

The Market Reaction to Voluntary Corporate Spinoffs: Revisited

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Spinoff excess returns exist, but the sources of these returns remain largely unexplained. This study reexamines the characteristics of spinoffs in a manner similar to three key studies: Schipper and Smith (1983), Miles and Rosenfeld (1983), and Hite and Owers (1983). An updated sample of 113 voluntary spinoffs from 1980 to 1991 is investigated. The above studies do not include spinoffs after 1981. Security returns are analyzed for the entire sample and for various subsamples.

We find that spinoff announcements continue to result in significant excess returns that are related to the size of the spinoff. Preannouncement returns are positive, whereas postannouncement returns are negative. Both are borderline significant. As expected, dispersion of spinoff announcement returns is related to the size of the spinoff. Neither firms' professed (stated) reasons for spinoffs, nor taxability information presented in press releases are related to announcement excess returns. Stated reasons, however, are considerably different from reasons reported in past studies.

INTRODUCTION

When corporate spinoffs occur, current shareholders "receive a pro-rata distribution of separate equity claims on a subset of the original firm's net assets" (Schipper and Smith, 1983, p. 437). Excess returns have been found to be associated with the announcement of such spinoffs. Yet spinoff owners do not receive compensation as a result of the spinoff; their original holdings simply are divided into two or more parts. The source of these excess returns, therefore, is an area of intrigue. Possible sources identified in prior research include regulatory or tax advantages, improved managerial efficiency (Schipper and Smith, 1983; Hite & Owers, 1983), and the contention that spinoffs are sometimes carried out to facilitate mergers (Hite and Owers, 1983). Two additional studies provide evidence that large spinoffs reflect disproportionate gains relative to small spinoffs (Hite and Owers, 1983; Miles and Rosenfeld, 1983). This study reexamines the shareholder wealth effects of spinoffs for robustness using corporate spinoffs that occurred during the 1980 to 1991 period. This is a more recent time period than those covered in previous studies and is marked by substantial changes in some of the underlying factors previously identified as sources of excess returns. Additionally, the reasons offered by management for the spinoff are investigated as possible sources of excess returns.

THE LITERATURE

Schipper and Smith (1983) report average excess two day announcement returns of 2.8 percent for the 93 companies in their study. Hite and Owers (1983) and Miles and Rosenfeld (1983) both report average excess two day returns of 3.3 percent for their samples of 123 and 55 firms, respectively. Rosenfeld (1984) finds two day excess returns of 5.6 percent; however, Rosenfeld's study includes only large spinoffs. Hite and Owers (1983) find an excess return of 5.5 percent over a two day period for large spinoffs (greater than 6.6 percent of the equity value spunoff) versus a .8 percent excess return for smaller spinoffs. Miles and Rosenfeld (1983) compare returns for large spinoffs (greater than 10 percent) to returns for small spinoffs and find a statistically significant (at the .05 level) differential of 20.7 percent over a 181 day observation period ($t = -120$ to $t = +60$).

Additionally, Hite and Owers provide some evidence that positive gains exist for firms spinning off units to facilitate mergers (12 firms) and that negative gains exist for firms spinning off segments for legal and regulatory purposes (19 firms). Eighteen of Schipper and Smith's 93 sample firms indicate relaxation of regulatory environments or corporate tax advantages as motivating their particular spinoffs. The excess returns for these firms exceed those of the entire sample over the two day period ($t = -1, 0$) around the spinoff event. Schipper and Smith note, however, that this factor alone does not begin to explain the gains for the entire sample (1983, p. 455).

Schipper and Smith also explore the improved managerial efficiency thesis by examining the average growth of the prespinoff entity for five years prior to the spinoff and the dissimilarity of the operations of the spunoff unit and parent. High growth rates of the firms spinning off segments and differences in the industrial classification of spinoff entities versus their parents seem to support the view that spinoffs are undertaken to increase management efficiency.

A wealth transfer from bondholders thesis also has been explored. Schipper and Smith examine bond price and rating behavior around the spinoff announcement and restrictive debt covenants. They compare the debt ratios of spunoff units to those of the prespinoff entity. Hite and Owers examine wealth transfers from bondholders by analyzing the returns for senior securities around the announcement date. Neither Schipper and Smith nor Hite and Owers find evidence to support the wealth transfer thesis.¹

RESEARCH HYPOTHESES

Prior spinoff studies primarily examine spinoffs executed during the 1960s and 1970s. The Schipper and Smith and Hite and Owers studies both cover the period from 1963 through 1981. The economic conditions existing in these two decades are significantly different from the economic conditions prevailing during the 1980s. For example, short-term interest rates averaged a little over 8 percent during the 1963 to 1981 time

¹ Davidson and McDonald (1987) provide evidence of large abnormal returns for spinoffs of royalty trusts. These authors examine the returns of a sample of 11 of these specialized spinoffs, but can not distinguish whether the positive returns observed are due to the spinoff or tax advantages. Tax advantages exist because earnings of a royalty trust can be transferred tax free to the unitholders of the trust. Denning (1988) categorizes sales of assets according to company motivations for the divestiture. Denning reports a 2.7 percent cumulative mean return for 42 spinoffs over a 13 day announcement period defined as $t = -6$ through $t = +6$. Use of this announcement period limits comparisons to other spinoff studies.

period versus a little over 11 percent from 1981 to 1991 (*Business Statistics*, p. 64). The earlier period is characterized, however, by average annual increases in short-term rates of over 10 percent, while the 1980s are characterized by average declines of over 6 percent. The earlier period also witnessed higher inflation, with an average rate of increase over 2 percent greater than during the later period (*Business Statistics*, p. 24). This occurred despite periods of wage and price controls. In addition to these economic differences, the 1980s saw significant changes with respect to some of the underlying factors cited as sources of observed excess returns (tax, regulatory, and merger facilitation). Major tax changes occurred throughout the later period. They included the Tax Reform Act of 1986, called "... the most sweeping reform in the history of our nation's tax structure" (Condrell, Tierney, and Siegel, 1987, p. 411), and the Revenue Reconciliation Act of 1990. In addition to tax law revisions, the Reagan Administration initiated widespread changes to the country's regulatory environment (e.g., banking and transportation deregulation). These changes in regulatory milieu no doubt are related to the empirical results that led researchers to conclude that a more lenient atmosphere toward mergers prevailed during the 1980s. That more lenient atmosphere resulted in significantly lower returns to bidder firms (Bradley, Desai and Kim, 1988; and Jarrell and Poulsen, 1989) and punished unrelated diversification much more in the 1980s than in the 1970s (Morck, Shleifer, and Vishny, 1990).

The primary purpose of this research is to reexamine spinoffs using spinoffs that occurred during the 1980-1991 period to see if the previously observed excess return behavior is consistent across a more contemporary and economically different time period. We also reexamine the size effect and investigate information regarding taxability of the spinoff. In addition, the stated reason given in the spinoff announcement is examined as a possible source of excess returns associated with the spinoffs.² The four hypotheses are stated formally, in null form, below:

- H1 Excess returns are not associated with spinoff announcements;
- H2 The relative size of the spinoff unit is unrelated to the magnitude of the observed excess return;
- H3 Statements concerning taxability of the dividend are unrelated to the magnitude of the excess return;
- H4 Reasons given for the spinoff are unrelated to the magnitude of the excess return.

SAMPLE, EVENT DATE SPECIFICATION AND ANALYTICAL METHODS

SAMPLE DESCRIPTION

The spinoff sample analyzed in this study is obtained by identifying transactions coded as noncash stock dividends from the *CRSP Daily Master File* which includes all firms traded on the NYSE and/or AMEX. This list is supplemented by including all firms paying dividends in the stock of another company. These firms are identified by *Moody's Dividend Record*. To be included in the sample, each spinoff unit has to have a parent

² No attempt is made to identify a wealth transfer from bondholders to shareholders as Schipper and Smith (1983) and Hite and Owers (1983) find no evidence to support such a transfer.

firm that is an existing publicly traded entity listed on the *CRSP Daily Returns File* during the period of analysis. A total of 155 spinoffs announced during the period January 1, 1980 through December 31, 1991 is identified.

The following criteria are used to qualify the transactions from the total sample. (The number of transactions excluded due to each qualification are shown in parentheses.)

- The spinoff has to be voluntary and not undertaken to comply with regulatory directives (two transactions excluded);
- The spinoff is not part of a liquidation or bankruptcy proceeding (six transactions excluded);
- The spinoff announcement does not coincide with an estimated earnings announcement, unexpected dividend announcement, or other major news release related to the parent firm, and/or the event period of each transaction is free of firm-specific news releases that could impact security returns (30 transactions excluded);
- The stock of the spunoff unit is free to trade separately and not paired for trading purposes with the stock of the parent company (four transactions excluded).

The final sample consists of 113 spinoffs (155 less 42 exclusions) divested by 109 different companies. The appendix lists the spinoffs in the final sample alphabetically by parent firm. Also included are the month and year of the announcement of each spinoff and the SIC code of the parent firm. Spinoffs are dispersed widely over the 12 year period, with a high of 19 spinoffs in 1983. The sample is also diverse with respect to industry representation. The crude oil and natural gas classification (SIC 1311) had the most spinoffs of any one industry (eight spinoffs). Size of the spunoff unit, measured by the proportion of equity value spunoff, ranges from .2 percent to 84 percent, with a median value of 13.9 percent.

EVENT DATE SPECIFICATION

Spinoffs usually involve more than one announcement. The announcement of an intention to divest typically is followed by an announcement that the transaction has been completed. In all such cases, the first announcement of the entire chain of events is designated as the event date, hereafter referred to as $t = 0$. The announcement date of the transaction is extracted from the *Dow Jones News Wire* and the *Broadtape Transcripts*.³ Documents located with this service include the time of day the document was released. If an announcement was made after the market's close, the event date is defined as the next trading day. If the announcement fell on a nontrading day, the first trading day following the announcement is considered to be the event date. All news items related to individual firms appearing during the year prior to the announcement date are examined to insure that the announcement date is identified correctly.

³ Includes press articles from *Dow Jones News*, *The Wall Street Journal*, and *Barron's* from June 1979.

ANALYTICAL METHODS

EXCESS RETURNS MEASUREMENT

Excess returns, ar_{it} (firm i , period t), for the firms spinning off segments are obtained from the CRSP excess returns file which uses the Scholes and William's method (1977) of adjusting for nonsynchronous trading.⁴ For each portfolio of securities, the average excess return, denoted AR_t , is estimated for each day over the period of interest surrounding the event date ($t = 0$). The average excess returns are estimated for each value of t from -10 to +10 days around the event date,⁵ i.e.,

$$(1) AR_t = \sum_{i=1}^n \frac{ar_{it}}{n}$$

(for $i = 1$ to the n securities in a particular portfolio).

The effect of the spinoff announcement on shareholder wealth for a given time period beginning at K ($t = -10$) and extending through L ($t = +10$) is examined using cumulative average residuals (CARs). The CAR over the period K to L is defined as follows:

$$(2) CAR_{K,L} = \sum_{t=K}^L AR_t$$

The following t -test⁶ is used to test for the significance of the CARs.

$$(3) t_{CAR} = \frac{CAR_T}{(\text{Var}(CAR_T))^{1/2}}$$

where:

T = The number of days from K to L .

Pairwise comparisons of the CAR means and variances are used to check for statistically significant differences between various subsamples in the study. Standard tests for unequal samples were used for these comparisons.

⁴ ER_{it} is estimated by annual groupings of all securities listed on the NYSE and the AMEX into ten equal control portfolios ranked according to the Scholes and Williams (1977) beta estimates from the prior year. Each security is assigned to one of the ten portfolios. The observed return for the control portfolio to which security i is assigned is used as the estimate of ER_{it} . The excess return, ar_{it} , is calculated as the difference between the observed return and ER_{it} .

⁵ Schipper and Smith (1983), Hite and Owers (1983), and Miles and Rosenfeld (1983) use much longer event periods to be certain they capture the market's reaction to their spinoffs. Their results justify the use of a shorter event window.

⁶ This t -test assumes that the excess returns are uncorrelated over time (Brown & Warner, 1983). The use of the Scholes-Williams method (1977) of adjusting for nonsynchronous trading should result in excess returns that approximately satisfy this assumption.

Size of the spinoff was measured using the approach of Hite and Owers (1983, p. 417). This approach proxies for size as:

$$\text{Proportion Divested} = \frac{\alpha P_s}{(P_p + \alpha P_s)}$$

where:

- α = The number of spunoff unit shares issued per original parent share;
- P_s = The distribution value of each share of the spunoff unit established by the board of directors as of the ex-dividend date;
- P_p = The ex-dividend value of the parent company shares.

DATA ANALYSIS AND FINDINGS

EXCESS RETURNS FOR THE COMPLETE SAMPLE

The first hypothesis tests if the announcement of corporate spinoffs is related to excess security returns. This is one of two confirmatory null hypotheses being examined.

Table 1 shows the average excess security returns for the complete sample over the period of analysis, $t = -10$ through $t = +10$, by day. Table 1 shows that the average excess security return at day 0 is significantly greater than zero at the .01 level. The average excess return on day -1 is marginally significant at the .10 level. This evidence supports the robustness of prior conclusions concerning the association between the announcement of corporate spinoffs and excess security returns. Even though the time period and economic conditions are different than those of previous studies, the return behavior pattern is similar to the findings of Schipper and Smith (1983), Hite and Owers (1983), and Miles and Rosenfeld (1983).

Cumulative average residuals (CARs) for the ten trading days before and after the announcement day and day 0's AR are shown in Table 2, Panel A. CAR (-1, 0) is the primary measure used in previous studies, but our primary concern is with the market response at day 0 due to improvements in announcement identification. AR (0) for the firms in this study is .0342 which is somewhat higher than like responses reported in earlier studies.⁷ Both pre- and post-CARs are significantly different from zero, but are of opposite sign. Pre-CARs are significant at the .05 level, and post-CARs are significant at the .10 level. The pre-CARs' behavior could be explained by market anticipation or information leakage. The post-CAR behavior is more difficult to understand, but has been observed in prior studies.

Though significance tests in prior spinoff studies do not correspond exactly to this study's post-announcement period, Hite and Owers (1983) report a negative CAR of 1.8 percent from day $t = +2$ through $t = +8$ without relating a significance level for this value. Schipper and Smith (1983) report a negative 1.97 percent CAR for the period $t = +1$ through $t = +40$. Their reported CAR is not significant at the .05 level.

⁷ A more detailed comparison was made of the sample of firms used in this study and the firms used in Schipper and Smith. The distributions of characteristics were quite similar.

Table 1—Average Security Returns for 113 Voluntary Spinoffs Over the Period of Analysis $t = -10$ through $t = +10$, 1980-1991

Day ^b	Number of Firms ^c	Average Security Return, AR	T Statistic ^a
-10	112	.0013	.58
-9	110	.0010	.71
-8	112	.0020	.90
-7	112	.0009	.48
-6	111	-.0005	-.25
-5	111	.0012	.69
-4	113	-.0004	-.20
-3	113	-.0013	-.80
-2	113	.0024	1.14
-1	113	.0047	1.98*
0	113	.0342	6.93***
+1	113	.0031	.94
+2	113	-.0018	-.79
+3	113	-.0009	-.47
+4	113	-.0029	-1.32
+5	113	-.0022	-.97
+6	113	-.0001	-.07
+7	113	-.0028	-1.32
+8	113	-.0024	-1.15
+9	113	-.0028	-1.32
+10	112	.0015	.88

* Significant at the .10 level

** Significant at the .05 level

*** Significant at the .01 level

footnote a is missing

^bDay 0 is the event date; that is, the date of the earliest press release^cA few days have missing stock returns**Table 2—Cumulative Average Residuals (CARs), Subsets of the Event Period for the Complete Sample (N = 113, Panel A) Versus the Sample Excluding the Outliers (N = 103, Panel B) of Voluntary Spinoffs in the Period 1980-1991**

Time Period	CAR	T Statistic ^a
Panel A Full Sample		
-10 to -1	.0132	2.05**
0	.0342	6.93***
+1 to +10	-.0115	-1.71*
Panel B Without Outliers		
-10 to -1	.0122	1.77*
0	.0267	8.11***
+1 to +10	-.0118	-1.73*

* Significant at the .10 level

** Significant at the .05 level

*** Significant at the .01 level

Because the CARs for the periods presented in Table 2, Panel A are the focus of discussion in the remainder of this study, it is desirable to know the effect of outliers. Ten

spinoffs have AR values that can be considered outliers.⁸ The values for the periods shown in Panel A are computed a second time for the complete sample excluding the outliers. The results are presented in Panel B of Table 2. Panel B shows that, without the outliers, AR (0) remains statistically significant at the .01 level. CAR (-10,-1) and CAR (+1,+10) significance levels are virtually unchanged. Thus, the results are not driven by outliers.

The preceding analysis leads to the conclusion that the announcement of corporate spinoffs does result in significant, positive excess security returns. This suggests that previous findings are robust across time and changing economic conditions. The source of the excess returns, however, remains unresolved. Finally, a comparison of the key CAR values with and without statistical outliers shows outliers do not have a significant impact on CAR (-10, -1), AR (0) and CAR (+1, +10) values reported in Panel A of Table 2.

RELATIONSHIP BETWEEN EXCESS RETURNS AND PERCENT OF THE PARENT'S EQUITY VALUE SPUNOFF (SIZE)

To examine the size effect, AR (0), CAR (-10, -1) and CAR (+1, +10) values for each spinoff transaction in the complete sample are treated as dependent variable values, and a regression analysis is conducted using the size measure described earlier as the regressor variable. The results of this regression are displayed in Table 3, Panel A. As shown, the regression test statistic is significant at the .01 level. This indicates a relationship between size and AR (0). The coefficient of determination, R^2 , indicates that size explains 15.9 percent of the variation in AR (0). As expected, this sample confirms previous findings concerning the relationship between size and security returns of spinoffs as reported by Hite and Owers (1983) and Miles and Rosenfeld (1983). Only Hite and Owers report results of a regression analysis. Their regression shows an adjusted R^2 of .164 and a highly significant size coefficient.

**Table 3—Regression Analyses: CARs Regressed on Proportion of Parent Company's Equity Spunoff or Size
Voluntary Spinoffs 1980-1991**

	Panel A AR (0)	Panel B CAR (-10, -1)	Panel C CAR (+1, +10)
Regression F Test Statistic	20.865***	.774	.346
F Significance Level	.000	.381	.558
Coefficient	.095	.026	.018
R^2	.159	.007	.003
Adjusted R^2	.152	-0.002	-0.006
Size Coefficient T Test Statistic	4.568***	.796	.574

* Significant at the .10 level

** Significant at the .05 level

*** Significant at the .01 level

⁸ Outliers are identified using procedures suggested by Ott (1984, p. 46). They are ARs < (lower quartile - 1.5 times the interquartile range) or > (upper quartile + 1.5 times the interquartile range).

Table 3 shows the results of two other regressions. In Panel B, size is regressed over CAR (-10, -1). The results indicate a lack of relationship between CAR (-10, -1) and size. Results from a third regression are presented in Panel C. In this regression the post-announcement reaction measure, CAR (+1, +10), is the dependent variable. The size of the spinoff is again the independent variable. Panels B and C indicate that size is not related differentially to pre- and post-CAR values.

To present a more thorough view of the size/AR (0) relationship, the complete sample is divided into halves and quartiles based on the proportion of parent equity spunoff. The median size is 13.9 percent divested. AR (0) mean and standard deviation values are calculated for each half of the sample and each quartile subsample. T and F tests are used to examine whether the respective subsample mean and variance are statistically different from corresponding values of its closest counterpart. That is, AR (0) mean and variance for the first half of the sample are compared to AR (0) mean and variance for the second half of the sample; quartile one values are compared to those of quartile two and so on. The comparisons are shown in Table 4 with pertinent test statistic values.

Table 4 shows that the mean AR (0) value for the smaller spinoffs is 1.9 percent versus 4.9 percent for the larger spinoffs. The difference between these values is significant at the .01 level. The variance of the AR (0) values for the larger spinoffs is also significantly greater (.01 level) than the variance of the smaller spinoffs.

The quartile mean comparisons indicate that significant differences between adjacent quartiles do not exist, although the mean of AR (0) increases as size increases. The largest mean comparison difference occurs between quartiles 3 and 4. The quartile comparisons show a jump in the mean AR (0) value of 2.4 percent from the third quartile to the fourth quartile, but the difference is not significant. The variances of the extreme quartiles are

Table 4—Comparisons of AR (0) Mean and Variability for Subsamples Formed by Proportion of Parent Equity Divested or Size; Voluntary Spinoffs 1980-1991

Comparison	AR (0)		Test of H_0	
	Mean	Standard Deviation	Means are Equal T-Value	Variances are Equal F-Value
First Half of Sample ^a	.019	.0373	3.15***	2.72***
Second Half of Sample	.049	.0620		
Quartile 1	.025	.0283	1.42	2.89***
Quartile 2	.026	.0434		
Quartile 2	.026	.0434	1.00	1.05
Quartile 3	.037	.0450		
Quartile 3	.037	.0440	1.46	2.74**
Quartile 4	.061	.0736		

* Significant at the .10 level

** Significant at the .05 level

*** Significant at the .01 level

^aSample partitioned by median spinoff size of 13.9 percent divested; first half of sample has the smaller spinoffs

variance is significantly smaller than the quartile 2 variance and the quartile 4 variance is significantly larger than the quartile 3 variance.

The preceding size analysis leads to the conclusion that excess security returns (and the dispersion of these returns) resulting from the announcement of corporate spinoffs are related to the proportion of equity value divested or spinoff size. Spinoff size accounts for approximately 16 percent of the variability in the announcement returns. It is also clear that size is not differentially related to the pre- or postannouncement reaction.

SOURCES OF SPINOFF SECURITY RETURNS BASED ON STATED REASON

Divesting firms provided reasons for 75 of the spinoffs in this sample. The remaining 38 announcements did not include a motive for the spinoff. The primary reasons, a brief description of those reasons, and the number of firms asserting each reason are given in Table 5. AR (0) and the CARs for spinoffs grouped by each primary reason and for the 38 spinoffs for which no reason is provided are presented in Table 6. Using the groupings

Table 5—Reasons for Spinoffs as Stated in Spinoff Announcements

Reason	Number of Spinoffs Having Stated Reason
Separate very different operations; allow management to concentrate on core business; EFFICIENCY	28
So stock prices more closely reflect value of units VALUATION	19
Allow parent to more easily attain financing EQUITY	16
Other reasons include; spunoff unit too capital intensive (3), separate regulatory environments (4), and one each for five other reasons	12
NO REASON given	38
Total	113

**Table 6—CARs by Reasons Stated in the Spinoff Announcement
Voluntary Spinoffs 1980-1991**

Description	Efficiency	Reason ^a Valuation	Equity	No Reason
Number of spinoffs	28	19	16	38
AR (0)	.0256***	.0407***	.0311***	.0379***
CAR (-1, -10)	.0224	.0008	.0185	.0120
CAR (+1, +10)	-.0218	-.0242	-.0158	-.0013

* Significant at the .10 level

** Significant at the .05 level

*** Significant at the .01 level

^a See Table 5 for category descriptions

by primary reason (efficiency, valuation, equity, and no reason stated), a four treatment analysis of variance (ANOVA) is performed using first AR (0), CAR (-10, -1), and then CAR (+1, +10) values as dependent variables.⁹ F-values do not approach significance for any of the ANOVAs using stated reason as the independent variable. Lack of significance indicates that the reasons given are not related to excess returns. As evidenced by CAR (+1, +10), however, the excess return for the efficiency category at day 0 essentially disappeared in the subsequent ten days.

Several differences exist between the stated reasons given in this study and similar categorizations by Hite and Owers (1983) and Schipper and Smith (1983). Hite and Owers classify merger facilitation as a stated reason for 12 of the spinoffs in their study and legal or regulatory difficulties as a motivation for 19 others. Schipper and Smith (1983) assert that the motive for 18 of their spinoffs is to loosen constraints of institutional or regulatory environments, including taxation, price, or other regulation. Both of these prior studies involve spinoffs from 1963 to 1981. In this study of voluntary spinoffs from 1980 to 1991, only four announcements report spinoffs motivated by regulatory environment considerations, one mentions tax benefits, and none offer merger facilitation as a reason. Because of these differences, some sources of spinoff security returns examined in prior studies are not investigated in this study.

SPINOFF SECURITY RETURNS AND TAXABILITY OF THE SPINOFF DIVIDEND

In addition to the stated reason, spinoff announcements may contain information concerning the taxability of the spinoff dividend to the recipients. Categorizations of such information for each of the 113 spinoffs in this study are shown in Table 7. In 59 instances, the taxability of the spinoff dividend is not mentioned in the initial spinoff announcement. The two remaining categories from Table 7 include spinoffs announced as tax free (25) and spinoffs conditional on the receipt of a tax free ruling from the IRS (16). Thirteen spinoff announcements make other statements regarding the taxability of the spinoff dividend.

AR (0) and the CARs for spinoffs grouped by the three primary categories from Table 7 are displayed in Table 8. The categories are nothing, tax free, and conditional. Interestingly, AR (0) for the nothing category almost completely reverses in the ten days subsequent to the announcement date, as evidenced by CAR (+1, +10).

Using the three taxability categories as treatments, three ANOVAs are performed: one using AR (0) values as the dependent variable and the other two using CAR (-10, -1) and CAR (+1, +10) values.¹⁰ The F test statistic was not significant for any of the ANOVAs. Therefore, no evidence exists to suggest a relationship between information about the taxability of the spinoff dividend provided in spinoff announcements and spinoff security returns.

⁹ Spinoffs classified as other are excluded from the analysis.

¹⁰ In all three analyses, the 13 spinoffs in the other grouping from Table 7 are excluded from the complete sample.

Table 7—Categories of Spinoff Dividend Taxability Information Available in Spinoff Announcements
113 Voluntary Spinoffs, 1980-1991

Category	Number of Spinoffs
NOTHING Dividend taxability to stockholders not mentioned in announcement or unknown	59
TAX FREE Announcement states dividend is tax free	25
CONDITIONAL Announcement states spinoff is conditional on a tax free ruling from the IRS	16
OTHER Includes stated taxable (5), expected tax free (7), and expected taxable (1)	13
Total	113

Table 8—CARs by Category of Spinoff Dividend Taxability Available in Announcement
Voluntary Spinoffs, 1980-1991

Description	Nothing	Category ^a Tax Free	Conditional
Number of Spinoffs	59	25	16
AR (0)	.0241 ***	.0410 ***	.0384 ***
CAR (-1, -10)	.0089	.0209	.0048
CAR (+1, +10)	-.0201	.0061	-.0099

* Significant at the .10 level

** Significant at the .05 level

*** Significant at the .01 level

^a See Table 7 for category descriptions

SUMMARY, CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

The excess announcement period return for the spinoffs in this study is highly significant and positive. The proportion of parent equity divested, or spinoff size, also is found to have a significant relationship to AR (0), with size accounting for slightly less than 16 percent of the variation in AR (0). These findings agree with the results from prior studies. Additionally, the preannouncement security return, CAR (-10, -1), and the post-announcement security return, CAR (+1, +10) are borderline significant. The pre-announcement CAR is positive, whereas the postannouncement CAR is negative. Spinoff unit size is not related to either the pre- or postannouncement return.

Spinoffs are grouped on the basis of stated reason for the divestiture and by information regarding the taxability of spinoff dividends to recipients. The source of information for both groupings is the language of the spinoff announcements. Neither grouping helps explain variation in the spinoff announcement return or in the pre- and postannouncement

reaction. For the efficiency reason category and the nothing tax category, however, the average excess returns observed at day 0 reverse over the ten days following the announcement.

Characteristics of spinoffs have changed over time. This study's spinoffs are larger than samples examined in prior studies. Also, the stated reasons for spinoffs offered in announcements differ from prior studies where merger facilitation and legal or regulatory difficulties frequently are the stated reasons for spinoffs.

Thus, spinoff announcement period excess returns remain largely unexplained, with slightly over 84 percent of the variation attributable to unknown factors. Further research related to spinoffs might compare the spinoff unit's before spinoff performance to announcement excess returns. A cursory subsample of spinoffs in this study that negatively affect the parent company's financial statements experience a very different announcement return than the other spinoffs in the study. Also, some spinoffs experience negative announcement returns. It might be fruitful in future research to study these types of spinoffs separately. Finally, the postannouncement drift observed as more pronounced for certain conditions bears further investigation.

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Appendix—Parent Firms Spinning Off Units Voluntary Spinoffs 1980-1991

	Company Name	Month/Year	SIC Code
1	Acton Corp.	5/81	4899
2	Adams-Russell Co., Inc.	6/86	3662
3	Affiliated Publications	1/89	2711
4	Allegheny Corp.	2/87	6611
5	American Natural Resources Co.	9/80	4923
6	AMETEK	3/88	3822
7	Amoco Corp.	1/85	6711
8	Astrex Corp.	1/82	5065
9	Bairnco Corp.	1/84	6711
10	Bairnco Corp.	4/88	6711
11	Bairnco Corp.	1/90	6711
12	Beard Oil Co.	11/83	1311
13	Borg Warner Corp.	7/85	2821
14	Broad, Inc.	12/88	1521
15	Bsn Corp.	12/83	5699
16	Calton Inc.	1/87	521
17	Centex Corp.	2/84	1531
18	Central Louisiana Energy Corp.	6/81	4923
19	Chelsea Industries, Inc.	1/82	2211
20	Coastal Corp.	5/80	4923
21	Community Psychiatric	4/89	8063
22	Cooper Laboratories, Inc.	9/83	2834
23	Copperweld Corp.	5/86	3316
24	Crane Co.	4/85	3494
25	Crane Co.	4/88	3494
26	Cray Research	5/89	3573
27	Culbro	3/88	2121
28	Datapoint Corp.	4/85	3573
29	Dorchester Gas Corp.	6/82	1311
30	Ediso Brothers Stores	4/85	5661
31	Emerson	8/90	3621
32	Engelhard Minerals & Chemicals Corp.	3/81	5051
33	ESI Industries, Inc.	7/86	1382
34	Ethyl	12/88	2988
35	Fedders Corp.	3/86	3714
36	Florida Dock Industries	3/86	3273
37	Fuqua Industries, Inc.	9/80	3732
38	Gatx Corp.	2/83	3743
39	Grow Group	1/87	2851
40	Gulf Canada Resources, Ltd.	1/87	1311
41	Hazleton Laboratories, Inc.	12/85	7391
42	Hi-shear Industries	4/84	3452
43	Honeywell Corp.	4/90	3483
44	Household International	1/89	6145
45	Houston Oil & Minerals Corp.	9/80	1311
46	Integra—A Hotel	8/88	7011
47	Itek Corp.	7/81	3861
48	Iu international Corp.	8/83	6711
49	Kaneb Services	6/81	1211
50	Kay Corp.	4/86	5944
51	Keystone Consolidated Industries, Inc.	2/84	3496
52	Keystone International, Inc.	7/83	3494
53	KN Energy, Inc.	10/83	4923
54	KN Energy, Inc.	5/84	4923
55	Kraft, Inc.	9/86	2022
56	Louisiana Land & Exploration Co.	4/83	1311
57	Masco Corp.	3/84	3432
58	Masco Corp.	7/88	3432
59	Mass Merchandisers, Inc.	8/83	5013
60	MCA, Inc.	3/82	7813
61	Medicare, Inc.	6/86	8081

Appendix (cont.)—Parent Firms Spinning Off Units Voluntary Spinoffs 1980-1991

	Company Name	Month/Year	SIC Code
62	Mesa Petroleum Co.	10/82	1311
63	Michigan Energy	10/88	4924
64	Moog, Inc.	6/83	3494
65	NL Industries	01/88	1389
66	Nui Corp.	10/87	6711
67	National Health Corp..	6/91	8049
68	National Medical Enterprises	1/89	8062
69	Newhall Land & Farming Co. Cal	7/82	6711
70	Newmont Mining Corp.	9/86	1382
71	Northeast Utilities	10/87	4911
72	Ogden Corp.	9/83	3356
73	Peabody International Corp.	7/80	3569
74	Penn Central Corp.	3/87	4011
75	Peoples Energy Corp.	1/81	4923
76	Perini Corp.	2/83	1629
77	Philadelphia Suburban Corp.	5/80	4941
78	Pier 1, Inc.	1/85	5712
79	Pioneer Corp.	10/83	4922
80	Plantronics, Inc.	5/84	3661
81	Pope & Talbot, Inc.	10/85	2421
82	Primark Corp.	1/88	2751
83	RJ Reynolds Industries, Inc.	8/8	36711
84	RLC Corp.	1/82	7512
85	Raymond James Financial	2/88	6211
86	Rollins, Inc.	12/83	7342
87	Rollins Truck Leasing	6/88	4213
88	Santa Fe Pacific Corp.	1/90	1311
89	Singer Co.	2/86	3636
90	Southland Royalty Co.	6/80	6792
91	Sparkman Energy Corp.	5/83	4922
92	Squibb Corp.	7/86	2834
93	Standard Havens, Inc.	10/88	3564
94	Standex International Corp.	9/81	2751
95	Standex International Corp.	9/82	2751
96	Tandy Corp.	6/86	5732
97	Teledyne, Inc.	1/84	3662
98	Teledyne, Inc.	7/86	3662
99	Texas Gas Resources	2/83	4922
100	Texas International Co.	2/82	1311
101	Thiokol Corp.	2/89	2891
102	Total Petroleum North American	8/90	2911
103	Transcanada Pipelines	1/89	4922
104	Transworld Corp.	9/83	4511
105	Tucson Electric Power	12/84	4911
106	Tyler Corp.	4/89	3321
107	Univar Corp.	9/83	2833
108	Univar Corp.	12/85	2833
109	Universal Corp.	6/91	5159
110	University Patents, Inc.	3/86	6794
111	URS Corp.	8/82	8911
112	Whitman Co.	9/90	2086
113	Whittaker Corp.	9/91	2851