CANADIAN
ETF Watch
VOL 7 ISSUE 2 MARCH 2016
canadianetfwatch.com

Unlimit the True Potential of Your Asset Allocation
A Canadian Perspective

- Overlooked Qualities. Not all Low-Volatility Strategies are the Same
- Navigating the Growing Canadian ETF Industry
- Understanding Counterparty Risk on Total Return Index ETFs

2016 CALENDAR OF EVENTS

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Exchange Traded Forum (ETF) 7th Annual

Tuesday, April 19 & Wednesday, April 20 ~ Toronto

Canada's leading event dedicated to **Exchange Traded Products**. Hear from leading financial industry professionals and industry experts who will provide valuable insights into the issues and trends that matter most to Canada's financial professionals. Join us for presentations, advisor/client-focused sessions, roundtable discussions, networking events and knowledge sharing critical issues facing the financial industry. This is an opportunity for IIROC based financial advisors and also Portfolio Managers to gather together in a great location to network, learn from each other, and participate in the numerous educational opportunities that fill the agenda.

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Niagara Institutional Dialogue (NID) 7th Annual

Mon., June 20 to Wed., June 22 ~ Niagara-on-the-Lake

Niagara Institutional Dialogue is Canada's premier institutional event with an academic angle and a focus on education & open dialogue. NID is an invitation-only symposium creating a forum for open dialogue and debate issues facing Canada's foremost institutional investors. The distinguished speaking faculty assembled each year includes academics, authors, policymakers, journalists, consultants and select practitioners. A selected group of senior representatives from Canadian pensions and family offices will participate in three days of informative discussions, education and networking. This confidential closed-door event is reserved for select industry participants.

Niagara Institutional Dialogue
InstitutionalDialogue.com

World Alternative Investment Summit (WAIS Canada)

Wed., Sept. 7 to Fri., Sept. 9 ~ Niagara Falls 15th Annual

WAIS Canada is in its 15th year and is Canada's largest gathering of **alternative** and **exempt market** investment professionals and service providers. Featuring panel discussions with top-level Canadian and international speakers, fund managers and leading service providers, WAIS Canada brings together over 300 delegates to explore every side of **alternative** investments. WAIS Canada is a popular annual event that is not to be missed.

WAIS CANADA
waisc.com

World Alternative Investment Summit (WAIS Bermuda)

Wed., Sept. 28 to Fri., Sept. 30 ~ Bermuda 1st Annual

WAIS Bermuda is in its 1st year and is a large gathering of of **alternative** and **exempt market** investment professionals and service providers. Featuring panel discussions with top-level Canadian and international speakers, fund managers and leading service providers, WAIS Bermuda brings together over 300 delegates to explore every side of **alternative** investments. WAIS Bermuda is a popular annual event that is not to be missed.

WAIS BERMUDA
waisc.com

Montebello Institutional Dialogue 1st Annual

Mon., Oct. 17 to Wed., Oct. 19 ~ Montebello, Quebec

The **Dialogue Institutionnel Montebello** is produced by Radius and modeled after the immensely successful Niagara Institutional Dialogue (NID) held annually at Queen's Landing, Niagara-on-the-Lake, Ontario, now in its seventh consecutive year. Fairmont Le Chateau Montebello in Montebello, Quebec, was historically founded as a private club in 1930, the resort is the world's largest log cabin, nestled in the heart of the scenic Montebello Village, and has hosted many political figures and royalty. This is an inspiring event at a unique venue, where plan sponsors can gather, discuss, debate and learn from industry experts, authors and their peers.

Montebello Institutional Dialogue
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For more information, please contact:
Radius Financial Education T 416.306.0151 info@radiusfinancialeducation.com

THIS MONTH

ETFs/ETPs listed in Canada gathered 1.30 billion US dollars in net new assets

ETFs/ETPs listed in Canada gathered net inflows of US$1.30 Bn in February 2016, according to data from ETFGI's February 2016 global ETF and ETP industry insights report. ETFs/ETPs listed in Canad gathered net inflows for 16 consecutive months.

The Canadian ETF industry had 384 ETFs, with 533 listings, assets of US$65 Bn, from 13 providers listed on 1 exchange at the end of February 2016.

"February was another volatile month for equity markets. The S&P 500 closed the month down 0.13%. Despite recent uncertainty, emerging markets gain 0.31% in February, while developed markets outside of the U.S. declined 1%." according to Deborah Fuhr, managing partner at ETFGI.

In February 2016, ETFs/ETPs listed in Canada gathered net inflows of US$1.30 Bn. Equity ETFs/ETPs gathered the largest net inflows with US$756 Mn, followed by fixed income ETFs/ETPs with US$427 Mn, and commodity ETFs/ETPs with US$1 Mn.

ETFs/ETPs listed in the United States have gathered 1.53 billion US dollars in net new assets

In February 2016, ETFs/ETPs listed in the United States gathered net inflows of US$1.53 Bn in February 2016, according to preliminary data from ETFGI's February 2016 global ETF and ETP industry insights report.

In the United States the ETF/ETP industry had 1,863 ETFs/ETPs, assets of US$2.02 Bn, from 95 providers listed on 3 exchanges at the end of February 2016.

"February was another volatile month for equity markets which drove investors to invest net flows into government bonds and gold. The S&P 500 closed the month down 0.13%. Despite recent uncertainty, emerging markets gain 0.31% in February, while developed markets outside of the U.S. declined 1%." according to Deborah Fuhr, managing partner at ETFGI.

In February 2016, ETFs/ETPs listed in the United States gathered net inflows of US$1.53 Bn. Fixed income ETFs/ETPs gathered the largest net inflows with US$10.47 Bn, followed by commodity ETFs/ETPs with US$5.62 Bn, while equity ETFs/ETPs suffered net outflows of US$15.34 Bn

The net inflows of US$ 5.62 Bn into Commodity ETFs/ETPs in February 2016 is a record high. The previous record was $4.28 Bn in September 2012.

ETFs/ETPs listed globally have gathered 10.80 billion US dollars in net new assets

ETFs/ETPs listed globally have gathered US$10.80 in net new assets in February 2016, according to preliminary data from ETFGI's February 2016 global ETF and ETP industry insights report. ETFs/ETPs listed globally have now gathered net inflows for 25 consecutive months.

In the first two months of 2016 record levels of net new assets have been gathered by ETFs/ETPs listed in Asia Pacific ex Japan with net inflows of US$6.41and in ETFs/ETPs listed in Japan where US$9.24 Bn has been gathered year to date. Year to date a record level of net new assets have been gathered by commodity ETFs/ETPs with US$12.28 Bn, leveraged ETFs/ETPs with US$5.61 and Inverse ETFs/ETPs with US$1.41 Bn.

The global ETF/ETP industry had 6,200 ETFs/ETPs, with 11,963 listings, assets of US$2.85 trillion, from 279 providers listed on 64 exchanges in 51 countries.

"February was another volatile month for equity markets which drove investors to invest net flows into government bonds and gold. The S&P 500 closed the month down 0.13%. Despite recent uncertainty, emerging markets gain 0.31% in February, while developed markets outside of the U.S. declined 1%." according to Deborah Fuhr, managing partner at ETFGI.

In February 2016, ETFs/ETPs saw net inflows of US$10.81 Bn. Fixed income ETFs/ETPs gathered the largest net inflows with US$13.64 Bn, followed by commodity ETFs/ETPs with US$8.89 Bn, while equity ETFs/ETPs experienced net outflows of US$12.95 Bn

The net inflows of US$ 8.91 Bn into Commodity ETFs/ETPs in February 2016 of is a record high. The previous high was U$6.72 Bn gathered in Sep 2012.

Source: ETFGI.com

About ETFGI
ETFGI the leading independent research and consultancy firm on trends in the global ETF/ETP ecosystem. Launched in 2012 by Deborah Fuhr and partners in London the firm offers paid for research subscription services: the ETFGI annual research service provides monthly reports on trends in the global ETF and ETP industry, access to the ETFGI database of all ETFs/ETPs listed globally with factsheets which are updated monthly, ETFGI annual review of institutions and mutual funds that use ETFs and ETPs, the Active ETF landscape report and the Smart Beta ETF Landscape report. Deborah Fuhr is the managing partner and co-founder of ETFGI, she previously served as global head of ETF research and implementation strategy and as a managing director at BlackRock/Barclays Global Investors from 2008 – 2011. Fuhr also worked as a managing director and head of the investment strategy team at Morgan Stanley in London from 1997 – 2008, and as an associate at Greenwich Associates. Shane Kelly and Matthew Murray are co-founders and partners in ETFGI.

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CANADIAN ETF Watch
canadianetfwatch.com
MARCH 2016 | VOL. 07 NO. 02

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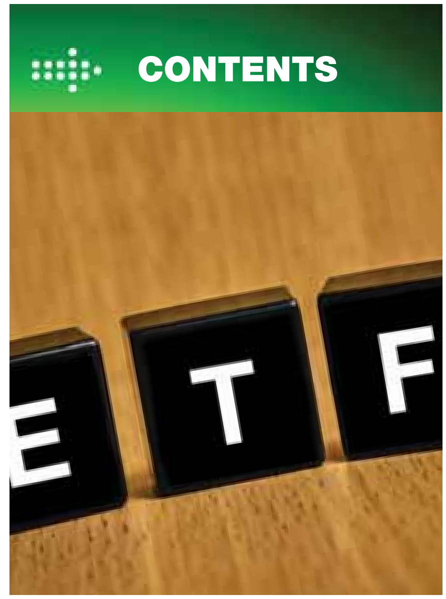


CONTENTS

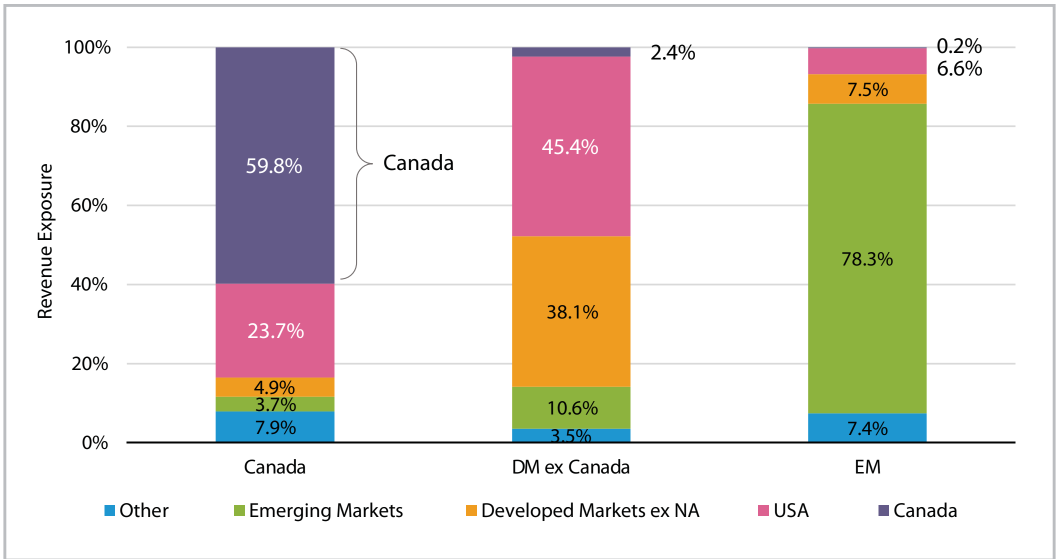
Unlimit the True Potential of Your Asset Allocation - a Canadian Perspective

Jan-Carl Plagge
Director, Business Development, Stoxx Ltd.

Investors typically assume that an investment in standard regional equity indices that select companies according to their country of domicile will provide them with adequate exposure to the targeted region. Far from it. Companies based in Canada, for example, generate only about 60% of their revenue within Canada. The remainder is generated in other parts of the world, with the United States contributing about 24%. A similar breakdown between local and foreign revenues holds true for other developed markets. Companies incorporated in emerging markets generate a slightly higher portion of revenue within emerging markets. But still roughly 20% of total revenue comes from regions outside of emerging markets (see Figure 1). Consequently, companies selected into these regional equity indices do not only provide exposure to the targeted region but also to foreign markets – markets to which investors might not want exposure. What makes matters worse is that investors are usually not aware of this indirect exposure and cannot control it.

STOXX

FIGURE 1: REGIONAL SOURCE OF REVENUE GENERATION



Source: UN Comtrade and Service Trade database. Reported Period: 2015.

Figure 1: Regional breakdown of revenue generation for regions Canada (STOXX Canada TMI), Developed Markets ex Canada (STOXX DM TMI ex Canada) and Emerging Markets (STOXX EM 1500). Exposures are weighted by free-float market cap.

Especially when viewed in a portfolio context, uncontrolled foreign exposure of portfolio constituents, or indices, can lead to substantial exposure overlaps.These overlaps increase the homogeneity of indices which increases their correlations. An increase in correlations, in turn, renders portfolios less efficient.

In this context, STOXX developed a new family of indices called STOXX True Exposure or STOXX TRU. By determining each company's revenue exposure to single countries, it is possible to make indirect or implicit exposures explicit which enables investors to regain control of effective exposures.

STOXX TRU Indices are currently available for five countries (Australia, Canada, Japan, UK and USA), four regions (Eurozone, Europe, Asia/Pacific and North America) as well as four market classifications (Developed Markets, Developed Markets ex Europe, Developed Markets ex USA and Emerging Markets).

Only those companies that generate a predefined minimum share of revenue in the respective market are selected into the respective index. STOXX TRU Indices are available with minimum exposure levels ranging from 25% up to the truly exposed 100%.

STOXX TRU Indices are found to capture three effects. First, they capture local market characteristics to a higher degree than standard equity indices. Second, companies selected in the STOXX TRU Indices are less dependent on foreign influences: in times of international crises, companies with high local revenue exposure are less prone to foreign market conditions. Third, and this, in part, follows from observations one and two, by disentangling regional revenue overlaps, STOXX TRU Indices are found to be less correlated among each other than standard equity indices are.

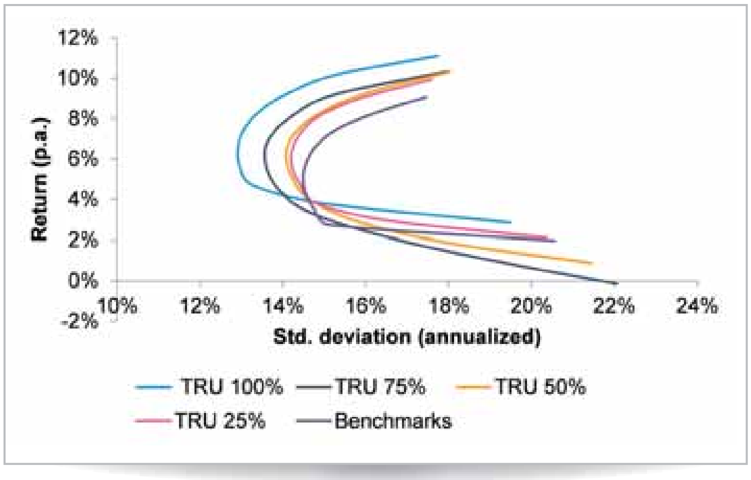
This paper empirically analyzes the third part of the stated value proposition. An efficient global equity portfolio from a Canadian perspective is constructed using STOXX TRU rather than standard regional equity indices. Since regional revenue exposures are found to be size and industry dependent, chapter 2 focuses on the relation between revenue exposure to the Canadian market and industry allocation as well as firm size.

1 STOXX TRU Indices and market efficiency

A major objective of the STOXX TRU index family is to decrease correlations among indices by reducing exposure overlaps. The following section looks into risk, return and correlation characteristics of STOXX TRU Indices as well as standard equity indices. Hereby, both concepts are analyzed on a standalone basis as well as in a portfolio context.

To assess whether a combination of STOXX TRU Indices leads to the expected increase in portfolio efficiency, efficient frontiers that represent the risk minimal combination of indices for a targeted level of return are calculated for both standard equity indices and four versions of STOXX TRU Indices with minimum exposure levels ranging from 25% to 100%. Figure 2 displays the empirical results.

FIGURE 2:
EFFICIENT FRONTIERS
(6-INDEX MODEL)



Source: STOXX

Figure 2: Efficient frontiers based on a six-index model (USA, Canada, Developed Europe, Japan, Australia and Emerging Markets). Benchmark indices are represented by STOXX USA 900, STOXX Canada 240, STOXX Europe 600, STOXX Japan 600, STOXX Australia 150 and STOXX EM 1500 Index. Annualized performance and volatility figures are based on CAD Gross Return indices. Volatilities and correlations are calculated based on daily logarithmic returns. Time period: Sep, 24, 2007 to April 06, 2016.

It can be observed that an increase in the minimum required exposure to the respective local market, which goes hand in hand with a decrease in revenue overlaps among indices, leads to a subsequent decrease in portfolio risk which moves the resulting efficient frontier further to the left, thus rendering combinations of STOXX TRU Indices significantly more efficient than combinations of standard equity indices. A combination of STOXX TRU 100% indices, i.e. a portfolio that includes only those companies that generate all of their revenue in the respective target-region, is hereby found to be the most efficient. As we can observe from Figure 2, the risk of the minimum-variance portfolio is reduced by about two percentage points, or 14 percent, relative to that of the benchmark.

In a portfolio context, risk is measured as a weighted average of the six indices' volatilities and correlations. To identify which of the two components drives the decrease in overall portfolio risk, correlations and volatilities need to be examined individually. Table 1 provides correlation figures for all six portfolio components.

TABLE 1:
CORRELATIONS

	BM to BM	TRU 25% to TRU 25%	TRU 50% to TRU 50%	TRU 75% to TRU 75%	TRU 100% to TRU 100%
USA - Canada	0.66	0.68	0.67	0.62	0.57
USA - Australia	0.62	0.62	0.61	0.59	0.54
USA - Japan	0.37	0.34	0.33	0.28	0.23
USA - Europe	0.74	0.71	0.69	0.66	0.62
USA - EM	0.63	0.64	0.63	0.61	0.58
Canada - Australia	0.74	0.70	0.68	0.67	0.65
Canada - Japan	0.29	0.28	0.27	0.19	0.13
Canada - Europe	0.70	0.68	0.66	0.59	0.53
Canada - EM	0.68	0.63	0.61	0.58	0.53
Japan - Australia	0.44	0.41	0.39	0.33	0.26
Japan - Europe	0.38	0.33	0.29	0.24	0.22
Japan - EM	0.37	0.29	0.27	0.21	0.16
Europe - Australia	0.73	0.71	0.69	0.67	0.61
Europe - EM	0.73	0.71	0.69	0.65	0.60
EM - Australia	0.76	0.72	0.71	0.71	0.67
Average	0.59	0.56	0.55	0.51	0.46
Median	0.66	0.64	0.63	0.59	0.54

Source: STOXX

Table 1: Correlations among benchmark indices (BM) and among derived STOXX TRU Indices. Benchmark indices are represented by STOXX USA 900, STOXX Canada 240, STOXX Europe 600, STOXX Japan 600, STOXX Australia 150 and STOXX EM Index. Annualized volatility figures are based on CAD Gross Return indices and calculated based on weekly returns. Time period: Sep, 24, 2007 to April 06, 2016.

It can be observed that an increase in revenue exposure to the respective local market tends to decrease the correlations among the resulting indices. When moving from a portfolio of standard regional benchmark indices to a portfolio of STOXX TRU 100% indices, average correlations are reduced by about 22% from 0.59 to 0.46.

Volatilities as a second factor that influences portfolio risk are found to remain relatively stable (see Table 2). On average, they are found to even decrease relative to the risk of the respective benchmark index. This observation is important as the increase of a common factor, such as companies' revenue exposure to a targeted market, may have led to an increase in homogeneity among those companies and consequently to an increase in pairwise correlations within indices. This increase, in turn, would have made these indices, ceteris paribus, more risky investments which may have offset the risk reducing effect as it stems from lower correlations among indices. The observed decrease in volatility, however, even supports the risk reducing effect as it comes from decreased correlations.

TABLE 2: VOLATILITIES

	Benchmark Index	TRU 25%	TRU 50%	TRU 75%	TRU 100%
USA	17.5%	17.6%	18.1%	18.0%	17.8%
Canada	20.6%	19.2%	18.5%	17.8%	17.3%
Australia	23.9%	22.9%	23.0%	22.8%	23.2%
Japan	18.2%	18.1%	18.2%	18.5%	18.8%
Europe	19.7%	20.4%	21.5%	22.1%	19.5%
EM	20.4%	21.5%	21.4%	21.6%	21.0%
Average	20.0%	19.9%	20.1%	20.1%	19.6%
Median	20.0%	19.8%	20.0%	20.1%	19.1%

Source: STOXX, Capital IQ

Table 2: Volatilities of benchmark indices and derived STOXX TRU Indices. Benchmark indices are represented by STOXX USA 900, STOXX Canada 240, STOXX Europe 600, STOXX Japan 600, STOXX Australia 150 and STOXX EM Index. Annualized volatility figures are based on CAD Gross Return indices and calculated based on weekly returns. Time period: Sep, 24, 2007 to April 06, 2016.

2 Market Structure

With a size weighted average share of about 60% of revenues generated within Canada, companies resident in Canada are about average in a global context. US companies display with roughly 65% a slightly higher “home bias” while companies domiciled in developed Europe generate only about 50% of their revenues locally. However, revenue exposure to the local market may vary significantly within industries and size segments.

For the case of Canada, we find that small cap companies are with about 65%, slightly more exposed to the local market that large cap companies with on average 61% (see Table 3). This is not surprising as global players tend to be more highly capitalized.

What is significant is the very high exposure of Canadian companies to the US market. More than 20% of total revenues is derived in this neighbouring market, with large cap companies generating as much as a fourth of total revenues.

TABLE 3: REGIONAL REVENUE ALLOCATIONS

	Total Market	Large Cap	Mid Cap	Small Cap	TRU 25%	TRU 50%	TRU 75%	TRU 100%
Developed NA	83.5%	85.8%	75.6%	82.3%	92.6%	94.1%	98.9%	100.0%
- of which Canada	*59.8%*	*60.6%*	*55.4%*	*64.6%*	*77.4%*	*81.8%*	*93.7%*	*99.9%*
- of which USA	23.7%	25.2%	20.2%	17.6%	15.2%	12.3%	5.2%	0.0%
Developed Europe	3.4%	2.1%	7.3%	6.3%	0.8%	0.4%	0.2%	0.0%
Other	2.2%	1.7%	4.3%	1.1%	0.7%	0.5%	0.0%	0.0%
Emerging	3.7%	1.7%	10.1%	7.5%	1.1%	1.0%	0.1%	0.0%
Developed APAC	1.5%	1.1%	2.6%	1.9%	0.4%	0.2%	0.3%	0.0%

Source: STOXX

Table 3: Regional breakdown of revenue generation for Canada Total Market (STOXX Canada TMI), Canadian Total Market Size indices and derived Canadian TRU indices . Exposures are weighted by free-float market cap. Cut-off date: April 06, 2016.

When applying the STOXX TRU methodology and selecting companies based on their regional source of revenue generation, we find that the average exposure to the Canadian market can be increased significantly relative to that of a standard Canadian broad equity index. Excluding only those companies that do not even generate a fourth of their overall revenue in Canada, increases the exposure to the local market by about 17 percentage points from 60% (STOXX Canada TMI) to 77% (STOXX TRU Canada 25%). For investors that want to avoid any foreign revenue exposures, the STOXX TRU Canada 100% provides a pure focus on the Canadian market by selecting only those companies that generate all of their revenues locally.

When it comes to constructing indices based on companies revenue exposure, it is important to understand that local sales exposures tend to vary among industries. Companies from the Telecommunications sector rank among those with the highest portion of local revenue. In fact, the Telecommunications companies selected into the STOXX Canada Total Market index generate all of their revenues, i.e. 100%, within Canada (see Table 4). Companies from the Technology and the Health Care sector, on the other hand, are very internationalized and generate only about 12% (4%) of their total sales within Canada; the majority is derived from foreign countries.

These industry dependent peculiarities affect industry allocations when the minimum required sales exposure to the Canadian market is gradually increased. As displayed in Table 4, we find a tendency of a reallocation of weights away from industries that display a low exposure to Canada to those industries with a high local exposure. However, for the case of Canada, even an increase of the local exposure threshold to 100% is not found to lead to significant industry concentrations.

ABLE 4
REVENUE EXPOSURE AND INDUSTRY ALLOCATION

Industry	Local revenue exp.	Benchmark	TRU 25%	TRU 50%	TRU 75%	TRU 100%
Basic Materials	**32.5%**	10.9%	4.1%	2.5%	1.8%	3.2%
Consumer Goods	**49.5%**	3.0%	1.0%	0.5%	0.5%	0.0%
Consumer Services	**56.5%**	8.9%	7.9%	7.8%	13.3%	20.3%
Financials	**62.2%**	37.3%	38.8%	39.7%	28.2%	30.0%
Health Care	**4.2%**	1.2%	0.0%	0.0%	0.0%	0.0%
Industrials	**54.9%**	9.5%	10.8%	11.0%	7.2%	2.0%
Oil & Gas	**69.5%**	17.6%	22.3%	21.8%	26.3%	22.9%
Technology	**12.0%**	2.8%	0.0%	0.0%	0.0%	0.0%
Telecom.	**100.0%**	5.8%	11.2%	12.1%	15.7%	16.4%
Utilities	**79.4%**	3.1%	4.0%	4.6%	7.1%	5.1%

Source: STOXX, ICB

Table 4: Share of revenue generated locally (i.e. in Canada) per industry (column 1) and industry allocations of STOXX Canada Total Market index as well as derived STOXX TRU Canada indices. Date: April 06, 2016.

3 Conclusion

STOXX TRU Indices include companies that generate a substantial portion of their revenue in targeted countries or regions. Making the regional source of revenue explicit, STOXX TRU Indices enable investors to effectively control exposure to foreign as well as to local markets.

By disentangling regional revenue overlaps, STOXX TRU Indices are found to be significantly less correlated among each other than standard equity indices. Viewed in a portfolio context, lower correlations among regional indices enable the construction of more efficient portfolios. e

Dr. Jan-Carl Plagge, Director, Business Development, Stoxx Ltd. ***jan-carl.plagge@stoxx.com***

About STOXX

STOXX Ltd. is a global index provider, currently calculating a global, comprehensive index family of over 7,000 strictly rulesbased and transparent indices. Best known for the leading European equity indices EURO STOXX 50, STOXX Europe 50 and STOXX Europe 600, STOXX Ltd. maintains and calculates the STOXX Global index family which consists of total market, broad and blue-chip indices for the regions Americas, Europe, Asia/Pacific and sub-regions Latin America and BRIC (Brazil, Russia, India and China) as well as global markets.

To provide market participants with optimal transparency, STOXX indices are classified into three categories. Regular "STOXX" indices include all standard, theme and strategy indices that are part of STOXX's integrated index family and follow a strict rulesbased methodology. The "iSTOXX" brand typically comprises less standardized index concepts that are not integrated in the STOXX Global index family, but are nevertheless strictly rules-based. While indices that are branded "STOXX" and "iSTOXX" are developed by STOXX for a broad range of market participants, the "STOXX Customized" brand covers indices that are specifically developed for clients and do not carry the STOXX brand in the index name.

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STOXX is part of Deutsche Börse Group, and markets the DAX indices.

Overlooked Qualities. Not all Low-Volatility Strategies are the Same.

As global equity markets continue to convulse, the perils of tracking a capitalization-weighted benchmark index have been laid bare once again.

Christopher Doll
AVP,
Product Management,
PowerShares Canada

A benchmark doesn't seek to boost an investor's exposure to undervalued securities, nor is it able to tap into other qualities overlooked by the market, such as lower volatility. The benchmark simply follows the herd.

Many investors build their portfolios with strategies that simply track the benchmarks. But investing isn't about achieving average results; it's about achieving goals.

Many investors may be hoping to reduce the volatility of their portfolios, but simply holding cash could jeopardize many investment plans.

A central tenet of finance is that investors seeking to reduce risk must accept reduced returns. Yet research suggests a portfolio of less-volatile stocks tends to provide a degree of protection during broad market declines while still participating in subsequent rallies.[†]

Investments that experience higher volatility have the potential to erode principal much more quickly than lower volatility investments. With smaller losses in down markets, low-volatility stocks don't have to rise as much in value in order to recover their pre-downturn value.

Critical Differences

Managing volatility is critical to investment success because volatility has the potential to wear away capital quickly. When choosing a low-volatility strategy, it is important to consider the qualities that go into that strategy.

While some low-volatility indices have sector constraints that prohibit them from straying too far from their parent index, the low-volatility indices created by Standard & Poor's (S&P) have the ability to dynamically rotate in and out of sectors as volatility dictates.

This allows S&P low-volatility indices to adjust to market conditions in a more timely fashion, focusing exclusively on volatility, without arbitrary constraints.

For example, PowerShares S&P/TSX Composite Low Volatility Index ETF (TLV) employs an unconstrained rebalancing approach. By adhering to this methodology, TLV's underlying portfolio began to reduce its energy weighting in September 2014 as volatility in the energy sector started to spike. By March 2015, the energy weighting in the portfolio had been completely eliminated.

An investment tracking the cap-weighted benchmark would have reduced its exposure to the energy sector but still held roughly 20% of assets in the struggling sector.

A constrained low-volatility strategy, bound to deviate only slightly from the benchmark, would have maintained its exposure to energy, even as the sector continued to fall through the latter half of 2015 and into 2016.

Between June 30, 2014 and February 29, 2016, volatility spiked repeatedly. In August 2015, the Chicago Board Options Exchange Volatility Index (or VIX) hit levels not seen since 2011, the last previous period of major volatility.

During this period, TLV experienced 85% of the S&P/TSX Composite Index's volatility, outperforming the benchmark by 19.13 percentage points and demonstrating the value of a low-volatility strategy.

Performance of PowerShares S&P/TSX Composite Low Volatility Index ETF (TLV), as at February 29, 2016: 1-yr, -2.92%; 3-yr, 8.07%; and since inception (April 5, 2012), 9.40%. Performance of the S&P/TSX Composite Index, as at February 29, 2016: 1-yr, -12.93%; 3-yr, 3.18%; 5-yr, 1.08%; 10-yr, 3.91%; and since inception of the ETF (April 5, 2012), 4.67%.

Name	**Cumulative return June 30, 2014 to Feb. 28, 2016**
PowerShares S&P/TSX Composite Low Volatility Index ETF (TLV)	8.30%
S&P/TSX Composite Index	-10.83%
Low-volatility advantage	**+19.13%**

Sources: Invesco and Bloomberg L.P., as at February 29, 2016. You cannot invest directly in an index.

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† Source: S&P Dow Jones Indices LLC.

Navigating the Growing Canadian ETF Industry

If 2015 and the year to date are any indication, the future is very bright for ETFs in Canada and globally. We are seeing an array of players join the industry, and innovative new ETF offerings coming to market from existing players and new entrants alike. Despite recent market volatility, Canada's ETF industry is showing few signs of slowing down as investors continue to demonstrate a healthy and growing appetite for ETF products.

Ronald C. Landry
CPA, CGA,
Executive Director of ETFs and Alternative Investments at CIBC Mellon

The Canadian ETF industry continues to pick up momentum

The ETF industry in Canada enjoyed strong momentum in 2015, with three new players coming to market - Questrade, Auspice and Lysander - bringing the total number up to 12 ETF sponsors. The industry also had a record-breaking year in net new assets, seeing inflows of $16.5 billion and ending the year at $89.5 billion across 373 ETFs. This growth of 14.3 per cent was achieved at a time of significant market volatility and uncertainty, and the momentum continues in 2016. Of course, the ETF industry in Canada is getting more crowded as the demand from investors brings in new sponsors. Market participants are in turn going beyond traditional index-based ETF offerings and delivering a wide range of innovative offerings, including actively-managed ETFs, commodity and currency ETFs, ETF-of-ETF products, smart beta and income producing ETFs. Investors and fund sponsors alike continue to recognize that as an access vehicle for an asset class, ETFs can provide many benefits such as liquidity, diversification, tradability, and transparency of trading costs. Regulatory change may also bring focus to ETF products, as new CRM2 rules will drive expanded disclosures of investment performance and costs for investors – in turn fostering potential further interest in the transparency which can be afforded by ETF products. With these advantages, the ongoing growth of Canada's ETF market is no surprise. As the industry continues its expansion, providers should be even better positioned with the scale and market demand to deliver increasingly precise portfolio products with more tightly targeted exposures for asset allocations.

2016 is set to deliver further industry growth. We saw Hamilton Capital **(www.marketwatch.com/story/hamilton-capital-launches-canadas-first-global-bank-etf-2016-01-22)** enter the ETF space with the launch of the Hamilton Capital Global Bank ETF (HBG), Canada's first global bank ETF, which began trading January 25, 2016 on the TSX. Market watchers also expect several large Canadian financial institutions to join the Canadian ETF industry and capitalize on ongoing industry success: on March 30, 2016, TD Asset Management **(http://td.mediaroom.com/2016-03-30-TD-Asset-Management-Inc-Launches-Six-Passive-ETFs)** announced in a press release the launch of six new passive ETF offerings, including equity and fixed income solutions such as an international Canadian-dollar hedged equity fund, and a Canadian bond ETF. Mackenzie Investments plans to launch four actively managed fixed income products, coming to market in April 2016. Their planned ETF lineup is set to include **(www.theglobeandmail.com/globe-investor/funds-and-etfs/etfs/mackenzie-investments-to-enter-canadian-etf-space-with-4-offerings/article29088137/)** the Mackenzie Core Plus Canadian Fixed Income ETF (MKB), Mackenzie Core Plus Global Fixed Income ETF (MGB), Mackenzie Floating Rate Income ETF (MFT) and Mackenzie Unconstrained Bond ETF (MUB). According to filings, Sphere Investment Management is yet another firm planning to start offering ETFs **(www.theglobeandmail.com/globe-investor/funds-and-etfs/etfs/mackenzie-investments-to-enter-canadian-etf-space-with-4-offerings/article29088137/)** later this year. Overall, it appears that by the time we are halfway through this year, the Canadian market will have surpassed the three new players added in 2015. More ETF players are expected to come later in the year, including non-Canadian firms seeing opportunities in Canada's markets, large domestic asset management players, and several start-ups.

What firms coming to Canada should be looking for when launching ETFs

When global institutional firms are interested in adding ETFs in the Canadian marketplace to their offerings, there are several key areas they may want to carefully consider, including audit, legal, ETF service providers, Designated Market Makers/Designated Brokers, and exchanges. Canada is a complex market, with a broad array of regulatory and industry bodies – each with their own expectations, requirements and reporting needs. A prospective entrant may want to carefully assess its potential service providers regarding their on-the-ground knowledge, the experience of their people; what type of specialists make up the team and which industry associations are they participants of, and carefully review the prospective provider's financial reporting and tax support. When launching ETFs, aspiring entrants should consider taking the time for a detailed review of what is already available in the Canadian marketplace to identify potential areas for further innovation where a firm can be first to market. Offering ETFs as a family of funds may have its advantages: while a firm's ETFs may cover different asset classes, allocation and strategies, they are marketed under a unified brand name by the distributor. Consider transparency when launching ETFs, including fee transparency, as well as for the ETF's holdings and its strategy. The Canadian market is experiencing an exciting uptick in demand for ETFs, but a prospective provider would be well served by taking the time to clearly understand the challenges, expectations and specific opportunities at hand before setting their course for a new ETF launch.

Rightsourcing ETF services in the Canadian market

Some independent investment firms and banks are choosing to focus on their core investment business, outsourcing ETF accounting and fund administration to external providers. It is important for sponsors to "rightsource," finding the right model for their back and middle office operations, with a division of in-house and outsourced functions that fit the sponsor's scale and business model.

Financial institutions looking to outsource ETF services to an external provider should consider looking for a provider that supports the widest range of ETF product types, including equity (domestic, global, emerging and frontier markets), fixed income (taxable, non-taxable, foreign and emerging markets), life-cycle blended funds, derivative based products, and hard commodity and currency funds. Even if an investment firm sticks with traditional ETFs, it may still want to be well positioned to be first to market when launching a new type of ETF fund or family of funds later down the road. It also helps to select an ETF servicing provider that can go beyond your immediate needs with custody, fund accounting and other related services as well, so it can be a one-stop shop for your growing and future ETF administration needs.

A fund administration provider may be expected to bring a proven array of ETF services to your firm including fund valuation, fund distribution, financing reporting/audit and tax services. For fund valuation, high NAV accuracy can be more consistently achieved with fund valuation internal controls, such as management oversight, NAV dissemination; electronic external feeds, corporate actions, a look-back price identifying and verifying the securities traded price versus the closing price. Accurate fund distributions are also a key ETF administration component, which can include calculating distribution items such as deferred capital loss and stop loss against client holdings. Another important focus area is financial reporting and audit support. Accurate and timely financial statements should be produced in accordance with relevant financial reporting standards such as International Financial Reporting Standards (IFRS) requirements. Back-up records may also be provided by the ETF servicer for audit and client requests. Finally, tax preparation services is a key area that administration providers can support – from correspondence with the Canada Revenue Agency (CRA), to tax election letters, annual preparation of T3/T2 tax returns and harmonized sales tax (HST) returns. In terms of basket creation, look for a provider that has capabilities to build, calculate and disseminate ETF "baskets" on their clients' behalf. Look for an automated basket calculation process whereby, the baskets are created using indexes, prices and/or from the portfolio, the baskets can be adjusted for corporate actions, the cash balancing value should be calculated, and the ability for automatic basket dissemination. The provider should be expected to interface with the portfolio manager, index provider, designated brokers and the related fund accounting system and custody systems. In a typical ETF life cycle, the Designated Broker/Market Maker sends an ETF creation/redemption order to the ETF service provider, and in turn the service provider can pass through creation/redemption instructions to the ETF Manager or Designated Broker/Market Maker. Following that the ETF service provider shares with their client and the Designated Broker/Market Maker an official statement of the results for the client's creation/redemption activity. Those can be just some of the many benefits to working with an asset servicing provider.

The future looks bright for ETFs in Canada, with increasingly frequent fund launches and continued production innovation of industry offerings matched with growing investor demand for ETF products. Market participants, providers and investors across the spectrum are looking with confidence toward healthy momentum for Canada's ETF industry this year, and in the years to come.

Ronald C. Landry, CPA, CGA, Executive Director of ETFs and Alternative Investments, CIBC Mellon

Understanding Counterparty Risk on Total Return Index ETFs

Horizons ETFs believes that investors should pay as little as possible for passive market returns. That's the idea behind our family of Total Return Index ETFs (TRI ETFs), which are low-cost index replicating ETFs that use an innovative Investment structure know as a Total Return Swap (TRS) to deliver index returns in a cost effective and tax-efficient manner.

None of our TRI ETFs are expected to make any taxable distributions, which means they can offer greater tax efficiency than an ETF that physically buys and sell the securities that constitute the index it is tracking.

All of our TRI ETFs track the total return version of their respective indices. This means that 100% of the index constituents' distributions (dividends and interest income) are automatically reflected in the Net Asset Value ("NAV") of the ETF when they are paid.

It's similar to a dividend reinvestment plan, also known as a DRIP, in which the ETFs distributions are automatically reinvested in additional units of the ETF. However it differs in that there are no taxable distributions and the value is reflected in a higher NAV per unit rather than more ETF Units.

For investors, the benefits of being invested in this type of ETF are the immediate compounding of total returns and the potential for substantial tax savings, since a tax liability only occurs when the ETF is sold for a capital gain.

Why are these ETFs not taxed upon receiving distributions?

The reason that TRI ETFs do not have to make taxable distributions is because the ETF does not receive distributions of dividend or interest income from the underlying securities. Rather, when using a TRS, the value of the distributions from the underlying index constituents to investors is reflected in the marked-to-market value of the swap, and consequently is reflected as an increase in the NAV per unit of the ETF.

Does this mean there is counterparty risk?

Yes. By using a TRS structure, our ETFs can take on some degree of counterparty risk. However, there are regulatory restrictions which govern who is eligible to be a counterparty and how much counterparty exposure is allowed in the ETF.

The counterparty risk of an ETF is limited to the marked-to-market gains of the swap, and cannot exceed 10% of the NAV of the ETF, per counterparty, in accordance with National Instrument 81-102 ("NI 81-102"). Horizons ETFs manages the operations of the TRI ETFs to ensure that they comply with this limit.

Also in accordance with NI 81-102, the counterparty to any underlying over-the-counter ("OTC") derivative (including a TRS) must maintain the following minimum credit rating: A (DBRS), A (Fitch), A2 (Moody's), A (Standard & Poor's). Only a few chartered banks in Canada meet this credit rating test.

In simple terms, a TRI ETF is only exposed to counterparty risk if the ETF is in a marked-to-market gain position and a maximum counterparty risk of 10% of the NAV per counterparty is allowed. There is no counterparty risk if the ETF is in a marked-to-market loss position. Each month, we post the counterparty risk level for each of our TRI ETFs on their associated webpage. One of the efficiencies of our ETF operations process is that, generally, our TRI ETFs are managed with the objective of maintaining a net marked-to-market loss position, meaning there is usually little to no counterparty risk for the ETF unit holder.

How often could the TRI ETFs exceed the 10% threshold?

It would be rare for the counterparty risk of a TRI ETF to approach or exceed 10% of the NAV per counterparty. Much of this has to do with the mechanics of how the swap operations are managed through the unit creation and redemption process.

Understanding Counterparty Risk on Total Return Index ETFs

Example:
One investor invests $100 into a TRS ETF and is the sole end-unitholder in the ETF. In this example, $100 is invested and held as cash collateral for the TRS in a custodial account. The counterparty of the swap is, therefore, obligated to increase the swap exposure to the underlying index by $100 to match the unitholder's investment. On day 1 of this investment, the counterparty risk is zero.
Day 1: $100 investment - $100 in the swap = $0 or 0% ($0/$100) marked-to-market value of the swap in the ETF.

On Day 5. Let's assume there is an exceptionally good week of market performance and the underlying index is up 10%. All else being equal, the counterparty now owes $10 to meet its obligation to deliver the returns of the index. The swap has a marked-to-market value of $10 + $100 of collateral (original investment), so the ETF's NAV is $110. The counterparty exposure = $10 or 9.1% ($10/$110) of the NAV of the ETF.

The marked-to-market value of the swap would have to rise $11.2 to exceed the 10% counterparty threshold. This example only holds true if there is no redemption or subscription activity.

Now, let's say another investor is enticed by the performance of the ETF and buys $100 of ETF units the next day, and the performance remains unchanged.

Day 6: $200 investment - $210 in the swap = 10$ or 4.8% (10$/210$) marked-to-market value of the swap in the ETF.
You can now see that the ETF has had its counterparty risk reduced almost in half with the increase in subscription activity. This happens on a daily basis in real life, where subscriptions into the ETF will tend to reduce the counterparty risk of the ETF.

Will redemptions increase counterparty risk?
Redemptions are actually beneficial to the management of the counterparty risk of the ETF. This is because Horizons ETFs can opt to pre-settle portions of any gains from the swap and assign that realized income to the redeeming unitholders of the ETF, which are almost always the Market Makers of the ETF*. Generally, Market Makers purchase or redeem units depending on their other trading activity in the units through the stock exchange.

When unitholders sell their ETF units through a stock exchange (the secondary market), this is not redemption; a redemption only occurs when Market Makers (or unit holders) redeem units directly with the Manger. Horizons ETFs will allocate income realized from redemptions, if any, to the Market Makers (i.e. income from the partial pre-settlement of the swap). This operation is disclosed in the Prospectus under the distribution policy and income tax consideration sections.

Why are TRI ETFs not re-characterizing taxes?
The pre-settlement of the swap during the redemption process may result in a taxable gain that is treated as regular income. However, through the process described above, any tax liability is allocated to, and borne by, the redeeming Market Maker of the ETF. Horizons ETFs has been consistently managing the operations of its TRI ETFs for over five years now and has yet to pay any income distributions to unitholders.

This unique swap management process accomplishes two goals: it keeps counterparty risk low or negative and it also allows for the effective management of the tax liabilities of the ETF, resulting in its current level tax efficiency for unitholders.

*Unitholders can redeem their units directly with Horizons ETFs, provided that they do not redeem their units directly with the ETF; the unit holder is not expected to receive any distributions of income. Unitholders are encouraged to sell their unit through the facilities of a stock exchange.

To learn more, please visit **www.HorizonsETFs.com**

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Mark Noble
Vice President & Head of Sales Strategy, Horizons ETFs Management (Canada) Inc.

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Key figures [1]	STOXX® Global 1800 Minimum Variance	STOXX® Global 1800 Minimum Variance Unconstrained	STOXX® Global Strong Quality 50	STOXX® Global Strong Balance Sheet	STOXX® Global Strong Balance Sheet Equal Weight	STOXX® Global 1800
Return	7.10%	6.90%	6.19%	7.10%	6.90%	2.58%
Volatility	13.20%	11.10%	21.65%	16.50%	17.10%	18.43%
Max drawdown	43.50%	31.90%	50.96%	47.71%	51.24%	58.23&
Sharpe ratio	0.5	0.6	0.4	0.5	0.4	0.2

1) STOXX data from Sep. 24, 2007 to Mar. 31, 2016. LIBOR used as a riskless asset to calculate Sharpe ratio. All indices are in USD Gross Return version.

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