Alpha Capture & Liquidity—A Look at the Canadian Market

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KEY POINTS:

Systematic stock selection—based on multi-factor composites for value and momentum—strikes a balance between absolute return, risk-adjusted return, and persistence of alpha in the most liquid part of the market.

Dynamic Rebalance® enables OSAM to balance alpha generation with market impact costs.

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Equity investing in the Canadian market poses unique liquidity and alpha capture challenges. Some of the features that create these challenges include:

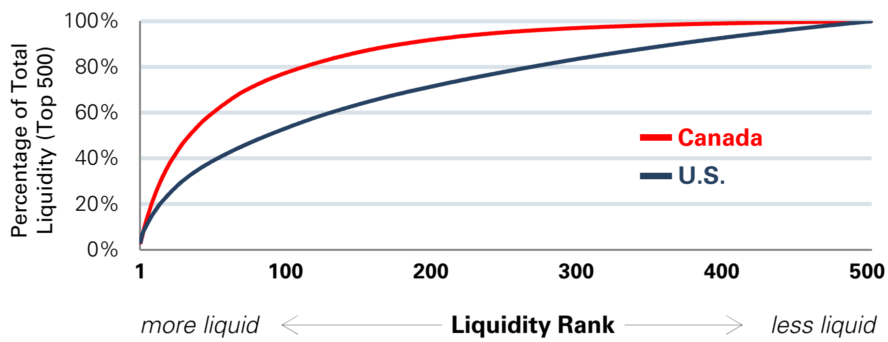
The benchmark comprises less than 300 names, with the top 10 names accounting for approximately 35 percent of the total market capitalization.

The top 50 of the 500 most liquid names within the Canadian market account for approximately 60 percent of total liquidity. By comparison, the top 50 most liquid names in the U.S. market account for less than 40 percent (see Fig.1).

Diving deeper into the liquidity differences between the U.S. and Canada uncovers some stark contrasts. As of May 2014, the 21-Day Average Daily Volume (ADV) of Facebook (the most liquid name in the U.S.) is nearly 3,500 percent higher than the Royal Bank of Canada (Canada's most liquid name). Moving down the list of most liquid names in each market, this trend continues. Figure 2 illustrates the startling comparison of liquidity between the top 25 stocks in the U.S. and Canadian markets.

The reduced liquidity and size imply a less efficient marketplace and thus a greater opportunity for active

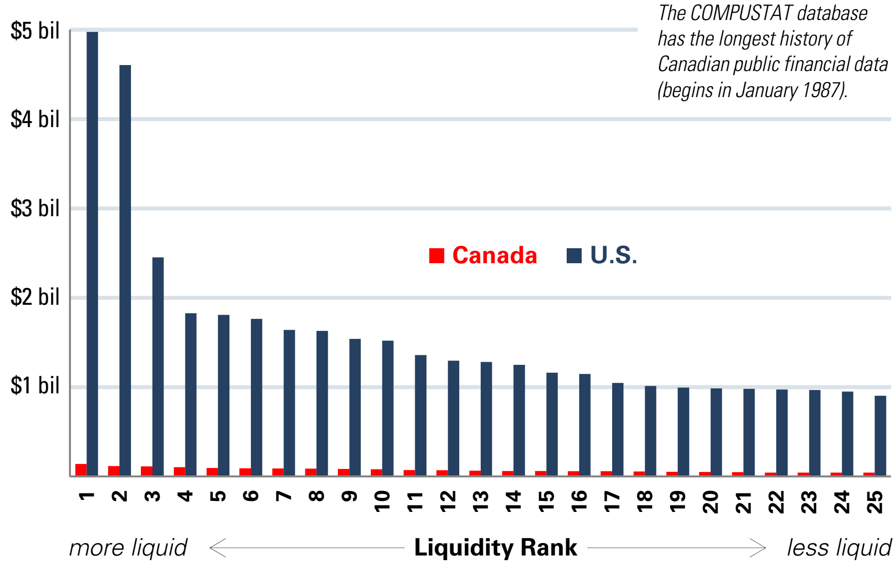
Figure 1: Liquidity Representation of Top 500 Stocks by 21-Day Avg. Daily Volume (1987–2013)



Source: Compustat and OSAM calculations

Figure 2: 21-Day Average Daily Volume (1987–2013)

The COMPUSTAT database has the longest history of Canadian public financial data (begins in January 1987).



Source: Compustat and OSAM calculations

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managers.[1] They also present challenges in terms of higher trading costs. In order to take advantage of this opportunity, it is our view that investors need to carefully manage these costs through factor selection, portfolio construction, and trading.

FACTOR PERFORMANCE

As shown in "Value & Momentum—Building a Unique Canadian Equity Portfolio,"[2] OSAM advocates a disciplined approach to investing in the Canadian market by focusing on high-quality companies with attractive valuations and superior momentum. While absolute and risk-adjusted returns are of paramount importance when determining investment factors, the ability to capture alpha in the most liquid part of the market is particularly important within Canada.

In order to capture alpha, OSAM utilizes a composited approach when measuring momentum. We favor companies that exhibit strong three-, six-, and nine-month momentum in addition to lower volatility over the past 12 months. Within Canada, this approach has an annualized return that is 240–440 bps higher than any of the individual momentum factors from 1987 to 2013 (see Figure 3). Table 1 shows the spread between the best and worst quintile for the multi-factor OSAM Momentum composite *within the bucket of most liquid stocks* (>$5 mil 21-day ADV). OSAM Momentum outperforms three-, six-, and nine-month momentum by 153–529 bps. The exception is 12-month volatility, where the spread between the best and worst quintile is higher by 152 bps. Since the best decile underperforms the composited approach by 350 bps, as shown in Figure 3, this tradeoff is acceptable.

Table 1: Spreads by Momentum

(1987–2013) >$5 mil 21-Day ADV	Spread Best-Worst Quintile
3-Month Momentum	8.59%
6-Month Momentum	9.90%
9-Month Momentum	6.15%
12-Month Return Volatility	12.95%
OSAM Momentum	**11.43%**

Source: Compustat and OSAM calculations

Similar to momentum, a multi-factor approach for defining the theme of value is advantageous. OSAM Value is a combination of five factors: price-to-sales, price-to-earnings, EBITDA-to-enterprise value, free cash flow-to-enterprise value, and shareholder yield.* Among these, OSAM Value and free cash flow-to-enterprise value are the only two that outperform the market in every five-year increment from 1987 to 2013.[2] Within the most liquid bucket, the performance of value factors is similar to momentum's results.

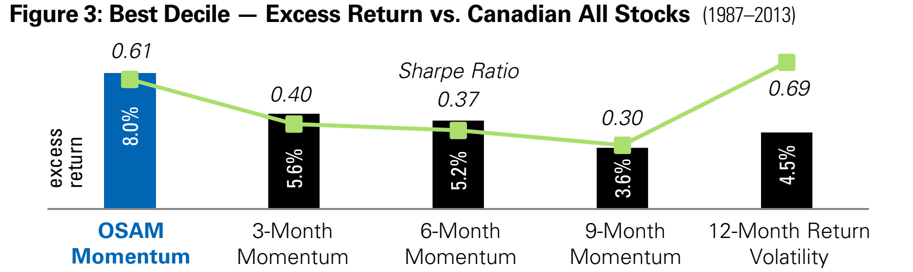
Table 2: Spreads by Value

(1987–2013) >$5 mil 21-Day ADV	Spread Best-Worst Quintile
Price-to-Sales	14.55%
Price-to-Earnings	9.79%
Free Cash Flow-to-Enterprise Value	7.18%
EBITDA-to-Enterprise Value	16.62%
Shareholder Yield	9.86%
Price-to-Book	5.53%
OSAM Value	**14.97%**

Source: Compustat and OSAM calculations

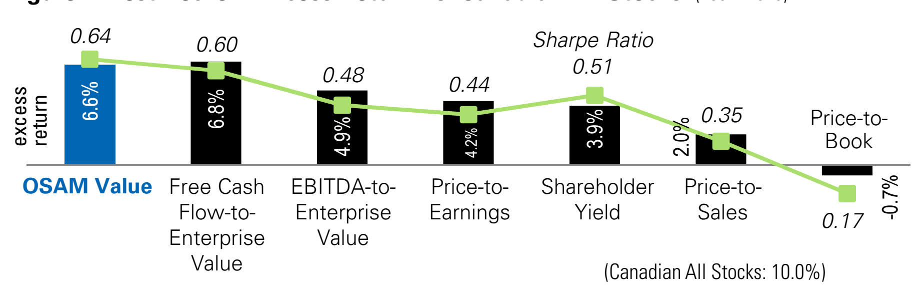
Table 2 shows that the spread between the best and worst OSAM Value quintile *within the most liquid bucket* outperforms all but EBITDA-to-enterprise value by 41–944 bps. While price-to-book is the most popular definition of value used by practitioners and academics, it is the worst performer of the group and is omitted from our value definition. EBITDA-to-enterprise value has a better spread in the most liquid bucket, but its best decile underperforms OSAM Value by 170 bps with a significantly lower Sharpe Ratio (see Fig. 4).

Figure 3: Best Decile — Excess Return vs. Canadian All Stocks (1987–2013)



Source: "Value & Momentum—Building a Unique Canadian Equity Portfolio" (March 2014) osam.com/research.aspx

Figure 4: Best Decile —Excess Return vs. Canadian All Stocks (1987–2013)



(Canadian All Stocks: 10.0%)

Source: "Value & Momentum—Building a Unique Canadian Equity Portfolio" (March 2014) osam.com/research.aspx

[1] See www.ibbotson.com/US/documents/Methodology Documents/ResearchPapers/LiquidityAsAnInvestmentStyle.pdf

[2] See March 2014 osam.com/research.aspx

* Shareholder Yield: the combination of dividend yield and buyback yield.

Liquidity is scarce in Canada and the stock selection criteria being utilized must take this into account. Our research shows that the multi-factor OSAM composites for value and momentum strike a balance between absolute return, risk-adjusted return, and persistence of alpha in the most liquid part of the market.

MANAGING MARKET IMPACT

In order to deliver superior investment results to their clients, asset managers must shift from the frictionless world of research to a real world setting. Another important aspect of capturing alpha in the Canadian market is managing market impact. Using the ITG cost estimates we are able to get a sense of the estimated market impact when trading a particular stock. For example, even the hundredth-most liquid name in Canada (currently Paramount Resources) exhibits a significantly higher cost to trade than Nike, its U.S. equivalent. ITG cost estimates indicate a $500,000 trade in Nike results in 6 bps instead of 36 bps—approximately one-sixth the cost (see Figure 5).

We construct our model portfolios through monthly updates that refresh the portfolio by incorporating new information and stocks. We determine a stock's weighting according to our conviction, which is driven by how frequently—and how recently—the name has passed our screens. Dynamic Rebalance is how we refer to this methodology of consistently refreshing the portfolio, and we believe it offers a balance between alpha generation and trading cost management.

Table 3: Actual Cost vs. Estimate to Trade 135,000 shares of Linamar Corp.

Weighted Average Cost Estimate:	Naïve Strategy	95 bps
	OSAM Dynamic Rebalance®	63 bps
Actual Cost:	**Net**	**31 bps**

Source: ITG (Investment Technology Group, Inc.)

Linamar Corp. is an example of a high-quality stock with attractive value and momentum scores that has qualified for our All-Canadian Equity strategy in each month from December 2013 to April 2014. During this five-month period, we purchased approximately 135,000 shares worth $5.8 million. Had we employed a *naïve strategy* by purchasing all of the shares in December 2013, ITG estimates the market impact of the trade at 95 bps ($55,000). Utilizing our Dynamic Rebalance methodology, we were able to reduce the estimated impact to 63 bps ($37,000), a reduction of approximately 33 percent. But these are just estimates; our *actual* cost of trading the security was significantly lower at 31bps ($18,000), beating the *estimate* by 51 percent and resulting in savings to the investor of $19,000 (see Table 3). On the following page, Figure 6 illustrates the monthly actual cost versus the estimate using Dynamic Rebalance.

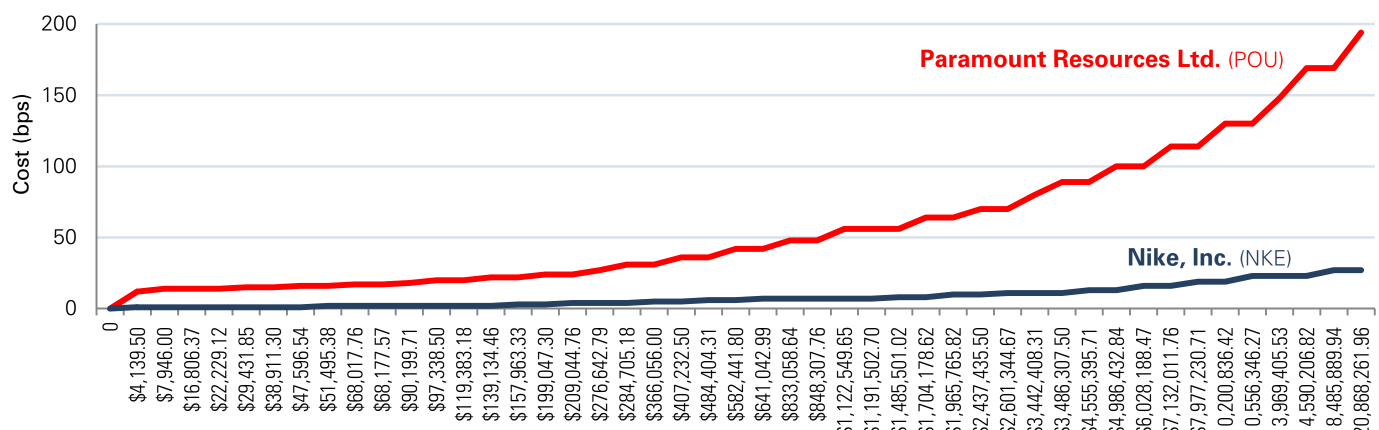
Looking at trading costs at the portfolio level over the past four years shows OSAM has delivered consistent results using this disciplined approach. Table 4 illustrates how we have beaten cost estimates by an average of 82 percent since 2010, demonstrating the synthesis of Dynamic Rebalance and trading expertise in the Canadian market.

Table 4: Trading Results (Canada)

	Cost	
	Estimated	Actual
2010	-37	-18
2011	-30	+1
2012	-31	-5
2013	-41	-5

Source: ITG

Figure 5: Estimated Market Impact



Source: ITG (Investment Technology Group, Inc.)

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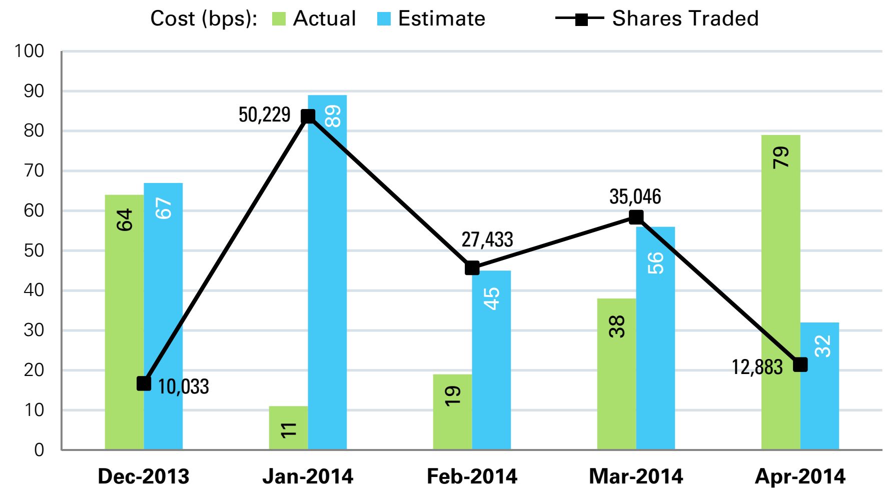
Figure 6: Actual Cost vs. Estimate to Trade Linamar Corp. (LNR)



Source: ITG (Investment Technology Group, Inc.)

CONCLUSION

When considering a Canadian equity strategy, investors should look for managers who not only have a superior investment process but who also have the skill to capture the alpha more cost-effectively. The Canadian market presents particular challenges for asset managers from a liquidity perspective. OSAM strikes a balance between alpha and liquidity in two ways. First, OSAM's proprietary value and momentum themes present an optimal trade-off between absolute return, risk-adjusted return, and consistency of alpha across the liquidity spectrum of the market. Second, portfolio construction utilizing Dynamic Rebalance enables OSAM to balance alpha generation and market impact costs, while OSAM's expertise in the Canadian market allows us to consistently beat cost estimates.

Investors who use the O'Shaughnessy All-Canadian Equity strategy can benefit from the proven themes of value and momentum while following a disciplined approach to trading, resulting in the potential to outperform Canadian benchmarks significantly over the long term.

International investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Also, some overseas markets may not be as politically and economically stable as the United States and other nations. Investments in emerging markets can be more volatile.

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