On a Risk-Adjusted Basis, Do Firms Featured on Business Magazine Covers Make Good Contrarian Investments?

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A recent article in *Investor's Business Daily* (Stalter [2005]) discusses how the print media is usually late in providing news about a given company because of the delay in getting a story ready for print. Consequently, the Stalter article focuses on the idea that a positive story in a business magazine usually coincides with the company's stock having already reached its zenith and reversing its trend rather than indicating superior future performance.

More recently, Arnold, Earl, and North (AEN [2007]) find that cover stories are not effective contrarian indicators but rather indicate the end of extreme performance; i.e., a positive (negative) cover means the end of the extremely positive (negative) trend in the stock price. Furthermore, the authors find that holding period returns over various horizons are positive after a positive or negative cover story, but the return is not abnormally positive when compared to an index or a firm of comparable size within the given industry; however, there is some weak evidence of positive momentum. The study does not test whether the post-publication returns are abnormally high or low on a risk-adjusted basis using a pricing model.

This article uses the same dataset as in AEN to determine if a cover story is an effective contrarian indicator on a risk-adjusted basis. By comparing the stock's performance against the associated capital asset pricing model (CAPM) return (Sharpe [1964]), we can determine if positive (negative) stories lead to negative (positive) risk-adjusted performance after publication. This is different from a traditional contrarian analysis because the return after a cover story may still follow the trend established prior to the published article, however, the post-publication performance could be opposite the pre-publication performance on a risk-adjusted basis.

In fact, we find that adjusting for risk in measuring the performance of a stock after the publication of a cover story is important because we do see positive returns after positive and negative cover stories. When the positive returns after the publication of a positive story are risk-adjusted based on the CAPM, however, the risk-adjusted returns are actually negative (i.e., a similarly risky security will produce a higher return). In other words, despite the stock price rising after a positive cover story, it is time to start considering selling the stock and certainly not the time to consider buying the stock. Negative cover stories are different in that risk-adjusted returns post-publication are not abnormally positive. If an investor was short the stock, a negative cover story can be a signal for covering the short position, but buying the stock post-publication will not provide excess risk-adjusted gains (i.e., no positive alpha).

In the next section, cover story information featuring a specific firm is collected from three major business magazines between

1983 and 2002 and is described as being positive, neutral, or negative based on a five-point scale. Historical returns are used to determine a firm's CAPM beta and then used to determine on a risk-adjusted basis how the company's stock performs just prior to and after the publication of a cover story featuring the firm.

DATA AND ANALYSIS

Companies that are the subject of feature (cover) stories in *Business Week* (weekly), *Fortune* (bi-monthly), and *Forbes* (bi-monthly) magazines between 1983 and 2002 are analyzed for stock price performance 24 months prior to and 24 months after the feature story is published. Using the categories created by Arnold, Earl, and North [2006], the headline for the feature story is categorized on a five-point scale (1 being very positive, 2 being positive, 3 being neutral, 4 being negative, and 5 being very negative).

- *Category 1*: Firm A "is" or "has done" something very innovative or profitable. (Very positive cover.)
- *Category 2*: Firm A "plans to" or "in the process of" something very innovative for the future, but will it work? (Optimistic cover.)
- *Category 3*: No particular intuition as to a company being good or bad. (Companies identified on cover, but no indication of a positive or negative slant to the feature.)
- *Category 4*: Firm A has experienced poor performance, but the headline questions that the end of poor performance may be near. (Pessimistic past, with implication for potential turnaround.)
- *Category 5*: Firm A is doing very poorly or a scandal has occurred. (Pessimistic cover sometimes with an implication of a future management change and/or litigation.)

There were 593 feature stories during the 20-year time period, of which 509 had four years of prior stock returns available for testing.[1] Exhibit 1 displays the frequency of positive (categories 1 or 2), neutral (category 3), and negative (categories 4 or 5) feature stories over the 20-year time period in total and by periodical. In viewing Exhibit 1, one sees that stories tend to be positive and most feature stories are not focused on a particular firm (593 out of 2,080 potential cover stories).

Exhibit 2 displays characteristics about the companies featured in the cover stories. The firms tend to be large and with greater than average market risk indicated by CAPM betas greater than one. The risk and size of the cover story firms do not vary greatly between the three periodicals. This is not surprising given that the magazines tend to have similar readership.

To analyze the impact of a given feature story on a firm, 24-month, 12-month, and 6-month holding period returns are calculated prior to the publication of the story and 6-month, 12-month, and 24-month holding period returns are calculated after the publication of the story. The holding period returns do not include the month in which the feature story is published to prevent any noise in regard

EXHIBIT 1
Positive, Neutral, and Negative Feature Story Frequency

	Positives			Neutral	Negatives		
Periodical	**1s**	**2s**	**Total**	**3s**	**4s**	**5s**	**Total**
Business Week	58	89	147	56	37	33	70
(273 features)	(20%)	(33%)	(53%)	(21%)	(14%)	(12%)	(26%)
Fortune	69	41	110	24	3	9	12
(146 features)	(47%)	(28%)	(75%)	(17%)	(2%)	(6%)	(8%)
Forbes	37	22	59	18	6	7	13
(90 features)	(41%)	(24%)	(65%)	(20%)	(7%)	(8%)	(15%)
Total:	164	152	316	98	46	49	95
(509 features)	(32%)	(30%)	(62%)	(19%)	(9%)	(10%)	(19%)

Note: Feature Categories: 1 (very positive), 2 (positive), 3 (neutral), 4 (negative), and 5 (very negative); 509 total feature stories on specific corporations between 1993 and 2002.

EXHIBIT 2
Feature Story Firm Characteristics

Firm Characteristic	*Business Week*	*Fortune*	*Forbes*	Total
CAPM Beta[a] Mean	1.20	1.21	1.19	1.20
CAPM Beta[a] Median	1.14	1.17	1.17	1.16
Market Capitalization Mean (mils)	42,755.6	53,272.5	37,011.7	44,756.6
Market Capitalization Median (mils)	14,283.7	19.294.3	16,680.6	15,059.2
Adjusted Market Capitalization Mean (mils)[b]	49,428.3	61,294.5	41,649.5	51,456.5
Adjusted Market Capitalization Median (mils)[b]	19,779.4	23,386.9	16.680.6	19,224.2

Note: [a]Calculated against the CRSP Value Weighted Index; [b]Adjusted to 2002 dollars using Consumer Price Index (CPI).

EXHIBIT 3
Analysis of the Holding Period Returns: All Feature Stories; Subdivided into Categories

Monthly Holding Period	-24 to -1	-12 to -1	-6 to -1	1 to 6	1 to 12	1 to 24
Positives—Category 1 (n=161)						
HPR	133.86***	48.39***	20.73***	6.63***	17.02***	31.38***
p-value	0.000	0.000	0.000	0.001	0.000	0.000
CPE	18.73***	10.58***	4.89**	-5.28**	-10.88***	-18.77***
p-value	0.000	0.000	0.022	0.041	0.000	0.000
Positives—Category 2 (n = 148)						
HPR	82.90***	36.16***	17.12***	5.94**	15.52***	34.16***
p-value	0.000	0.000	0.000	0.021	0.000	0.000
CPE	3.19	2.20	0.89	-5.88	-8.96**	-16.35***
p-value	0.288	0.641	0.888	0.105	0.038	0.001
Neutrals—Category 3 (n = 96)						
HPR	89.41***	31.04***	11.04***	13.22***	20.49***	36.77***
p-value	0.000	0.000	0.000	0.021	0.000	0.000
CPE	-5.53	-1.45	-1.48	0.44	-3.80	-11.19
p-value	0.473	0.965	0.583	0.236	0.784	0.265
Negatives—Category 4 (n = 44)						
HPR	5.68	-1.67	1.04	4.08	10.36	31.18***
p-value	0.861	0.559	0.559	0.299	0.120	0.003
CPE	-32.34***	-17.50***	-8.90**	-3.47	-3.41	-3.98
p-value	0.000	0.000	0.014	0.455	0.567	0.842
Negatives—Category 5 (n = 49)						
HPR	6.97	3.31	-3.31	9.07**	24.41***	48.89***
p-value	0.406	0.838	0.553	0.021	0.000	0.000
CPE	-28.89***	-24.30***	-13.96***	-0.96	1.16	-1.85
p-value	0.001	0.000	0.003	0.687	0.608	0.838

*Note: HPR is holding period return and CPE is cumulative prediction error based on value-weighted CRSP index market model. Returns are average returns for the sample. P-values are from Wilcoxon signed rank test. ** indicates 95% significance; *** indicates 99% significance.*

to the publication date and the availability date of the story not being synchronized (and to avoid any temporary effects). Ultimately, we want to determine if a feature story has a lasting effect on price performance indicating that the story generates previously unincorporated information into the market.

To determine the abnormal return on the stock pre and post publication, the holding period return is compared to a CAPM market model return (Holding period return – [CAPM beta × CRSP value-weighted market index]). The market model return is parameterized using 60 months of data preceding the 24th month prior to the publication date using the CRSP value-weighted index (i.e., the market model calculation is not contemporaneous with any of the holding period return calculations to prevent any possible effects from the publishing of the article). A minimum of 24 monthly observations are required to estimate the market model return. A cumulative prediction error (CPE) is calculated by summing the difference between the cover firm's monthly return and a monthly market model return. A Wilcoxon signed rank test is used to determine if the holding period return is abnormally positive or negative.

For all return calculations we attempt to eliminate "duplicate" observations.[2] We define "duplicate" as a feature story happening less than three months after another feature for a given firm and having the same

EXHIBIT 4

Monthly Cumulative Prediction Error (CPE)

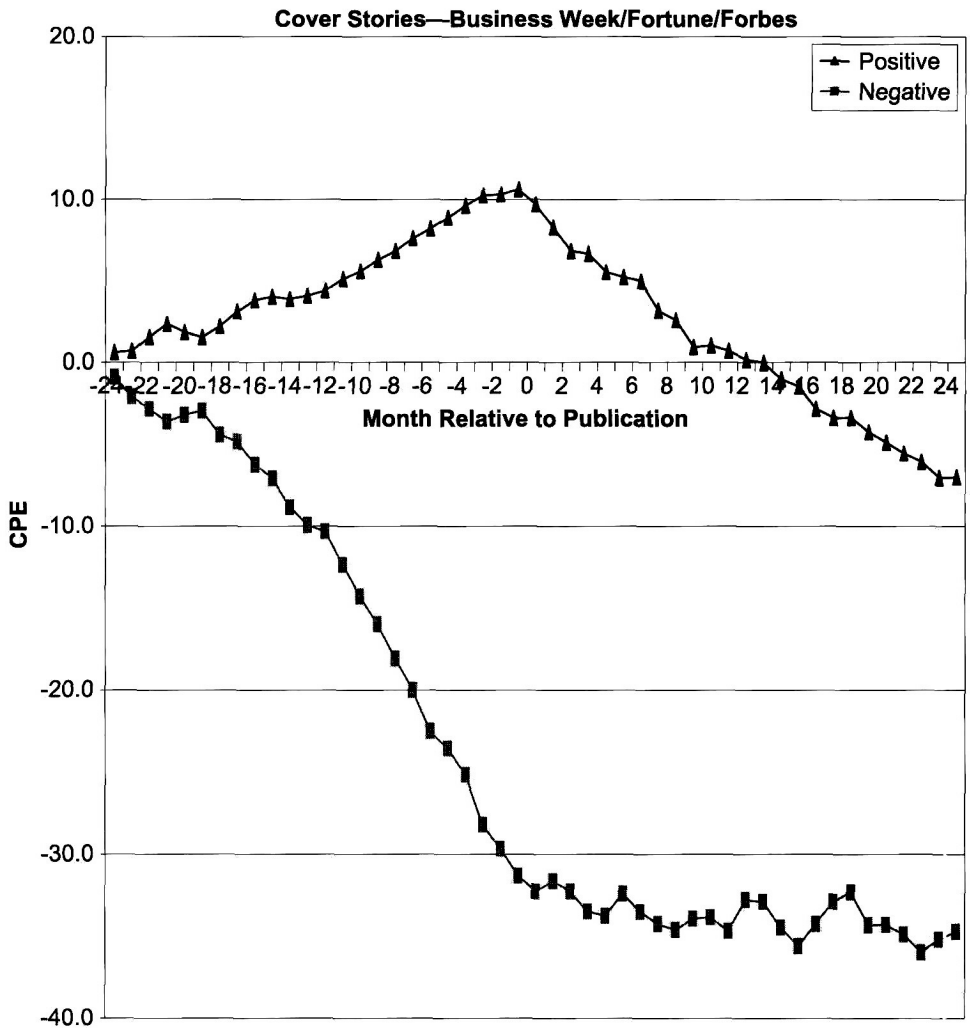

EXHIBIT 5
Post-Publication Investment Advice Based on CPE Analysis

	Positive Cover Story	Negative Cover Story
Current Position		
Long	Sell stock because superior performance has ended.	
Short		Cover the short because inferior performance has ended.
Post-Publication Position		
Long	Not recommended due to possible negative alpha.	Not recommended, no indication of positive risk-adjusted performance.
Short	Recommended in a long–short portfolio because of the possibility of negative alpha.	Not recommended, no indication of negative risk-adjusted performance.

categorization. We include the first instance and drop the subsequent observation(s). For this reason, the sample size drops from 509 to 498. Additionally, when a firm is delisted post-publication, the return calculation is carried out through the delisting date. Exhibit 3 displays the results of the analysis.

When viewing positive cover stories (categories 1 and 2), the pre-publication holding period returns are abnormally high (positive CPEs) followed by post-publication holding period returns that are positive but abnormally low on a risk-adjusted basis (negative CPEs). An investor holding the stock should consider selling the stock after the cover story appears because the superior performance is finished. In fact, on a risk-adjusted basis or viewing the alpha of the stock, continuing to hold the stock after the publication of the article will be a mistake. In a sense this is a risk-adjusted contrarian signal of a performance reversal, but not a genuine contrarian signal in that the investor should not short the stock because holding period returns are not negative during the post publication period. However, the investor may want to consider shorting the stock if it is part of a long–short portfolio strategy.

When viewing negative cover stories (categories 4 and 5) the pre-publication holding period returns are abnormally low (negative CPEs) followed by post-publication holding period returns that are positive but not abnormally high (CPEs are not statistically different from zero). If an investor has been shorting the stock, it is time to cover the position after the story is published. In other words, the stock has hit its "bottom." There really is no risk-adjusted contrarian signal, because firms do not statistically outperform or underperform in the near future. Using the traditional definition of a contrarian signal, a long position in the stock after the story publishes will result in a positive return, but no superior performance on a risk-adjusted basis (i.e., an investor will not gain any alpha). Because there is no clear indication of the direction of the risk-adjusted post-publication performance, we cannot recommend shorting the stock within the context of a long–short portfolio. For such a recommendation, one would like to see the possibility of negative alpha similar to what is seen after the publication of a positive cover story.

Exhibit 4 displays the CPE graphed on a monthly basis. The CPE for positive stories dissipates quickly after publication, again, indicating that one should sell once the positive cover story publishes. The CPE for negative stories levels out after publication of the story; again, indicating the stock has hit its "bottom." Exhibit 5 provides more precise investment advice based on the CPE analysis.

CONCLUSION

Consistent with the idea that print media cannot publish new information in a timely manner, positive cover

stories and negative cover stories illustrate events that have already occurred (i.e., the story is not news). With positive cover stories, negative risk-adjusted performance follows after publication of the cover story, which does not make the stock attractive for a long position (or continued long position) but may make the stock attractive for a short position in a long–short portfolio scheme. If a long–short strategy is not what the investor desires, consider selling the stock after the positive cover story and certainly do not consider buying the stock after the positive cover story.

With negative cover stories, there is no superior or inferior performance on a risk-adjusted basis after the story is published. Consequently, existing short positions should cover after a negative cover story with no expectations of superior or excess returns with new long or short positions after the story publishes because there is no clear indication of how the stock will perform on a risk-adjusted basis.

If the goal is to seek exceptional return, which generally comes with exceptional risk, cover stories do not provide a signal for investment into or out of an individual stock, but are helpful in determining action on existing positions or in developing a long–short strategy going forward in the case of positive cover stories. As noted in the previous section, on a risk-adjusted basis, the exceptional performance has already ended by the time the story is in print. Consequently, forecasting and exploiting exceptional return is still difficult and risky, but extreme success or failure will probably lead to a cover story.

ENDNOTES

The authors would like to thank Greg Gregoriou and an anonymous referee for helpful comments.

[1]A period of 84 months to 25 months prior to the feature story are used to estimate a market model benchmark with a minimum 24 months necessary for the market model calculation.

[2]Results remain qualitatively similar if these observations are not deleted.

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The Journal *of*
Wealth Management