash flows generated or drained by a strategy as a ratio of pre-distress year total assets, with the exception of dividend change where the change is related to pre-distress dividend per share. Non-recoverers appear to restructure their operations significantly more intensively than recoverers one year after distress. This trend is continued in the second post-distress year caused perhaps by lack of effectiveness in the previous year.

There is no significant difference in asset sales, acquisition and capital expenditure. The mean difference in dividend change ranges from 28% to 48% between recoverers and non-recoverers over the two years after distress. Dividend cut or omission is used intensively by non-recoverers to conserve scarce cash resources in distress year + 2. The lower levels of equity issues by non-recoverers, in distress year + 2, may be due not only to managers' lack of efforts but also due to lack of enthusiasm among investors to support a failing firm.¹⁴

Impact of non-recovery on subsequent restructuring

It may be argued that level of intensity of restructuring in later years may be influenced by

¹⁴ Tests of difference in median intensities based on the Mann-Whitney Wilcoxon test yield similar conclusions to those based on the t-test except that the median equity issue in distress year + 2 by non-recovery firms is significantly lower than for recovery firms.

the failure to recover in the initial years of distress. For example, as noted above, non-recovery firms may be less able to issue new equity in the second year than in the first. Similarly, non-recoverers may be forced to cut or omit dividends or restructure debt more intensively in the second year. Our data in Tables 5 and 7 are consistent with this interpretation. However, to the extent that such restructuring actions, whether triggered by their earlier ineffectiveness or not, are designed to achieve recovery it is of empirical and practical interest whether they are associated with recovery. For example, even though a deep dividend cut may be forced on the distressed firm by failure of earlier cuts to produce recovery, it may nevertheless be a decision calculated to effect subsequent recovery.¹⁵

Restructuring, control factors and corporate turnaround

It appears that non-recovery is not due to managerial inertia in non-recoverers. Yet they fail to recover. One possible reason is that these managers are not effectively implementing their chosen strategies. It appears that recoverer managers are not only doing the right things but also doing them right. Non-recovery, despite similarity between recoverer's and non-recoverer's restructuring strategies, may also be due to factors other than flawed implementation. Whether particular restructuring strategies are effective may depend on circumstances beyond the control of distressed-firm managers. Economic and industry conditions and firm-specific factors such as the cause of distress may impede or aid effectiveness of strategies. Benign economic and industry conditions may facilitate firm recovery. Very severe distress may diminish the chances of recovery. We look to the logit and linear regressions to assess how much the turnaround strategies contribute to recovery from financial distress after controlling for a number of these factors.

Table 8 shows the logit and linear regressions of recovery to positive Z score and the change in Z score two years post-distress from that in the

¹⁵ However, a dividend cut or debt restructuring may merely contribute to survival. Thus it is a necessary, but not a sufficient, condition for subsequent recovery.

Table 7. Intensity of restructuring by recovery and non-recovery firms in response to financial distress

| Restructuring strategy | Distress year | | | Distress year + 1 | | | Distress year + 2 | | | Distress years 1 + 2 | | |
|---------------------------|---------------|--------------|-------------|-------------------|--------------|-------------------|-------------------|--------------|-------------------|----------------------|--------------|-------------------|
| | Recovery | Non-recovery | t statistic | Recovery | Non-recovery | t statistic | Recovery | Non-recovery | t statistic | Recovery | Non-recovery | t statistic |
| Operational restructuring | 2.85 | 2.41 | 0.81 | 1.53 | 2.80 | 2.07 ^b | 1.72 | 3.51 | 1.75 ^c | 3.48 | 6.95 | 2.55 ^b |
| Asset sales | 5.35 | 4.74 | 0.77 | 8.01 | 10.70 | 1.09 | 9.07 | 14.30 | 1.18 | 17.28 | 23.25 | 1.09 |
| Acquisition | 19.13 | 22.27 | 0.76 | 13.09 | 20.78 | 1.32 | 13.12 | 14.74 | 0.34 | 27.44 | 31.50 | 0.50 |
| Capital expenditure | 13.54 | 14.68 | 0.64 | 16.80 | 18.64 | 0.47 | 19.55 | 19.80 | 0.04 | 36.50 | 39.07 | 0.28 |
| Dividend change | -3.05 | -9.03 | 0.87 | 2.58 | -16.35 | 1.66 ^c | 16.59 | -31.71 | 3.61 ^a | 15.99 | -40.99 | 2.51 ^b |
| Equity issue | 0.76 | 1.16 | 1.34 | 5.22 | 9.29 | 1.24 | 4.28 | 2.34 | 1.02 | 17.80 | 23.78 | 0.60 |

Notes. This table shows the intensity of restructuring by recovery and non-recovery firms. Operational restructuring is measured by the cash expended on restructuring as reported in the company's cash-flow statement/pre-distress year total assets. Asset reduction, acquisition and capital expenditure are measured by the cash flows received expended/pre-distress year total assets. Dividend change is the change in current year dividends per share/the pre-distress year dividend per share. Equity issue is measured by cash raised by equity issue/pre-distress year total assets. Differences in means between recovery and non-recovery firms are tested by t tests. Significance levels at 1%, 5% and 10% are indicated by ^{a,b,c}. Sign of t statistic not shown.

Sources. Datastream International and Company Reports and Accounts.

Table 8. Logit and multiple regressions of recovery and change in Z score two years after distress, on intensity of restructuring strategies and control variables

| | Logit regression Model 1 | | Linear regression Model 2 | |
|--|-----------------------------|------|------------------------------|------|
| | Coeff. | p | Coeff. | p |
| Operational restructuring | -3.33 | 0.17 | -11.90 | 0.03 |
| Asset sales | -0.50 | 0.55 | -1.88 | 0.31 |
| Acquisitions | -0.43 | 0.40 | -1.42 | 0.20 |
| Capital expenditure | 0.30 | 0.58 | -0.08 | 0.94 |
| Managerial restructuring | -0.03 | 0.93 | -0.15 | 0.85 |
| Dividend change | 0.31 | 0.07 | 0.62 | 0.08 |
| Equity issue | -0.17 | 0.68 | 0.29 | 0.75 |
| Debt restructuring | -1.56 | 0.02 | -6.08 | 0.00 |
| Internal cause of distress | 0.35 | 0.43 | 1.02 | 0.28 |
| Severity of distress | 0.16 | 0.13 | 0.47 | 0.03 |
| Firm size | 0.05 | 0.67 | 0.15 | 0.56 |
| Economic condition | 0.01 | 0.87 | 0.13 | 0.25 |
| Industry condition – distress year + 1 | -0.10 | 0.35 | -0.11 | 0.63 |
| Industry condition – distress + 2 | 0.11 | 0.25 | -0.08 | 0.71 |
| Constant | 0.46 | 0.75 | -1.69 | 0.59 |
| McFadden's R-Square/ Adj R ² | 16.9% | | 25.7% | |
| Chi-square/F statistic | 30.6 | | 5.05 | |
| Regression p-value | 0.00 | | 0.00 | |

Notes: Model: Recovery/change in Z score = f (operational, asset, managerial and financial restructuring intensity and control variables). Logistic and multiple regression coefficients of restructuring strategies and control variables are shown. Debt and managerial restructurings are coded as dichotomous variables. Recovery is defined as return to positive Z score, two years after distress year or as change in Z score two years after distress from pre-distress year's Z score. Control variables are internal cause of distress, severity of distress, firm size and external environments during the restructuring period. Internal problem refers to reported internal problems such as project failures, bad acquisitions or poor financial management. Severity of distress refers to Z score in the distress year. Size is measured by the log of total assets. External environment during restructuring refers to economic and industry condition in the two years after distress. Economic condition is measured by the GDP growth rate in the two years after distress year. Industry condition is proxied by the Z score of the median firm in the sample firm's FTA industry sector, in the same period. Existence of an internal cause of distress is represented by dummy variable 1, 0 if otherwise. Coefficients are tested for significance using the Wald/t-test statistic.

pre-distress year on intensity of restructuring strategies and control variables.¹⁶ As the outcome of restructuring is recovery or non-recovery, logit

¹⁶ Since recovery is measured by the return to pre-distress performance, i.e. positive Z score, the extent of recovery is the change in Z score two years post-distress from the pre-distress year's Z score.

regression in Table 8 measures the impact of explanatory variables on the logarithm of the likelihood of a firm recovering or non-recovering. Linear regression complements the logit regression by capturing the magnitude of recovery as represented by the Z score change two years after distress.

The signs of coefficients in both logit and linear regressions are quite similar. The R² of both regressions is between 17% and 26%, proving that restructuring strategies explain a significant part of the recovery story but a substantial part remains unexplained. Higher intensity of operational restructuring appears to be associated with negative, rather than positive, Z scores. It is also negatively related to change in Z score. Dividend change is positively related to recovery but it is only weakly significant. In other words, dividend cut/omission is not an effective recovery strategy. Yet, as we have seen earlier in Table 7, non-recoverers resort to dividend cut/omission with increasing intensity over the turnaround period. Non-recoverers' resort to debt restructuring is again ineffective.

Asset sales appear to be adopted by both recoverers and non-recoverers with the difference between them not significant. Other restructuring strategies are not significantly different between the two groups. Surprisingly, none of the control variables except severity of distress contributes significantly to recovery. Nor do they make it more difficult. The less-severely distressed firm i.e. with a higher Z score in the distress year achieves a significantly higher level of recovery. As we control for several factors in our multiple regressions in Table 8 that may potentially impede or facilitate recovery, the lack of effectiveness of more intensive strategies raises questions about the quality of implementation especially in the early years of distress. These questions can only be answered by a close scrutiny of the organizational decision and implementation processes within the recovery and non-recovery firms.¹⁷

¹⁷ It may be argued that the factors associated with non-recovery in the models in Table 8 – operational restructuring, dividend change, debt restructuring – may have been triggered by severity of distress, thus potentially causing a collinearity problem. Lai (1997, ch. 9) investigates the impact of severity of distress on the choice of the three restructuring strategies one at a time using logit models and including a range of other

Summary and conclusions

How firms faced with potential bankruptcy avoid that fate and turn themselves around is of profound importance to those firms, their stakeholders and the economy at large. In both finance and strategy literature we find a range of prescriptions of turnaround strategies. These studies also provide reasons why these often fail. In this study we compare the strategies of recovery and non-recovery firms in a sample of 166 financially distressed UK firms, and evaluate their effectiveness. We examine the frequency, timing and intensity of use of the prescribed strategies including operational, asset, managerial and financial restructuring.

The results show that higher proportions of non-recovery than recovery firms restructure their operations, cut/omit dividends and restructure their debts in each of the two post-distress years. Non-recovery firms also appear to restructure more intensively than recovery ones, significantly so in the case of operational restructuring and dividend cut/omission. Our univariate analysis and multiple regressions show higher levels of such restructuring to be associated less with the probability or size of recovery.

determinants such as corporate governance, board structure, creditors' monitoring etc in the distress year and the two post-distress years. The models include many variables that are a priori expected to influence the choice of restructuring strategies. Severity of distress is one of these. He finds that severity of distress does not influence operational restructuring in any of the three years. It increases the likelihood of dividend cut or omission in all three years but it is one of two or three other determinants. The explanatory power of the logit model is in the range of 13% to 16%. Thus the association between severity and dividend change is very modest. Severity of distress significantly increases the likelihood of debt restructuring only in two years, distress year and distress year + 1. Again it is one of two or more significant determinants. The explanatory power of the models is modest at about 15%. Thus, while severity of distress is indeed associated with at least dividend change and debt restructuring, the degree of collinearity is quite low (Lai, 1997, ch. 9). Further, in spite of this collinearity, all four variables – severity of distress, operational restructuring, dividend change and debt restructuring – are significant in the linear model in Table 8. Thus, while severity of distress is correlated with dividend change and debt restructuring, the correlations are not strong enough to invalidate the results in Table 8.

This result does not point to restructuring strategies being the cause of non-recovery. Indeed, some of the restructuring actions taken by non-recoverers in the later years of distress may be occasioned by the failure of actions in the earlier years. The major difference between recovery and non-recovery firms is that, with the latter, ineffectiveness of restructuring in early years leads to more intensification of strategies. However, when the restructuring intensity is cumulated over the post-distress years, these strategies nevertheless do not contribute to recovery.

We also find that the strategic choices of recovery and non-recovery firms diverge over time with recovery firms choosing investment and acquisition to lead them out of trouble, whereas non-recovery firms are more internally focused on operational and financial restructuring. The shifting pattern of the relative frequencies of different turnaround strategies suggests that recovery firms adopt more forward-looking, expansionary and external market focused strategies than non-recovery firms, which are still preoccupied with internal changes. This preoccupation is consistent with the behaviour of sharpbenders observed by Grinyer, Mayes and McKiernan (1988, ch. 4). The shifting pattern is also consistent with the two-stage turnaround process noted by Bibeault (1982), Robbins and Pearce II (1992) and Slatter (1984).

Our analysis of the time pattern of restructuring activities by distressed firms suggests that they should be examined over time, allowing for the long-drawn out nature of recovery and for the feedback effects of early-stage strategies. Such a temporal analysis provides more insight into the dynamics of corporate recovery than analysis of single-period strategies. Recovery strategies are not one-shot actions, but may be calibrated to respond to the pace of recovery or the effectiveness of earlier actions. Thus the temporal pattern of deployment of recovery strategies may differ between recovery and non-recovery firms and be conditioned by the success of earlier strategies.

Intensive adoption of prescribed restructuring strategies is an insufficient condition for corporate recovery from poor performance. Our research emphasizes the need to explore the process and microstructure of turnaround strategies and identify factors impeding their

effective implementation, as suggested by Barker III and Mone (1994) and Hoffman (1989).

We have focused on generic turnaround strategies suggested in the literature, while controlling for broad industry-wide influences through industry proxies. These may not fully capture the dynamics of performance decline and recovery in specific industries, partly accounting for the low explanatory power of our multivariate models. This also explains why we observe, counter-intuitively, a large similarity between recovery and non-recovery firms in the use of many restructuring strategies. This emphasizes the need to identify turnaround strategies beyond the generic ones. How firms in specific industries achieve turnaround in response to industry-specific causes of financial distress is an interesting area of further research, requiring a rigorous conceptual development. This framework can map out a precise strategic link between causes of distress, e.g. technological uncertainty or failure of expected market for the industry's products to develop, and turnaround strategies in an industry and suggest more refined proxies for the latter. Large industry-specific samples would then allow a robust testing of the conceptual model predictions.

Further research may also include other turnaround strategies such as revenue enhancement strategies which, for want of publicly available data, were excluded from the current study. Such an extension may strengthen the conclusions reported here. Strategies such as top-management replacement have an indirect impact on financial performance. The length of time required for the effect of a strategy to show through in the firm's financial performance is indeterminate. Future research needs to refine its methodology to overcome these limitations.

References

- Altman, E. I. (1968). 'Financial ratios, discriminant analysis and the prediction of corporate bankruptcy', *Journal of Finance*, **23**, pp. 589-609.
- Baden-Fuller, C. W. F. and J. M. Stopford (1992). *Rejuvenating the mature business*. Routledge, London and New York.
- Barker III, V. L. and M. A. Mone (1994). 'Retrenchment: Cause of turnaround or consequence of decline', *Strategic Management Journal*, **15**, pp. 395-405.
- Bibeault, D. B. (1982). *Corporate Turnaround*. McGraw-Hill, New York.
- Bonnier, K. and R. F. Bruner (1989). 'An Analysis of Stock Price Reaction to Management Change in Distressed Firms', *Journal of Accounting and Economics*, **11**, pp. 95-106.
- Bowman, E. D. and H. Singh (1993). 'Corporate Restructuring: Reconfiguring the Firm', *Strategic Management Journal*, **14**, pp. 5-14.
- Brown, D. T., C. M. James and R. M. Mooradian (1993). 'The Information Content of Distressed Restructuring Involving Public and Private Debt Claims', *Journal of Financial Economics*, **33**, pp. 93-118.
- Brown, D. T., C. M. James and R. M. Mooradian (1994). 'Asset sales by financially distressed firms', *Journal of Corporate Finance*, **1**, pp. 233-257.
- Cameron, K. S., R. I. Sutton and D. A. Whetten (1988). 'Issues in organisational decline'. In: K. S. Cameron, R. I. Sutton and D. A. Whetten (eds), *Readings in Organisational Decline: Frameworks, Research and Prescriptions*, pp. 3-19. Ballinger, Boston MA.
- Coughlan, A. T. and R. M. Schmidt (1985). 'Executive Compensation, Management Turnover, and Firm Performance: An Empirical Investigation', *Journal of Accounting and Economics*, **7**, pp. 43-66.
- DeAngelo, H. and L. DeAngelo (1990). 'Dividend policy and financial distress: An empirical investigation of troubled NYSE firms', *Journal of Finance*, **45**, pp. 1425-1431.
- Finkin, E. F. (1985). 'Company turnaround', *Journal of Business Strategy*, **5**(4), pp. 14-24.
- Franks, J. R. and W. N. Tourous (1994). 'A Comparison of Financial Recontracting in Distressed Exchanges and Chapter 11 Reorganisations', *Journal of Financial Economics*, **35**, pp. 349-370.
- Freeman, S. J. and K. S. Cameron (1993). 'Organisation downsizing: A convergence and reorientation framework', *Organisation Science*, **4**, pp. 10-29.
- Gilson, S. C. (1989). 'Management Turnover and Financial Distress', *Journal of Financial Economics*, **25**, pp. 241-262.
- Gilson, S. C. (1990). 'Bankruptcy, boards, banks, and bondholders - Evidence on changes in corporate ownership and control when firms default', *Journal of Financial Economics*, **27**, pp. 355-387.
- Gilson, S. C., K. John and L. H. P. Lang (1990). 'Troubled debt Restructuring: An empirical study of private reorganisation of firms in default', *Journal of Financial Economics*, **27**, pp. 315-353.
- Grinyer, P. and P. McKiernan (1990). 'Generating major change in stagnating companies', *Strategic Management Journal*, **11**, pp. 131-146.
- Grinyer, P. H., D. G. Mayes and P. McKiernan (1988). *Sharpbenders: The Secrets of Unleashing Corporate Potential*. Basil Blackwell, Oxford.
- Hambrick, D. C. and R. A. D'Aveni (1988). 'Large Corporate Failures as Downward Spirals', *Administrative Science Quarterly*, **33**, pp. 1-23.
- Hambrick, D. C. and S. M. Schecter (1983). 'Turnaround strategies for mature industrial-product business units', *Academy of Management Journal*, **23**(2), pp. 231-248.
- Hofer, C. W. (1980). 'Turnaround Strategies', *Journal of Business Strategy*, **1**(1 Summer), pp. 19-31.
- Hoffman, R. C. (1989). 'Strategies for corporate turnarounds: what do we know about them?', *Journal of General Management*, **46**, pp. 46-66.

- John, K., L. H. P. Lang and J. Netter (1992). 'The Voluntary Restructuring of Large Firms in Response to Performance Decline', *Journal of Finance*, July, pp. 891–917.
- Kang, J. and A. Shivdasani (1997). 'Corporate restructuring during performance declines in Japan', *Journal of Financial Economics*, **46**, pp. 29–65.
- Keasey, K. and R. Watson (1987). 'Non-Financial Symptoms and the Prediction of Small Company Failure: A Test of Argenti's Hypotheses', *Journal of Business Finance and Accounting*, **14**(3), Autumn, pp. 335–353.
- Khanna, V. and A. B. Poulsen (1995). 'Managers of Financially Distressed Firms: Villains or Scapegoats?', *Journal of Finance*, December, pp. 919–940.
- Lai, C. C. (1997). *Corporate turnaround of firms in performance decline and financial distress: Impact of corporate governance*, unpublished PhD thesis, City University Business School, London.
- Lang, L., A. Poulsen and R. Stulz (1995). 'Asset sales, firm performance, and the agency costs of managerial discretion', *Journal of Financial Economics*, **37**, pp. 3–37.
- Makridakis, S. (1991). 'What Can We Learn from Corporate Failure', *Long Range Planning*, **24**(4), pp. 115–126.
- Murphy, K. J. and J. L. Zimmerman (1993). 'Financial performance surrounding CEO turnover', *Journal of Accounting and Economics*, **16**, pp. 273–315.
- Ofek, E. (1993). 'Capital structure and firm response to poor performance: An empirical analysis', *Journal of Financial Economics*, **34**, pp. 3–30.
- O'Neill, H. M. (1986). 'Turnaround and recovery: What strategy do you need?', *Long Range Planning*, **19**(1), pp. 80–88.
- Pearce II, J. A. and K. Robbins (1993). 'Toward improved theory and research on business turnaround', *Journal of Management*, **19**(3), pp. 613–636.
- Pearce II, J. A. and K. Robbins (1994). 'Retrenchment remains the foundation of business turnaround', *Strategic Management Journal*, **15**, pp. 407–417.
- Robbins, D. K. and J. A. Pearce II (1992). 'Turnaround: Retrenchment and Recovery', *Strategic Management Journal*, **13**, pp. 287–309.
- Robbins, D. K. and J. A. Pearce II (1993). 'Entrepreneurial retrenchment among small manufacturing firms', *Journal of Business Venturing*, **8**, pp. 301–318.
- Schendel, D. and G. R. Patton (1976). 'Corporate Stagnation and Turnaround', *Journal of Economics and Business*, **28**(3), Spring-Summer, pp. 236–241.
- Schendel, D., G. R. Patton and J. Riggs (1976). 'Corporate Turnaround Strategies: A Study of Profit Decline and Recovery', *Journal of General Management*, Spring, pp. 3–11.
- Schleifer, A. and R. W. Vishny (1992). 'Liquidation values and debt capacity: A market equilibrium approach', *Journal of Finance*, **47**, pp. 1343–1366.
- Slatter, S. (1984). *Corporate Recovery: Successful Turnaround Strategies and Their Implementation*, Penguin, Harmondsworth, UK.
- Taffler, R. J. (1983). 'The assessment of company solvency and performance using a statistical model', *Accounting and Business Research*, Autumn.
- Taffler, R. J. (1984). 'Empirical models for the monitoring of UK corporations', *Journal of Banking and Finance*, **8**, pp. 199–227.
- Taffler, R. J. (1995). 'The use of Z score approach in practice', City University Business School, Working paper 95/1.
- Warner, J. B., R. S. Watts and K. H. Wruck (1988). 'Stock prices and top management changes', *Journal of Financial Economics*, **20**, pp. 461–492.
- Weisbach, M. (1988). 'Outside directors and CEO turnover', *Journal of Financial Economics*, **20**, pp. 431–460.
- Weitzel, W. and E. Jonsson (1989). 'Decline in organisations: A literature integration and extension', *Administrative Science Quarterly*, **34**, pp. 91–109.
- Worrell, D. L., W. N. Davidson III and J. L. Glascock (1993). 'Stockholder Reactions to Departures and Appointments of Key Executives Attributable to Firings', *Academy of Management Journal*, **36**(2), pp. 387–401.
- Wruck, K. H. (1990). 'Financial distress, reorganisation, and organisational efficiency', *Journal of Financial Economics*, **27**, pp. 419–444.