

CURBING THEIR Enthusiasm

A Canadian look at the value of analysts' recommendations (1996 to 2004).

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The value of analysts' recommendations is evident in the relationship between those recommendations and abnormal market returns in the United States (Barber et al., 2001). There is, however, little Canadian evidence on this topic. This study investigates the value of analysts' recommendations for Canadian firms in three market periods: the "pre-crash" period from 1996-1998, the "bubble and crash" period from 1999 to 2001, and the "post-crash" period from 2002 to 2004.¹ These market periods have disparate characteristics and consequently provide an opportunity to explore the value and durability of analysts' recommendations over time and across varying market conditions.

The relationship between analysts' recommendations and abnormal market returns may be dependent on the characteristics of the time frame investigated (Barber et al., 2003). The period of investigation (i.e. 1996 to 2004) chosen for this study contains three distinct market periods. The first (1996-1998) is characterized by a bullish market. Studies conducted on U.S. firms during this period confirmed the value of analysts' recommendations. For example, Barber et al. (2003) examined analysts' recommendations of U.S. firms between the years 1996 and 2001. Consistent with their earlier findings (Barber et al. 2001), they found that firms with more favourable consensus recommendations outperformed the market.

The second market period (1999-2001) is characterized by a market bubble and subsequent crash in equity prices. The apparent diversion between prices and fundamental values and the subsequent market crash caused researchers to re-examine the value of analysts' recommendations.

There were concerns that the value ascribed to analysts' recommendations may have been affected by the significant decline in the market and the resultant losses suffered by investors (Barber et al., 2003). Investor confidence in analysts' recommendations may have been further affected by the disclosure of conflicts of interest between analysts and the financial institutions upon which they were reporting. Barber et al. (2003) examined the value of analysts' recommendations during the 2000-2001 period and their results were strikingly different when compared to the results of the years prior to that period. They found that the value in the analysts' recommendations deteriorated during this period. In fact, they discovered that the portfolio of the most highly favoured firms underperformed the market by 7.1% and earned a return that was 20% lower than the return of the most unfavoured firms. Barber et al. (2001) suggested that this "anomaly" was driven in part by analysts' reluctance to abandon recommendations for small capitalization growth stocks which had been at the forefront of the bull market during the 1990s.

The final market period (2002-2004) is characterized by a market recovery and increased regulation. To restore investor confidence, regulatory changes were introduced in both the U.S. and Canada following the market crash. In Canada, for example, the Ontario Securities Commission (OSC) adopted NP 51-201 in 2002,² a regulation intended to clarify the rules against the selective disclosure of information to analysts.³ Also, the IDA passed Policy 11 on Analyst Standards in 2003 which requires firms to disclose the distribution of their analysts' recommendations by category. These regulatory changes may affect the value of analysts' recommendations, making the examination of the 2002-2004 post-crash period

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an important contribution to the literature.

This study contributes to our understanding of the value of analysts' recommendations in two ways. Firstly, the value of analysts' recommendations for Canadian firms is considered, whereas previous studies concentrated on U.S. firms. The study's results suggest that analysts' recommendations for Canadian firms do have value. Secondly, the value of those recommendations is examined across three separate periods with distinguishing characteristics. In fact, the time frame of investigation extends to 2004 to allow for an examination of a period characterized by increased regulation and market recovery. The results of this study suggest that the value of analysts' recommendations may be dependent on the characteristics of the market period. Further, although the value of analysts' recommendations during the 2002-2004 post-crash period is both evident and consistent with the 1996-1998 pre-crash period, there are notable decreases in the relative size and relative number of firms receiving the strongest buy recommendations.

DATA AND METHODOLOGY

This study includes firms that were both listed on the Toronto Stock Exchange (TSX) between January 1, 1996 and December 31, 2004 and available in the Stock Guide database. For each of those firms, the Institutional Brokers' Estimate System (IBES) monthly mean analyst recommendation, when available, is gathered for the period 1996 to 2004. The descriptive statistics for the study's sample of analysts' recommendations are provided in Table 1. It indicates that both the number of companies covered and the total number of recommendations increase from 1996 to 1999 and, in general, decline from

2000 to 2004 (the only exception being the increase in total recommendations in 2003). For the period 1996 to 2004, the average number of "strong buy/buy" recommendations is 60% of all recommendations, the average number of "hold" recommendations is 30% and the average number of "sell/strong sell" recommendations is only 9%, thus demonstrating an inherent bias toward "strong buy/buy" recommendations by analysts. The "strong buy/buy" recommendations increase monotonically from 54% to 71% in the 1996 to 2000 period and then decline monotonically to 52% by 2004. The increase and subsequent decrease in "strong buy/buy" recommendations may suggest a return to a more conventional pattern of analysts' recommendations following the market crash and the introduction of increased regulation. The increased conservatism in the period following 2000 is in contrast to the increased optimism demonstrated in the periods prior to the market peak in 2000. The increase in the optimism of analysts' recommendations from 1996 to 2000 is also reflected in the monotonic decline in "hold" recommendations from 32% in 1996 to 23% in 2000 and in "sell/strong sell" recommendations from 13% in 1996 to 6% in 2000. The subsequent increase in analyst conservatism is further demonstrated by the monotonic increase in "hold" recommendations from 23% to 37% in the period from 2000 to 2004 and the increase in "sell/strong sell" recommendations from 6% to 11% in the same period. This change in the distribution of "strong buy/buy," "hold" and "sell/strong sell" recommendations over the 1996 to 2004 period indicates that the pattern of analysts' recommendations changes as characteristics of the market period change.⁴

Table 1: Descriptive Statistics for Analysts' Recommendations, 1996-2004 (Monthly Averages)

| Period | Year | Number of Companies | Number of Recommendations | Recommendation Frequency | | | | | |
|------------------|------|---------------------|---------------------------|--------------------------|---------|------|---------|------------------|---------|
| | | | | Strong Buy/Buy | | Hold | | Sell/Strong Sell | |
| | | | | N | Percent | N | Percent | N | Percent |
| Pre-Crash | 1996 | 403 | 2707 | 1472 | 54% | 878 | 32% | 358 | 13% |
| | 1997 | 515 | 2909 | 1644 | 56% | 912 | 31% | 354 | 12% |
| | 1998 | 535 | 3136 | 1911 | 61% | 907 | 29% | 318 | 10% |
| Bubble and Crash | 1999 | 545 | 3260 | 2152 | 66% | 877 | 27% | 232 | 7% |
| | 2000 | 464 | 2725 | 1936 | 71% | 637 | 23% | 152 | 6% |
| | 2001 | 436 | 2332 | 1571 | 67% | 620 | 27% | 141 | 6% |
| Post-Crash | 2002 | 421 | 2357 | 1456 | 62% | 739 | 31% | 162 | 7% |
| | 2003 | 399 | 2450 | 1266 | 52% | 867 | 35% | 316 | 13% |
| | 2004 | 368 | 2328 | 1203 | 52% | 860 | 37% | 264 | 11% |
| Overall | | 454 | 2689 | 1623 | 60% | 811 | 30% | 255 | 9% |

The IBES monthly mean analysts' recommendations (which are published on the third Thursday of each month) are used to create portfolios based on the strength of the mean recommendation.^{5,6} Those portfolios reflect the holdings of a hypothetical investor for one month beginning on the first day of the month immediately following the analysts' mean (consensus) recommendation. Consistent with Barber et al. (2003), each firm in the study is assigned to one of five portfolios based on the strength of the mean (consensus) recommendations. IBES classifies recommendations using a five point scale where "1" is a strong buy, "2" is a buy, "3" is a hold, "4" is a sell and "5" is a strong sell. The mean recommendations (\overline{MR}) for each company i on month $t-1$ are represented by $\overline{MR}_{i, t-1}$. The five portfolios are:

- Portfolio 1: $1.0 \leq \overline{MR}_{i, t-1} \leq 1.5$
- Portfolio 2: $1.5 < \overline{MR}_{i, t-1} \leq 2.0$
- Portfolio 3: $2.0 < \overline{MR}_{i, t-1} \leq 2.5$
- Portfolio 4: $2.5 < \overline{MR}_{i, t-1} \leq 3.0$
- Portfolio 5: $3.0 < \overline{MR}_{i, t-1} \leq 5.0$

The portfolios are rebalanced at the beginning of the following month based on newly published monthly mean recommendations.⁷

For each portfolio, calendar time mean abnormal returns are calculated for the periods of interest. The appropriate monthly TSX index return is subtracted from the individual return for each firm to calculate the market-adjusted abnormal return for each firm for each calendar month.⁸

That is ⁹, $AR_{it} = R_{it} - E(R_{it})$, where

AR_{it} = Abnormal (market-adjusted) return for firm i for month t .

R_{it} = Return for firm i for month t .

$E(R_{it})$ = Expected return for firm i for month t , that is, the TSX index return for month t .

Further for each portfolio, the value weighted mean abnormal return for all firms in the portfolio for each month is calculated. That is,

$MAR_t = \sum_{i=1}^{n_t} w_{it} AR_{it}$, where

MAR_t = mean abnormal return of all firms in the portfolio.

w_{it} = value weighting calculated as $MV_{it} / \sum_{i=1}^{n_t} MV_{it}$, where

MV_{it} is the market value of the common shares of firm i for month t .

n_t = number of firms in the portfolio for month t .

Finally, the mean monthly abnormal return (MMAR) for the period of interest is determined.

That is, $MMAR_t = \frac{1}{T} \sum_{t=1}^T MAR_t$, where

$MMAR$ = mean monthly abnormal return.

T = total number of calendar months in the period of interest.

MMAR, however, does not explicitly consider factors such as size and book value to market value (BV/MV) which are known to affect security returns. As a result, the analysis is extended to examine the monthly average market-adjusted returns while controlling for firm size, risk (as measured by company beta) and BV/MV by employing the Fama-French Three-Factor Regression Model (1992).^{10,11} The form of the model employed is as follows:

$$R_{pt} - R_{ft} = \alpha_p + \beta_p (R_{mt} - R_{ft}) + S_p SMB_t + h_p HML_t + \varepsilon_{pt}$$

Where: $R_{pt} - R_{ft}$ is the total market value weighted return for portfolio p during month t less the risk-free rate for month t .

α_p is the monthly average abnormal return for portfolio p .

$R_{mt} - R_{ft}$ is the market risk premium or the excess return on the market portfolio relative to the risk-free rate.

SMB_t is the difference in returns of portfolios of small and big firms for month t .

HML_t is the difference in returns of portfolios of high and low book value (BV) to market value (MV) ratio firms for month t .

RESULTS

The average market value, by portfolio, for Canadian firms followed by analysts is presented in Table 2. The portfolio comprised of the most highly recommended firms (i.e., P1) contains firms with smaller market capitalizations. Over the nine-year period of the study, the average size of firms in P1 was \$457 million, or only 28% of the size of the average firm in the study. Interestingly, while P1 firms have a much smaller market capitalization than the average firm in the study, the firms in the least recommended portfolio (i.e., P5) are also smaller than average. These results suggest that analysts of Canadian firms are more likely to provide "strong buy" or "sell/strong sell" recommendations for firms with smaller market capitalizations while the firms with large market capitalizations elude weaker buy, sell, or hold recommendations. This behavior is consistent with the 'size effect' reported by Fama and French (1992) who found that small market capitalized firms, in general, generate better average returns. Firms with small market capitalizations, however, are not necessarily less risky firms. As Fama-French (1992) have argued, "firms with low market equity are more likely to have poor prospects, resulting in low stock prices and high book-to-market equity" (p. 446) but generate more opportunities for higher average returns.

Table 2 also shows that the makeup of the firms in the portfolio of highly recommended securities (P1) changes

Table 2: Average Market Value (in Millions): Companies Followed by Analysts (Relative market value by year in italics)

| Period | Year | Portfolio | | | | | Yearly Average |
|-------------------|------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | | P1 | P2 | P3 | P4 | P5 | |
| Pre-Crash | 1996 | \$377 <i>0.34</i> | \$1,282 <i>1.17</i> | \$1,985 <i>1.81</i> | \$909 <i>0.83</i> | \$561 <i>0.51</i> | \$1,099 <i>1.00</i> |
| | 1997 | \$297 <i>0.25</i> | \$1,295 <i>1.11</i> | \$2,108 <i>1.80</i> | \$1,148 <i>0.98</i> | \$695 <i>0.59</i> | \$1,171 <i>1.00</i> |
| | 1998 | \$340 <i>0.25</i> | \$1,637 <i>1.21</i> | \$2,297 <i>1.69</i> | \$1,375 <i>1.01</i> | \$876 <i>0.64</i> | \$1,359 <i>1.00</i> |
| Bubble and Crash | 1999 | \$401 <i>0.30</i> | \$2,027 <i>1.54</i> | \$1,973 <i>1.49</i> | \$588 <i>0.45</i> | \$190 <i>0.14</i> | \$1,320 <i>1.00</i> |
| | 2000 | \$1,159 <i>0.55</i> | \$3,538 <i>1.67</i> | \$2,173 <i>1.02</i> | \$763 <i>0.36</i> | \$169 <i>0.08</i> | \$2,124 <i>1.00</i> |
| | 2001 | \$576 <i>0.33</i> | \$2,091 <i>1.19</i> | \$3,301 <i>1.87</i> | \$1,076 <i>0.61</i> | \$203 <i>0.12</i> | \$1,761 <i>1.00</i> |
| Post-Crash | 2002 | \$386 <i>0.22</i> | \$1,777 <i>1.00</i> | \$2,916 <i>1.64</i> | \$1,598 <i>0.90</i> | \$505 <i>0.28</i> | \$1,775 <i>1.00</i> |
| | 2003 | \$247 <i>0.12</i> | \$1,067 <i>0.53</i> | \$3,647 <i>1.80</i> | \$2,397 <i>1.18</i> | \$1,295 <i>0.64</i> | \$2,031 <i>1.00</i> |
| | 2004 | \$333 <i>0.14</i> | \$1,305 <i>0.56</i> | \$3,009 <i>1.30</i> | \$3,758 <i>1.62</i> | \$1,507 <i>0.65</i> | \$2,321 <i>1.00</i> |
| Nine-Year Average | | \$457 <i>0.28</i> | \$1,780 <i>1.11</i> | \$2,601 <i>1.60</i> | \$1,513 <i>0.88</i> | \$667 <i>0.41</i> | \$1,662 <i>1.00</i> |

significantly in 2000 and again in 2003 and 2004. Both the average and relative market values of P1 firms rise considerably in 2000. Specifically, the average firm size of the P1 group rose to \$1.16 billion in 2000 (an increase of approximately 190% in one year), suggesting that analysts began recommending larger-cap firms in 2000 in response to the higher level of uncertainty in the marketplace at that time. In contrast, the average size of firms in the P1 category declines significantly in the “post-crash” period of 2002 to 2004. In fact, in 2003 and 2004, the relative size of P1 firms is only 12% and 14% of the size of the average firm in those years. This is half (or less) of the average relative size of the P1 firms in the 1996-1998 and 1999-2001 periods. These results indicate that the firms receiving the most favourable recommendations by analysts are considerably smaller in the post-crash period. A similar pattern is also evident for firms in the P2 portfolio.

The distribution of firms followed by analysts among the five portfolios is presented in Table 3. The percentage of firms in the post-crash period (i.e. 2002-2004) receiving the strongest “consensus buy” recommendation (P1) declines sharply compared to the earlier periods. In fact, in 2003 and 2004 less than 10% of firms covered by analysts qualify for the P1 portfolio, while approximately 20% of firms

qualify for P1 in the two prior market periods (1996-1998 and 1999-2001). This decline in the willingness of analysts to use their strongest recommendations implies that analysts are more conservative in the post-crash period.

Table 4 provides the monthly average market-adjusted returns for the five portfolios constructed on the basis of consensus (average) analyst recommendations. Over the entire nine-year period of the study, using monthly return data, portfolios of the most highly recommended stocks (i.e., both P1 and P2) outperformed the market. The P1 portfolio earns on average 1.69% more per month than a market portfolio while the P2 portfolio averages 1.35% more. Both of these above-average returns are statistically significant at the 5% level. From P1 through to P5, the monthly average market-adjusted return for each portfolio, while positive in all cases, decreases as the analysts’ recommendations move from most favourable to least favourable.¹²

Panel A of Table 4 separates the portfolio returns into three 3-year market periods. The portfolio of the most highly recommended stocks (P1) earns above-average market-adjusted returns ($p < .05$) during the 1996-1998 and 2002-2004 periods. During the tumultuous 1999-2001 period, the market-adjusted returns for P1, while positive, are not significant. Interestingly, the P2 portfolio earns significant

above-average market-adjusted returns in all three market periods. In contrast, the market-adjusted returns for P3, P4 and P5 are not significant in any market period.

When examined on a year-by-year basis, the portfolio returns provide a similar picture (Panel B of Table 4). The most highly favoured firms (P1) earn positive average returns in eight of the nine years studied, with four of these eight positive returns significant at the 5% level. P2, the second most highly recommended group of firms, also consistently outperforms the market (all market-adjusted returns were positive) but only three of the nine average monthly returns are significant. The least favoured group of stocks (P5) has four years in which the monthly average market-adjusted return is negative but none of these are significant.

Multivariate regression results for each portfolio

| Period | Year | Portfolio | | | | |
|------------------|------|-----------|-----|-----|-----|-----|
| | | P1 | P2 | P3 | P4 | P5 |
| Pre-Crash | 1996 | 19% | 24% | 23% | 22% | 12% |
| | 1997 | 22% | 27% | 22% | 19% | 10% |
| | 1998 | 22% | 32% | 20% | 16% | 10% |
| Bubble and Crash | 1999 | 20% | 36% | 19% | 17% | 8% |
| | 2000 | 22% | 39% | 17% | 15% | 7% |
| | 2001 | 17% | 38% | 21% | 17% | 7% |
| Post-Crash | 2002 | 14% | 34% | 26% | 21% | 6% |
| | 2003 | 9% | 26% | 26% | 26% | 13% |
| | 2004 | 9% | 25% | 26% | 27% | 14% |

Table 4: Monthly Average Market-Adjusted Returns of Portfolios Formed on the Basis of Analysts' Recommendations: 1996-2004 (t-statistics and significance levels reported in parentheses)

| Panel A: Monthly Average Market-Adjusted Return by Period | | | | | | | | | |
|--|-----------------------------|-------------------------|--|--------------------------|-------------------------|------------------------|-----------------------|------------------------|-----------------------|
| Portfolio | Average Number of Companies | Total 1996-2004 | Monthly Average Market-Adjusted Return | | | | | | |
| | | | Pre-Crash 1996-98 | Bubble and Crash 1999-01 | Post-Crash 2002-04 | | | | |
| P1 | 64 | 0.0169 (4.55, .00)* | 0.0172 (4.00, .00)* | 0.0089 (1.21, .23) | 0.0248 (3.50, .00)* | | | | |
| P2 | 114 | 0.0135 (5.54, .00)* | 0.0135 (4.22, .00)* | 0.0194 (3.35, .00)* | 0.0076 (2.63, .01)* | | | | |
| P3 | 80 | 0.0059 (1.69, .09) | 0.0025 (1.05, .30) | 0.0111 (1.13, .27) | 0.0040 (1.52, .14) | | | | |
| P4 | 71 | 0.0060 (1.55, .13) | 0.0033 (0.84, .41) | 0.0090 (0.87, .39) | 0.0056 (1.61, .12) | | | | |
| P5 | 34 | 0.0049 (1.00, .32) | 0.0016 (0.26, .80) | 0.0010 (0.08, .94) | 0.0122 (1.99, .06) | | | | |
| Panel B: Monthly Average Market-Adjusted Return by Year | | | | | | | | | |
| Portfolio | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| P1 | 0.0169 (2.20, .05)* | 0.0250 (3.32, .01)* | 0.0095 (1.36, .20) | -0.0126 (-1.39, .19) | 0.0194 (1.13, .28) | 0.0201 (2.27, .04)* | 0.0189 (2.06, .06) | 0.0334 (2.74, .02)* | 0.0219 (1.44, .18) |
| P2 | 0.0118 (2.39, .04)* | 0.0157 (4.48, .00)* | 0.0129 (1.68, .12) | 0.0254 (2.64, .02)* | 0.0139 (1.66, .13) | 0.0187 (1.53, .16) | 0.0087 (1.91, .08) | 0.0083 (1.81, .10) | 0.0058 (0.95, .36) |
| P3 | 0.0031 (1.09, .30) | -0.0007 (-0.17, .87) | 0.0050 (1.00, .34) | -0.0086 (-0.68, .51) | 0.0348 (1.70, .12) | 0.0071 (0.45, .66) | 0.0050 (1.01, .33) | 0.0004 (0.13, .90) | 0.0067 (1.19, .26) |
| P4 | -0.0064 (-0.95, .37) | 0.0077 (1.82, .10) | 0.0078 (0.92, .38) | 0.0026 (0.17, .87) | 0.0053 (0.25, .80) | 0.0191 (1.03, .33) | 0.0113 (1.44, .18) | 0.0027 (0.75, .47) | 0.0027 (0.46, .65) |
| P5 | -0.0052 (-0.94, .37) | 0.0190 (1.86, .09) | -0.0095 (-0.73, .48) | -0.0020 (-0.17, .87) | -0.0323 (-1.52, .16) | 0.0373 (1.55, .15) | 0.0174 (1.22, .25) | 0.0180 (1.69, .12) | 0.0010 (0.21, .83) |

* significant at 5% level

for the entire 1996-2004 period and each of the three market periods are provided in Table 5.¹³ For the entire period of the study, the intercept values for the five portfolios, although positive, monotonically decrease from P1 through P5 (i.e. from strongest buy to strong sell). Only the returns for P1 and P2 (portfolios of the most highly recommended firms), as measured by p , are statistically significant (the returns were 1.5% and 1.4% per month respectively). These findings are similar to those reported in Table 4; that is, the average abnormal return for all portfolios is positive but only the most

highly recommended portfolios' abnormal returns are statistically significant.

The multivariate results for the three 3-year market periods are consistent with earlier findings. The portfolios of the most highly recommended stocks (i.e., P1 and P2) exhibit significant positive abnormal returns for the market periods 1996-1998 and 2002-2004. During the more volatile 1999-2001 market period, only P2 shows evidence of a significant positive return. The returns for P3, P4 and P5 are not statistically significant for any of the three market periods.

Table 5: Coefficient Estimates for the Fama-French Three-Factor Model (t-statistics reported underneath coefficients)

| Portfolio | Adjusted R ² | Intercept | RPM | SMB | HML |
|---|-------------------------|-----------------|-----------------|------------------|-----------------|
| Panel A: Results for Period (1996-2004) | | | | | |
| P1 | 0.617 | 0.015 4.18* | 1.057 11.99* | 0.469 3.49* | 0.227 2.32* |
| P2 | 0.779 | 0.014 5.76* | 0.919 15.20* | -0.166 -1.79 | -0.060 -0.89 |
| P3 | 0.627 | 0.005 1.72 | 0.859 13.32* | 0.204 2.07* | 0.456 6.36* |
| P4 | 0.505 | 0.005 1.78 | 0.766 10.41* | 0.153 1.36 | 0.416 5.09* |
| P5 | 0.349 | 0.004 0.97 | 0.745 7.26* | 0.639 4.08* | 0.360 3.16* |
| Panel B: Results for Pre-Crash Period (1996-1998) | | | | | |
| P1 | 0.911 | 0.021 6.19* | 1.110 17.18* | 0.550 4.17* | -0.241 -1.73 |
| P2 | 0.916 | 0.012 3.95* | 0.949 16.81* | -0.400 -3.48* | -0.084 -0.69 |
| P3 | 0.939 | 0.001 0.59 | 0.980 21.71* | -0.020 -0.22 | 0.191 1.96 |
| P4 | 0.812 | 0.005 1.23 | 0.818 11.80* | 0.126 0.89 | 0.165 1.10 |
| P5 | 0.629 | 0.006 1.18 | 0.715 7.62* | 0.570 2.98* | 0.259 1.28 |
| Panel C: Results for Bubble and Crash Period (1999-2001) | | | | | |
| P1 | 0.439 | 0.009 1.30 | 0.755 3.69* | 0.119 0.50 | 0.079 0.47 |
| P2 | 0.702 | 0.020 3.25* | 0.930 5.24* | -0.118 -0.57 | -0.042 -0.29 |
| P3 | 0.169 | 0.011 1.65 | 0.599 3.10* | 0.219 0.96 | 0.356 2.25* |
| P4 | 0.182 | 0.009 1.12 | 0.689 3.10* | 0.160 0.61 | 0.424 2.33* |
| P5 | 0.138 | -0.001 -0.13 | 0.775 2.55* | 0.733 2.05* | 0.371 1.50 |
| Panel D: Results for Post-Crash Period (2002-2004) | | | | | |
| P1 | 0.500 | 0.018 2.43* | 1.134 5.16* | 0.801 2.28* | 0.155 0.39 |
| P2 | 0.727 | 0.008 2.80* | 0.751 8.67* | 0.204 1.48 | -0.161 -1.02 |
| P3 | 0.784 | 0.002 0.89 | 0.911 11.02* | 0.118 0.90 | 0.291 1.94 |
| P4 | 0.596 | 0.006 1.62 | 0.782 7.19* | 0.017 0.10 | 0.143 0.73 |
| P5 | 0.395 | 0.007 1.09 | 0.800 4.38* | 0.483 1.66 | 0.755 2.27* |
| * Significant at the 5 percent level or better | | | | | |

CONCLUSION

This study investigates the value of analysts' recommendations in investment decisions for Canadian firms during the period 1996-2004. The study demonstrates that there is value in analysts' recommendations as evidenced by a positive abnormal return for firms with the strongest consensus buy recommendations. The positive abnormal return for the most highly recommended firms is, however, limited to two time periods, namely the 1996-1998 (i.e. pre-crash) and 2002-2004 (i.e. post-crash) market periods. Return results for the 1999-2001 period (i.e. market bubble and crash) are less robust and symptomatic of a period in which there is a diversion between prices and fundamental values. The period 2002 to 2004 (i.e. post-crash) is characterized by increased regulation and, in that period, the pattern of analysts' recommendations changed. Analysts provide their most favourable recommendations to smaller firms (as measured by market capitalization) and they make fewer strong buy recommendations, perhaps reflecting a more conservative approach when compared to the prior periods. Translating the study's results into a profitable trading strategy, however, is constrained by the transaction costs required to rebalance portfolios in response to analysts' strong buy recommendations. Results from prior studies (e.g., Cleary et al., 2002) suggest that transaction costs, especially for small market capitalized firms, may render such a strategy unprofitable. ■

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ENDNOTES:

1. The years 1999 to 2001 are used as a 36-month period to capture the effects of the bubble and crash of the market. The market, as measured by the TSX index, began the final leg of its climb in March 1999 with the Index at 6180 and peaked 17 months later at 11,389 on September 1, 2000. By December 31, 2001 (16 months later), the TSX had fallen to 7688. This period also corresponds with a significant change in the pattern of analysts' recommendations (see Tables 1 to 3).
2. NP 51-201 refers to National Instrument 51-102 Disclosure Standards issued in 2002 by the Ontario Securities Commission.
3. NP 51-201 is similar to Regulation FD in the U.S. In addition to the release of the draft of NP 51-201, in July of 2001 the OSC reached a settlement with Air Canada over its selective disclosure to 9 analysts in the previous October. These two events in 2001 provided clear guidance to companies as to the unacceptability of selective disclosure to analysts.
4. It is interesting to note that it took until 2003 in Canada for recommendations to return to the same level of conservatism as found in 1996. In the Barber et al. (2003) study, the return to more conservative recommendations in the U.S. occurred almost immediately in 2001. This pattern may reflect differences in the population of companies examined in this study, which are much smaller than those in the U.S. study.
5. Thus the portfolio was usually formed 10 to 17 days after the consensus was available.
6. Barber et al. (2001) include a neglected firm portfolio (i.e., firms not covered by an analyst) in their study. We do not include such a portfolio in our study as our preliminary investigation suggests that the Canadian neglected firms are quite small and highly illiquid. Further, many were delisted during the period of study. Results from such a population are likely to be difficult to obtain and potentially biased.
7. Monthly rebalancing at the beginning of the month is a practical approach that approximates the behaviour that is possible for an average retail investor.
8. The top and bottom 1% of return data for each year are excluded to eliminate extreme outliers.
9. This presentation follows closely Zutter's (2001) presentation of the calendar time portfolio approach.
10. Higher BV/MV stocks are often referred to as "value" stocks whereas low BV/MV stocks are viewed as "growth" stocks.
11. There are other multifactor models, which include factors such as price momentum but these models are not investigated in this study (for example, see Jegadeesh et al., 2004). Note that this study uses Canadian Fama-French factors.
12. It might seem odd that all portfolios have, on average, positive monthly average market-adjusted returns (P3, P4 and P5 not significantly different from zero) over the study period and further that abnormal returns were only present in the P1 and P2 portfolios. Several explanations are possible. One possible explanation may derive from the types of firms followed by Canadian security analysts. It may be that Canadian firms followed by analysts perform, on average, better than firms that do not elicit analyst following. This was not explored in this particular study. An alternative explanation is presented in Finger and Landsman (2003). They reference Abarbanell and Lehavy's (2002) working paper to argue that firms that have been rated a 'buy' are more price-sensitive and firms that have been rated a 'sell' are less price-sensitive. This may lead to a greater possibility of abnormal returns for more highly recommended firms. Another explanation may be that the market does not react as quickly to the information contained in a positive analyst recommendation as it does for the information in a negative recommendation. Hennessey (1995), in a Canadian study of the market impact of analysts' earnings forecast revisions, found that the market does not react immediately to positive revisions but reacts quickly to negative revisions. For the portfolio of firms with the greatest positive earnings revisions (>10%), the CAR for the 12 months following the revision was 18.2%.
13. Comparison of the results found in Table 5 to the results of Barber et al. (2001) may be complicated by the fact that analyst coverage in Canada may differ from analyst coverage in the U.S. Anecdotal evidence from Canadian analysts would appear to confirm that differences exist but the nature of these differences is an empirical question that could be investigated in a future study.