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Additional Evidence on the Relation Between Divestiture Announcements and Shareholder Wealth

JAMES D. ROSENFELD*

ABSTRACT

This paper presents estimates of the effect of voluntary divestiture announcements on shareholder wealth. The results show that both spin-off and sell-off announcements tend to have a positive influence on the stock prices of the divesting firms, and that the spin-offs "outperform" the sell-offs on the day of the event. We also find that the economic gains to the shareholders of the selling and acquiring firms are nearly identical, suggesting that the sell-off decision is perceived by both investor groups as a positive net present value (NPV) transaction.

A DIVESTITURE IS AN alteration of the firm's productive asset portfolio and is accomplished by either spinning-off or selling-off the unwanted assets. A spin-off occurs when the firm distributes all of the common stock it owns in a controlled subsidiary to its existing shareholders, thereby creating a separate publicly-traded company. The taxation consequences are identical to that of a stock dividend (i.e., it is a tax-free exchange). A sell-off, on the other hand, occurs when the divested assets are purchased and become part of another firm. Unlike the spin-off, these transactions are subject to capital gains taxes.

The growing popularity of voluntary (as opposed to court-ordered) corporate divestitures is documented by recent articles in the financial press.¹ Although the reasons underlying the latest "divestiture wave" are not clear, recent studies (e.g., Miles and Rosenfeld [18], Hite and Owers [11], and Schipper and Smith [20]) have found evidence that spin-off announcements have a positive influence on common-stock prices around the day of the event. The empirical studies on sell-offs have produced mixed results. While Boudreaux [3] and Klein [12] report that sell-off announcements produce significantly positive abnormal returns on the announcement day(s), the findings of Alexander, Benson, and Kampmeyer (hereafter ABK [1]) reveal a far weaker response. The purpose of this paper is to provide further evidence regarding the impact of voluntary spin-offs and sell-offs on shareholder wealth.

We find that both types of divestitures have a significantly positive influence on share prices and that the spin-offs "outperform" the sell-offs over the an-

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¹ See *Forbes*, March 19, 1979 and February 15, 1981; *Dun's Review*, March 1981; and *Fortune*, June 15, 1981.

nouncement period. After attempting to control for the unfavorable corporate news that sometimes accompanies divestiture announcements of financially-weak firms, the results are essentially unchanged. The final tests compare the adjusted returns of the selling firms to the acquiring firms. Unlike the merger studies (e.g., Mandelker [16] and Asquith [2]) that show that acquiring firms tend to “break even” on the transaction, the current study shows that the economic gains to both groups of shareholders are virtually identical.

The following section discusses possible motives underlying the divestiture decision and offers alternative hypotheses concerning its impact on stock prices. Section II describes the research design while Sections III and IV present the empirical results. The final section summarizes the principal findings and presents conclusions.

I. Motives for Divestitures

A. Sell-offs

Since the goal of financial management is to maximize owner wealth, the firm should not undertake a divestiture unless the transaction is expected to benefit its shareholders. For sell-offs, this implies that the sales price exceeds the present value of the divested asset's future net cash flows (NCFs). Although this would not occur in a world of full information and perfect capital markets, there are a number of real-world situations that could turn a sell-off decision into a positive NPV investment for either the seller, buyer, or both. For example, ABK conclude that the desire to sell unprofitable ventures is one of three primary motives for sell-offs.² If the buyer of these assets has a competitive advantage over the seller (e.g., either is manufacturing or marketing), the price he or she pays may exceed the present value of the assets' future NCFs from the seller's perspective. If the purchase price falls short of the present value of the asset's future NCFs from the buyer's perspective, it then becomes a positive NPV project for both parties. In addition, the sell-off announcement may act as a signal to shareholders concerning the firm's future investment strategy. If investors interpret the divestiture as a bullish signal, the announcement should have a positive influence on share prices. A negative signal, such as the need for cash to maintain corporate solvency, would have the opposite effect on shareholder wealth. The signaling effect could either reinforce or dampen the investment effect.

B. Spin-offs

In complete and perfect markets, a spin-off announcement would not alter firm value unless shareholders expect the divestiture to increase future NCFs. Such an increase could come from the elimination of negative synergies. For example, insofar as management is unable to replicate the role of financial markets, capital may be misallocated and a spin-off, by improving investment

² The other two motives mentioned are: (1) narrowing the scope of the firm's operations by divesting nonrelated activities and (2) selling off assets to generate cash for the firm's remaining activities.

decisions, may enhance the value of the divested assets. An alteration of the divested unit's tax status could also increase future NCFs. A prime example would be the creation of a tax-free, natural-resource, royalty trust.³

Agency theory offers alternative reasons why shareholders may benefit from spin-offs. Galai and Masulis [9] claim that spin-offs may erode the position of the bondholders causing a wealth transfer from bondholders to stockholders while leaving the value of the firm unchanged. However, neither Hite and Owers nor Schipper and Smith find material evidence of a wealth transfer between securityholders. Schipper and Smith also contend that the creation of publicly-traded firms results in new information sources which enable shareholders to more closely monitor the activities of managers, thereby reducing agency costs and enhancing shareholder wealth. For spin-offs, these information sources include the daily price activity of the divested firm's common stock as well as its separate financial statements and reports. More timely and reliable corporate information, in turn, could lead to improved contractual arrangements with managers.

II. Research Design

The preceding section on sell-offs and spin-offs suggests that many reasons underlie the divestiture decision, particularly in the case of spin-offs. Rather than attempting to discriminate among the various hypotheses, the current study focuses on comparing each event's influence on the stock prices of both the divesting and, in the case of sell-offs, the acquiring firms.

The initial spin-off sample consists of 93 firms that had spun-off subsidiary common stock over the period January 1963 to December 1981. This listing is obtained from *Moody's Dividend Record* and *Moody's Industrial Manual*.⁴ Since a study by Miles and Rosenfeld [18] shows that "large" spin-offs have a stronger effect on share prices than "small" spin-offs, the sample is restricted to those firms whose divested property had an equity market value at least 10% as large as the market value of the firm's common stock.⁵ After eliminating firms that engaged in involuntary spin-offs and those not listed on either the NYSE or ASE, the sample is reduced to 35 firms and 35 spin-off events.

³ A royalty trust is not subject to federal taxes and is required to pay out 90% of its earnings as dividends to stockholders. Examples of recent royalty trust spin-offs include the Mesa Royalty Trust by Mesa Petroleum in 1979, the Permian Basin and San Juan Royalty Trusts by Southland Realty in 1980, and the Houston Oil Trust by Houston Oil and Minerals in 1981. In addition to the tax advantages, royalty trusts are sometimes created to avoid takeover attempts by other oil companies. By spinning off a portion of its oil and gas reserves to the shareholders, these assets can no longer be claimed by suitors attempting to purchase the parent firm.

⁴ *Moody's Dividend Record* contains a section entitled "Stock Dividends and Stock Splits . . ." If a firm distributes subsidiary common stock rather than parent common stock, the name of the subsidiary is listed below the parent firm. Otherwise, only the parent firm is cited. *Moody's Industrial Manual* was then used to determine whether the stock distribution could be classified as a spin-off.

⁵ This criterion implicitly assumes that the market value of the divested unit in the initial trading data is a reasonable proxy for its true (but indeterminant) market value on the announcement date. Alternatively, we could have classified the securities based upon the value of the subsidiary relative to the firm as of the spin-off date.

The sell-off candidates include those firms that engaged in a sell-off over the January 1969 through December 1981 interval. An initial listing of sample firms is obtained from the "sell-offs" section of *Mergers and Acquisitions*. As before, the sample is restricted to large voluntary sell-offs. To be included in the sample, the selling price of the divested unit must have been at least 10% as large as the market value of the firm's equity as of the announcement date. The final sample consists of 62 firms and 62 sell-off events.⁶ Of the 62 firms, 11 had engaged in at least one sell-off over the five-year period preceding the announcement month of the current study. However, none occurred within one year of the event.

The *Wall Street Journal Index* is used to determine when the initial public announcement of the firm's *intention* to divest appeared in the *Wall Street Journal* (WSJ). The fact that the item appeared in the WSJ on a particular date suggests that the original press release occurred during the preceding trading day. Since it is impossible to determine whether the announcement occurred before or after the close of trading on that day, we arbitrarily designated the WSJ date as day 0. In all cases, the announced intention to divest was accomplished.

The mean-adjusted-return (MAR) approach is used to compute abnormal returns. This approach has been used by Masulis [17], Dann [6], Miles and Rosenfeld [18], and ABK [1] in their empirical studies. To determine the adjusted daily returns of a security, the average daily return over a specified interval, the comparison period, is first calculated. This comparison-period return (CPR) is a proxy for the expected daily return for the period under study, the observation period. Adjusted returns are then computed by subtracting the CPR from the daily returns over the observation period. The day -150 through day -31 period is used as the comparison period primarily because it is used in the ABK study, thereby allowing us to compare our empirical results with those of ABK.⁷ The

⁶ The distributions of events over the spin-off and sell-off sample periods are:

Category	Year									
	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972
Sell-off	9	8	9	7	3	4	6	2	2	6
Spin-off	4	4	4	1	2	2	3	—	1	1

Category	Year							
	1971	1970	1969	1968	1967	1966	1965	1964
Sell-off	2	3	1	—	—	—	—	—
Spin-off	—	1	1	2	2	1	2	2

⁷ The ABK study employs three different approaches to compute the mean return over the comparison period. The first uses the mean return over a designated pre-event period (i.e., day -150 through day -31) to compute both pre-event and post-event abnormal returns. The second approach uses the pre-event mean return to compute pre-event adjusted returns and post-event mean return to compute post-event adjusted returns. The last method uses the combined mean return over both the pre-event and post-event comparison periods to compute adjusted returns over the full observation period. Since all three approaches produced adjusted returns which were quite similar, both in terms of sign and magnitude, the current study does not use the post-event period to compute post-event abnormal returns. Finally, because the statistical results may be sensitive to the period used to

observation period extends from day -30 through day $+30$. The average adjusted return (AAR) is derived for each trading day over the 61-day observation period using the following formula:

$$AAR_d = \frac{\sum_{i=1}^n e_{id}}{n}$$

where

n = number of sample securities

e_{id} = adjusted return for security i on day d

AAR_d = average adjusted return for day d

The cumulative average adjusted return for day d , $CAAR_d$, is defined by

$$CAAR_d = \sum_{k=-30}^d AAR_k$$

To take into account any cross-sectional dependence of the abnormal returns over the observation period, t -tests are performed using the crude adjustment method (CAM) suggested by Brown and Warner [5, pp. 250–52].

III. Analysis of Abnormal Returns: Spin-offs Versus Sell-offs

Table I compares the abnormal returns for the complete sample of 35 spin-offs and 62 sell-offs.⁸ Both groups record a highly significant t -value on day 0, the announcement day. For the spin-offs, the AAR is 4.57% with a corresponding t -statistic of 9.78.⁹ The sell-offs' AAR on day 0 is 1.79% with a t -value of 5.25.

The CAARs of the spin-offs and sell-offs over the full 61-day observation period are 6.06% and 5.25%, respectively, implying that the influence of each event on shareholder wealth may be quite similar. However, over shorter, selected intervals, there exist sizeable differences in the CAARs. Table II shows that from day -10 through day -2 the spin-offs' CAAR is 4.15% compared to 2.05% for the sell-offs. Both of these values are statistically significant, suggesting the possibility of pre-event information leakage.¹⁰ Because some of the announcement effect is reflected in day -1 , one can consider the interval day -1 through day 0 to be the "announcement period." Although the excess returns of both groups are significant at the 1% level, the spin-offs record a CAAR of 5.56% compared

compute the CPR, we duplicated our tests using both the day -240 through day -61 and day -150 through day -61 intervals to compute an expected daily return. The results were consistent with our earlier findings.

⁸ Although the average comparison period return for the 35 spin-offs is 0.142%/day compared to 0.057%/day for the sell-offs, both statistics exceed the CRSP Index's mean return of 0.037%/day over the 1963–81 period. We therefore reject the notion that a low comparison-period return biased the adjusted returns of the two samples upward.

⁹ See Brown and Warner ([5, p. 250]). The t -test used was:

$$t = \frac{AAR_d}{\sigma_{ar}}$$

where σ_{ar} = estimated standard deviation of adjusted returns over the comparison period.

¹⁰ See Brown and Warner ([5, pp. 251–52]) for a full description of the CAAR t -test.

Table I
Analysis of Abnormal Returns: Spin-offs Versus Sell-offs

Abnormal Returns of Spin-offs Around Announcement of Spin-off (35 observations)				Abnormal Returns of Sell-offs Around Announcement of Sell-off (62 observations)			
Day	AAR	<i>t</i>	CAAR	Day	AAR	<i>t</i>	CAAR
-30	0.0062	1.32	0.0096	-30	-0.0064	-1.89	-0.0064
-25	-0.0110	-2.37*	0.0046	-25	0.0007	0.19	0.0107
-20	-0.0019	-0.41	0.0086	-20	-0.0006	-0.18	-0.0196
-15	0.0002	0.04	0.0034	-15	-0.0034	-1.00	-0.0243
-10	0.0064	1.37	-0.0065	-10	-0.0006	-0.18	-0.0098
-9	0.0086	1.85	0.0022	-9	0.0057	1.68	-0.0041
-8	-0.0013	-0.29	0.0008	-8	-0.0035	-1.02	-0.0075
-7	-0.0023	-0.50	-0.0015	-7	0.0058	1.71	-0.0017
-6	0.0027	0.58	0.0012	-6	-0.0018	-0.53	-0.0035
-5	0.0051	1.09	0.0063	-5	0.0055	1.62	0.0020
-4	0.0064	1.38	0.0127	-4	0.0001	0.02	0.0021
-3	0.0038	0.80	0.0164	-3	0.0033	0.97	0.0054
-2	0.0121	2.59*	0.0286	-2	0.0059	1.74	0.0113
-1	0.0099	2.12*	0.0385	-1	0.0054	1.58	0.0167
0	0.0457	9.78**	0.0842	0	0.0179	5.25**	0.0345
1	0.0092	1.96	0.0933	1	0.0042	1.24	0.0388
2	0.0015	0.32	0.0948	2	0.0011	0.34	0.0399
3	-0.0008	-0.17	0.0940	3	-0.0017	-0.15	0.0382
4	0.0124	2.66**	0.1065	4	0.0022	0.64	0.0403
5	-0.0030	-0.06	0.1062	5	-0.0005	-0.15	0.0398
6	-0.0089	-1.91	0.0973	6	-0.0023	-0.67	0.0376
7	0.0054	1.17	0.1027	7	-0.0022	-0.63	0.0350
8	-0.0039	-0.84	0.0988	8	0.0025	0.72	0.0379
9	-0.0065	-1.38	0.0924	9	0.0001	0.02	0.0380
10	-0.0108	-2.31*	0.0816	10	0.0005	0.15	0.0385
15	0.0013	0.29	0.0751	15	0.0057	1.67	0.0420
20	0.0003	0.07	0.0778	20	0.0009	0.26	0.0440
25	-0.0008	-0.18	0.0771	25	0.0002	0.07	0.0492
30	0.0007	0.15	0.0606	30	0.0008	0.23	0.0525

* Significant at the 5% level using a two-tailed test.

** Significant at the 1% level using a two-tailed test.

to 2.33% for the sell-offs. After day +10, the magnitude of the spin-offs' (sell-offs') CAAR experiences a negative (positive) drift.¹¹

Since efficient market theory states that the announcement effect should be fully and immediately impounded in security prices, we view the CAAR over the interval day -10 through day 0 as a more reliable indicator of the event's influence on shareholder returns relative to, say, the interval day -30 through day +30. To determine if the differences in CAARs over selected intervals are

¹¹ These sell-off results are in sharp contrast to those of ABK, who report a slightly positive CAAR (0.17%) over the two-day AP and a significantly negative statistic (-3.05%) over the 30-day post-event period. The CAAR over the 61-day interval is -5.42%. Since the statistical methodology employed in our study and ABK's is identical, there is a strong possibility that their sample contained a disproportionate number of "minor" sell-offs and/or firms experiencing financial difficulties (see footnote 14) that, in turn, weakened their statistical findings.

Table II
CAAR Tests over Selected Intervals

Spin-offs Only			Sell-offs Only		
Interval	CAAR	<i>t</i>	Interval	CAAR	<i>t</i>
-30 through +30	0.0606	1.66	-30 through +30	0.0525	1.98*
-30 through +30 ^a	0.0050	0.14	-30 through +30 ^a	0.0292	1.11
-30 through -11	-0.0129	-0.62	-30 through -11	-0.0092	-0.61
-10 through - 2	0.0415	2.96**	-10 through - 2	0.0205	2.01*
- 1 through 0	0.0556	8.42**	- 1 through 0	0.0233	4.60**
+ 1 through +10	-0.0026	-0.17	+ 1 through +10	0.0039	0.36
+11 through +30	-0.0210	-1.00	+11 through +30	0.0141	0.93

Spin-offs Versus Sell-offs

Interval	Spin-offs	Sell-offs	Spin-offs Minus Sell-offs	<i>t</i>
-30 through +30	0.0606	0.0525	0.0081	0.18
-30 through +30 ^a	0.0050	0.0290	-0.0240	-0.55
-30 through -11	-0.0129	-0.0092	-0.0037	-0.14
-10 through - 2	0.0415	0.0205	0.0211	1.22
-10 through 0	0.0971	0.0438	0.0533	2.81**
- 1 through 0	0.0556	0.0233	0.0323	4.00**
+ 1 through +10	-0.0026	0.0039	-0.0065	-0.36
+11 through +30	-0.0210	0.0141	-0.0351	-1.38

^a Excludes day -1 through day 0.

* Significant at the 5% level using a two-tailed test.

** Significant at the 1% level using a two-tailed test.

statistically significant, we employ a *t*-test suggested by Brown and Warner.¹² The results are shown in the bottom half of Table II. Over the critical day -1 through day 0 interval, the 3.23% differential in favor of the spin-offs is significant at the 1% level. The 5.33% differential from day -10 through day 0 also has a *t*-value significant at the 1% level. These results suggest that the spin-off announcement effect has a stronger positive influence on share prices relative to the sell-offs.

The above findings, by themselves, do not necessarily mean that a spin-off strategy is superior to a sell-off strategy in terms of enhancing shareholder wealth. The fact remains that a sell-off brings liquid resources into the firm while a spin-off does not. Consequently, the decision to sell may often be associated with potentially unfavorable information (e.g., the admission by management that a particular project has proved to be unprofitable).¹³ Although we expect the sell-off announcement, by itself, to have a positive influence on share prices, the simultaneous release of negative news would tend to dampen the strength of the announcement effect.¹⁴ Consequently, controlling for the financial condition of

¹² See [18, p. 1603] for a description of this test.

¹³ The divestiture announcement could also convey positive economic information to shareholders which is separate from the sell-off news itself.

¹⁴ The sell-offs' excess returns over the full observation period would have been considerably higher had we excluded the 1981 observations. For the nine events, the AAR for day 0 is 2.59% with a *t*-value of 3.11. However, the CAAR from day -30 through day -1 is -9.57%. Over the 61-day period,

the sample firms should enable us to make more meaningful comparisons between spin-offs and sell-offs. To test this hypothesis, the sample issues are classified as either high quality (HQ), medium quality (MQ), or low quality (LQ) based upon the parent firm's Standard and Poor's (S&P) quality rating one year *after* the announcement month.¹⁵ Since low-quality firms' divestiture announcements are more likely to be accompanied by less favorable corporate news, we hypothesize that there will be a positive relationship between an issue's S&P rating one year after the event and the magnitude of its CAAR over the 61-day observation period as well as over other selected intervals. Those securities rated A- or higher will be categorized as high quality, those rated B+ will be considered medium quality, while those rated B or lower will constitute the low-quality group. Using this criterion, the spin-off HQ, MQ, and LQ classes contain 7, 11, and 17 observations, respectively, while the sample size of the sell-off HQ, MQ, and LQ classes are 19, 17, and 26, respectively.

The results are shown in Table III. The wide differential among the CAARs of the three classes for both spin-offs and sell-offs over the 61-day interval cannot be easily ignored.¹⁶ This finding, coupled with the result that all three classes of sell-offs produce similar CAARs over the day -1 through day 0 interval, suggests that, for the high-quality issues, more favorable corporate news is being released during the observation period. We therefore conclude that forming subsamples based upon the Standard and Poor's quality rating of the parent firm should yield more valid comparisons between spin-offs and sell-offs.

For all three groups, particularly the HQ and LQ issues, the comparisons look similar to those reported in the lower half of Table II. On balance, these findings suggest that the share prices of divesting firms tend to respond more favorably to spin-offs than sell-offs. Nevertheless, because an issue's S&P rating may be an imperfect proxy for the type of corporate news being released over the observation period, additional testing using alternative surrogates seems necessary before more definitive conclusions can be drawn.¹⁷

IV. Buyers Versus Sellers

The merger literature suggests that the synergistic effects of business combinations can often raise the value of corporate resources, thereby increasing shareholder wealth. In a competitive acquiring market, the extent to which the

the CAAR is -5.11%. These results suggest that, for the firms in our sample, negative corporate news was being released prior to the event.

¹⁵ Since the stock's S&P rating as of the announcement month reflects the firm's *past* financial condition, it may not be as useful in predicting the sign of new information surrounding the event as, say, its rating one year after the announcement. Accordingly, the securities are classified on the latter basis.

¹⁶ For the sell-offs, the HQ group records a CAAR of 13.14% compared to 4.55% for the MQ group and just 0.88% for the LQ issues. For the spin-offs, the CAARs are 18.52%, 11.83%, and 2.61% for the HQ, MQ, and LQ samples, respectively.

¹⁷ It is possible that the differential tax treatment of corporate sell-offs and spin-offs may partially explain the differences in abnormal returns. This, of course, is an issue that can be resolved only through further empirical analysis.

Table III
CAAR Tests over Selected Intervals Adjusted for Quality Rating

HQ Spin-offs Versus HQ Sell-offs				
Interval	Spin-off	Sell-off	Diff.	<i>t</i>
-30 through +30	0.1852	0.1314	0.0538	0.55
-30 through +30 ^a	0.0653	0.1152	-0.0499	-0.52
-30 through -11	-0.0340	0.0149	-0.0489	-0.88
-10 through - 2	0.0864	0.0378	0.0486	1.31
-10 through 0	0.2064	0.0537	0.1527	3.70**
- 1 through 0	0.1199	0.0162	0.1037	5.91**
+ 1 through +10	-0.0185	0.0374	-0.0559	-1.42
+11 through +30	0.0313	0.0254	0.0059	0.11

MQ Spin-offs Versus MQ Sell-offs				
Interval	Spin-off	Sell-off	Diff.	<i>t</i>
-30 through +30	0.1183	0.0455	0.0728	0.88
-30 through +30 ^a	0.0762	0.0206	0.0556	0.69
-30 through -11	0.0136	-0.0048	0.0184	0.39
-10 through - 2	0.0676	0.0128	0.0548	2.14*
-10 through 0	0.1096	0.0377	0.0719	2.05*
- 1 through 0	0.0421	0.0249	0.0172	1.15
+ 1 through +10	-0.0092	0.0105	-0.0197	-0.59
+11 through +30	0.0048	0.0021	0.0028	0.06

LQ Spin-offs Versus LQ Sell-offs				
Interval	Spin-off	Sell-off	Diff.	<i>t</i>
-30 through +30	0.0261	0.0088	0.0173	0.22
-30 through +30 ^a	-0.0334	-0.0176	-0.0158	-0.21
-30 through -11	-0.0280	-0.0334	0.0054	0.12
-10 through - 2	0.0474	0.0136	0.0338	1.11
-10 through 0	0.1069	0.0400	0.0669	2.03*
- 1 through 0	0.0595	0.0264	0.0331	2.36*
+ 1 through +10	0.0201	-0.0138	0.0339	1.08
+11 through +30	-0.0327	0.0016	-0.0343	-0.77

^a Excludes day -1 through day 0 -0.0343.

* Significant at the 5% level using a two-tailed test.

** Significant at the 1% level using a two-tailed test.

shareholders of both firms benefit from the merger will depend upon whether these resources are unique to the bidding firms, the target firms, or to both firms. Only in the latter case will both shareholder groups earn abnormal returns. Recent studies ([2], [4], and [15]) demonstrate the following: (1) the shareholders of the acquired firms, on average, incur significant economic gains while those of the acquiring firms tend to break even and (2) the combined market values of both firms tend to increase over the announcement period. These results suggest that the target firm has unique resources whose value is enhanced when combined across firms.

Since a similar investigation of corporate sell-offs represents a natural extension to the research performed in the merger studies, this section compares the abnormal returns of the firms that acquired the divested assets to those of the selling firms to determine the extent to which the two firms share in the

Table IV
CAARs of Divesting and Acquiring Firms over Selected Intervals

Divesting Firms Only			Acquiring Firms Only		
Interval	CAAR	<i>t</i>	Interval	CAAR	<i>t</i>
-30 through +30	0.0699	1.78	-30 through +30	0.0706	1.98*
-30 through +30 ^a	0.0423	1.10	-30 through +30 ^a	0.0496	1.43
-30 through - 2	0.0074	0.27	-30 through - 2	0.0053	0.22
- 1 through + 1	0.0276	3.17**	- 1 through + 1	0.0210	2.66**
+ 2 through +10	0.0113	0.75	+ 2 through -10	0.0004	0.03
+ 2 through +30	0.0370	1.50	+ 2 through +30	0.0422	1.56
+11 through +30	0.0257	1.14	+11 through +30	0.0418	2.02*

Divesting Firms Versus Acquiring Firms				
Interval	Sellers	Buyers	Sellers Minus Buyers	<i>t</i>
-30 through +30	0.0699	0.0706	-0.0007	-0.01
-30 through +30 ^a	0.0423	0.0496	-0.0073	-0.16
-30 through - 2	0.0074	0.0053	0.0021	0.06
- 1 through + 1	0.0276	0.0210	0.0066	0.56
+ 2 through +10	0.0113	0.0004	0.0109	0.52
+ 2 through +30	0.0370	0.0422	-0.0052	-0.14
+11 through +30	0.0257	0.0418	-0.0161	-0.53

^a Excludes day -1 through day +1.

* Significant at the 5% level using a two-tailed test.

** Significant at the 1% level using a two-tailed test.

synergistic effects of the combination. The sample was restricted to those firms where the purchase price was at least 10% as large as the market value of the acquiring firm's equity as of the announcement date. After eliminating those firms not listed on the daily CRSP tape, the final sample consists of 30 selling and 30 acquiring companies.

Table IV shows the results. Over the full observation period, the CAARs are almost identical with 7.06% for the acquiring firms compared to 6.99% for the sellers.¹⁸ Unlike the spin-off versus sell-off comparisons in Section III, there also exists a striking similarity between the CAARs of the two samples over most of the subintervals.¹⁹ The bottom half of Table IV confirms that the differences between the samples are not statistically significant. In contrast to the merger studies, the economic gains to the shareholders of both buyers and sellers are virtually identical. These findings suggest 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.

V. Summary and Conclusions

Despite the fact that spin-offs and sell-offs record similar cumulative average adjusted returns over the full observation period, there are significant differences

¹⁸ The average comparison period return for the selling firms is 0.039%/day compared to 0.076%/day for the acquiring firms.

¹⁹ Because the acquiring firms apparently experienced a one-day adjustment lag, we include day +1 in the announcement-period interval.

between the two groups over the announcement period, suggesting that the announcement effect of spin-offs has a stronger positive influence on share prices than sell-offs. This does not necessarily mean that, *ceteris paribus*, the spin-off strategy is superior to the sell-off strategy. For example, one could hardly expect a sell-off, intended to prevent corporate insolvency, to have the same effect on share prices as a spin-off designed to enhance the divested unit's investment and growth opportunities. However, when we compare sell-offs and spin-offs of comparable financial strength, the findings are essentially unchanged. Nevertheless, in contrast to the recent findings of ABK, we conclude that sell-off announcements, on average, are perceived by shareholders as a positive NPV transaction. The final group of sell-off tests compares the adjusted returns of acquiring and divesting firms. The close similarity between the CAARs of the two groups, regardless of the interval investigated, suggests that the shareholders of both firms share nearly equally in the transaction. Unlike the merger studies, this result demonstrates that the transaction's synergistic effects are not restricted to the selling firm.

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