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Author(s): Neil W. Sicherman and Richard H. Pettway

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Acquisition of Divested Assets and Shareholders' Wealth

NEIL W. SICHERMAN and RICHARD H. PETTWAY*

ABSTRACT

The divesting of corporate assets has become quite popular. Previous studies of divestitures have found conflicting impacts upon shareholders' wealth of the buying firm. This study measures the impacts of product-line relatedness between the acquiring firm and the divested unit and financial weakness of the selling firm upon the abnormal returns to the acquiring firm. Although the study finds that the impact of financial strength of the seller is ambiguous, the purchase of related assets produces more wealth than does the purchase of unrelated divested units. Further, firms that purchase related divested units have larger proportions of insider ownership.

MANAGERIAL DECISIONS TO DIVEST corporate assets or whole divisions are becoming increasingly popular. In fact, there has been a forty percent increase in corporate divestitures over the past four years, with 2,000 divisions and subsidiaries divested from parent firms in 1984 and 1985 alone [14]. Recent research on divestitures has concentrated mostly upon selling-firm shareholder-wealth effects [1, 6, 7, 8, 11, 15]. This study analyzes buying-firm wealth effects resulting from the purchases of divested assets.

Studies of mergers have found that, on average, shareholders of acquiring firms do not gain. However, the acquisition of divested assets may be wealth enhancing. Usually, the sell-off of some of a firm's existing assets is initiated by the seller, and, typically, only one potential buyer actively negotiates to purchase the divested assets [6]. Thus, the divestiture market may not be perfectly competitive, and economic rents may be earned. Rosenfeld [11] explains that "both the acquiring firm and acquired assets have unique resources that earn positive economic rents when combined with the assets of the other firm."

The portion of these economic rents accruing to the acquiring firm's shareholders is hypothesized in this study to depend upon the following factors: (a) the relatedness, or strategic alignment, of the buyer and the divested assets, (b) the level of managerial stock ownership of the acquiring firm, and (c) the financial condition of the selling firm. Corporate combinations are more likely to succeed if between related firms and thus can be managed more efficiently. Financial theory does not support business diversification [9]. Also, empirical evidence of mergers confirms that conglomerating purchases do not enhance shareholder wealth [12]. Acquiring related assets is also consistent with stated managerial motives [5]. Thus, we will test whether the acquisition of related divestitures will enhance shareholders' wealth more than the acquisition of unrelated assets.

* College of Business, University of South Carolina and College of Business, University of Missouri at Columbia, respectively. This paper was begun when both authors were at the University of Florida.

Concerning the second hypothesis, a substantial portion of the manager's wealth is represented by human capital generated from his or her employment. The manager may wish to reduce his or her "employment risk" by diversifying the real-asset portfolio of the firm [2]. Thus, managers of buyers may wish to acquire unrelated assets to reduce personal risk bearing. Conversely, owner-managers, whose wealth is a function of share performance, may be less motivated to reduce personal risk. In fact, they may be induced to acquire related assets. Thus, we will determine the relationship between the percentage of management ownership of the company and the relatedness between the divested assets and the acquiring firm's assets.

On the other hand, the financial instability of the parent firm may precipitate divestiture. As Jain [6] suggests, an unanticipated decrease in expected cash flow may imply a higher probability of default. A firm in this position will find difficulty in raising external capital; therefore, the company may sell off assets to raise needed cash. If the parent is in a financially distressed situation, the buyer may extract higher gains from the seller due to the seller's weaker negotiating position. Thus, we will determine the impact of the seller's financial condition upon the gains from the purchase of the divested assets.

There have been three recent studies of acquiring firms that purchased divested units, but the results of analyzing a homogeneous class of acquisitions are conflicting. Jain [6] examined the announcement effect of 304 acquiring firms without stratifying the data and found a significant positive abnormal return on the day prior to the announcement of the acquisition of the divested unit. Even though his measures of cumulative abnormal returns are generally negative and not significant, he concluded that there was a significant positive announcement effect to acquiring firms of divested assets. Zaima and Hearth [15] found positive, but not statistically significant, abnormal returns for various intervals in a test of seventy-five firms that purchased divested units. On the other hand, Rosenfeld [11] found statistically significant positive gains in shareholders' wealth from thirty days before to thirty days after the announcement. Unfortunately, Rosenfeld's sample was only thirty firms. Thus, the results of previous studies are conflicting and may be sample sensitive.

This paper attempts to resolve these conflicting results by using a larger sample than both Rosenfeld and Zaima and Hearth. More importantly, this study will not only measure the changes in wealth from acquiring divested units but will determine the causes of these changes through sample stratification based on (a) product-line relatedness between the acquiring firm and the divested unit and (b) perceived financial weakness of the selling firm. Additionally, it will examine the relationship between insider ownership and product-line relatedness.

I. Data and Research Design

The sample utilized in this study includes divestitures that occurred between January 1, 1983, and September 30, 1985. The event had to be specifically announced by the *Wall Street Journal* and had to have both the acquiring and selling firms listed and continuously traded on either the NYSE or AMEX exchanges. The sample does not include leveraged buyouts, management acqui-

sitions of divested assets, or divested financial services. There were 147 sell-offs listed in *Mergers and Acquisitions* that met these criteria. The divestitures were widely dispersed over the period, with as few as four sell-offs occurring in the second quarter of 1983 and as many as twenty-four sell-offs in the second quarter of 1984.

The purposes of this research are to determine and to stratify the gains to shareholders of firms that acquire divested assets; therefore, an event-study methodology is employed. Since Brown and Warner [4] and Jain [6] have found the OLS market model well specified under a variety of conditions, we have utilized this model (1) during the base or estimating period:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + e_{i,t}, \quad t = AD - 210 \text{ to } AD - 31, \quad (1)$$

where $R_{i,t}$ is the actual daily return including dividends for company i at time t found in the CRSP daily return file at the Center for Research in Security Prices at the University of Chicago, $R_{m,t}$ is the CRSP equally weighted market index return on day t , α_i and β_i are the parameters, and $e_{i,t}$ is the error term of the model.

The market model is estimated over the period beginning 210 trading days before and ending thirty-one days before the *Wall Street Journal* announcement of the acquisition of the divested assets by the acquiring firm. During the test period, which begins thirty trading days before the announcement day (AD) and continues until thirty days after the announcement, the residuals or measures of abnormal return were determined using (2), which states:

$$u_{i,t} = R_{i,t} - [\alpha_i + \beta_i R_{m,t}], \quad t = AD - 30 \text{ to } AD + 30, \quad (2)$$

where $u_{i,t}$ is the residual, or abnormal return, for company i at time t . The abnormal return for each acquiring firm is obtained on day t , and then the average abnormal return of all companies on each day t is determined by (3) as follows:

$$AR_t = \sum_{i=1}^N u_{i,t} / N_t, \quad t = AD - 30 \text{ to } AD + 30, \quad (3)$$

where N_t is the number of firms in the sample on day t .

To determine the cumulative effect, the average abnormal returns are accumulated across time to yield cumulative abnormal returns using (4)

$$CAR_T = \sum_{t=1}^T AR_t, \quad t = t \text{ to } T, \quad (4)$$

where CAR_T is the average return accumulated from day t to day T .

After obtaining these values for all 147 acquiring companies around the AD , these divestiture-related results were first compared with results of other acquiring-firm (not specifically divestiture-related) studies. Second, the abnormal-return data were stratified on the basis of product-line relatedness and seller financial condition in order to measure their impacts upon shareholders' wealth.¹

The first hypothesis to be tested with the stratified data is that acquiring firms

¹ Certainly, these abnormal returns could be caused by the stockholders perceiving that the acquiring firm may obtain expected synergy from the purchase of divested assets. In most merger studies, the measurement of potential as well as actual synergy has been difficult and complicated. We have chosen a different method of trying to measure the level of expected synergy from the purchase. We suggest that investors are trying to judge expected synergy or benefits from the purchase

purchasing assets related to their existing line of business will gain more wealth than firms acquiring unrelated units. It will also be determined whether the percentage of management ownership of the acquiring firm is associated with the relatedness between the buyer and the divested unit. The financial condition of the selling firm also will be analyzed to determine whether the acquiring firms' shareholders gain wealth when divesting-firm financial weakness is indicated before the sale. Finally, multi-tier stratifications will be performed to measure the joint relationship between relatedness of product lines, financial soundness, and the abnormal returns to shareholders of firms acquiring divested assets.

II. Results

A. Unstratified Sample Results

The full sample of 147 acquisitions of divested assets was studied first to determine whether the abnormal returns to firms acquiring divested assets are different from the results that have been found for buyers in merger studies. Table I provides abnormal returns and cumulative abnormal returns of these 147 firms from $AD - 30$ to $AD + 30$. The data reveal small positive gains from the acquisition of divested assets, with $CARs$ reaching 0.589 percent by the end of the test period, but these gains are insignificant.² These results are consistent with results from studies of acquiring firms in mergers that also have found that acquiring firms have positive but insignificant gains. Also, a nonparametric binomial test yields no significant p -values when testing for the number of firms earning positive ARs during the test period. Thus, abnormal returns to firms acquiring divested assets are similar to those found for buyers in general merger studies.

The full-sample results obtained in this study are also similar to those results obtained on divested assets by Jain [6]. However, for a longer period, Rosenfeld [11] finds positive $CARs$ for firms purchasing divested assets. Over a similar time period, Rosenfeld's $CARs$ are much larger than those found in this study of 147 firms. Rosenfeld's study of only thirty firms may be sample specific and may be biased by the characteristics of the divestitures analyzed.

B. Stratified Sample Analysis

B.1. Relatedness

The population of 147 firms acquiring divested assets was stratified first as a function of the acquiring firm's relatedness with the acquired divested assets.

based on the relatedness of the product lines between the divested assets and the acquiring firm. Therefore, this study does not measure directly the expected synergy or benefits of the merger, but only the stockholders' perceptions of the expected gains from the purchase that are associated with relatedness of the assets involved.

² The t -values shown in Table I were calculated using the variance of abnormal returns (i.e., actual return versus expected return each day) during the 180-day base period for each company as recommended by Brown and Warner [4]. These individual company variances were averaged across all companies to determine the estimated variance of the residuals. This overall variance was used to test the significance of either AR or CAR from the expected values of zero at time T . See Brown and Warner [4], page 7, for the specific calculation of the t -values for the ARs and page 29 for t -values of $CARs$.

Table I
Abnormal Returns of Firms Acquiring Divested Assets; Full Sample; $n = 147$

Day (AD)	Abnormal Returns around Announcement Day			Cumulative Abnormal Returns around Announcement Day	
	AR	t	Number Positive	CAR	t
-30	-0.011%	-0.071	73	-0.011%	-0.071
-25	0.189	1.225	66	-0.297	-0.786
-20	-0.003	-0.019	76	-0.387	-0.756
-15	0.014	0.091	64	-0.562	-0.911
-10	0.056	0.363	69	-0.441	-0.624
-9	-0.214	-1.387*	64	-0.655	-0.905
-8	0.154	0.998	78	-0.501	-0.677
-7	0.183	1.186	74	-0.318	-0.421
-6	0.011	0.071	71	-0.307	-0.398
-5	-0.041	-0.266	67	-0.348	-0.442
-4	0.107	0.694	64	-0.241	-0.301
-3	-0.074	-0.480	72	-0.315	-0.386
-2	0.310	2.009**	73	-0.005	-0.006
-1	0.002	0.013	71	-0.003	-0.004
0	0.113	0.732	74	0.110	0.128
+1	0.091	0.590	64	0.201	0.230
+2	-0.080	-0.519	69	0.121	0.136
+3	0.186	1.206	75	0.307	0.341
+4	-0.075	-0.486	61	0.232	0.254
+5	-0.035	-0.227	68	0.197	0.213
+6	-0.218	-1.413*	60	-0.021	-0.022
+7	0.200	1.296*	74	0.179	0.188
+8	0.400	2.593***	80	0.579	0.601
+9	0.207	1.342*	68	0.786	0.806
+10	0.118	0.765	74	0.904	0.915
+15	0.160	1.037	69	1.156	1.105
+20	-0.121	-0.784	65	0.964	0.875
+25	-0.046	-0.298	63	0.581	0.503
+30	0.033	0.214	66	0.589	0.489

* Significant at ten percent level using a one-tailed test.

** Significant at five percent level using a one-tailed test.

*** Significant at one percent level using a one-tailed test.

The relatedness stratification is based upon similarity of the SIC codes.³ Forty-nine firms acquired related divested assets, and ninety-eight firms acquired unrelated assets. Table II provides the abnormal returns for the two strata over the sixty-one-day test period. There appear to be strong positive returns associated with the announcement of related acquisitions, as there are several significant positive ARs during the test period. The announcement of unrelated

³ The two-digit SIC code was used in this study to obtain a reasonably broad definition of industry class. Choosing a broad definition perhaps results in a large classification of related purchases, but a more restrictive definition would reduce the number of related acquisitions in the analysis.

Table II
Abnormal Returns of Firms Acquiring Divested Assets; Related
versus Unrelated Acquisitions (in Percent)

Day (AD)	Related Acquisitions; <i>n</i> = 49			Unrelated Acquisitions; <i>n</i> = 98			Related Minus Unrelated
	<i>AR</i>	Number Positive	<i>CAR</i>	<i>AR</i>	Number Negative	<i>CAR</i>	<i>CAR</i>
-30	0.057%	25	0.057%	-0.027%	50	-0.027%	0.084%
-25	0.063	20	-0.128	0.236	52	-0.387	0.259
-20	-0.201	23	-0.255	0.088	45	-0.438	0.183
-15	-0.061	16	-0.553	0.076	50	-0.515	-0.038
-10	0.304	25	-0.270	-0.084	54	-0.571	0.301
-9	0.212	26	-0.058	-0.402**	60**	-0.973	0.915
-8	-0.016	24	-0.074	0.194	44	-0.779	0.705
-7	0.420*	30*	0.346	0.092	54	-0.687	1.033
-6	-0.123	25	0.223	0.061	52	-0.626	0.849
-5	0.388*	26	0.611	-0.226	57*	-0.852	1.463
-4	-0.022	17	0.589	0.189	51	-0.663	1.252
-3	0.218	25	0.807	-0.211	51	-0.874	1.681
-2	0.377*	25	1.184	0.256*	50	-0.618	1.802
-1	0.055	25	1.239	-0.081	52	-0.699	1.938
0	0.357*	30*	1.596	-0.016	54	-0.715	2.311
+1	0.124	24	1.720	0.097	58**	-0.618	2.338
+2	0.179	24	1.899	-0.207	53	-0.825	2.724*
+3	0.144	25	2.043	0.177	48	-0.648	2.691*
+4	-0.142	19	1.901	-0.091	56*	-0.739	2.640*
+5	-0.174	18	1.727	0.032	48	-0.707	2.434
+6	-0.293	21	1.434	-0.109	59**	-0.816	2.250
+7	0.553**	31**	1.987	0.033	55	-0.783	2.770*
+8	0.601**	28	2.588*	0.295*	46	-0.488	3.076*
+9	0.348	25	2.936**	0.131	55	-0.357	3.293*
+10	0.516**	33***	3.452**	-0.083	57*	-0.440	3.892**
+15	-0.086	23	3.278**	0.296*	52	0.061	3.217*
+20	-0.094	21	3.044*	-0.144	54	-0.120	3.164*
+25	0.028	19	3.387**	-0.064	54	-0.804	4.191**
+30	-0.237	21	3.227*	0.146	53	-0.748	3.975*

* Significant at ten percent level using a one-tailed test.

** Significant at five percent level using a one-tailed test.

*** Significant at one percent level using a one-tailed test.

acquisitions results in both positive and negative abnormal returns over the test period. Again, these results are generally confirmed by a binomial test of the number of positive (negative) *AR*s for each day; therefore, the *AR* values do not appear to be affected by outliers.

The *CAR*s listed in Table II highlight the advantage of stratifying on the basis of relatedness. The *CAR*s for the related acquisitions are positive and significant after the announcement and reach +3.227 percent thirty days after the announcement date. The *CAR*s for the unrelated or diversified acquisitions are -0.748 percent thirty days after the announcement. More important is the far-right column, which shows the net *CAR*s for the related versus the unrelated acquisition of divested assets. The data indicate that there are greater gains for firms

Table III
Cumulative Abnormal Returns of Firms Acquiring Divested Assets; Related versus Unrelated Acquisitions; Selected Intervals (in Percent)

	Interval	Forty-nine Related Acquisitions; CAR	Ninety-eight Unrelated Acquisitions; CAR	Difference; CAR
	-30 to -11	-0.574%	-0.487%	-0.087%
	-30 to -1	1.239	-0.699	1.938
	-10 to -1	1.813**	-0.212	2.025**
	+1 to +10	1.856**	0.275	1.581*
	+1 to +30	1.631	-0.033	1.664
	+11 to +30	-0.225	-0.308	0.083
Announcement Effects	-10 to +10	4.026***	0.047	3.979***
Total Effects	-30 to +30	3.227*	-0.748	3.975*

* Significant at ten percent level using a one-tailed test.

** Significant at five percent level using a one-tailed test.

*** Significant at one percent level using a one-tailed test.

that purchase related divested assets than for firms that acquire unrelated divested assets. These gains are +3.975 percent and are significant.⁴

Comparison of the stratum-specific CARs for the two groups over selected intervals is presented in Table III. Related acquisitions result in significant positive CARs over the entire test period and highly significant positive CARs over the announcement interval from AD -10 to AD +10. Thus, both the total effect and the announcement effect are positive and significant for the firms that purchase similar divested assets. The ninety-eight firms that purchased unrelated assets have negative CARs for the majority of the intervals shown in Table III, and none are significant.

Also in Table III are the differences between CARs for these two groups over various intervals. The CARs from related acquisitions are significantly greater than the CARs from unrelated acquisitions. The greatest difference in CARs between the two strata is 3.979 percent for the twenty-one-day period around and including the announcement, which is significant at the 0.01 level. The

⁴ The *t*-test reported for differences in CARs was developed from Miles-Rosenfeld [8], page 1603, and was calculated as

$$t = (\overline{AR}_{i,1} - \overline{AR}_{i,2}) / S_p [(1/T_{i,1}) + (1/T_{i,2})]^{1/2},$$

where $\overline{AR}_i$ is the stratum-specific average abnormal return over interval *i*, T_i is the stratum-specific number of days in interval *i*, and S_p is the pooled estimated of each group's standard deviation. Note:

$$(1) \quad S_p = \frac{[(T_{\text{Base}(i,1)} - 1)S_1^2 + (T_{\text{Base}(i,2)} - 1)S_2^2]^{1/2}}{[T_{\text{Base}(i,1)} + T_{\text{Base}(i,2)} - 2]},$$

$$(2) \quad \overline{AR}_i = \sum_{t=1}^T AR_i(1/T_i) = CAR_{T_i}/T_i,$$

$$(3) \quad t = \frac{[CAR_{T_{i,1}}/T_{i,1}] - [CAR_{T_{i,2}}/T_{i,2}]}{S_p [(1/T_{i,1}) + (1/T_{i,2})]^{1/2}}.$$

Table IV
Insider Equity Ownership and the Acquisition
Decision; Mann-Whitney *U* Test

Sample	Sample Size	Group Mean	Rank Sum	<i>U</i> -Statistic
Related Acquisitions	38	11.38%	2704.5	1963.5*
Unrelated Acquisitions	84	8.07	4798.5	1228.5

* Significant at 2.5 percent level using a one-tailed test.

findings support the hypothesis that firms acquiring related divested assets enhance shareholder wealth more than firms acquiring unrelated divested assets.⁵

Further, a test was performed to determine whether an increase in risk explains the significant increase in abnormal returns for the forty-nine firms that purchased related assets. Measures of both systematic and unsystematic risk were compared for stability from the base to test periods.⁶ Among the forty-nine firms, there were only four significant changes in systematic risk at the 0.05 level (two increases and two decreases) but fifteen significant changes in unsystematic risk (five increases and ten declines). Therefore, the positive abnormal returns resulting from the purchase of related divested assets are not associated with a significant increase in either systematic or unsystematic risk.

With divestitures, managers have the flexibility to acquire specific related assets. Yet, firms still acquire unrelated assets despite the suggestions in finance literature and the findings of this study, which suggest that the diversification of a firm will not improve shareholders' wealth. It is hypothesized that managerial motivation to reduce personal risk bearing results in the acquisition of unrelated assets at the shareholders' expense. To examine this suggestion, the proportion of insider equity ownership was compared for the two groups.

The proportions of insider equity ownership to total equity ownership were gathered for each firm.⁷ To determine whether the two strata come from different populations in terms of the percentage of insider equity ownership, the Mann-Whitney *U* test was applied.⁸ Table IV provides the results of this test. The Mann-Whitney *U* statistic is highly significant, indicating that firms acquiring related divested assets are more likely to have greater insider equity ownership than firms acquiring unrelated divested assets. Further, the related-acquisitions group has a higher mean insider equity ownership than the unrelated-acquisitions

⁵ As suggested by an anonymous referee, we also regressed the full-sample CARs against our measure of relatedness and found that the relatedness dummy variable was positive and statistically significant. The *t*-statistic was 1.83. This finding supports our stratified results.

⁶ These tests for stability in risk parameters are similar to those used by Pettway [10] and others.

⁷ The percentage of insider ownership of outstanding shares was obtained from the most recent *Value Line* issue about the company prior to the AD. *Value Line* gathers these data from Securities and Exchange Commission reports and states the percentage of direct ownership of the company's outstanding shares by company employees and directors. Since direct ownership is provided, ownership by management in stock options is not included. *Value Line* reported no data for twenty-five of the 147 firms; therefore, this study of insider equity ownership is based on 122 acquiring firms. There were eighty-four firms that purchased unrelated assets and thirty-eight firms that acquired related divested assets.

⁸ See Siegel [13], pages 116–27, Ben-Horim and Levy [3], pages 658–66, and others for details on the Mann-Whitney *U* test.

group. Therefore, firms that buy related divested assets have higher insider ownership than firms that purchase unrelated units.

B.2. Financial Condition

Since the divesting firm initiates the transaction, the seller's financial condition may affect the gains obtained by the acquiring firms. A negative change in the seller's financial condition may result in an increased necessity to divest assets and, thus, a lower asking price. Of the 147 firms that divested assets during the study period, forty-two were downgraded by *Moody's* and/or *Standard & Poor's Investment Services* during the two years prior to the announcement. This downgrade, which was not reversed before the announcement, was considered a signal of a worsening in the firm's financial condition and, thus, a potential weakening of the seller's negotiating position. These firms are classified as weak. The remaining 105 firms are classified as not weak or simply strong.

The impacts of stratification by financial condition of the divesting firm are shown in Table V. There are three significant positive *ARs* for firms acquiring assets from parents in weak negotiating positions. On the other hand, there are four *ARs* that are significantly positive for firms acquiring assets from nonweak parents.

Table V also provides the *CARs* for both of these groups, as well as for the net of the weak-parent *CARs* minus the strong-parent *CARs*. The *CARs* resulting from weak sellers exceed the *CARs* resulting from nonweak sellers for accumulations to any given day. This result is consistent with the hypothesis that acquiring assets from sellers in weak negotiating positions enhances shareholder wealth more than acquiring assets from sellers in strong negotiating positions. Significant *p*-values for the number of negative *ARs* for strong sellers are also consistent with this hypothesis.

The *CARs* for various intervals for the three groups are reported in Table VI. The results indicate a significant announcement effect from the purchase of divested assets from strong sellers. The *CARs* for the interval from *AD* -30 to -11 exhibit a significant difference, with positive gains to purchasers from weak sellers but losses to purchasers from strong sellers. On the other hand, during the period *AD* -10 to -1, the *CARs* have just the reverse effect, as acquisitions from strong parents yield significant positive *CARs* and acquisitions from weak parents yield negative *CARs*. Due to these differences and the lack of significant total effect, it is not clear that shareholders can gain significantly from purchases to weak sellers.⁹

C. Further Stratifications

Four substrata were created to determine the joint effects of related versus unrelated acquisitions and strong versus weak sellers. First, strong sellers were dichotomized on the basis of whether the assets purchased were related or unrelated to the existing assets of the acquiring firm. Thirty-eight acquiring

⁹ As a further clarification, a regression was run between the full-sample *CARs* and the financial status of the seller. The financial-status dummy variable was insignificant and thus consistent with our stratified results.

Table V
Abnormal Returns of Firms Acquiring Divested Assets; Weak
Versus Strong Parents (in Percent)

Day (AD)	Weak Parents; <i>n</i> = 42			Strong Parents; <i>n</i> = 105			Weak Minus Strong
	AR	Number Positive	CAR	AR	Number Negative	CAR	CAR
-30	0.227%	25	0.227%	-0.105%	57	-0.105%	0.332%
-25	0.288	16	0.515	0.149	55	-0.620*	1.135*
-20	-0.110	21	0.262	0.039	50	-0.646	0.908
-15	0.325	22	0.684	-0.110	63**	-1.060*	1.744
-10	-0.180	19	0.897	0.150	55	-0.977	1.874
-9	-0.236	18	0.661	-0.205	59	-1.182*	1.843
-8	-0.029	23	0.632	0.227	53	-0.955	1.587
-7	-0.005	20	0.627	0.258*	51	-0.697	1.324
-6	-0.227	16	0.400	0.106	51	-0.591	0.991
-5	-0.015	20	0.385	-0.051	57	-0.642	1.027
-4	0.294	16	0.679	0.032	57	-0.610	1.289
-3	-0.056	19	0.623	-0.082	52	-0.692	1.315
-2	0.122	21	0.745	0.385**	53	-0.307	1.052
-1	-0.222	16	0.523	0.091	52	-0.216	0.739
0	0.112	23	0.635	0.113	54	-0.103	0.738
+1	0.118	17	0.753	0.079	58	-0.024	0.777
+2	-0.244	20	0.509	-0.014	56	-0.038	0.547
+3	-0.058	15	0.451	0.283*	47	0.245	0.206
+4	0.020	17	0.471	-0.113	59	0.132	0.339
+5	0.160	20	0.631	-0.113	59	0.019	0.612
+6	0.042	18	0.673	-0.322**	63**	-0.303	0.976
+7	0.465*	24	1.138	0.094	54	-0.209	1.347
+8	0.438*	20	1.576	0.386**	46	0.177	1.399
+9	0.282	17	1.858	0.177	54	0.354	1.504
+10	0.088	18	1.946	0.130	49	0.484	1.462
+15	0.532**	23	2.126	0.012	58	0.765	1.361
+20	-0.260	17	2.287	-0.066	55	0.430	1.857
+25	-0.017	19	1.478	-0.058	61**	0.217	1.261
+30	0.057	14	1.547	0.023	53	0.199	1.348

* Significant at ten percent level using a one-tailed test.

** Significant at five percent level using a one-tailed test.

firms purchased related assets from a strong seller, and sixty-seven acquiring firms purchased unrelated assets from a strong seller.

In Table VII, comparison 1 shows both the twenty-one-day announcement effect and the sixty-one-day total effect for the strong sellers. The announcement effect for the thirty-eight firms that purchased related assets from strong sellers has the highest and most significant abnormal return of any stratum in the study, with a CAR value of +4.832 percent.¹⁰ The announcement effect of the sixty-

¹⁰ For the thirty-eight firms having an increase in abnormal returns of 4.832 percent, a similar test to that described in footnote 6 was performed to determine whether the increase was related to an increase in systematic and unsystematic risk. Of the thirty-eight firms, four had significant increases in systematic risk from the base period before the purchase compared with the systematic risk around

Table VI
Cumulative Abnormal Returns of Firms Acquiring
Divested Assets; Weak versus Strong Parents;
Selected Intervals (in Percent)

	Interval	Forty-two Weak Parents; CAR	105 Strong Parents; CAR	Difference; CAR
	-30 to -11	1.077%	-1.127%*	2.204%
	-30 to -1	0.523	-0.216	0.739
	-10 to -1	-0.554	0.911*	-1.465*
	+1 to +10	1.311*	0.587	0.724
	+1 to +30	0.912	0.302	0.610
	+11 to +30	-0.399	-0.285	-0.114
Announcement Effects	-10 to +10	0.869	1.611**	-0.742
Total Effects	-30 to +30	1.547	0.199	1.348

* Significant at ten percent level using a one-tailed test.

** Significant at five percent level using a one-tailed test.

seven firms purchasing unrelated assets from strong sellers is slightly negative and insignificant. The difference between the announcement effects for the two groups of companies in this comparison is significant at the 0.01 level. The total effect is similar, with the thirty-eight firms receiving a gain of 3.684 percent and the sixty-seven diversifying firms having a loss of 1.768 percent.

The CARs for the acquiring firms that purchased related assets from strong sellers were 5.452 percentage points higher than the CARs for the sixty-seven firms purchasing unrelated assets from strong sellers. These findings support the suggestions of finance theory that managers should not diversify their product lines. Yet, almost twice as many firms in this stratum diversified, rather than concentrating their purchases in similar lines of business. The differences in the two outcomes caused by diversification indicate that agency cost is quite high in these sixty-seven firms, as their managerial actions resulted in agency costs or residual loss to stockholders as high as 5.452 percent. Three other multistrata comparisons were made and are shown in Table VII, but those comparisons yield no significant differences.

IV. Summary and Conclusions

The purpose of this paper has been to determine the impacts upon shareholders' wealth of the acquisition of divested assets. Specifically, this paper determined the influence of (a) the relatedness of product lines between the divesting assets and the assets of the buying firm and (b) the financial condition of the seller

the announcement. The four changes were equally divided, with two increases and two declines in beta estimates. There were eleven significant changes in the measure of unsystematic risk, with five increases and six declines. Thus, because of the balanced increases and decreases in measures of risk, there does not appear to be a significant enough increase in systematic or unsystematic risk for these firms to have caused the observed increase in abnormal returns.

upon the abnormal returns of shareholders whose firms acquire divested assets. Additionally, the impact of the manager's percentage of stock ownership upon the relatedness of the acquisition was measured.

Abnormal returns to stockholders of 147 firms that acquired divested assets were positive but insignificant around the announcement and over the sixty-one-day test period. These unstratified results are similar to those of most studies of merger but not similar to the results of Rosenfeld's study of thirty purchases of divested assets. To gain more insights into the causes of these abnormal returns, the sample was stratified based upon relatedness of the acquisition and the financial strength of the divesting firm.

Stratification based upon the relatedness of the divested asset and the assets of the acquiring firms yields interesting results. The acquisition of related divested assets enhances the shareholder wealth of acquiring firms. The acquisition of unrelated divested assets affects shareholder wealth negatively. The cumulative abnormal returns resulting from related acquisitions are significantly greater than the cumulative abnormal returns resulting from unrelated acquisitions, and these gains are not associated with changes in either systematic or unsystematic risk.

The acquisition of unrelated assets may be motivated by managerial preferences that differ from shareholder desires. Firms that acquired unrelated divested assets have smaller proportions of insider equity ownership than firms that acquired related divested assets. Thus, there is an economically significant agency conflict in decisions to acquire unrelated divested units. The residual loss due to this conflict is as high as 5.45 percent.

The results are not as clear when stratification is based upon the inferred negotiating position of the seller. Purchases from weak sellers result in greater

Table VII
Acquisition of Divested Assets; Multiple Stratification Comparisons;
Announcement Effects and Total Effects

Comparison	Stratum	Sample Size	Announcement Effect (AD -10 to +10) CAR	Total Effect (AD -30 to +30) CAR
1	Strong Seller/Related	38	4.832%***	3.684%*
	Strong Seller/Unrelated	67	-0.211	-1.768
	Difference ($S/R - S/U$)	105	5.043***	5.452**
2	Weak Seller/Related	11	1.596	1.778
	Weak Seller/Unrelated	31	0.611	1.466
	Difference ($W/R - W/U$)	42	0.985	0.312
3	Related/Weak Seller	11	1.596	1.778
	Related/Strong Seller	38	4.832***	3.684*
	Difference ($R/W - R/S$)	49	-3.236	-1.906
4	Unrelated/Weak Seller	31	0.611	1.466
	Unrelated/Strong Seller	67	-0.211	-1.768
	Difference ($U/W - U/S$)	98	0.822	3.234

* Significant at ten percent level using a one-tailed test.

** Significant at five percent level using a one-tailed test.

*** Significant at one percent level using a one-tailed test.

CARs than acquisitions from nonweak sellers. However, the difference is not statistically significant. On the other hand, the acquisition of related assets from nonweak parent firms yields highly significant positive cumulative abnormal returns.

It is evident that some firms earn economic rents by acquiring divested assets. Other firms decrease shareholders' wealth by acquiring divested assets. This study found that purchases of assets with product-line relatedness have the greatest positive impact upon shareholder wealth and that acquiring firms with higher insider ownership concentrated in these types of acquisitions. The purchase of divested assets from financially weak sellers generally does not yield significant gains, but the purchase of related assets from strong sellers results in significant positive changes in wealth. In summary, the analysis suggests that further study of product-line relatedness of purchased assets will be fruitful in distinguishing profitable from unprofitable asset acquisitions.

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