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Dividend Policy and Financial Distress: An Empirical Investigation of Troubled NYSE Firms

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ABSTRACT

This paper studies the dividend policy adjustments of 80 NYSE firms to protracted financial distress as evidenced by multiple losses during 1980–1985. Almost all sample firms reduced dividends, and more than half apparently faced binding debt covenants in years they did so. Absent binding debt covenants, dividends are cut more often than omitted, suggesting that managerial reluctance is to the *omission* and not simply the reduction of dividends. Moreover, managers of firms with long dividend histories appear particularly reluctant to omit dividends. Finally, some dividend reductions seem strategically motivated, e.g., designed to enhance the firm's bargaining position with organized labor.

THIS PAPER STUDIES THE dividend policy adjustments of 80 NYSE firms to protracted financial distress as evidenced by multiple losses during 1980–1985. The prospect of such financial distress, while generally viewed as a first-order determinant of optimal capital structure, has heretofore been largely ignored in analyses of dividend policy. The lack of attention to the dividend-distress link is perhaps traceable to the belief that managers generally adopt conservative payout policies so that future dividend reductions will simply not be necessary. It is probably also attributable to the general perception that debt covenants rarely affect dividend policy in publicly held firms because any nominally binding covenants are readily waived by lenders.

Our most striking finding is that more than half the sample apparently faced binding debt covenants in years they reduced dividends. This finding lends credence to the agency view that covenants significantly affect the dividend policies of even the largest publicly held firms. However, many sample firms reduced dividends when covenants were far from binding, so that agency considerations are clearly not the exclusive determinant of the dividend reductions in our sample. We also find that, absent binding covenants, dividends are cut more often than omitted, suggesting that managerial reluctance is to the *omission* and not simply the reduction of dividends. Moreover, managers of firms with long dividend histories apparently view dividend omissions as particularly unattractive, perhaps because they would mark themselves as the first managers in many years whose policies generated insufficient cash to pay dividends.

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Overall, managers of sample firms responded to financial distress with early and aggressive dividend reductions. For the typical firm, the initial dividend reduction represents a cut of more than 70%, made before the firm's first annual loss and immediately after one or two quarterly losses. Almost half the sample made multiple dividend reductions and, for these firms, the initial cut was typically followed quickly by additional severe dividend reductions. Finally, while poor financial performance seems to be the primary determinant of sample firms' dividend reductions, we also find evidence that some managers voluntarily reduced dividends for strategic reasons, e.g., to enhance the firm's bargaining position with organized labor or its lobbying position with Congress.

Section I reports sampling procedures and descriptive statistics. Section II documents the magnitude and timing of sample firms' dividend reductions. Section III documents the reasons for firms' dividend reductions according to *Wall Street Journal* reports. Section IV analyzes the link between debt covenants and dividend reductions, while Section V investigates other determinants of dividend reduction decisions. Section VI summarizes our findings.

I. Sampling Procedure and Descriptive Statistics

Our sampling procedure first identifies NYSE-listed firms on *Standard & Poor's Compustat Annual Industrial and Research Tapes* in industries other than finance, insurance, and real estate (i.e., consistent with Christie (1988), we consider all firms with primary SIC codes not in the 6000s). We focus on firms that experienced protracted financial trouble, as evidenced by at least three annual losses during 1980–1985. We define a loss as either negative net “bottom line” income or negative pre-tax operating income.¹ On Compustat's 1986 primary and research tapes, there are 1,843 nonfinancial firms (currently or previously NYSE-listed), with 133 (7.2%) meeting the multiple loss criterion.

Since we are concerned with dividend policy both before and after the onset of financial trouble, we restrict attention to the 114 firms for which Compustat provides complete data on per share dividends for ten years before the firm's initial annual loss during 1980–1985. We consider only the 80 of these firms that were initially healthy insofar as, in the year before their initial loss during 1980–1985, they had both positive net and pre-tax operating income, and paid cash dividends on common stock. Of the 80 firms in the final sample, 42 firms had exactly 3 losses, 22 firms had 4 losses, 14 firms had 5 losses, and 2 firms had 6 losses during 1980–1985.

Although we require positive earnings only in the last year before the initial loss during 1980–1985, the 80 sample firms reported very few losses in the 10 years before the onset of financial trouble. Fifty-one firms (64% of the sample) had both positive net income and positive operating income in all 10 of these

¹ Specifically, a net “bottom line” loss occurs when Compustat Item 18, income before extraordinary items and discontinued operations, plus Item 48, extraordinary items and discontinued operations, is less than zero. A pre-tax operating loss is equivalent to negative earnings before interest and taxes (EBIT) and occurs when Item 13, operating income before depreciation, minus Item 14, depreciation expense, is less than zero.

years. Another 15 firms (19%) reported no losses of either type in the 5 years before the initial loss during 1980–1985. Of the remaining 14 firms, only 1 had a loss within the 2 prior years, 6 reported a loss as recently as 3 years prior, 3 had a loss as recently as 4 years prior, and 4 had a loss as recently as 5 years prior. These facts suggest that our sampling algorithm predominantly identifies firms that were healthy prior to their initial annual loss during 1980–1985.

The differential impact of the early 1980s recession on certain industries probably accounts for the industry clustering in our sample: 31 (39%) of our 80 firms fall into just 8 primary 4-digit SIC industries, while the remaining 49 firms are spread over 41 industries. The typical sample firm is quite large, with average annual sales of \$1.7 billion, total book assets of \$1.4 billion, and market value of equity of \$498 million as of the year before the first annual loss.² The sample includes numerous high visibility firms such as Allis-Chalmers, Amax, Asarco, Bethlehem Steel, Caterpillar, Ford Motor Company, International Harvester, Kaiser Aluminum, United Airlines, and Western Union. In short, our sample consists primarily of large, well-known industrial firms that were adversely affected by the economic downturn of the early 1980s.

II. Magnitude and Timing of Dividend Adjustments

Table I provides an overview of our firms' annual dividend records for 10 years before the first annual loss during 1980–1985, through the following 5 years. The table presents the "normalized" dividend, which expresses each year's per share dividend as a fraction of that paid in the benchmark healthy year ($t = 0$), adjusted for intervening splits or stock dividends. By construction, each firm has a \$1.00 normalized dividend in $t = 0$, so that other years' figures reveal the extent to which per share dividends fall below or exceed the $t = 0$ payment.

Table I indicates that sample firms strongly tended to increase dividends in the pre-distress period, but reduce dividends materially during the distress period. (We use the term "distress period" to connote the period that begins with the first loss year and ends in 5 years or 1986, whichever occurs first.) The median firm paid a normalized dividend of \$0.388 ten years before experiencing financial trouble which, after split-adjustment, grew to \$1.00 in year $t = 0$. These figures translate to a 158% dividend increase over the entire pre-distress period, or an annualized rate of about 11%. By the third year of trouble ($t = 3$), the dividends of 74 firms (93%) had fallen below the $t = 0$ level, with 46 firms (58%) paying no dividends, and 28 firms (35%) paying lower dividends.

This high incidence of dividend reductions contrasts markedly with normal dividend patterns, both for the current sample and for publicly held firms in general. For example, if sample firms' dividends had continued to grow at the pre-distress 11% median annual rate, the median normalized dividend would have reached \$1.37 by $t = 3$ and \$1.69 by $t = 5$, rather than fallen to zero. For public firms, *Moody's Dividend Record* shows that annual dividend decreases are

² The corresponding medians are \$468 million, \$369 million, and \$151 million. The means exceed the medians because our sample includes some very large firms with multi-billion dollar sales, total assets, and equity values.

Table I
Normalized Cash Dividends Paid by 80 NYSE-Listed
Firms that Experienced Financial Difficulties
During 1980–85

The normalized dividend, $d(t)$, is the total cash dividend paid per split-adjusted share of common stock in year t relative to that paid in year 0. The sample consists of NYSE-listed nonfinancial firms on Compustat's Primary and Research tapes that (i) reported three or more years of negative net or operating income during 1980–85, and that (ii) reported positive income and paid cash dividends in $t = 0$, the year immediately prior to the first loss year during 1980–85.

Year relative to first annual loss (at $t = 1$)	Mean (median) normalized dividend	Number of firms with normalized dividend, $d(t)$, taking value in specified range:			
		$d(t) = 0$	$0 < d(t) < 1$	$d(t) = 1$	$d(t) > 1$
A. Pre-distress period					
−9	0.460 (0.388)	23	46	4	7
⋮	⋮	⋮	⋮	⋮	⋮
−2	0.813 (0.833)	6	51	14	9
−1	0.944 (0.950)	3	44	24	9
0	1.000 (1.000)	0	0	80	0
B. Distress period					
1	0.752 (0.750)	7	47	10	16
2	0.320 (0.176)	33	38	3	6
3	0.215 (0.000)	46	28	4	2
4 ^a	0.190 (0.000)	47	27	2	3
5 ^a	0.199 (0.000)	49	17	1	2

^a Years 4 and 5 have fewer than 80 firms either because the firms were removed from Compustat or because data are not yet available.

uncommon, with increases usually swamping decreases by a factor of 15 or 20 to one.³

Dividend Cuts versus Omissions

According to the *Wall Street Journal Index* and Compustat, no sample firm raised and consistently maintained its dividend in the 5 years following the onset

³ Dividend reductions are clustered in time, with 14 initial reductions in 1980, 16 in 1981, and 37 in 1982. This clustering is consistent with the general pattern for the economy; *Moody's Dividend Record* indicates that dividends were reduced in 1982 far more often than in any other year during 1971–85.

Table II
Magnitude of Dividend Reductions for Subsample of 78
NYSE-Listed Firms that Cut and/or Omitted Dividends in
Response to Financial Difficulties During 1980–85

The percentage figures refer to changes in cash dividends per share of common stock (after adjustment for any stock splits or stock dividends). The frequency distribution summarizes the percentage *reductions* in dividends per share associated with the various company announcements during the period of financial trouble—e.g., an entry in the 0–24.9% column refers to a dividend *decline* of less than 25%.

Reduction number (No. cuts; No. omits)	Mean (median) percentage change in dividend	Number of firms with % dividend reduction in specified range:			
		0–24.9%	25–49.9%	50–74.9%	75–100%
First reduction (43; 35)	–72.4% (–73.6%)	1	16	22	39
Second reduction (18; 20)	–77.6% (–100.0%)	1	4	13	20
Third reduction (3; 9)	–88.2% (–100.0%)	0	1	1	10
Fourth reduction (0; 2)	–100.0% (–100.0%)	0	0	0	2

of financial trouble (relative to its benchmark year dividend). Only two firms (2.5% of the sample) consistently maintained dividends at the pre-distress level throughout the distress period. Sixty-six firms (82.5%) eventually omitted dividends entirely, while the remaining 12 firms (15.0%) cut dividends but continued positive payments to stockholders throughout the distress period.

Multiple Dividend Reductions

For our sample firms, dividend reductions were often part of a multi-step adjustment process, rather than isolated one-time events. Almost half the sample (38 firms) made multiple dividend reductions during their financial troubles. For the 38 firms with multiple reductions, the average number of reductions is 2.4 per firm, with a maximum of 4 reductions. Twenty-six firms reduced dividends twice, 10 firms reduced them 3 times, and 2 firms reduced them 4 times. For 31 of the 66 firms that eventually omitted dividends, the omission was preceded by one or more cuts to a lower, still-positive level.

Magnitude of Dividend Reductions

Table II reports percentage reductions in quarterly (rather than annual, as in Table I) dividends. Table II more accurately reflects the magnitude of dividend adjustments because firms often reduce dividends mid-year, so that annual figures understate the true dividend change.⁴ The table shows dramatic dividend

⁴ For example, the mean annual $t = 1$ dividend of \$0.75 (in Table I) typically includes two or three quarterly payments at the pre-change (year $t = 0$) level, and two or one quarters at the new rate. Clearly, if a given year's *total* dividend is 25% below the prior year's payment (as in Table I) because of a mid-year reduction, the true reduction in the flow to stockholders greatly exceeds 25%.

reductions at all stages of the adjustment process. The mean initial reduction is 72.4% (median, 73.6%). In more than three-fourths of the sample, the initial reduction represents a dividend cut of at least 50%, and almost every firm (77 of 78) cut dividends by at least 25%. For firms that reduced dividends multiple times, subsequent reductions are even more severe than the initial cut.

Timing of Dividend Reductions Relative to Losses

We find that sample firms reduced dividends early in their period of financial difficulties. The median firm reduced dividends two quarters *before* the year end of its first annual loss, while the mean initial reduction came roughly one quarter beforehand. Subsequent dividend reductions quickly followed: the median second reduction came only two quarters after the year end of the initial annual loss, and the median third reduction occurred four quarters later. The data also show that roughly two-thirds of sample firms reduced dividends shortly after experiencing only one or two quarterly losses.

The Overall View

Sample firms typically reduced dividends by substantial amounts prior to their first annual loss, usually immediately following two or fewer quarterly losses. Approximately half the sample made multiple dividend reductions, and, for these firms, the initial cut was typically soon followed by additional large dividend reductions. The fact that dividends were cut early and aggressively in response to financial trouble is difficult to reconcile with the view that managers are generally reluctant to reduce dividends. Accordingly, in the next two sections we analyze the extent to which sample firms' dividend reductions are associated with binding debt covenants.

III. Stated Reasons for Dividend Reductions

Table III documents the factors responsible for firms' dividend reductions, according to reports in the *Wall Street Journal*. These reports often cite multiple factors underlying dividend changes, and the table entries reflect our judgment of the appropriate factor grouping. The first column reports the frequency with which the *Wall Street Journal* cites each factor, while the second indicates how often the *Wall Street Journal* presents each factor as part of management's explanation for the dividend reduction.

Earnings problems are the most frequently cited firm-specific reason for dividend reductions, with losses cited in 53 cases and low or declining earnings in 17. Managers often attribute earnings problems to factors beyond their control, e.g., weak product markets (42 cases) or general economic conditions (30 cases). The high frequency with which earnings problems are blamed on factors beyond managers' control is probably due in part to the fact that our sample period includes the early 1980s recession, which makes it more plausible that the firm's problems were not caused primarily by managers' policies.

In explaining a given dividend reduction, managers often cite the need to conserve cash (29 cases). Particular uses for the cash are less frequently

Table III
Factors Responsible for Dividend Reductions
According to *The Wall Street Journal* for 78
NYSE-Listed Firms that Reduced Dividends in
Response to Financial Difficulties During
1980–85

These factors are compiled from all *Wall Street Journal* reports of dividend cuts and omissions for the subsample of 78 firms that reduced dividends in response to financial difficulties during 1980–85. The first column refers to all factors mentioned in the *WSJ* while the second column refers to factors the *WSJ* presented as part of managers' explanation for the dividend reduction. The *WSJ* often cited more than one factor as responsible for a given dividend reduction and so the categories here are not mutually exclusive. No factors were cited in the reports on six firms, and there was no *WSJ* report for another three.

Factors in dividend reduction	Number of firms in given category:	
	All factors cited in <i>WSJ</i>	Factors given by managers
Firm-specific		
Current or expected losses	53	37
Low or declining earnings	17	14
Conserve cash	31	29
Fund new investment	14	14
High debt payments	9	9
Debt covenant restrictions	6	6
Credit line cancellation	1	1
Litigation	3	2
Industry-specific and general		
Weak product market	47	42
High or rising input prices	12	10
Regulation/deregulation	4	2
Absence of import relief	2	2
General economic downturn	36	30

mentioned—14 firms indicate it will fund new investment, while nine flag high interest payments as influential, thereby intimating the cash will service debt obligations. Dividend reductions are sometimes attributed to high input prices (12 cases), regulation (4 cases), and foreign import competition (2 cases).

Table III indicates that the dividend reductions of only six firms are reported in the *Wall Street Journal* as due to binding debt covenants. This observation is consistent with the low incidence of binding covenants found by Kalay (1980) and Lintner (1956). It also raises doubts about the empirical importance of debt covenants and hence about agency analysis of corporate dividend policy (e.g., Jensen and Meckling (1976), Smith and Warner (1979), Kalay (1982)). However, the apparently low incidence of binding covenants in our sample seems to be an artifact of the disclosure practices of managers and/or the *Wall Street Journal*. As we next document, more than half of our firms apparently faced binding covenants in years they reduced dividends.

IV. Debt Covenants and Dividend Reductions

To assess the importance of debt covenants in dividend reductions, we inspected annual reports for all dividend reduction years to determine unrestricted retained earnings (URE) available for dividends, and for any other indications that the firm faced binding debt constraints. We checked annual reports against Compustat's URE figure (Item 97) and found Compustat an incomplete source of information about troubled firms' dividend constraints. Even though our sample consists entirely of NYSE firms, Compustat's URE reporting is spotty at best, and its reporting frequency declines markedly during the distress period.⁵ Thus, sampling on the basis of Compustat URE data would have engendered a selection bias against finding binding covenants, since periods of financial trouble are exactly when covenants should become binding.

We classify dividend constraints as binding if either (i) the annual report states that such constraints are binding, or (ii) the annual report's figure for year-end URE indicates the firm would violate the constraint had it not reduced dividends below the prior year's level. Our calculation in (ii) parallels that in Kalay (1980, p. 862). Specifically, we take URE at the end of the reduction year and add back any common stock cash dividends paid in that year to obtain the pool of funds the firm *could* have paid as dividends in the reduction year.⁶ We classify the dividend constraint as binding if the pool of available funds is insufficient to cover the prior year dividend, and non-binding otherwise.⁷

Incidence of Binding Debt Covenants

Table IV reveals that more than half of the sample firms that reduced dividends had binding debt covenants according to the above classification scheme. For 29 firms, covenants were binding in the year they initially reduced dividends. Ten firms had binding covenants in years in which they made their second or later dividend reduction. Another seven firms reduced dividends in a year in which debt constraints were close to but not technically binding, *and* the firm's next annual report indicates that covenants did indeed become binding the

⁵ URE is missing from Compustat in 36% of the dividend reduction years in our sample, and annual reports flag binding debt covenants in 40% of these cases. Forty-four sample firms have more missing URE data in the distress period than in the prior five years, whereas only nine have less missing URE data.

⁶ We treat the entire year-end retained earnings figure as unrestricted if the annual report neither mentions a dividend constraint, nor provides a URE figure. This approach underestimates the coverage ratio insofar as it ignores any paid-in capital available for dividends. Note also that this algorithm does not identify absolutely rigid constraints since it takes all other managerial decisions as given. For example, DeAngelo, DeAngelo, and Skinner (1990) find that managers make income-reducing accounting decisions (which tighten covenants) in the same year they reduce dividends, suggesting that binding covenants are at least partially discretionary to managers.

⁷ Incomplete disclosure makes it impossible to quantify the *degree* to which covenants are binding. Most annual reports disclose only that dividends are prohibited, or that no earnings are available for dividends. Moreover, dividends may have been paid part-way through a year in which a firm renegotiated its debt and agreed to stop paying dividends, so that the "pool of funds" calculated from the full year's data overstates the amount available (which is zero).

Table IV
Incidence of Binding Debt Covenants for Subsample of
NYSE Firms that Reduced Dividends in Response to
Financial Difficulties During 1980–85

Debt covenants are classified as binding in the year of a dividend reduction if (i) the annual report states that the firm is prohibited from paying dividends, or if (ii) the financial statement footnote disclosure of unrestricted retained earnings indicates the firm would have violated a covenant had it paid the same dividend in the year of the reduction as it did in the prior year. Category C contains firms whose dividend covenants were binding in the year after a dividend reduction was announced, but whose covenants were not technically binding the year the dividend reduction was announced. In most of these cases, covenants were very close to binding in the reduction year. To avoid double counting, firms in category B are limited to those not in category A, and firms in category C are limited to those not in either category A or B. The data in the table are for 76 firms because we exclude two firms that changed fiscal year ends around the time they reduced dividends (making it difficult to place different years' dividends on a comparable basis).

Covenant classification	Number of firms	Percentage of sample
A. Binding in the year of initial dividend reduction	29	38.2
B. Binding in subsequent dividend reduction year	10	13.2
C. Binding year after dividend reduction	7	9.2

following year. For the latter firms, managers reduced dividends when they knew it was highly likely they would soon be required to do so (and their expectations were confirmed the next year). Thus, depending on how one classifies the latter cases, between 39 and 46 of the firms that reduced dividends (between 51.4% and 60.6% of the sample) had binding debt covenants in years managers reduced dividends.

Voluntary Dividend Reductions

Table V reports dividend coverage ratios for firms that reduced dividends in the absence of currently binding debt covenants.⁸ These data clearly show that a material number of managers reduced dividends when covenants were far from currently binding. For example, the mean coverage ratio in the reduction year is a substantial 10.52, and the median of 5.14 is also large. Moreover, in almost one-third of the voluntary dividend reduction years (18 of 63 cases, or 28.6%), managers reduced dividends even though the firm's coverage ratio exceeded 10.0. The mean, median, and incidence of very high coverage ratios is substantially identical for initial dividend reduction years. These facts indicate that current or soon-to-be binding debt constraints are clearly not the pivotal factor underlying many dividend reductions in our sample.

⁸ These ratios should *not* be interpreted as the number of years the firm can continue to pay dividends at the same level. Dividend constraints may limit only common dividends or both common and preferred dividends, and it is often impossible to tell which from annual report disclosures. For covenants that constrain both common and preferred dividends, the common stock dividend coverage ratio is clearly an incomplete measure of future dividend-paying ability.

Table V

**Dividend Coverage Ratios for NYSE Sample Firms with
Nonbinding Debt Covenants that Reduced Dividends in
Response to Financial Difficulties During 1980–85**

The dividend coverage ratio is (i) year-end unrestricted retained earnings plus any common stock dividends paid during the dividend reduction year, divided by (ii) common dividends paid during the prior year. These data are for years in which sample firms had nonbinding debt covenants but nevertheless reduced dividends. The right column contains data for initial dividend reduction years, while the left column contains data for both initial and subsequent reduction years. The frequencies are stated in firm-years since we have annual report data on covenant constraints and we wish to avoid double-counting when a company announces multiple reductions in a given year. The figures exclude one firm with a nonbinding constraint that contemporaneously changed its fiscal year.

Dividend coverage ratio statistic	All reductions	Initial reductions
A. Summary statistics		
Mean	10.52	10.56
(median)	(5.14)	(5.14)
B. Incidence of dividend coverage ratios in specified interval		
1.01 to 2.0	11	9
2.01 to 5.0	19	13
5.01 to 10.0	13	10
Above 10.0	18	13
Insufficient data to calculate ratio	2	2
Total	63	47

Implications of the Debt Covenant Evidence

Viewed collectively, our debt covenant evidence suggests a “middle ground” interpretation of the effect of debt covenants on dividend policy. On the one hand, most sample firms apparently faced binding covenants in years managers reduced dividends. This finding lends substantial credence to the agency view that debt covenants have an important influence on dividend policy. The evidence in support of the agency view is especially strong given that our sample consists of the largest publicly held firms (so that binding covenants are not merely a concern for small or closely held firms as is sometimes argued). On the other hand, debt covenants are clearly not the exclusive determinant of dividend reductions, since numerous sample firms reduced dividends when debt constraints were far from binding.

V. Other Determinants of Dividend Reductions

The Reluctance to Omit Dividends

Our sample also yields evidence that managers’ reluctance to *omit* dividends—as opposed to cut them to a still-positive level—is another important determinant of the dividend reduction decision. By this view, managers are not just reluctant to reduce dividends (per conventional wisdom), but they are especially reluctant to cease dividends altogether. Accordingly, managers are more likely to voluntarily cut dividends to mitigate the chances that an omission will be

necessary in the future. This interpretation seems plausible since, although reasonable people might disagree over the proper level of positive dividends, it is more difficult to argue that a zero payout represents an adequate “reward” for stockholders.

Table VI summarizes the incidence of dividend cuts versus omissions for the sample partitioned by whether or not covenants were binding according to our classification scheme. Panel A presents data for all 106 “firm years” in which dividend reductions were made, including 76 initial reduction years (for 76 firms) and 30 subsequent reduction years (for 28 firms). We work with firm years rather than individual reductions, since annual reports describe dividend constraints on an annual basis only, and a given year sometimes contains multiple reductions. For firms that cut and then omitted dividends in the same year, we classify that year as an omission year. [We study 76 initial reductions (versus 78 in the sample) because two firms changed fiscal year ends around the time they reduced dividends, making it difficult to compare different years’ financial data.]

Managerial reluctance to omit dividends is supported by the fact that voluntary dividend cuts significantly exceed voluntary omissions, both for the full sample and for initial reduction years. For the full sample, 78.6% of dividend cuts were undertaken voluntarily (33 of 42 cuts), whereas only 46.9% of omissions were

Table VI
Voluntary Dividend Cuts versus Voluntary Dividend
Omissions for Subsample of 76 NYSE Firms that Reduced
Dividends in Response to Financial Difficulties During
1980–85

Debt covenants are classified as binding in the year of a dividend reduction if (i) the annual report states that the firm is prohibited from paying dividends, or if (ii) the financial statement footnote disclosure of unrestricted retained earnings indicates the firm would have violated a covenant had it paid the same dividend in the year of the reduction as it did in the prior year. Panel A includes 106 firm-years: 76 initial firm-years in Panel B and 30 subsequent year reductions by 28 firms. The frequency is stated in firm-years since we have annual report data on covenant constraints, and we wish to avoid double-counting when a company announces multiple reductions in the same year. There are 76 firms represented here because we exclude two firms that changed fiscal year ends around the time they reduced dividends (making it difficult to place different years’ dividends on a comparable basis).

Sample partition	Dividend cut	Dividend omission	Row total
A. All dividend reduction years ($n = 106$) ^a			
Binding covenants	9	34	43
Nonbinding covenants	33	30	63
Column total	42	64	106
Chi-square = 9.32	p -value = 0.005		
B. Initial reduction years only ($n = 76$)			
Binding covenants	7	22	29
Nonbinding covenants	28	19	47
Column total	35	41	76
Chi-square = 7.68	p -value = 0.01		

^a n = sample size.

not associated with binding covenants (30 of 64 omissions). This difference is significant at the 0.005 level under a Chi-square test. For the initial reduction subsample, voluntary cuts exceed voluntary omissions by 80.0% versus 46.3%, with the difference between the two significant at the 0.01 level. These differences become even more significant when we classify as binding the cases in which covenants were not strictly binding the year the firm reduced dividends but became so the following year (per category C of Table IV).

Dividend History and Dividend Reductions

Our sample also yields evidence that managers' reluctance to omit dividends is a function of the length of the firm's dividend record. Specifically, managers of firms with long dividend histories appear especially reluctant to omit dividends and thereby break the string of continuous payments to stockholders. This empirical tendency is suggested by Table VII which reveals that the median firm had paid dividends for 21.5 continuous years (mean 24.7) at the onset of financial trouble. These average figures mask the fact that most firms' dividend records are either quite short or quite long, with 30 firms (37.5%) having paid dividends continuously for 10 years or less, and 34 firms (42.5%) having paid them for at least 31 years.

Firms that made multiple dividend cuts stand out in Table VII as having paid dividends for a very long time. For example, the median firm in the subsample

Table VII
Years of Continuous Cash Dividends Prior to the Advent of
Financial Distress by 80 NYSE-Listed Firms that Faced
Financial Difficulties During 1980–85

The sample consists of NYSE-listed nonfinancial firms on Compustat's Primary and Research tapes that (i) reported three or more years of negative net or operating income during 1980–85, and that (ii) reported positive income and paid dividends in the year before the first loss during 1980–85.

Sample category (number of firms)	Mean (median) years of continuous	Number of firms with years of continuous dividend payments in specified range:			
		10 or less	11 to 20	21 to 30	31 or more
Full sample (<i>n</i> = 80)	24.7 (21.5)	30	9	7	34
Firms that maintained dividends (<i>n</i> = 2)	13.0 (13.0)	1	1	0	0
Firms that made one reduction (<i>n</i> = 40)	17.9 (8.0)	22	3	3	12
Firms that made two reductions (<i>n</i> = 26)	27.4 (23.0)	7	5	3	11
Firms that made three or more re- ductions (<i>n</i> = 12)	43.8 (45.0)	0	0	1	11

Table VIII
Logit Analysis of the Decision to Cut versus
Omit Dividends by 76 NYSE Firms that Faced
Financial Difficulties During 1980–85

The dependent variable equals one if the firm cut its dividend, and zero if the firm omitted its dividend during year t . "Continuous years" represents the number of continuous years the firm has paid dividends. "ChgE" represents the change in earnings (net income) in each year relative to t , the year of the initial dividend reduction. Earnings changes are standardized by year-end book equity prior to the firm's first loss during 1980–85. "Model p -value" is the significance level at which a likelihood ratio test rejects the hypothesis that all coefficients except the constant are zero. The sample contains initial dividend reductions by 76 firms (versus 78 in the full sample) because it excludes two firms that changed fiscal years around the time they reduced dividends, making it difficult to put financial data on a comparable basis with other firms.

Variable	Parameter estimates (t -statistics)		
Constant	1.69 (3.53)	1.44 (2.49)	1.48 (2.50)
Continuous years	0.057 (3.84)	0.059 (3.83)	0.059 (3.82)
ChgE _{$t-1$}	—	4.39 (1.94)	4.29 (1.88)
ChgE _{t}	—	0.72 (0.56)	0.48 (0.33)
ChgE _{$t+1$}	—	—	−0.55 (−0.38)
Model p -value	<.001	<.001	<.001

of 12 firms that made 3 or more reductions had paid dividends for 45 continuous years (mean 43.8 years), and 11 had paid dividends for at least 31 years. This pattern suggests that managers of firms with long dividend histories more frequently cut than omit dividends to preserve the firm's continuous record of payments to stockholders. [Although not shown in the table, a similar pattern holds for virtually every four-digit industry with three or more sample firms.]

Table VIII's logit analysis supports the view that managers of firms with long continuous dividend records are especially reluctant to omit dividends. In this analysis, the dependent variable equals zero if the firm's initial dividend reduction is an omission, and one if it is a cut to a still-positive level. The explanatory variables are (i) the number of continuous years the firm has paid dividends and (ii) the change in earnings for the year before, year of, and year after the dividend reduction. Earnings changes are standardized by stockholders' book equity prior to the first annual loss during 1980–1985.⁹ The inclusion of earnings variables makes the current analysis consistent with prior studies of the effect of earnings

⁹ We find qualitatively identical results when earnings changes are standardized by net income in the year before the first loss during 1980–1985.

on dividend policy (e.g., Fama and Babiak (1968), Watts (1973), Pettit (1972), Brickley (1983), Healy and Palepu (1988)).

The logit regressions in Table VIII reveal a strong relation between the length of a firm's dividend history and the decision to cut or omit dividends. For all logit specifications, the coefficient on "continuous years" is positive and highly significant, with a *t*-statistic exceeding 3.8. This result indicates that a longer continuous dividend record is associated with a greater tendency to cut rather than omit dividends.

For all specifications, the overall model is significant at better than the 0.001 level. As expected, firms with larger—or, more precisely, less negative—earnings changes the year prior have a greater tendency to cut than to omit dividends. There is no statistically detectable difference in current or future earnings changes for firms that cut rather than omit dividends. Thus, relative to firms that cut dividends to a positive level, firms that omit them entirely typically experience greater earnings deterioration the year before the dividend reduction (and indistinguishable earnings changes thereafter).

The latter observation suggests that it may be appropriate to control for the level rather than the change in earnings around the dividend reduction decision. Thus, we repeated our logit analysis with each earnings change variable replaced by the earnings level, again standardized by stockholders' book equity prior to the initial loss during 1980–1985. These regressions—the details of which are not reported here—yield virtually identical coefficient estimates and *t*-statistics for the effect of dividend history on the cut versus omit decision.¹⁰

Because of the bimodality in firms' continuous dividend histories, we re-ran the tests treating "continuous years" as a dummy variable which takes a value of one if the firm has paid dividends for at least 31 continuous years, and zero otherwise. These tests also indicate a highly significant tendency for firms with long dividend records to cut rather than omit dividends.

As a final check, we re-ran the logit tests on the subsample (described above) whose dividend reductions were not associated with binding covenants. These tests indicate the same strong positive relation between the length of a firm's dividend history and the decision to cut rather than omit dividends (with *t*-statistics consistently around 3.5). They are particularly informative because they indicate that the Table VIII findings are not driven by a coincidentally higher frequency of binding covenants in firms with short dividend histories.

All of this evidence suggests that managers of firms with long dividend histories are especially reluctant to omit dividends. This finding might be viewed as surprising since the firm's dividend history is "sunk" at the time of the dividend reduction decision. A plausible explanation is that a dividend omission would tarnish current managers' reputations by marking them as the first managers in many years who have failed to generate cash for stockholders. If such reputation

¹⁰ These regressions show very high overall model *p*-levels, weaker positive coefficients for the prior year's earnings level, and somewhat stronger positive coefficients for current and future earnings. The latter regression coefficients are not significant at conventional levels, with the highest *t*-statistics (on the order of 1.3–1.4) on the coefficient of the prior period's earnings level.

effects are important, managers of firms with long dividend histories have incentives to meet deteriorating financial performance with dividend cuts that attempt to preserve the firm's continuous dividend record.

However, managers' desire to preserve a continuous dividend record is clearly not the only factor at work here, since more than 80% of our sample firms eventually omitted dividends. Moreover, dividends were ultimately omitted by all but 1 of the 12 firms that reduced dividends 3 or more times, and by 20 of the 26 firms that reduced them twice. Finally, dividends were omitted by 25 of the 34 companies with dividend histories extending 31 or more continuous years, and in roughly one-third of these cases debt covenants were far from binding in the dividend omission year.¹¹ Thus, once dividends are reduced to a low level, managers do not shave them asymptotically toward zero to avoid at all costs breaking a continuous dividend record.

Strategic Motives for Dividend Reductions

One possible reason managers voluntarily omit (or cut) dividends is to enhance their bargaining position with organized labor or other stakeholders. We found evidence to support this view while investigating the eight sample firms (described in Footnote 11) whose managers broke a long history of dividends when debt constraints were far from binding. [We investigated these cases in detail since they are difficult to reconcile with the notion that managers of firms with long dividend histories are especially reluctant to omit dividends.]

A reading of *Wall Street Journal* articles yields indications that managers of five of these eight firms attempted to use dividend policy strategically, e.g., as a negotiating tactic with unions or as part of a Congressional lobbying effort. For example, Bethlehem Steel's dividend reductions are coupled with a call for "prompt implementation of import restraints under President Reagan's Comprehensive Fair Trade Program" and with indication that "it would seek to restructure its labor agreement with the United Steelworkers union 'well before' the contract expires . . .".¹² For Ford Motor Company and three other firms, *Wall Street Journal* articles around the time of the dividend omission document managers' requests for labor concessions. Thus, one apparent motive of these firms' voluntary dividend omissions was to provide organized labor with credible evidence that the firm was in fact experiencing serious financial trouble.

Although strategic motives apparently underlie some firms' dividend reductions, our reading of the evidence is that financial problems (e.g., as indicated by persistent losses) are the predominant factor, and that strategic motives are at most a secondary factor in some cases. This interpretation makes sense because

¹¹ There were nine firms with dividend histories extending 31 or more years whose managers omitted dividends in a year in which the dividend coverage ratio exceeded 10.0. Eight of these firms missed a full year of dividend payments so that the continuous year payment record was indeed broken. The remaining firm in similar circumstances omitted and immediately reinstated its dividend and therefore did not break its continuous annual string of payments.

¹² See *Wall Street Journal* reports on Bethlehem Steel dated January 31, 1985 (page 7) and October 31, 1985 (page 2).

it would be difficult to convince labor unions or Congress that concessions are in order simply by reducing dividends with no corroborative evidence of the firm's "need" for financial assistance.

VI. Summary of Findings

This paper studies the dividend policy adjustments of 80 NYSE firms that experienced multiple losses during 1980–1985. Our most striking finding is that more than half the sample apparently faced binding debt covenants in years managers reduced dividends. This finding supports the agency view of dividend policy, since it indicates that debt covenants influence the dividend decisions of even the largest publicly held firms. However, agency considerations are clearly not the only factor at work in our sample, since many firms voluntarily reduced dividends when debt covenants were nowhere close to binding.

We also find that, absent binding covenants, dividend cuts are undertaken significantly more often than are dividend omissions, suggesting that managerial reluctance is to the omission and not simply the reduction of dividends. Moreover, managers of firms with long dividend histories view dividend omissions as especially unattractive, perhaps because they would be the first managers in many years whose policies have generated insufficient cash to pay dividends. Finally, some dividend reductions seem strategically motivated, e.g., designed to enhance the firm's bargaining position with organized labor.

Overall, our evidence on 80 troubled NYSE firms indicates that managers of large public corporations respond to financial distress with rapid and aggressive dividend reductions. The motivations underlying these dividend reductions are various and are not reducible to one simple theory of dividend policy. They include binding debt covenants, a desire to maintain a long history of continuous dividend payments, and strategic considerations. The latter perhaps represents the most promising area for future research into the complex factors that influence dividend policy.

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