



SEOs Bearers of long-term bad news

This examination of a sample of Canadian seasoned equity offerings, or SEOs, looks at their abnormal performance over the long run.

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“Investing in firms issuing stock is hazardous to your health.” Such is the caution offered by Loughran and Ritter (1995) to warn investors about the risks of buying newly issued U.S. stocks. According to their results, issuing firms perform poorly compared to non-issuing firms of the same size. The magnitude of this underperformance is notable, regardless of whether the issue consists in an initial public offering (IPO) or a seasoned equity offering (SEO). In the case of IPOs, the underperformance reaches -26.9% three years after the issue and -50.7% over a period of five years. These results corroborate those of Ritter (1991), who was among the first to observe the long-run underperformance phenomenon in newly listed U.S. firms. In the case of SEOs, the underperformance reaches -33.0% and -59.4% three and five years respectively after the issue. Spiess and Affleck-Graves (1995) also observed this long-term downward drift in U.S. SEOs. These findings are troubling because they suggest that investors need up to five years to integrate all available information, therefore challenging the market efficiency hypothesis. Indeed, why would investors keep buying newly issued stock if the long-term prospects are, on average, poor?

Ritter, Loughran and Ritter, and Spiess and Affleck-Graves all suggest that the asymmetry of information between a firm's managers and investors may explain this long-run underperformance phenomenon in stock issues, commonly known as “the new

issues puzzle.” According to Myers and Majluf (1984), managers—unlike investors—have information concerning the future earnings and investment opportunities which allows for a better valuation of the firm's intrinsic value. Managers can consequently take advantage of investors' optimism to issue stock when they perceive the price to be overvalued. Managers can create this “window of opportunity” by altering discretionary accounting accruals to artificially increase the intermediate earnings reported before the issue (Teoh, Welch and Wong, 1998). By projecting those inflated earnings, investors temporarily overvalue the stock (Rangan, 1998). Investors' expectations regarding the future earnings of the issuing company may also be influenced by the overly optimistic projections of financial analysts. Optimistic projections are more likely to occur if the analyst is related to the underwriter (Dechow, Hutton and Sloan, 2000) or if the company has high-growth opportunities (Hansen and Sarin, 1999).

Barber and Lyon (1997), Kothari and Warner (1997), Fama (1998), Lyon, Barber and Tsai (1999), Brav (2000), Mitchell and Stafford (2000) as well as Loughran and Ritter (2000) have all questioned the methodology used to measure the long-run abnormal performance following a corporate financial decision such as an IPO, a SEO, a merger or acquisition, a stock split, a stock repurchase, etc. What comes out of this debate is that the magnitude of the average abnormal performance and the reliability of the statistical inference vary from one methodology to another. To estimate an average abnormal performance over a long-term

horizon, one must choose from different time frameworks (event-time or calendar-time), different measures of abnormal performance (cumulative average abnormal returns, or \overline{CARs} ; compounding mean buy-and-hold abnormal returns, or \overline{BHARs} ; mean calendar-time abnormal returns, or \overline{CTARs} ; or intercepts from a factor pricing model), different classes of benchmarks (matching firms, reference portfolios or factor pricing models) and, finally, different weighting procedures (equally-weighted or value-weighted returns). In summary, “measuring long-term abnormal performance is treacherous” (Mitchell and Stafford, 2000, p. 288).

In light of these methodological concerns, Brav, Geczy and Gompers (2000) examined the average abnormal performance of U.S. SEOs and found that the underperformance is not robust to the use of different methodologies. Eckbo, Masulis and Norli (2000) found no abnormal performance using a pricing model with macroeconomic variables. However, Jegadeesh's results (2000) do not lead to the same conclusion.

Fama and French (1998) argue that it is useful to investigate whether documented patterns in U.S. security returns hold in other countries, to ensure that such patterns are not the outcome of data mining. Whereas the long-run underperformance phenomenon following an SEO has been observed on international markets, evidence from the Canadian market is rare. Ikenberry, Lakonishok and Vermaelen (2000) studied the effect of stock repurchase programs on the long-run performance of Canadian firms. To ascertain the robustness of their results, they examined Canadian stock-issuing firms and found an abnormal downward drift subsequent to a share issue. Mittoo (1996) examined the market's reaction to Canadian SEOs over a two-day period. Her results show an average price drop of -1.8% and support the notion that equity issues by large domestically-listed firms generate more of a negative market response. She subsequently concluded that “issues are the bearers of bad news for both shareholders and portfolio managers alike” (p.23).

To determine whether Mittoo's warning holds over a longer horizon, we examine the abnormal performance of Canadian SEOs over periods of 12, 24, and 36 months following the month of the issue. In addition, we assess issuing firms' performance over the 12-month period preceding the SEO. This second time-window is of interest because it provides insight into the reasons underlying the issue: usually, firms seek new equity to finance growth opportunities. These favorable earnings prospects in turn contribute to the increasing market value of the firm. Finding an abnormal downward drift over the 36-month period following the month of the issue will inevitably cast doubt on the validity of the earnings prospects prior to the issue.

Overall, we find that Canadian issuing firms experience positive abnormal returns in the year preceding the SEO and negative abnormal returns over a 36-month horizon following the issue. Our results suggest that managers time their issues to profit from windows of opportunity created by optimistic investors.

1.0: The data used

Our sample of 161 Canadian SEOs comes from the 1986 to 2001 *Records of New Issues*, compiled by the Financial Post Data Group. It is comprised of common share or unit issues completed over the 1989-1999 period, by a total of 150 Canadian firms listed on the Toronto Stock Exchange. One of our main concerns in selecting our data was to avoid overlapping of equity issues undertaken by the same firm, in order to obtain a “pure event,” free of concomitant events. Only the issues that were neither preceded by an equity issue (IPO or SEO) in the past 36 months nor followed by another SEO in the next 36 months were retained. In addition, we excluded the IPOs to restrict our selection to SEOs, and removed all SEOs that were entirely secondary. To remain in our sample a firm must also be listed in the Research Insight (Compustat) database, from which the monthly returns, the book-to-market equity (BE/ME) ratios and the market capitalizations were extracted. The gross proceeds averaged \$75 million, representing roughly

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8% of the average market capitalization of the issuing firms. Although the average market capitalization hovers around \$920 million, 65% of the firms have an average market capitalization of less than \$500 million.

2.0: Estimating the long-run abnormal performance of SEOs

We use an event-time approach as well as a calendar-time approach to examine the post-issue long-run abnormal performance of Canadian SEOs over horizons of 12, 24 and 36 months. To distinguish between both time frameworks, we use the following notation: m for event months and t for calendar months.

2.1: Event-time approach

In the event-time approach, time is defined relative to the event ($m=0$). We estimate the abnormal performance on the post-issue window [$m=1$ to $m=36$]; that is, the 36 monthly returns following the month of the issue. To estimate whether an issuing firm generated an abnormal return, we compare its return to the performance of a benchmark. Fama and French (1992) emphasized the importance of size and BE/ME ratios in capturing the cross-sectional variation in returns. Thus, we use size and BE/ME reference portfolios as benchmarks. The reference portfolios are rebalanced monthly (Rau and Vermaelen, 1997) and purged of the issuing firms within the 36-month post-issue window (Brav, Geczy and Gompers, 2000). To construct these portfolios, we use all the firms available on the purged Research Insight database. We perform two independent sorts on the basis of size (measured by market capitalization) and BE/ME to form quartile portfolios. Finally, 16 reference portfolios are formed as the combination of these quartile portfolios.

We use two measures to estimate the average abnormal performance over a horizon of 12, 24 and 36 months: the cumulative average abnormal returns (\overline{CARs}), and the mean buy-and-hold abnormal return (\overline{BHARs}). Both estimators are computed with equally-weighted (EW) as well as with value-weighted (VW) returns.

Cumulative Average Abnormal Returns (\overline{CARs})

The monthly abnormal return of an issuing firm, $r_{i,m}$, corresponds to the difference between the monthly return of the issuing firm ($R_{i,m}$) and the monthly return of its reference portfolio ($R_{rpi,m}$). For each of the 36

event-months ($m=1$ to 36), we calculate the average abnormal return of the N issuing firms in the sample (\overline{ARs}). As shown in the equation below, we then compute the average cumulative abnormal return (\overline{CARs}_q) from event month $m=1$ to q , where $q=12, 24$ and 36.

$$\overline{CARs}_q = \sum_{m=1}^q \overline{ARs}_m$$

$$\text{where } \overline{ARs}_m = \sum_{i=1}^{N_m} w^*_{i,m} r_{i,m}$$

with $w^*_{i,m}$ and N_m respectively standing for the weight of firm i and the number of firms in event month m .

Mean Buy-and-Hold Abnormal Returns (\overline{BHARs})

The buy-and-hold return of an issuing firm i (BHR_i) is obtained by compounding its monthly returns over the q -month period following the month of the SEO. This measure replicates an investment strategy that consists in buying and holding shares for a period of time. The same logic applies to the reference portfolio associated with the issuing firm i . The difference between the BHR of the issuing firm and the BHR of its reference portfolio corresponds to the buy-and-hold abnormal return ($BHARs$). As shown below, the mean $BHAR$ of the sample equals to the summation of the 161 weighted $BHARs$.

$$\overline{BHAR}_q = \sum_{i=1}^{Nq} w^*_{i,q} BHAR_{i,q}$$

$$\text{where } BHAR_{i,q} = \left[\prod_{m=1}^q (1 + R_{i,m}) - \prod_{m=1}^q (1 + R_{rpi,m}) \right]$$

Bad news ahead?

\overline{CARs} and \overline{BHARs} reported in Table I suggest that Canadian SEOs underperform in the long run. Over a 36-month horizon, this underperformance is estimated at -32.23% according to the \overline{CARs} (EW) and at -41.27% according to the \overline{BHARs} (EW). The use of value-weighted returns instead of equally-weighted returns reduces by half the \overline{CARs} and by 37% the \overline{BHARs} . Regardless of the weighting procedure, the results are statistically significant at the 95% confidence level. Table I also reports negative

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abnormal returns over the 12 and 24-month horizons. For a given horizon, we observe similar \overline{CARs} (*EW*) and \overline{BHARs} (*EW*) that amount to roughly -1% per month. \overline{CARs} and \overline{BHARs} documented in U.S. studies also suggest that SEOs underperform in the long-run. However, the magnitude of the negative abnormal performance is inferior to the one we observe on the Canadian

SEO market. Indeed, Spiess and Affleck-Graves (1995) estimate the \overline{CARs} (*EW*) at -17.51% over a 36-month horizon using matching firms selected on the basis of size and *BE/ME* as benchmarks. Brav, Geczy and Gompers (2000) find a similar result (-15.4%) over a 60-month horizon using size and *BE/ME* reference portfolios as benchmarks.

Loughran and Ritter (1995) observe an underperformance of -33% over a 36-month horizon using the \overline{BHARs} (*EW*) measure and sized matched firms as benchmarks. This underperformance lowers to -22.84% according to Spiess and Affleck-Graves (1995) when issuing firms are matched according to their size and their industry. Jegadeesh (2000) documents an underperformance of -34.3% over a period of five years after the issue. This \overline{BHARs} (*EW*) is estimated with reference portfolios, constructed on the basis of size and *BE/ME*. Using similar benchmarks and horizon, Brav, Geczy and Gompers (2000) report \overline{BHARs} (*EW*) of -26.3% and \overline{BHARs} (*VW*) of -25%.

According to Barber and Lyon (1997), the summation of monthly abnormal returns that underlies \overline{CARs} induces biases (measurement bias, new listing bias and skewness bias) which lead to positively biased test statistics. The \overline{BHARs} estimates are also subject to bias (new listings, skewness and rebalancing) which lead to negatively biased test statistics. To alleviate the biases, sample firms should be matched to control firms of similar size and *BE/ME*. Furthermore, statistical inference should be performed via either a bootstrapped skewness-adjusted t-statistic or the bootstrapping procedure of Ikenberry, Lakonishok and Vermaelen (1995). Lyon, Barber, and Tsai (1999) argue in favour of the \overline{BHARs} estimator because it “accurately represents investor experience.” According to Fama (1998), the methodology underlying the \overline{BHARs} leads to overstated test statistics because it ignores the cross-sectional dependence between the abnormal returns of the event firms which are overlapping in calendar-time.

2.2: Calendar-time approach

As opposed to the event-time approach, the calendar-time approach takes into account the real date of the event. The first SEO in our sample occurred in June 1989 and the last in December 1999. The calendar-time period therefore starts in July 1989 (the month after the first issue) and ends in December 2000 when the 12-month post-issue window is considered. In July 1989, we form a portfolio of SEOs and rebalance it each following month in order to include new SEOs that occurred during the previous month, remove the SEOs for which we do not have a return in the database for the current and subsequent months, and remove the SEOs that have been in the portfolio for the past 12, 24 or 36 months, depending on the chosen horizon. We then calculate the monthly returns of our portfolio of issuing firms over the calendar-time period. We use two measures to estimate the average abnormal performance over the 12, 24 and 36-month horizons: the mean calendar-time abnormal returns (\overline{CTARs}), and the alpha coefficient resulting from a time-series regression (Fama and French, 1993, three-factor pricing model, *TFFPM*). Again, both of these estimators are computed with equally-weighted (*EW*) and value-weighted (*VW*) returns.

TABLE 1
AVERAGE ABNORMAL RETURN POST-SEO
(Estimated using the event-time approach)

Horizon	\overline{CARs}		\overline{BHARs}	
	Equal Weighted	Value Weighted	Equal Weighted	Value Weighted
12 months	-13.50% (-3.58**)	-2.85% (-1.18)	-12.71% (-2.94**)	-2.64% (-0.89)
24 months	-25.57% (-4.12**)	-10.55% (-2.69**)	-23.90% (-2.54**)	-13.64% (-3.12**)
36 months	-32.23% (-3.78**)	-16.49% (-3.15**)	-41.27% (-5.08**)	-26.05% (-4.96**)

**Significant at 95% confidence level



Mean calendar-time abnormal returns (\overline{CTARs})

The monthly average abnormal performance of our portfolio of SEOs is taken from 16 size- BE/ME reference portfolios constructed for the purpose of the event-time approach. On each month of our calendar-time period, we compute the difference between the return on the portfolio of SEOs ($R_{p,t}$) and the return on its corresponding size- BE/ME reference portfolio ($R_{rp,t}$). As shown in the following equation, \overline{CTARs} are obtained by averaging these monthly calendar-time abnormal performances over the T months defining the calendar-time period.

$$\overline{CTARs} = \frac{1}{T} \sum_{t=1}^T (R_{p,t} - R_{rp,t})$$

$$\text{where } R_{p,t} = \sum_{i=1}^{N_t} w_{i,t} R_{i,t}$$

$$\text{and } R_{rp,t} = \sum_{i=1}^{N_t} w_{i,t} R_{rpi,t}$$

with $w_{i,t}$ and N_t respectively standing for the weight of firm i and the number of firms in the portfolio during the month t .

Alpha coefficient from three-factor pricing model

To test whether our portfolio of issuing firms generated an abnormal return, we compared its performance to an expected return estimated via the *TFPM*. As shown below, the dependent variable of the regression is the monthly excess returns of the SEOs portfolio ($R_{p,t} - R_{f,t}$), where the risk-free rate for a given month t ($R_{f,t}$) is measured by the monthly return of the 91-day Canadian Government Treasury bills.

$$R_{p,t} - R_{f,t} = \alpha_p + \beta_p(R_{m,t} - R_{f,t}) + s_p \text{SMB}_t + b_p \text{HML}_t + e_{p,t}$$

The independent variables are the excess market return ($R_{m,t} - R_{f,t}$) and two zero-investment portfolios constructed such as to mimic the risk factors common to all securities, namely a size factor (SMB_p , small minus big) and a factor related to the BE/ME ratio (HML_p , high minus low). The size factor is the difference in

returns between a portfolio of small capitalization firms and a portfolio of big capitalization firms. The BE/ME factor is the difference in returns between a portfolio of firms with high BE/ME ratios and a portfolio of firms with low BE/ME ratios. The loadings of the portfolio on each risk factor (β_p, s_p, b_p) are estimated by the time-series regression on the calendar-time period. The parameter (α) indicates the monthly average abnormal return of our sample of 161 SEOs.

Still bad news ahead?

According to the calendar-time results presented in Table 2, Canadian firms which proceeded to a SEO during the 1989-1999 period have generated a negative abnormal return in the long-run. Overall, regardless of the horizon, the underperformance estimated by the alpha coefficient (\overline{EW}) is similar to the \overline{CTARs} (\overline{EW}) and to the results obtained via the event-time approach. The results are statistically significant and adjusted R^2 range from 56% (36 months), to 35% (12 months). Three years after the issue, SEOs yield an average abnormal performance in the vicinity of -29% which is 25% less than the -39.17%

TABLE 2
AVERAGE ABNORMAL RETURN POST-SEO
(Estimated using the calendar-time approach)

	CTARs	Fama and French three-factor model				adjusted R ²
		α_p	b_p	s_p	h_p	
12 months						
Equally weighted	-12.94% (-2.86**)	-13.20% (-2.92**)	0.765 (-2.43**)	0.375 (3.34**)	0.185 (1.75*)	35%
Value weighted	-3.94% (-0.78)	-3.60% (-0.66)	0.867 (-1.28)	0.16 (1.32)	0.308 (2.7**)	33%
24 months						
Equally weighted	-24.48% (-3.87**)	-21.60% (-3.67**)	0.825 (-2.57**)	0.313 (3.97**)	0.266 (3.57**)	53%
Value weighted	-12.36% (-1.68*)	-7.20% (-0.89)	0.920 (-1.01)	0.072 (0.78)	0.280 (3.24**)	49%
36 months						
Equally weighted	-29.63% (-3.32**)	-28.80% (-3.16**)	0.838 (-2.4**)	0.382 (4.87**)	0.267 (3.62**)	56%
Value weighted	-24.73% (-2.08**)	-14.40% (-1.35)	0.906 (-1.16)	0.105 (1.11)	0.29 (3.25**)	47%

*Significant at 90% confidence level

**Significant at 95% confidence level

H₀ for the beta coefficient is beta=1

Alpha coefficients are respectively reported on a 12, 24 and 36-month basis

observed by Ikenberry, Lakonishok and Vermaelen (2000) on the Canadian market over the 1989-1995 period.

Analysis of the loading on the market factor reveals that the issuing firms have, on average, a market risk significantly inferior to 1. The loading on the *SMB* factor is positive and statistically significant, suggesting that the issuing firms are, on average, mainly small firms. The positive loading on the *HML* factor is statistically significant but the monthly risk premium is negative (-0.26%). This suggests that the issuing firms in our sample are, on average, growth firms.

Table 2 also shows that the underperformance of Canadian SEOs, estimated by the alpha coefficient, becomes statistically insignificant when the monthly returns of the firms composing the SEOs portfolio are value-weighted instead of equally-weighted.

Interestingly, the \overline{CTARs} (*VW*) are statistically significant over the 24 and 36-month horizons, indicating that the abnormal performance results differ whether or not we use a benchmark supposing a constant risk exposure to risk factors (*TFPM*).

Mitchell and Stafford (2000) constructed 25 size-*BE/ME* reference portfolios to estimate \overline{CTARs} . Using equally-weighted returns they estimated the underperformance over 36 months at -7.56%. Contrary to our results, their estimates of \overline{CTARs} become statistically insignificant with value-weighted returns. Brav, Geczy and Gompers (2000) report an underperformance of -24% for the U.S. SEOs over a period of five years using the *TFPM* and purged factors. They also show that this underperformance disappears with the use of value-weighted returns. Jegadeesh (2000) observes similar equally-weighted results (-27%) with the same benchmark and purged factors.

Contrary to the event-time approach, the calendar-time approach allows us to simulate an investment strategy that could be implemented by a portfolio manager. Loughran and Ritter (2000) argue against the calendar-time portfolio approach because it averages months of "hot" and "cold" event activity. Fama (1998) argues in favor of a monthly calendar-time portfolio approach for measuring the long-term abnormal performance because it is robust to some of the statistical problems related to the event-time approach. Indeed, monthly returns are less susceptible to the bad model problem. Also, by forming monthly calendar-

TABLE 3
AVERAGE ABNORMAL RETURN OVER THE
12-MONTH PERIOD PRIOR TO SEO
(Estimated using the calendar-time approach)

	Event-time approach		Calendar-time approach	
	\overline{CARs}	\overline{BHARs}	\overline{CTARs}	α_p
Equally weighted	27.50% (6.22**)	39.00% (6.6**)	25.83% (3.76**)	20.59% (3.11**)
Value weighted	14.80% (5.29**)	23.00% (3.71**)	9.98% (1.52)	4.57% (0.75)

*Significant at 90% confidence level

**Significant at 95% confidence level

H_0 for the beta coefficient is $\beta=1$

Alpha coefficients are respectively reported on an annual basis

time portfolios, all cross-correlations of event-firm abnormal performance are automatically accounted for in the portfolio variance. Finally, the distribution of this estimator is better approximated by the normal distribution, allowing for classical statistical inference. However, as sustained by Fama (1970), if the pricing model only explains part of the SEO's expected returns, then the estimated abnormal performance will combine the abnormal return attributable to the event and the unexplained part of the return not captured by the misspecified pricing model.

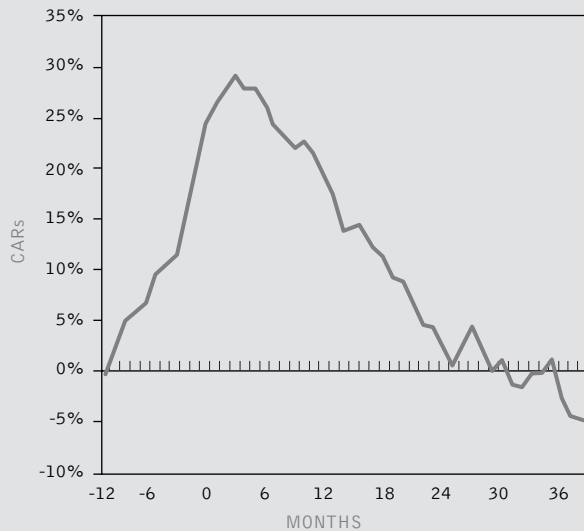
3.0: Estimating the performance a year prior to the SEO

To test the market-timing hypothesis, we measure the pre-issue performance ($m=-11$ to $m=0$) of our sample using the event-time approach as well as the calendar-time approach. Table 3 presents the equally-weighted and value-weighted \overline{CARs} , \overline{BHARs} and \overline{CTARs} , and the intercept from the time-series regressions with the *TFPM*.

Canadian firms which staged an SEO between 1989-1999 posted a positive average abnormal return during the year leading up to the issue. In the event-time framework, the overperformance is estimated at 27.50% (\overline{CARs} *EW*) and 39% (\overline{BHARs} *EW*). The use of value-weighted returns instead of equally-weighted returns reduces by more than 40% the \overline{CARs} and the \overline{BHARs} . Regardless of the weighting procedure, the results are statistically significant at the 95% confidence level. In the calendar-time framework, the results lower to an estimated \overline{CTARs} (*EW*) of 25.83%. Mitchell and Stafford (2000) observe an average price run-up of 15.96% on the U.S. market using the same

FIGURE 1

CUMULATIVE AVERAGE ABNORMAL RETURNS SURROUNDING CANADIAN SEASONED EQUITY OFFERINGS (1986-1999)



measure. The alpha coefficient from the *TFPM* regression translates into an abnormal return of 20.59% (*EW*). This statistically significant result is higher than the 13.33% reported by Ikenberry, Lakonishok and Vermaelen (2000). For comparison, Jegadeesh (2000) documents an overperformance of 25% on the U.S. market in the six months preceding the issue. Our results become statistically insignificant with value-weighted returns.

Figure I presents the evolution in the SEOs' \overline{CARs} on a monthly basis over the $m = -11$ to $m = 36$ window. The cumulative average abnormal performance of 27.5% gained during the year preceding the issue vanishes over the next 36 months. These results suggest that managers take advantage of investors' optimism to issue stock when they perceive the price to be overvalued. Investing in newly issued equity by Canadian firms is therefore far from profitable in the long run.

4.0: Conclusion

Are SEOs the bearers of long-term bad news? Our results seem to suggest so. The 161 Canadian SEOs completed during the 1989-1999 period posted, on average, a disappointing performance over the 36-month horizon following the month of the issue. Using an event-time approach, we found $\overline{CARs} (EW)$ of -32% and $\overline{BHARs} (EW)$ of -41%. Our benchmarks consist in 16 continuously rebal-

anced and purged size and *BE/ME* ratios reference portfolios. To ascertain the robustness of these event-time results, we calculate the long-run abnormal performance using a calendar-time approach as well. The $\overline{CTARs} (EW)$ estimated with our size and *BE/ME* reference portfolios is close to -29%.

A similar result is obtained when we estimate the long-run abnormal performance with the *TFPM* of Fama and French (1993). The use of value-weighted returns instead of equally-weighted returns lowered the underperformance to -16% in the case of the \overline{CARs} , to -26% in the case of the \overline{BHARs} , to -25% in the case of \overline{CTARs} and to a result not statistically different from zero in the case of the *TFPM*.

Based on our results from the calendar-time approach, the long-run underperformance observed in Canadian SEOs is preceded by a positive abnormal return hovering around 21% and 25% in the year leading up to the issue. The results from the event-time approach are higher and ranging from $\overline{CARs} (EW)$ of 27.50% to $\overline{BHARs} (EW)$ of 39%. These results are consistent with the timing hypothesis whereby managers time the issue when the stocks are overvalued. The post-issue underperformance could then reflect the adjustment of the market. In fact, Graham and Harvey (2001) found that two-thirds of CFOs agree that "the amount by which our stock is undervalued or overvalued was an important or very important consideration" in issuing equity. According to Baker and Wurgler (2000), firms lean towards equity issue before periods of low market returns.

Our results suggest that Canadian SEOs underperform in the long-run, but it should be noted that this conclusion is based on an average. Therefore, exploring why issuing firms generated a deceiving performance in the long-run while other firms do not will undoubtedly contribute to a better understanding of the long-run underperformance of SEOs. ■

References and other notes:

Available from the author upon request (jlher@cdpcapital.com). A full list will also be available on www.investmentreview.com this summer.

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