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Causes and Effects of Corporate Refocusing Programs.

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ABSTRACT

We provide evidence that corporate refocusing is motivated, in part, by the desire to enhance shareholder value, but that it is often necessary for agency problems to be reduced before managers will begin divestiture programs. Diversified firms that refocus have significantly greater value losses from their diversification policies than multisegment firms that do not refocus. Major events of market discipline usually must occur, however, before managers attempt to undo suboptimal diversification programs, whereas the same events occur only rarely for a matched sample of nonrefocusing firms during the same time frame. Refocusing firms have a high frequency of CEO changes, and also often have new outside blockholders, unsuccessful takeover bids, and signs of financial distress in the period preceding their divestitures. Finally, we find that the cumulative abnormal returns over all of the refocusing-related announcements of a refocusing firm average 7.3%, and that these abnormal returns are significantly related to the amount of value that was being destroyed by the refocuser's diversification policy.

1. Introduction

Major corporate restructurings by (formerly) diversified firms have become relatively common in the United States, with AT&T, ITT, W. R. Grace, and many others having recently decided to shed major, often unrelated, lines of business. We study whether one cause of these downsizings is the desire to enhance shareholder value. We examine this issue by documenting whether diversification represents a more suboptimal managerial strategy among firms that shed significant businesses. We also explore whether the reduction of agency problems through market disciplinary forces increases divestiture activity. Finally, we investigate whether restructuring firms enhance value as a result of their divestitures.

Berger and Ofek (1995) confirm recent evidence by Lang and Stulz (1994) of a value loss from diversification in the 1980s, which Servaes (1995) finds also occurred in the 1960s, and, to a lesser extent, in the 70s. Extant evidence also shows that increasing focus is value enhancing. John and Ofek (1995) show that increase in focus is a major factor in explaining seller gains from asset sales, and Comment and Jarrell (1995) find a positive relation between abnormal stock returns and increases in focus as measured by either the number of segments reported by management or accounting-based Herfindahl indices. In addition, Allen et al. (1995) find that the stock price gains to parent firm shareholders at spin-off announcements are negatively related to the (generally negative) combined firm reactions to diversifying acquisitions. Their findings are thus consistent with value destruction from diversifying acquisitions being reversed (at least in part) by subsequent spin-offs.

There are at least two possible explanations for why a large number of firms pursued diversification strategies that were suboptimal for shareholders. The ‘honest mistake’ explanation is that, ex ante, the managers of these firms believed they were pursuing a value-maximizing strategy, but, ex-post, the decision to diversify was a poor one. The ‘agency’ explanation is that unresolved agency problems are the culprit. One difficulty confronted by

the honest mistake hypothesis is that it does not explain why the value losses documented in the literature persist for so many years. Perhaps reversing the strategy by breaking up the conglomerate would not restore any value. We therefore examine whether or not divestiture programs create value on average. We also investigate whether refocusing that result from market disciplinary forces create more value than those that occur without events of market discipline.

If suboptimal diversification strategies result from agency problems, the recent trend toward increased focus may be attributable to market disciplinary forces decreasing these problems. Berger and Ofek (1996) provide evidence that increased focus does follow one act of market discipline, a successful takeover. They find that the divisions of conglomerates sold off in post-takeover break-ups are usually sold to either LBOs or focused, related buyers. There is, however, conflicting evidence on the roles of market disciplinary forces and reduced agency problems in ‘voluntary’ restructurings made by firms that have not been taken over. Lang, Poulsen, and Stulz (1995) find evidence in support of their hypothesis that management sells assets when doing so provides the cheapest funds to pursue its objectives rather than for operating efficiency reasons alone. Moreover, John, Lang, and Netter (1992) find no evidence of abnormally high levels of forced turnover in top managers of firms that voluntarily restructure in response to product market pressures. On the other hand, Denis, Denis, and Sarin (1995) document a strong relation between decreases in diversification and such market disciplinary forces as external corporate control threats, financial distress, and management turnover.

To test the relation between value destruction and divestiture activity, we follow Berger and Ofek (1995) in comparing the sum of the imputed stand-alone values of the segments of diversified companies to the actual values of those companies. The resulting construct, which we call excess value, is designed to capture the value loss from diversification. We then

identify all substantial refocusing by these diversified companies, and relate the magnitude of the value loss to the likelihood of refocusing. We find that, after controlling for other determinants of refocusing, greater value losses are associated with higher probabilities of divestiture.

We also find that a number of other firm characteristics have significant associations with the likelihood of refocusing. Smaller firms are more likely to refocus, consistent with smaller firms being more susceptible to market disciplinary forces such as corporate control threats, although size may proxy for many other factors as well. Companies with higher leverage are also more likely to refocus, consistent with closer monitoring by debtholders versus equityholders and with a greater need to generate cash (to cover interest) in refocusing firms. Refocusers also perform more poorly than nonrefocusers, with lower rates of both sales growth and return on assets. Finally, firms embarking on divestiture programs are more diversified than other multisegment firms prior to beginning their restructuring.

We examine in detail each of the 107 diversified firms we classify as refocusers, in order to explore the reasons why they restructured. The results show that corporate control events frequently precede the decrease in diversification. For example, 22% of refocusing events are preceded by a change in CEO, 26% by a new outside blockholder, 19% by financial distress, and 12% by an unsuccessful takeover bid. Overall, 57% of our sample of divesting firms has at least one major corporate control event occur in the period immediately prior to the restructuring. In contrast, just 17% of the firms in a matched sample has one or more of these events occur during the same time frame. Thus, value destruction alone is apparently not sufficient to spur management to divest lines of business. This finding confirms evidence by Denis, Denis, and Sarin (1995), who show that 54% of firms decreasing diversification during 1985-1989 have at least one major corporate control event occur during the year prior to the diversification decrease, versus 27% for firms with no change in diversification.

Our examination of events of market discipline suggests that these events somehow interact with the value loss from diversification in spurring companies to refocus. We therefore examine, for the matched sample, whether firms with both below median excess value and one or more events of market discipline are more likely to refocus than firms meeting just one of these conditions, and than firms meeting neither of these conditions. We find that firms meeting both conditions are the most likely to refocus, and that their 81% frequency of refocusing is considerably larger than the 43% frequency for large value losers that have not been subject to disciplinary events. We go on to explore whether greater value losses increase the likelihood that events of market discipline will occur to the firm. The results generally support the conjecture that value destruction increases the likelihood of experiencing an agency reducing event. This evidence is consistent with value loss being a fundamental driver of the refocusing decision, although large value losses may not lead to divestitures unless disciplinary events occur.

Finally, we examine the market reaction to restructuring-related announcements and find that the cumulative abnormal returns over all of the refocusing-related announcements of a refocusing firm average 7.3%, and that these abnormal returns are significantly related to the amount of value that was being destroyed by the refocuser's diversification policy.

In section 2, we present sample selection details, and describe the sample. We explain our empirical approach in section 3, where we also present tests of the relation between value destruction from diversification and the probability of refocusing. In section 4, we examine the effect of market discipline on the decision to refocus and we document the market's reaction to refocusing-related announcements. We summarize the results and offer our conclusions in section 5.

2. Sample selection and estimation of segment values

2.1 Sample selection and description

FASB No. 14 and SEC Regulation S-K require firms to report segment information for fiscal years ending after December 15, 1977. Firms must report audited footnote information for segments whose sales, assets, or profits exceed 10% of consolidated totals. The Compustat Industry Segment (CIS) database reports segment information for all Compustat firms other than utility subsidiaries.

To identify our sample of refocusers, we obtain data for all 1984-1993 observations on the CIS database that have total sales of at least \$100 million in 1984 (or their first year of existence), and no segments in the financial services industry (SIC codes between 6000 and 6999). We require firms to have sales of at least \$100 million to facilitate gathering detailed transaction information from news stories and to avoid distorted valuation multiples for firms with small levels of sales or assets. Firms with financial services segments are removed from consideration because applying the valuation methods we use is problematic for such firms.

We use three levels of screening to identify the refocusing firms within the CIS observations. First, we gather information on the number of segments and the revenue-based Herfindahl index of each observation. The Herfindahl index, H , is calculated across n business segments as the sum of the squares of each segment i 's sales, S_i , as a proportion of total sales:

$$H = \frac{\sum_{i=1}^n S_i^2}{(\sum_{i=1}^n S_i)^2} \quad (1)$$

Thus, the closer H is to one, the more the firm's sales are concentrated within a few of its segments.

Firms become candidates for further screening if they have at least one year during 1985-1993 in which they have both a decrease in the number of segments reported on the CIS database and an increase of at least 0.1 in their Herfindahl index. The second screen

eliminates firms without available Compustat data, firms for which we cannot calculate at least one of our three excess value measures, and firms in which the decrease in the number of segments is reversed within several years. The remaining 295 firms are examined in detail using the IDDMA, M&ANWS, and ALLNWS files of the COMPNY library on LEXIS/NEXIS, and the Wall Street Journal Index. We use this final screen because firms may decrease their number of reported segments without refocusing, due to such events as reconfigurations of existing lines of business or decreases to below 10% in the contribution of segment sales to firm sales. Our procedures result in a sample of 107 refocusing observations.¹ We measure the time period over which each refocusing program occurs, adjusting (based on the news stories) the initial estimate we obtain from the CIS database by up to one year for both the beginning and ending years of the restructuring program. Finally, we identify as nonrefocusers all 1985-1993 observations of multisegment firms that never enter the initial refocusing sample of 295 firms, have total sales of at least \$100 million in 1984 (or their first year of existence), and have no segments in the financial services industry. Note that this procedure results in many firms entering the control sample in multiple years.

Table 1 describes the sample of refocusing firms. Panel A describes the relative frequencies with which each sample year contains the first year of the refocusing program. Between 10% and 17% of the refocusing sample begin their divestiture programs each year during 1985-1988. Between 1989 and 1993, new refocusing programs are less frequent, representing about 8% of the sample in all of these years except 1991.

Panel B provides descriptive statistics about the refocusing programs. On average, firms report 3.5 segments before refocusing versus 1.5 after, and have their revenue-based Herfindahl indices change from 0.5 to 0.8 as a result of the refocusing. The number of divisions sold by refocusing firms averages 3.6. We also construct continuous, scaled measures of the value

¹The results we report in the paper remain qualitatively unchanged when we use all 295 firms that were classified as refocusers prior to the final screen.

of divestiture activity. We sum, for each of the 87 refocusers with at least one available selling price, all available prices paid for the divested divisions, then divide this total by the market value of the refocuser's equity (book value of assets) in the year before the refocusing began. The resulting ratio measures the proportion of the refocuser's value for which information on values divested is available. On median, refocuser's divest at least 49% (18%) of their market value of equity (book value of assets) during their refocusing program.² The refocusing programs thus represent substantial restructurings. These restructurings also occur over reasonably short times, with a median of two years between the fiscal year prior to the first sale and the fiscal year of the last sale.

Table 2 compares the refocusing and control samples. For the refocusers, all variables are measured in the year prior to refocusing. The refocusers and controls have markedly different values for the variables reported, with the difference in means (medians) between groups significant at better than the .10 level for all variables except sales growth (leverage). The median refocuser is smaller than the median nonrefocuser, with assets of \$0.8 billion rather than \$1.1 billion. Managers of smaller firms may be more susceptible to market disciplinary forces such as corporate control threats, although size may proxy for many other factors as well. Refocusers also have higher leverage (debt/assets), slower growth (annual rate of change in sales), and a lower rate of return on assets (EBITD/assets). The difference in leverage is consistent with refocusers being more closely monitored, to the extent that debtholders tend to monitor managers more closely than equityholders do. The refocusers' higher leverage is also consistent with a greater need to generate cash (to cover interest), yet the slower growth and lower rate of return indicate that the refocusers are performing more poorly than the

²Unfortunately, of the divisions we know were divested by refocusers with at least one available selling price, just 60.2% have information about the value of the division sold. The ratio we construct is thus likely to considerably understate the proportion of equity (asset) value divested during the refocusing. We deflate the prices paid for divested divisions by both total equity and total asset measures, because some selling prices represent only the value of the equity of the divested division (e.g., spinoffs), whereas others also represent the value of acquired debt (e.g., some of the asset sales).

nonrefocusers. Finally, the lower Herfindahl index and the higher number of segments for the refocusers shows that they are, on average, more diversified than the nonrefocusers prior to beginning their divestiture programs. Overall, refocusers are smaller, more levered, more poorly performing, and more diversified than their nonrefocusing counterparts.

3. Value loss from diversification and subsequent refocusing

3.1 Estimating segment values using multipliers

To measure diversification's value effect, we follow the procedures described in Berger and Ofek (1995). We measure the percentage difference between a firm's total value and the sum of imputed values for its segments as stand-alone entities. We calculate the imputed value of each segment by multiplying the median ratio, for single-segment firms in the same industry, of total capital to one of three accounting items (assets, sales, or EBITD) by the segment's level of the accounting item. The industry median ratios are based on the narrowest SIC grouping that includes at least five single-line businesses with at least \$20 million of sales and sufficient data for computing the ratios.

The sum of the imputed values of a company's segments estimates the value of the firm if all of its segments are operated as stand-alone businesses. The natural log of the ratio of a firm's actual value to its imputed value is our measure of excess value, or the gain or loss in value from diversification. Negative excess value indicates that diversification reduces the value of segments below that of their stand-alone counterparts.

3.2 Total value destruction and subsequent refocusing

To investigate whether the magnitude of the value loss from diversification affects the likelihood of refocusing, we see whether diversified firms in which more value is being destroyed are more likely to undertake major divestitures. We compare the excess values of refocusers, measured in the year prior to the start of their refocusing, to those of the nonrefocusers.

Table 3 shows that value destruction is greater among subsequent refocusers than among other diversified firms. Using the asset (sales, EBITD) multiplier, the mean value loss among firms that begin refocusing the following year is 27.3% (30.5%, 23.9%), which is 16.8% (25.8%, 14.6%) more than the loss among other diversified firms. The differences in mean value destruction between refocusers and controls are significant at better than the .01 level. These results are consistent with restructuring occurring at those multisegment firms whose diversification policies result in greater value losses. The inferences remain similar when the median value destruction of refocusers and nonrefocusers is compared. Restructuring firms destroy 13.8% more value based on the asset multiplier, 26.9% more using the sales multiplier, and 13.6% more using the EBITD multiplier, all significant at better than the .01 level.

Note that for both the differences in means and the differences in medians in tables 2 and 3, the inclusion of multiple observations for many of the nonrefocusing firms may result in deflated standard errors for this group, due to a lack of independence across observations. We therefore recompute the means and medians for the nonrefocusing firms using one observation per firm. The value of the single observation is the average value of the multiple observations for the firm used in tables 2 and 3. The results, which we do not report in a table, are very similar to those reported using multiple observations for the control firms. For example, for the excess value measures, we continue to find that the differences in means and medians between refocusers and nonrefocusers are significant at better than the .01 level using all three measures of excess value.³

The validity of the table 3 results using the multiplier method depend on management disclosure policies. Theoretical models of managerial disclosure decisions suggest that managers may have incentives to misstate segment data to both providers of capital and product

³When we compare the mean and median excess value measures between refocusers and nonrefocusers separately for each year during 1984-1992, the mean (median) excess value measure is more negative for the refocusers in 25 (23) of 27 cases.

market competitors.⁴ In the setting we examine, managers have incentives to overstate value-relevant data on segments being divested. Reported earnings, sales, and assets of segments about to be divested could all be overstated by ‘borrowing’ from the future (when new owners will control the segment). Earnings, however, are likely to be subject to the greatest incentives to overstate and are also easiest to overstate. Such overstatements could potentially explain part of the excess value differences documented in table 3. If so, it would be unusual for the differences to be smallest using the EBITD multiplier. Moreover, the earnings-management explanation is also inconsistent with the ROA and sales growth measures being smaller for refocusing firms.

The preceding univariate tests in tables 2 and 3 show that refocusers are smaller, more levered, worse performing, more diversified, and more value-destroying than the controls. To examine the correlations among these characteristics, we present Pearson correlation coefficients in table 4. The pairwise correlations among the three excess value measures range between 47% and 59%. These relatively high correlations provide some assurance that the various excess value measures are measuring the same economic construct. The correlations also indicate that excess value is not merely a measure of poor performance. Although the 53% correlation between the asset multiplier measure of excess value and return on assets (ROA) is high, the remaining excess value measures have correlations with ROA that are much lower, and of opposite sign to one another. Moreover, the correlations between the excess value measures and sales growth are just 7%. Finally, the remaining correlations reported in table 4 are generally small, with none exceeding 19%.

Although the descriptive evidence from the univariate tests is suggestive, we need to evaluate each explanatory variable after incorporating the effects of the other variables on divestiture likelihood. We therefore perform multivariate logit regressions in which a refo-

⁴See Darrough and Stoughton (1990), Wagenhofer (1990), Feltham and Xie (1992), Feltham, Gigler, and Hughes (1992), and Newman and Sansing (1993).

cusing indicator is the dependent variable, and is set equal to one if the firm refocuses the following year and to zero otherwise. The independent variables are excess value, size (log of total assets), ROA, sales growth, leverage, and the revenue-based Herfindahl index. All explanatory variables are measured in the year prior to refocusing. We also include fixed factors for each year, whose coefficient estimates we do not report in table 5.

Table 5 presents estimations of the refocusing likelihood models. We use the estimations to evaluate the economic importance of the explanatory variables. The magnitudes of the coefficients from a discrete choice model are, however, difficult to interpret because the marginal effects of each variable on the choice probability depend on all of the data in a nonlinear manner. To aid in interpretation, we present “standardized elasticities” for each variable in tables 5 and 6. The standardized elasticities are calculated by first determining the probability of takeover at an evaluation point on the cumulative logistic distribution. We use the point which results when all of the explanatory variables have their median values.⁵ The elasticity for a given variable is then the amount by which the probability of refocusing increases above this evaluation point when the variable’s median is replaced with either its 25th- or 75th-percentile (whichever leads to a probability increase).

The table 5 results show that excess value has a strong negative relation with refocusing probability, indicating that firms destroying more value with their diversification strategy are, all else equal, more likely to refocus. For all three excess value measures, the coefficient estimate is always negative and significant at the .01 level. The effect of value destruction on divestiture likelihood appears to be important economically as well as statistically. Changing the asset (sales, EBITD) multiplier measure of excess value from its median to its 25th-percentile increases the refocusing probability to 0.65% (1.13%, 0.40%) from its evaluation point of 2.84% (3.49%, 1.22%). Thus, a diversified firm destroying more value than three

⁵Note that the nonlinearity of the logit model could make inferences sensitive to the evaluation point chosen.

quarters, rather than half, of the sample is 23% (32%, 33%) more likely to refocus. None of the other explanatory variables have standardized elasticities greater than those on the excess value measures in all three regressions, although the extent of diversification is slightly more important economically in two of the three logits. Consistent with the univariate results, all of the other explanatory variables (except sales growth) are generally significantly related to the probability of refocusing. Firms with smaller ROAs, less total assets, more leverage, and more diversification are more likely to refocus. Each of these four variables has coefficient estimates significant at better than the .10 level in at least two of the three logistic regressions.

The significance levels in table 5 are potentially overstated because observations for the same nonrefocusing firm are often included for multiple years. We address this concern in table 6, which presents regressions using the same variables as in table 5, but for a reduced sample size. All firms are included as observations only once. The value for each explanatory variable is the average value across all years in which the firm entered the table 5 sample. Note that the size of the refocusing sample is slightly decreased by this procedure because three firms entered that sample in two different time periods as a result of having two separate refocusing episodes.

The results reported in table 6 are very similar to those discussed above. For all three measures, the magnitude and significance of the estimates on excess value are somewhat greater than they were in table 5. The standardized elasticities paint a nearly identical picture to those from table 5 about the economic significance of excess value. A diversified firm destroying more value than three quarters, rather than half, of the table 6 sample is 23% (32%, 29%) more likely to refocus. Only the extent of diversification has a consistently greater standardized elasticity than excess value. With respect to the other explanatory variables, the signs and significance levels in table 6 are similar to those reported in table 5. Overall, the logit regression results show that diversified firms are more likely to refocus

when their diversification programs are destroying more value, the firm is small, and the extent of pre-refocusing diversification is large. The results also provide weaker evidence that the likelihood of refocusing is increased by poor performance (as measured by ROA and sales growth) and high leverage.

4. Refocusing and market discipline

4.1 *The effect of market discipline on refocusing*

Destroying value through a diversification strategy may not provide sufficient motivation to managers to reverse the strategy. If agency problems play a role in creating suboptimal diversification policies, then these problems may have to be reduced before managers will undertake a divestiture program. For example, Dial and Murphy (1995) report that General Dynamics implemented a strategy that included downsizing, restructuring, and exit only after it engaged a new management team whose compensation was closely tied to shareholder wealth creation.

The results in tables 5 and 6 show that factors other than poor performance and the amount of value destroyed by the diversification policy affect the likelihood of restructuring. The positive relation between leverage and restructuring is consistent with Jensen's (1989) argument that Previous research has found that managers of firms with higher leverage levels are more likely to sell assets and take value increasing actions (Ofek 1993). Similarly, the negative relation between firm size and restructuring is consistent with decreases in diversification being driven by the market for corporate control, which is less active for large firms. Evidence that decreases in diversification are associated with pressures from the market for corporate control is also presented by Bhagat, Shleifer, and Vishny (1990) and Berger and Ofek (1996). The former paper shows that hostile takeovers are often followed by bustups of the target, whereas the latter paper finds that the value loss from diversification is positively related to the probability of a future takeover and bustup of the firm.

Although the results in the preceding tables are suggestive of a relation between changes in diversification and events of market discipline, they provide no direct documentation on this issue. Therefore, in table 7, we document evidence on the relation between refocusing and events of market discipline. We gather information on events of market discipline from the Wall Street Journal Index and the IDDMA, M&ANWS, and ALLNWS files of the COMPNY library on LEXIS/NEXIS. These events are gathered for both the refocusing sample and a matched control sample for the period from 12 months before the first divestiture announcement until one month after the announcement. To qualify as a matched control, the observation must be for the same year as the refocuser, be for a firm that does not refocus during 1984-1992, have book value of assets within 20% of its matched refocuser, and have a revenue-based Herfindahl index within 0.2 of its matched refocuser. These criteria often result in identifying multiple potential matches for a refocusing firm. In such cases, the chosen matched firm is the one that minimizes the sum of the size and Herfindahl index deviations. The deviations between the final sample of controls and their matched refocusers are, on average, within 1% for book value of assets and within .01 for the Herfindahl index.⁶

Table 7 shows the number of times various events occurred during the 13 month window examined for the 107 refocusers and their matched controls. We examine three categories of events: management turnover, outside shareholder pressure, and financial distress. Note that we did not construct the categories to be mutually exclusive. The results indicate that corporate control events often precede refocusing. About 31% of the refocusers have a change in top management in the period before their restructuring. A top management change is defined as any change in the set of individuals holding the titles CEO, president, or chairman of the board. The 31% management turnover rate is not significantly greater

⁶We performed logistic regressions like those reported in tables 5 and 6 on the matched sample, but with the matching variables omitted from the independent variables. The results were very similar to those reported in tables 5 and 6, with the coefficient estimate on excess value negative and significant at better than the .10 level using all three measures of excess value.

than the 22% rate for the matched controls. It is, however, much greater than the 11.5% rate reported by Warner, Watts, and Wruck (1988) from Wall Street Journal reports of the same definition of top management change for a random sample of 269 NYSE/AMEX firms during 1963-1978. When we restrict attention to CEO turnover, the 22% rate for refocusers significantly exceeds the 7% rate for the controls. This result contrasts with the findings of Denis, Denis, and Sarin (1995), who find little difference in CEO turnover between refocusing firms and firms with no change in diversification. Our result is, however, consistent with the findings of Weisbach (1995), who shows that at the time of a CEO change, there is an increased probability of divesting recently acquired divisions that are performing poorly.

We also find that 26% of refocusers have a new outside blockholder, 12% are targets of unsuccessful takeover bids, and 33% have either of these events or outside pressure occur. All three figures are significantly higher than the corresponding percentages for the controls, which experienced no unsuccessful takeover bids and had new outside blockholders in just 8% of the observations. Our results contrast with those of Brickley and Van Drunen (1990), who find that just 11% of firms undertaking 'internal restructurings' (which exclude selloffs and spinoffs) display any evidence of being the targets of a corporate control contest in the year prior to the restructuring. A number of the refocusers also experience signs of financial distress in the period preceding the restructuring. Seven percent cut their dividend to common stockholders, 11% restructure debt agreements, 3% file for bankruptcy protection, and 19% exhibit at least one of these indications of financial distress. With the exception of the dividend cuts, the controls do not exhibit any of these indications of financial distress during the thirteen month period examined.

In total, 57% of the refocusers experience at least one of the market discipline events in the period preceding the refocusing (excluding non-CEO management turnover). In contrast, just 17% of the controls experience one of these events. This evidence is thus consistent with

the reduction in agency problems via corporate control events playing an important part in the manager's decision to refocus.

The preceding tables have provided evidence that both value loss from diversification and events of market discipline affect diversified firms' decisions on whether to refocus. Managers may be more likely to refocus after events of market discipline because, without such events, unresolved agency problems may lead managers to persist with value destroying strategies. Shleifer and Vishny (1989) provide a model in which agency problems lead managers to make excessive manager-specific investments, including diversifying acquisitions that are value-destroying. By making such investments, however, the manager becomes more entrenched. Amihud and Lev (1981) argue that diversification may have greater value for managers than for shareholders because managers can diversify their human capital at the firm level, but not in the capital markets. They find that when agency problems are greater, as proxied by more dispersed shareholdings, conglomerate mergers are more numerous. May (1995) adds support for Amihud and Lev's theory, finding that CEOs with more personal wealth vested in firm equity are more likely to diversify. Theory and empirical work thus indicate that value loss alone may not induce managers to refocus. Unresolved agency problems may need to be reduced before value-enhancing actions are taken.

To examine how the interaction between corporate control events and value loss affects the likelihood of refocusing, we divide the matched sample into four groups and compare the proportion of refocusers across the groups. Table 8 shows that two dimensions determine the group that a firm is placed in. The columns of table 8 separate losers and non-losers, with a firm defined as a loser if its sales multiplier measure of excess value falls below the median value for the control firms. The rows of the table separate targets of events of market discipline from those firms not subject to such events. All events from table 7, other than non-CEO management changes, are included as events of market discipline. The

table 8 results show that value destruction and reduction of agency problems both affect the decision to divest. Firms with both above-median value destruction and one or more disciplinary events refocus frequently, with 81% of such firms divesting. In contrast, just 23% of non-losers with no disciplinary events sell businesses. Moreover, just 43% of losers without disciplinary events refocus. The descriptive evidence in table 8 is thus consistent with reduction of agency problems through events of market discipline being necessary before most firms with above-median value destruction will refocus.

We next explore whether value destruction and events of market discipline are related to each other, since both are important to the refocusing decision. In particular, events of market discipline may be more likely to occur to firms that are destroying more value. To test this conjecture, we measure excess value in the fiscal year prior to the 13 month period that we examined for events of market discipline. Table 9 presents comparisons of the mean and median of these prior year excess values for firms that were or were not subject to various events of market discipline. The results show that for all three measures of excess value and either, or both, events of market discipline, the prior year excess values are lower for firms subsequently subject to the disciplinary event.⁷ For example, the asset multiplier measure of excess value for firms that subsequently get a new CEO averages -27.5% , whereas for companies that do not get a CEO change the average is -13.3% . The 14.2% difference in value destruction is significant at the .10 level, as are three of the remaining eight differences in mean value loss and two of the nine differences in median value loss. Overall, the table 9 results provide some support for greater value destruction serving to trigger events aimed at reducing agency costs. This evidence is consistent with value loss being a fundamental driver of the refocusing decision that may not lead to action unless disciplinary events occur.

⁷We exclude events of financial distress from the analysis, because value destruction will mechanically increase the likelihood of such events.

4.2 *The market's reaction to the refocusing*

We examine the market reaction to divestiture-related announcements of the refocusing firms by computing abnormal excess returns as the actual announcement day returns minus the firm's expected daily return. Expected daily returns are computed using a market model estimated over the 250-trading-day period that ends prior to the firm's first refocusing announcement. Table 10 reports the abnormal stock returns of the sellers for each of 404 refocusing-related announcements made by 105 of the refocusing firms. The abnormal return to the seller on the day preceding, the day of, and the day following the announcement is reported, along with the cumulative abnormal return (CAR) over the three-day period. The top four rows of the table show that the mean and median abnormal returns (and the percentage of these returns that are positive) are significantly greater than zero (50%) at the .01 level for both day zero and the cumulative three-day period. The average CAR for the seller is 1.9% and the median is 0.7%.

The 404 refocusing-related announcements include 339 asset sale (or spin-off) announcements and 65 announcements of restructuring programs or of the amount of consideration received for previously announced sales. Our finding of a significant positive return to the seller of 1.9% is consistent with previous research. Using two-day windows ending on day zero, Jain (1985) and Hite, Owers, and Rogers (1987) document CARs of 0.5% and 1.66%. Using three-day windows ending on day zero, Klein (1986) and John and Ofek (1995) find CARs of 1.13% and 1.5%.

The bottom four rows of table 10 provide CARs for various subsets of the 404 refocusing-related announcements. The 29 announcements of planned restructuring programs result in an average cumulative return for the announcer of 3%, significant at the .10 level. Many of these 29 announcements are the first of a series of announcements made by the refocusing firm. For all 105 refocusing firms, the CAR for the first announcement made averages

3.6%, with 63.81% positive, both of which are significant at the .01 level. The resolution of uncertainty may be smaller for second and subsequent announcements by refocusing firms. Therefore, it is perhaps unsurprising that the CAR for second or later announcements by these firms averages a considerably smaller 1.3%, still significant at the .01 level. Finally, it is of interest to document the CAR over all of the three-day announcement windows for each refocusing firm. The last row of table 10 shows that the market reacts very favorably to the total refocusing program of the sample firms. The CAR over all refocusing announcements is 7.3% on average, 4.4% on median, and is positive for 73.33% of the refocusing firms. All of these figures are significant at better than the .01 level.

The positive market reaction to the refocusing-related announcements is consistent with the market viewing the reversal of suboptimal diversification strategies as reversing part of the value destruction of these policies. We investigate this possibility further in table 11 by performing regressions of the total CAR from all refocusing announcements by a refocusing firm on the firm's excess value, and other variables, measured in the year preceding the first refocusing announcement. In addition to the variables used in tables 5 and 6, we include indicator variables for the events of market discipline reported in tables 7 - 9. These events generally precede all of the refocusing announcements. The occurrence of disciplinary events may reduce the market's surprise at the time of a divestiture, but may also induce more value-increasing divestitures than those that occur for firms not subject to such events. Finally, we include a control variable for the number of sale-related announcements reported by the firm.

The results show a negative relation between excess value and the cumulative abnormal returns, significant at the .01 level for all three excess value measures. Thus, firms whose diversification policies destroy more value realize greater value enhancements from refocusing. This result is consistent with the value loss from operating diverse businesses within one corporation being reversed (at least in part) when the diverse businesses are split apart.

The indicators for CEO turnover, financial distress, and outside pressure generally have coefficient estimates that are not significantly different from zero. These results are consistent with at least two possibilities. One is that disciplinary events do affect neither the magnitude of benefit from, nor the amount of market surprise to, divestiture announcements. The second possibility is that disciplinary events are associated with subsequent divestiture announcements that have both more economic benefit and less surprise.

4.3 Details about the refocusing firms

The appendix provides details on the sample of 107 refocusing firms. The third and fourth columns show the number of segments reported by the firm at the beginning and at the end of the refocusing period. Just nine firms report more than two segments by the end of their refocusing period. Companies typically have multiple divisions within each reported business segment. Thus, the number of divisions we know were sold occasionally reaches double digits, even though the reporting on selloffs tends to be incomplete. The sum of all available prices paid for the equity of the divested divisions ranges, among firms with at least one available price, from a low of \$3 million for two divisions sold by North Star Universal to a high of \$5.086 billion for three divisions divested by Burlington Northern. The value of a refocuser's divested divisions is generally a conservative estimate, since most companies have divestiture prices available for just a subset of the divisions we know were sold.

The eighth column reports the CARs from each firm's refocusing-related announcements. The largest negative reaction is Newmont Mining's CAR of -20.5% . Newmont announced a restructuring to fend off T. Boone Pickens hostile takeover attempt, and subsequently sold or spun-off six divisions. Arbitrators valued the restructuring at a lower amount than Pickens' offer, but the restructuring dissuaded the Pickens group from pursuing the takeover. In conjunction with the restructuring, Newmont also sanctioned employment contracts for 25

executives. Thus, although the refocusingings are generally value-enhancing and typically follow disciplinary events, in some cases managers remain strongly entrenched after refocusing. In such cases, the refocusing announcements made may be seen by the market as less value-enhancing than those shareholders had expected. Another point that can be gleaned from the individual CARs is that many of the most extreme CARs are associated with firms that refocused in response to events of financial distress. The effect of financial leverage on the market value of equity is obviously high for such firms. Finally, the last six columns of the appendix detail the events of market discipline that occurred in the year preceding the start of each refocusing program.

5. Conclusions

We investigate the causes and effects of corporate divestiture programs. One cause of refocusingings appears to be the desire to enhance shareholder value. Diversified firms that refocus have significantly greater value losses from their diversification policies than multisegment firms that do not refocus.

If agency problems play a role in creating suboptimal diversification policies, such problems may have to be reduced before managers will undertake a divestiture program. Consistent with this conjecture, we find that corporate control events often precede refocusingings. About 31% of refocusers have a change in top management in the period before their restructuring, three times as high a rate as that reported by Warner, Watts, and Wruck (1988) for a random sample of firms. Moreover, 57% of refocusers have at least one corporate control event (other than non-CEO turnover) in the year preceding their first divestiture, whereas only about 17% of a matched sample have one of these events. Our evidence is thus consistent with the reduction in agency problems via corporate control events playing a part in the manager's decision to refocus.

We examine whether the value loss from diversification interacts with events of market

discipline in affecting the decision to refocus. Within a matched sample with 50% refocusers, we find that 81% of firms with below-median excess value which are subject to disciplinary events refocus. In contrast, 43% of firms with below-median excess value which are not subject to disciplinary events refocus, and just 23% of firms with above-median excess value and no disciplinary events refocus. This descriptive evidence is consistent with reduction of agency problems through events of market discipline affecting whether managers attempt to reverse value-destroying diversification strategies.

Finally, we examine the market reaction to restructuring-related announcements and find that the cumulative abnormal returns over all of the refocusing-related announcements of a refocusing firm average 7.3%, and that these abnormal returns are significantly related to the amount of value that was being destroyed by the refocuser's diversification policy. These results are consistent with refocusing creating economically significant enhancements in shareholder wealth. The fact that the gain from refocusing is positively related to the amount of value that was being destroyed indicates that divesting divisions from a diversified firm can reverse (at least in part) the value that was being destroyed through operating multiple lines of business within one firm.

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Table 1
DESCRIPTION OF REFOCUS SAMPLE.
A. SAMPLE FREQUENCIES BY FIRST YEAR OF REFOCUS PROGRAM

Fiscal Year 0	number of firms	Frequency
1984	5	0.047
1985	11	0.103
1986	18	0.168
1987	14	0.131
1988	12	0.112
1989	9	0.084
1990	8	0.075
1991	13	0.121
1992	9	0.084
1993	8	0.075
Total	107	1.000

B. DESCRIPTIVE STATISTICS

Variable	Mean	Median	Std	Low	High
Number of segments before the refocus	3.514	3.000	1.239	2.000	7.000
Number of segments after the refocus	1.505	1.000	0.744	1.000	5.000
Change in the number of segments	-2.009	-2.000	1.042	-1.000	-6.000
Sales Herfindahl before the refocus	0.486	0.466	0.184	0.184	0.883
Sales Herfindahl after the refocus	0.837	1.000	0.214	0.362	1.000
Change in the sales Herfindahl	0.344	0.291	0.197	0.105	0.748
Number of divisions sold	3.617	3.000	2.887	1.000	15.000
Minimum value divested/Market equity ¹	1.185	0.489	2.392	0.025	15.730
Minimum value divested/total assets ¹	0.283	0.176	0.286	0.013	1.369
Length of the refocus program ²	1.887	2.000	1.030	1.000	5.000

¹ The minimum value divested is the sum of all available sale prices of the divisions sold or spun off. The ratio is calculated only if value is available for at least one selloff.

² The number of years between the fiscal year prior to the first sale and the fiscal year of the last sale.

Table 2
COMPARATIVE STATISTICS OF DIVERSIFIED FIRMS THAT DO OR DO NOT REFOCUS.

Variable	Means			Medians		
	No refocus	Refocus	Difference	No refocus	Refocus	Difference
Total Assets	3515	1806	1709 ^a	1066	760	306 ^b
Leverage	0.293	0.325	-0.032 ^c	0.285	0.294	-0.009
Sales growth	0.090	0.067	0.023	0.061	0.048	0.013 ^c
Return on Assets (EBITD/assets)	0.138	0.114	0.024 ^a	0.134	0.112	0.022 ^c
Sales Herfindahl index	0.534	0.486	0.047 ^b	0.515	0.466	0.049 ^b
Number of segments	3.232	3.514	-0.282 ^b	3.000	3.000	0.000 ^a

^a denotes significance at the 1% level.

^b denotes significance at the 5% level.

^c denotes significance at the 10% level.

Table 3
VALUE DESTRUCTION IN DIVERSIFIED FIRMS THAT DO OR DO NOT REFOCUS.

Variable	Means			Medians		
	No refocus	Refocus	Difference	No refocus	Refocus	Difference
Excess value, asset multiplier ¹	-0.105	-0.273	0.168 ^a	-0.148	-0.286	0.138 ^a
Excess value, Sales multiplier ²	-0.046	-0.305	0.258 ^a	-0.042	-0.312	0.269 ^a
Excess value, EBITD multiplier ³	-0.093	-0.239	0.146 ^a	-0.114	-0.251	0.136 ^a

¹ The natural logarithm of actual value/imputed value where: actual value is total book value of debt plus market value of equity, and imputed value is the sum of imputed values of the firm's segments. Each segment's imputed value is the segment's assets multiplied by its industry median capital-to-assets ratio.

² The natural logarithm of actual value/imputed value with each segment's imputed value equal to the segment's sales multiplied by its industry median capital-to-sales ratio.

³ The natural logarithm of actual value/imputed value with each segment's imputed value equal to the segment's EBITD multiplied by its industry median capital-to-EBITD ratio.

^a denotes significance at the 1% level.

^b denotes significance at the 5% level.

^c denotes significance at the 10% level.

Table 4
CORRELATION TABLE¹

	Excess value					Herfindahl	Sales
	Sales	EBITD	Leverage	Size	ROA	index	Growth
Excess value assets	0.591	0.470	0.001	-0.050	0.525	0.031	0.069
Excess value sales		0.560	0.116	0.209	0.149	0.016	0.073
Excess value EBITD			0.046	0.008	-0.158	0.072	0.068
Leverage				0.103	-0.171	0.042	0.046
Size					0.065	-0.188	-0.034
ROA						-0.055	0.078
Herfindahl index							0.032

¹ See footnotes 1-3 table 3.

Table 5
REFOCUS LIKELIHOOD MODELS - FULL SAMPLE

Logit regressions estimating refocus likelihood models. The dependent variable equals 1 if the firm started refocusing in the following year and 0 if the firm reported two or more segments for the year and did not refocus during the period 1985-1993. Each firm-year is a separate observation. The top number for each variable is the parameter estimate, the middle number is the elasticity, and two-tailed P-values are in parentheses. All independent variables are measured in the year prior to classifying the observation as refocusing or not refocusing. The elasticities for the explanatory variables are defined as the percentage increase in the probability of takeover above the evaluation point (see definition below) when the variable's median is replaced with either its 25th- or 75th-percentile (whichever leads to a probability increase). The probability of takeover at the evaluation point is defined as the probability of takeover at the point on the cumulative logistic distribution which results when all of the explanatory variables have their median values.

Observations=0, no refocus	3329	4136	3166
Observations=1, refocus	80	106	69
Probability of takeover at evaluation point	2.840	3.488	1.224
Intercept	-0.736 (0.369)	-1.364 ^c (0.051)	-0.649 (0.469)
Excess value, asset multiplier	-1.091 ^a 0.652 (0.003)		
Excess value, sales multiplier		-0.836 ^a 1.128 (0.000)	
Excess value, EBITD multiplier			-1.421 ^a 0.402 (0.000)
Return on assets	-2.597 0.266 (0.176)	-4.585 ^a 0.434 (0.001)	-7.883 ^a 0.389 (0.000)
Size	-0.290 ^a 1.070 (0.000)	-0.135 ^c 0.557 (0.058)	-0.250 ^a 0.397 (0.005)
Sales growth	-0.170 0.033 (0.687)	-0.258 0.061 (0.500)	-0.286 0.024 (0.570)

Table 5 - continued

Leverage	1.265 ^b 0.376 (0.031)	1.234 ^b 0.447 (0.012)	0.533 0.067 (0.475)
Sales Herfindahl	-1.839 ^a 0.827 (0.004)	-1.517 ^a 0.812 (0.006)	-2.428 ^a 0.502 (0.001)
Year dummies 85-92			

^a denotes significance at the 1% level.

^b denotes significance at the 5% level.

^c denotes significance at the 10% level.

Table 6
REFOCUS LIKELIHOOD MODELS - ONE OBSERVATION PER FIRM

Logit regressions estimating refocus likelihood models. The dependent variable equals 1 if the firm started refocusing in the following year and 0 if the firm reported two or more segments for the year and did not refocus during the period 1985-1993. A firm has only one observation, which is the average of all firm-year observations in the full sample. The top number for each variable is the parameter estimate, the middle number is the elasticity, and two-tailed P-values are in parentheses. All independent variables are measured in the year prior to classifying the observation as refocusing or not refocusing. The elasticities for the explanatory variables are defined as the percentage increase in the probability of takeover above the evaluation point (see definition below) when the variable's median is replaced with either its 25th- or 75th-percentile (whichever leads to a probability increase). The probability of takeover at the evaluation point is defined as the probability of takeover at the point on the cumulative logistic distribution which results when all of the explanatory variables have their median values.

Observations=0, no refocus	612	670	586
Observations=1, refocus	78	103	67
Probability of takeover at evaluation point	10.024	11.329	9.333
Intercept	0.532 (0.550)	0.426 (0.582)	0.720 (0.453)
Excess value, asset multiplier	-1.420 ^a 2.338 (0.001)		
Excess value, sales multiplier		-1.097 ^a 3.645 (0.000)	
Excess value, EBITD multiplier			-1.778 ^a 2.672 (0.000)
Return on assets	-0.994 0.314 (0.685)	-4.604 ^b 0.685 (0.013)	-3.597 1.108 (0.130)
Size	-0.295 ^a 3.346 (0.001)	-0.164 ^b 1.952 (0.035)	-0.197 ^b 2.012 (0.041)
Sales growth	-0.499 0.216 (0.408)	-0.906 0.440 (0.128)	0.276 ^c 0.136 (0.063)

Table 6 - continued

Leverage	1.558	1.631 ^b	0.215
	1.513	1.765	0.186
	(0.146)	(0.012)	(0.800)
Sales Herfindahl	-2.270 ^a	-2.367 ^a	-2.778 ^a
	3.367	3.913	3.992
	(0.002)	(0.000)	(0.001)

^a denotes significance at the 1% level.

^b denotes significance at the 5% level.

^c denotes significance at the 10% level.

Table 7
CORPORATE CONTROL EVENTS IN YEAR -1

Total number and frequency of various events that occurred in a period of 13 months for the refocus and matched control samples. The period is 12 months before the first sale or refocusing announcement until 1 month after the announcement. Each refocusing firm has a matched control firm with similar size and sales Herfindahl index at the end of year -1.

Group Action	Refocus		Control		Difference Frequency
	Occurance	Frequency	Occurance	Frequency	
New CEO	23	0.215	7	0.065	0.150 ^a
New top manager	33	0.308	23	0.215	0.093
New outside block holder	28	0.262	8	0.075	0.187 ^a
Unsuccessful takeover bid	13	0.121	0	0.000	0.121 ^a
Outside pressure	35	0.327	8	0.075	0.252 ^a
Dividend cut	7	0.065	4	0.037	0.028
Debt restructuring	12	0.112	0	0.000	0.112 ^a
Chapter 11 filing	3	0.028	0	0.000	0.028 ^c
Financial distress	20	0.187	4	0.037	0.150 ^a
New CEO, financial distress, or outside pressure	61	0.570	18	0.168	0.402 ^a
At least one of the above	65	0.607	33	0.308	0.299 ^a

Table 8
VALUE LOSS, CHANGES IN AGENCY COST, AND THE DECISION TO REFOCUS

		Loser ¹	non-loser
Agency reduction²	Number of firms that refocus	39	21
	Number of firms that do not refocus	9	9
	Total number of firms	48	30
	Percent refocusers	0.81	0.70
No agency reduction	Number of firms that refocus	33	13
	Number of firms that do not refocus	44	44
	Total number of firms	77	57
	Percent refocusers	0.43	0.23

¹ A firm is defined as a loser if it falls below the median sales multiplier measure of excess value of the control group.

² Agency reduction occurs if the firm has a new CEO, or outside pressure, or events of financial distress.

Table 9
EXCESS VALUE PRIOR TO EVENTS OF MARKET DISCIPLINE.¹

	Mean			Median		
	No	Yes	Diff	No	Yes	Diff
New CEO						
Excess value, asset multiplier ¹	-0.133	-0.275	0.142 ^c	-0.182	-0.236	0.054
Excess value, Sales multiplier ²	-0.196	-0.296	0.100	-0.244	-0.290	0.046
Excess value, EBITD multiplier ³	-0.162	-0.204	0.042	-0.166	-0.214	0.048
Outside pressure⁴						
Excess value, asset multiplier	-0.118	-0.299	0.181 ^b	-0.161	-0.303	0.142 ^b
Excess value, Sales multiplier	-0.177	-0.343	0.166 ^c	-0.242	-0.337	0.095
Excess value, EBITD multiplier	-0.152	-0.239	0.087	-0.162	-0.222	0.060
New CEO or outsider pressure						
Excess value, asset multiplier	-0.086	-0.277	0.192 ^a	-0.124	-0.280	0.157 ^a
Excess value, Sales multiplier	-0.175	-0.271	0.096	-0.233	-0.279	0.046
Excess value, EBITD multiplier	-0.145	-0.218	0.073	-0.158	-0.208	0.051

¹ See footnotes 1-3 table 3.

^a denotes significance at the 1% level.

^b denotes significance at the 5% level.

^c denotes significance at the 10% level.

Table 10

ABNORMAL RETURNS AROUND THE REFOCUSING-RELATED ANNOUNCEMENTS

Abnormal excess returns of 404 refocusing related announcements made by 105 firms. The events include 339 assets sales (or spin-off) announcements and 65 announcements that sales are under consideration or that a general restructuring has been approved. Abnormal excess returns are calculated using a market model with β s calculated over 250 days prior to the event and the equally weighted market portfolio as the proxy for market return.

Variable	Obs	Mean	Median	% positive
Abnormal return day -1	404	0.002	0.000	51.98%
Abnormal return day 0	404	0.011 ^a	0.041 ^a	61.14% ^a
Abnormal return day 1	404	0.006 ^a	0.000	50.99%
Cumulative Abnormal return days -1 to 1	404	0.019 ^a	0.007 ^a	59.41% ^a
CAR restructuring announcement	29	0.030 ^c	0.008	62.07%
CAR first announcement	105	0.036 ^a	0.012 ^a	63.81% ^a
CAR second or later announcement	299	0.013 ^a	0.006 ^a	57.86% ^a
CAR all sale related announcements	105	0.073 ^a	0.044 ^a	73.33% ^a

^a denotes significance at the 1% level.

^b denotes significance at the 5% level.

^c denotes significance at the 10% level.

Table 11
EXCESS VALUE AND THE ANNOUNCEMENT RETURNS

Linear regressions relating the total cumulative abnormal returns of all refocus related announcements to excess value prior to the first announcement and other control variables. Two-tailed P-values are in parentheses.

Dependent variable	CAR refocusing		
	78	103	67
Observations			
Adjusted R ²	0.041	0.160	0.159
Intercept	0.030 (0.783)	0.124 (0.208)	0.108 (0.319)
Excess value, asset multiplier	-0.131 ^a (0.008)		
Excess value, sales multiplier		-0.074 ^a (0.004)	
Excess value, EBITD multiplier			-0.103 ^a (0.009)
Return on assets	0.017 (0.953)	-0.271 (0.267)	-0.755 ^b (0.010)
Size	-0.012 (0.313)	-0.014 (0.179)	-0.009 (0.435)
Sales growth	0.039 (0.656)	0.044 (0.583)	-0.003 (0.969)
Leverage	0.006 (0.949)	-0.054 (0.516)	0.085 (0.397)
Sales Herfindahl	0.090 (0.304)	0.039 (0.584)	0.096 (0.243)
New CEO dummy	-0.037 (0.331)	-0.051 (0.124)	-0.059 (0.166)
Financial distress dummy	0.060 (0.200)	0.099 ^b (0.015)	-0.003 (0.959)
Outside pressure dummy	0.031 (0.368)	0.044 (0.133)	0.056 (0.117)
Number of sale related events	0.003 (0.573)	0.006 (0.210)	0.007 (0.228)

^a denotes significance at the 1% level.

^b denotes significance at the 5% level.

Appendix 1

Description of firms that refocused

Name	Start	# Segment		# div	value	# with	Return	mgt	ust	par	div	deb	c11
	refocus	Start	End	sold	sold	value							
ABITIBI PRICE INC	9106	6	3	4	336	3	-0.019	1	0	0	0	0	0
ACME-CLEVELAND CORP	8606	3	2	1	0	0	0.012	0	0	0	0	0	0
ALLEGHENY INTERNATIONAL	8602	5	1	15	492	5	0.452	0	1	1	0	1	0
ALLIED PRODUCTS	9102	3	1	8	77	2	0.108	0	0	0	0	1	0
ALLIS-CHALMERS CORP	8502	4	1	13	700	7	0.478	0	0	0	0	1	0
AMDURA CORP	8901	4	1	6	134	3	0.345	1	0	1	0	0	1
AMERICAN CYANAMID CO	8812	4	2	8	465	1	0.050	0	0	1	0	0	0
AMERICAN MAIZE-PRODS	8809	3	2	2	25	1	-0.016	2	0	0	0	0	0
ANACOMP INC	8607	2	1	3	0	0	-0.076	0	0	0	0	0	0
APACHE CORP	8707	2	1	5	108	2	0.017	0	0	0	0	0	0
ARDEN GROUP INC	9309	3	1	2	40	2	0.086	0	0	0	0	0	0
ARMCO INC	9111	5	2	5	150	3	-0.160	1	0	0	1	0	0
ASTROTECH INTL	8710	3	1	3	11	1	0.291	2	0	0	1	1	0
BAIRNCO CORP	9206	4	2	2	0	0	0.116	0	0	1	0	0	0
BAXTER INTERNATIONAL INC	9204	4	2	3	1024	2	0.133	2	0	0	0	0	0
BELL INDUSTRIES INC	9210	4	3	1	0	0	0.023	0	0	1	0	0	0
BERGEN BRUNSWIG CORP	8711	3	2	1	40	1	0.007	0	0	0	0	0	0
BERGEN BRUNSWIG CORP	9202	2	1	1	78	1	0.038	0	0	0	0	0	0
BURLINGTON NORTHERN INC	8712	4	1	3	5086	3	-0.048	0	0	1	0	0	0
BUSINESS RECORDS HLDG	8602	3	1	2	108	1	0.160	0	0	0	0	0	0
CARDINAL HEALTH INC	8803	2	1	1	27	1	0.086	0	0	0	0	0	0
COMMUNITY PSYCHIATRIC	8904	3	1	1	131	1	0.011	0	0	1	0	0	0
COOPER COMPANIES INC	8710	4	1	4	261	4	0.162	0	1	1	0	0	0
CPC INTERNATIONAL INC	8703	3	2	5	982	3	0.098	2	1	1	0	0	0
CROSS (A.T.) & CO	9303	2	1	1	8	1	0.044	1	0	0	0	0	0
CRSS INC	9107	7	2	2	64	2	-0.075	1	0	0	0	0	0
DEKALB ENERGY CO	8602	5	1	4	105	3	0.095	2	0	0	1	0	0
DI GIORGIO CORP	8606	4	1	3	70	2	0.187	0	0	1	0	0	0
DIGICON INC	8603	3	1	6	23	3	0.271	0	0	1	0	1	0
DRAVO CORP	8602	4	1	8	10	1	-0.167	2	0	1	0	0	0
DUCOMMUN INC	8709	2	1	1	120	1	0.126	2	0	0	0	0	0
ECOLAB INC	8701	4	2	7	615	2	0.037	0	0	0	0	0	0
EL PASO ELECTRIC CO	9001	5	1	2	0	0	0.026	1	0	0	1	0	0
ETHYL CORP	8905	5	2	4	3678	4	-0.031	0	0	0	0	0	0
FAIRFIELD COMMUNITIES INC	9312	2	1	1	41	1	0.357	1	0	1	0	0	1
FEDERAL-MOGUL CORP	9110	3	1	1	150	1	0.004	0	0	0	0	1	0
FERRO CORP	8508	6	4	3	0	0	-0.056	0	0	0	0	0	0
FURON CO	9201	5	1	7	0	0	0.059	1	0	1	0	0	0

Name	Start refocus	# Segment Start	# div End	# div sold	value sold	# with value	Return	mgt	ust	par	div	deb	c11
GENCORP INC	8702	5	3	8	1528	6	0.012	1	0	0	0	0	0
GENERAL DYNAMICS CORP	9109	6	3	9	2612	6	0.303	1	0	0	0	0	0
GENERAL HOST CORP	8605	4	1	4	355	3	0.139	0	0	0	0	0	0
GRACE (W.R.) & CO	9010	4	2	10	632	6	0.036	1	0	0	0	0	0
GRC INTL INC	8905	3	1	4	65	2	0.243	2	0	1	0	0	0
HANOVER DIRECT INC	9005	2	1	4	28	3	0.025	0	0	1	0	0	0
INTERCO INC	8812	4	2	9	953	7	-0.190	0	1	0	0	0	0
INTERLAKE CORP	8602	4	2	1	49	1	0.101	0	0	0	0	0	0
JOHNSON WORLDWIDE	9405	2	1	2	0	0	0.007	1	0	0	0	0	0
KYSOR INDUSTRIAL CORP	8510	4	2	1	0	0	0.023	0	0	0	0	0	0
LAC MINERALS LTD	8807	3	1	2	62	2	0.091	0	0	1	0	0	0
LONE STAR TECHNOLOGIES	9302	3	2	1	150	1	0.330	0	0	0	1	0	0
LUKENS INC	9307	5	2	2	0	0	-0.007	0	0	0	0	0	0
MAXUS ENERGY CORP	8605	4	1	5	1517	4	0.031	0	1	0	0	0	0
MCDERMOTT INTL INC	8712	4	2	1	68	1	0.030	0	0	1	0	0	0
MCKESSON CORP	8701	6	5	8	0	0	-0.003	1	0	0	0	0	0
MEDALIST INDS	9204	4	1	5	65	1	#N/A	0	0	1	0	0	0
MORRISON KNUDSEN CORP	8802	4	2	2	14	1	0.021	1	1	1	0	0	0
NATIONAL INTERGROUP INC	9001	4	1	4	278	3	0.560	2	0	1	0	0	0
NATIONAL SEMICONDUCTOR	8812	2	1	2	488	2	0.092	0	0	1	0	0	0
NATIONAL-STANDARD CO	9001	2	1	8	0	0	0.170	0	0	0	0	0	0
NAVISTAR INTERNATIONAL	8411	2	1	2	488	1	-0.122	0	0	0	0	1	0
NEWMONT MINING CORP	8609	3	1	6	1024	6	-0.205	0	1	1	0	0	0
NICOR INC	8602	5	3	5	0	0	0.091	1	0	0	1	0	0
NORTH STAR UNIVERSAL INC	9009	3	1	4	3	2	-0.043	0	0	0	0	0	0
NOVA CORP ALTA	8906	7	2	2	516	2	0.166	0	0	0	0	0	0
NUI CORP	8710	4	1	1	17	1	0.173	0	0	0	0	0	0
OFFSHORE LOGISTICS	9010	2	1	1	0	0	-0.038	0	0	0	0	0	0
OGDEN CORP	8507	4	2	3	728	3	0.078	0	0	0	0	0	0
OUTBOARD MARINE CORP	8908	4	1	2	235	2	0.035	0	1	1	0	0	0
OWENS & MINOR INC	9201	3	1	2	53	2	0.070	0	0	0	0	0	0
OWENS CORNING FIBRGLAS	8602	5	2	8	236	1	0.179	0	1	0	0	1	0
PACIFIC ENTERPRISES	9205	4	1	4	686	3	-0.153	1	0	0	0	1	0
PANHANDLE EASTERN CORP	8608	4	1	2	1161	1	-0.021	0	1	0	0	0	0
PARAMOUNT COMMUNICATIONS	8409	7	2	5	1290	2	-0.012	0	0	0	0	0	0
PLACER DOME INC	8909	2	1	3	663	3	0.007	1	0	0	0	0	0
POPE EVANS & ROBBINS INC	8505	2	1	1	52	1	-0.116	0	0	0	0	0	0
READING & BATES CORP	8705	4	1	4	92	2	0.178	0	0	0	1	1	0
RITE AID CORP	9408	3	1	2	217	4	0.183	0	0	0	0	0	0
ROBBINS & MYERS INC	8412	3	2	2	14	1	-0.026	0	0	0	0	0	0
ROBBINS & MYERS INC	9103	2	1	2	19	1	-0.011	0	0	0	0	0	0
ROLLINS TRUCK LEASING	8806	3	1	2	44	2	0.110	0	0	0	0	0	0

Name	Start	# Segment		# div	value	# with	Return	mgt	ust	par	div	deb	c11
	refocus	Start	End	sold	sold	value							
RYDER SYSTEM INC	9307	3	2	1	280	1	0.016	0	0	0	0	0	0
SENECA FOODS CORP	8604	4	3	2	42	1	0.069	0	0	0	0	0	0
SHERWIN-WILLIAMS CO	8507	4	2	3	240	1	0.062	0	1	0	0	0	0
SIZZLER INTL INC	8612	4	1	2	0	0	0.008	1	0	0	0	0	0
SOUTHEASTERN PUBLIC SVC	9309	4	1	3	87	2	#N/A	0	0	0	0	0	0
SOUTHERN NEW ENG TELE	8604	2	1	2	0	0	-0.022	2	0	0	0	0	0
SUDBURY INC	9203	2	1	6	0	0	-0.079	1	0	0	0	0	1
SYNTEX CORP	8410	6	2	3	60	1	0.050	0	0	0	0	0	0
TASTY BAKING CO	9303	2	1	1	0	0	0.059	1	0	0	0	0	0
TELE-COMMUNICATIONS	9103	2	1	2	1246	2	0.085	0	0	0	0	0	0
THIOKOL CP	8902	3	1	2	1920	1	0.067	0	0	0	0	0	0
TRANSTECHNOLOGY CORP	9201	3	2	1	38	1	0.241	1	0	1	0	1	0
TRIARC COS INC	9207	7	1	1	21	1	-0.026	1	0	1	0	0	0
TYLER CORP/DE	8803	3	1	3	677	3	0.255	0	0	0	0	0	0
UNC INC	8809	4	1	2	119	2	0.045	0	0	0	0	0	0
UNION CORP	8702	5	1	5	69	1	0.143	1	0	0	0	0	0
UNITED INNS INC	8812	3	1	2	11	1	-0.054	0	0	1	0	0	0
UNIVAR CORP	8512	4	1	1	82	1	0.031	0	0	0	0	0	0
UNIVERSAL CORP/VA	9109	4	3	1	44	1	0.148	0	0	0	0	0	0
UPJOHN CO	8412	3	2	2	257	1	0.049	0	0	0	0	0	0
USX-U S STEEL GROUP	9104	2	1	2	0	2	0.062	0	0	1	0	0	0
VARLEN CORP	8808	3	2	4	0	0	-0.046	0	0	0	0	0	0
VULCAN MATERIALS CO	8710	4	2	2	0	0	0.043	0	0	0	0	0	0
WHITTAKER CORP	8503	5	2	4	147	2	0.443	0	1	0	0	0	0
WHITTAKER CORP	8904	2	1	15	368	4	0.293	0	1	0	0	0	0
XEROX CORP	8504	3	1	5	693	6	0.020	0	0	0	0	0	0
ZAPATA CORP	8808	3	2	4	895	4	-0.080	0	0	0	0	1	0

with value - represents the number of divisions sold with available sale price.

Return - the cumulative abnormal return from all announcement related to the refocus.

mgt - equals 1 if CEO change, 2 if only president or chairman change, and 0 otherwise

ust - equals 1 if unsuccessful takeover

par - equals 1 if partial acquisition

div - equals 1 if dividend cut

det - equals 1 if debt restructuring

c11 - equals 1 if filed for chapter 11