

IIAC Market Insights – Canadian ETF Dynamics, Risks and Outlook

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INTRODUCTION

Growth of exchange traded funds (ETFs) has accelerated in recent years while ETF industry product offerings have also expanded beyond just bond and equity indices. Those offerings now include defined sub-sets of indices based on the formats of specific equity and bond characteristics. ETFs have unique features relative to mutual funds that have made them popular among investors including, lower costs and deep liquidity as well as high transparency, tax efficiency, high diversification, easy access to specific asset classes and targeted exposures. Globally, outstanding ETF assets are currently in excess of US \$5.1 trillion, up from US \$774 billion in 2008 and are one of the fastest growing sectors in the investment industry.¹

ETF liquidity has generally been perceived as much more robust than the underlying equity and bond sectors. However, concerns have surfaced related to whether this perceived liquidity could wither under pressure in response to crisis conditions including heavy selling and collapsing values in underlying investments. These concerns have intensified as more ETF structures and providers have entered the marketplace in the last few years.

Multilateral organizations like the International Organization of Securities Commissions (IOSCO) and the Financial Stability Board (FSB), have voiced similar concerns for some time, specifically, the systemic market implications of large and growing ETF holdings at big asset managers. There is worry that in a crisis, ETF liquidity could quickly evaporate causing asset values to tumble, spilling over to an already illiquid sector of the market and potentially triggering a broadly-based decline in asset values in the marketplace.

TYPES OF EXCHANGE TRADED FUNDS

In Canada, ETFs are legally organized as a mutual fund trust with the trust units listed and traded on stock exchanges like an individual stock. ETFs come in a number of investment styles and can be actively or passively managed, mirroring an index.

INDEX ETFs

In this structure, the index ETF attempts to closely track the returns of the overall market, or a subset of it, excluding transaction and management costs. Index ETFs are structured in a way that replicates the market benchmark by investing in all the representative products (full replication) or a sample which is statistically representative of the index and is optimized by picking securities that have the highest correlation with the underlying index (partial replication).

There is a very broad selection of Index ETFs that cover most segments of equity, fixed income, commodity and currency markets both domestically and internationally. As is the case with mutual funds, some equity ETFs reflect a particular investment style, such as growth or value, while other ETFs focus on specific market segments such as large cap or small cap. These types of investments can and often do have differing returns and risks than the overall market that they are based upon.

Another class of index-based funds are leveraged, inverse and leveraged inverse funds that provide a multiple of daily performance of an underlying benchmark or index and are considered riskier than a basic index ETF. These funds are not intended to be held for long periods of time and are generally intended for short-term investment strategies. This class of ETFs is not usually purchased by the average investor and is normally used by sophisticated investors who actively trade the market. Investors and their advisors need to clearly understand the risks associated with this type of ETF investment.

OTHER CLASSES OF ETFs

A smaller segment of index ETFs are invested in currencies, commodities, multi asset classes and volatility through holding either physical assets or by investing in the futures and derivatives markets. These types of ETFs allow investors to gain exposure to alternative investments including energy, precious metals, farm products and currencies.

¹ See [ETF threat fizzles: Hunt for systemic risk comes up short](#) Financial News September 2018

As with mutual funds, the large variety of ETFs has helped them become a popular choice for investors and fueled their rapid growth among market participants. ETFs enable investors to gain exposure to a wide range of products and strategies with great ease that would be extremely difficult to replicate with a standard investment portfolio.

ETF STRUCTURING AND THE ROLE OF AUTHORIZED PARTICIPANTS AND ETF PROVIDERS

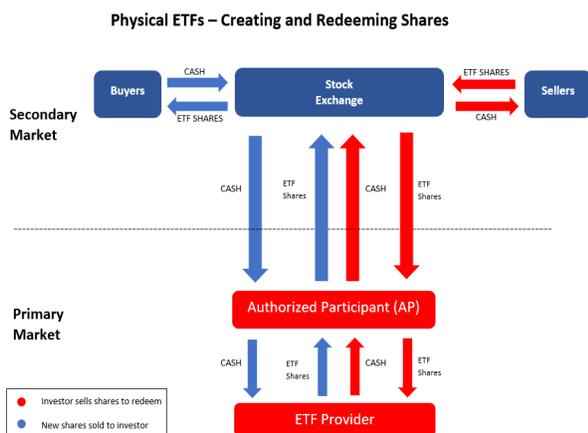
PHYSICAL ETFs

Physical ETFs attempt to track their targeted indices or defined sub-sets of indices by holding all, or a statistically representative sample of the underlying securities that make up the index or sub-set. Replication of a physical index or sub-set of an index is a fairly straight forward and transparent process and represents most ETFs in Canada.

As shown below in diagram 1, in the primary market the ETF provider issues shares to the authorized participant (AP) in exchange for an appropriate basket of securities. Once the ETF provider issues the shares to the AP they are then delivered to an exchange although a portion can be kept in inventory by the AP, usually for a short period of time.

The APs are an integral participant in the market that enable ETFs to have the flexibility and characteristics that differentiate them from standard mutual funds. As mentioned above, the AP can keep some ETFs in inventory or readily sell them on an exchange in the secondary market, but generally most are placed on the exchange at the time of creation. APs can also unwind their ETF shares with the ETF provider enjoying what is typically ready two-way transactional liquidity.

DIAGRAM 1



SYNTHETIC ETFs

Synthetic ETFs were first developed in Europe. Like physical ETFs, synthetic ETFs are designed to track an index or sub-set of an index, but the replication process is very different. As

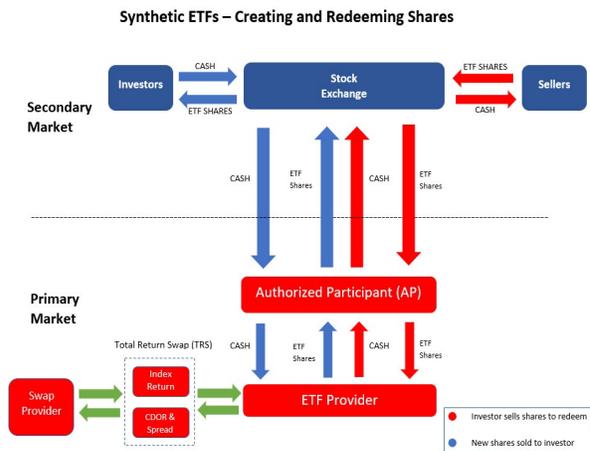
shown in diagram 2, swap-based ETF providers enter into a total return swap (TRS) with a swap counterparty (usually a financial institution) as opposed to owning the underlying shares of the ETF. In this synthetic arrangement, the swap provider contracts to provide the total return of a basket of securities plus all dividends in accordance with the ETF's strategy to the ETF provider in exchange for an agreed funding rate that is normally based on a benchmark plus a markup.

The economic value of the ETF is the total value of the swap and the collateral. The ETF provider issues shares to an AP for a cash price. The proceeds are invested in collateral and the interest earned on this closely matches the cost of the swap. At redemption, the ETF provider liquidates the collateral and receives the ETF shares. The swap counterparty plays no role in the share-creation/redemption process. The only obligation of the swap counterparty is to pay the return on the index or underlying basket of assets it is contracted to replicate for the investors.

The synthetic ETF structures can provide competitive offerings for investments in difficult-to-access markets that have less liquid benchmarks and components. In addition, synthetic ETFs provide an avenue to invest in difficult-to-implement strategies that would be hard to replicate with physical ETFs.

Diagram 1 and 2 illustrate that physical and synthetic ETFs have 3 levels of liquidity. The first level consists of investors who are buyers and sellers. The second and third are comprised of APs and ETF providers in the primary market which is further comprised of share creation and redemptions.

DIAGRAM 2



ETF MARKET STATISTICS

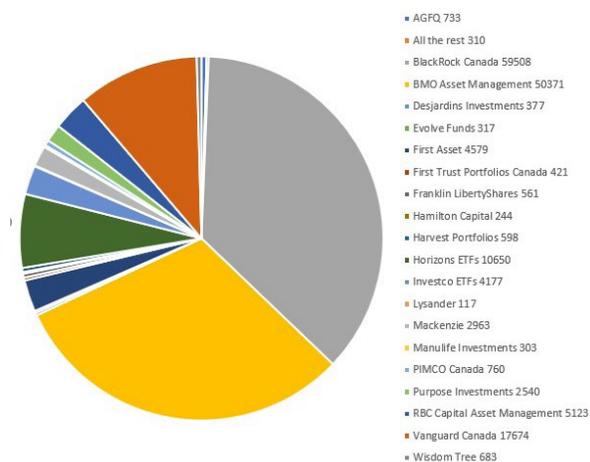
As can be seen in figure 1, BlackRock Canada and BMO Asset Management dominate the ETF space in Canada, but it should be noted that other Canadian bank heavy weights have recently entered the ETF market and are known to be fierce competitors. While other Canadian domestic banks have been slow to enter the fray, they have recently been introducing a number of ETF product offerings, moving away

from the notion that ETFs will cannibalize other business that they are involved in.

Globally in 2008 there were approximately \$800 billion in ETF assets under management (AUM) and 1,600 separately traded ETFs. By 2018 these numbers had swelled to approximately \$5 trillion and 5,000, respectively.²

FIGURE 1 (AS OF SEPTEMBER 2018)

Total Assets Under Management by ETF Provider (\$mm)

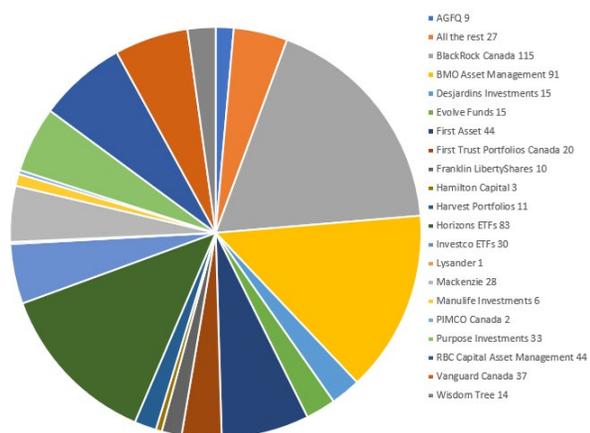


Source: CEFTA Monthly Report

As figure 2 below demonstrates, BlackRock Canada and BMO Asset Management have significant market presence as would be expected considering their dominant AUM position, but other firms have a noteworthy number of products as well, albeit with smaller individual product AUM. As the industry continues to grow, some smaller non-bank ETFs will likely be acquired by larger market participants and other underperforming product offerings will likely be retired.

FIGURE 2 (AS OF SEPTEMBER 2018)

Number of Funds by ETF Provider



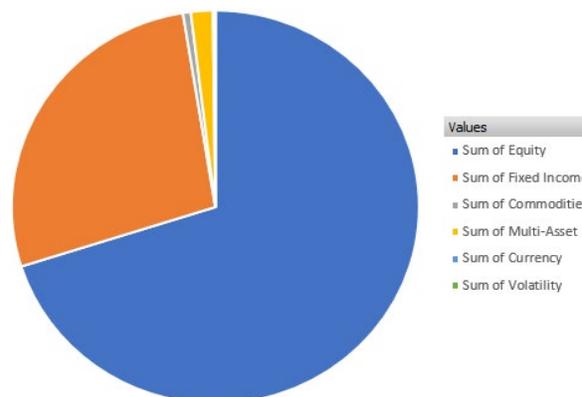
Source: CEFTA Monthly Report

As figure 3 below illustrates, equity and fixed income ETFs make up the clear majority of ETFs in Canada. Over time, however, it would not be surprising to see other types of ETFs increase their market share. In particular, fixed income ETFs have experienced solid growth in recent quarters as the long running bull market in equities is beginning to be questioned.

Of note, in Canada and the United States there has not been the rapid growth of synthetic ETFs that has been experienced in Europe largely due to regulatory limitations.

FIGURE 3 (AS OF SEPTEMBER 2018)

ETFs by Type



Source: CEFTA Monthly Report

ETF MARKET RISKS

LIQUIDITY RISK

ETFs are normally priced close to their underlying component securities. Since the ETFs are priced off those securities, an unforeseen event to one or more of them could affect the willingness of an ETF provider to allow redemptions and thus greatly affect liquidity. Further, there are some less liquid sectors and individual securities which source information from ETFs, so in the event of a disruption in redemptions, an underlying illiquid sector or security could be negatively impacted.

Because many equity funds are focused on passive investing strategies, there is a tendency by these funds to concentrate ETF investments in large cap stocks when choosing stocks based on factor style. The concern here is that these large cap companies may tend to be overvalued compared to small and mid-cap securities. In the event of a large market correction, risks of dislocation could potentially be significant due to this fact, but to date these ETFs have not been tested on this.

² See Long-Term Asset Return Study: The Next Financial Crisis Deutsche Bank AG/London September 2017

As a Deutsche Bank study notes “Events like the “taper tantrum” in 2013 and the energy/oil US credit sell-off in late 2015/early 2016 tested market liquidity but in the former, only for a brief but stressful period, and in the later only in one sector – albeit an important one.”³

Liquidity issues could also arise where ETF providers pause redemptions due to such factors as balance-sheet issues related to constraints on the provider’s banking activities. With increasing regulatory burdens and capital requirements, this risk could more readily present itself in the future.

COUNTERPARTY RISKS

Synthetic ETFs normally rely on TRSs that raise counterparty risks with swap providers. However, this increased counterparty and collateral risk is somewhat offset by a lower tracking error than ETFs that rely on physical securities. There is also the risk that in the event of a swap provider defaulting or being downgraded, a new swap counterparty would have to be found or the ETF itself would have to be closed. Both of these events could result in losses for the ETF investor, the magnitude of which could vary depending on the situation.

This scenario could have broader implications if the TRS provider has a relationship with a number of ETFs. Shaken investor confidence could result in mass liquidations that could have broad implications for the overall market. Thankfully synthetic ETFs have not faced this scenario, but there is a concern that a rush of investor redemptions could result in significant dislocation, losses and riskier ETF strategies being monitored by various regulators.

COLLATERAL RISKS

As previously mentioned, a synthetic ETF is valued as the combined amount of the TRS swap and collateral. The investor in a synthetic ETF is exposed to any change in the value of the collateral in the ETF and if the value of the collateral were to fall, the value of the ETF could decline, negatively impacting investors.

SYSTEMIC RISKS

Currently there are two schools of thought concerning potential system-wide-risks emanating from the ETF sector. On one side, it’s possible that the risks identified above could send shocks through the marketplace. Proponents that believe ETFs could pose system-wide-risks note that physical and synthetic ETFs have different risk profiles but assert that both types of products have potential risks in the event of a large and protracted market downturn. As the Bank of Canada notes “In a worst-case scenario, this could trigger investor runs on the ETFs and similar funds (e.g. mutual funds). These events could then feed back to the underlying asset markets, amplifying the initial shock and propagating beyond the ETF market.”⁴

Physical ETFs could be impacted by one or more of their underlying components suffering a shock. Likewise, in the event of a shock originating in the ETF itself, this could potentially reverberate into the underlying component stock. However, compared to mutual funds there are multiple layers of liquidity in the primary and secondary ETF markets and the liquidity should never be less than that of the ETFs underlying holdings.

Synthetic ETFs are most vulnerable to counterparty and collateral risk. The swap counterparty risk is lessened if there are multiple swap counterparties in a given structure as is mandated in some European jurisdictions. If a swap counterparty were to have financial difficulty and the TRS was terminated, a new swap counterparty would have to be found or the synthetic ETF would have to be wound up, resulting in potential losses for the investor.

The other school of thought includes the belief that because there are multiple levels of liquidity in the ETF primary and secondary markets and no past evidence of a system wide issue emanating from the ETF sector, fears of systemic market risks originating in the ETF market are unfounded.

ETFs as mentioned above have not been comprehensively tested in a protracted bear market. Since their inception, there have only been brief episodes of market downturns and more importantly, material redemptions. In a period of mass redemptions, it remains to be seen how well these products will perform under duress and illiquid asset classes are likely to be the most vulnerable. Despite the lack of direct evidence that ETFs could be vulnerable in a downturn, regulators have increased their supervision resources to monitor developments in this important and growing sector.

REGULATION

In Canada, the ETF market is regulated by provincial securities commissions. Since December 10, 2018, dealers have been required to send ETF Facts to investors no later than the second business day following a purchase of ETF securities. “The ETF Facts is a two-page document that summarizes key information about an ETF in a simple, accessible and easily comparable format. It is designed to help you make an informed decision about your investment by including information such as a fund’s investments, risk rating, past performance and the costs associated with owning it.”⁵

In the U.S. there is no dedicated system of regulation of the ETF market and current oversight of ETFs is a combination of stock exchange listing rules and laws that were initially put in place for different products. The U.S. Securities and Exchange Commission acts in a largely reactive manner introducing regulations as new forms of ETFs enter the market.

³ See [Long-Term Asset Return Study: The Next Financial Crisis](#) Deutsche Bank AG/London September 2017

⁴ See [Exchange-Traded Funds: Evolution of Benefits, Vulnerabilities and Risks](#) Bank of Canada December 2014

⁵ See [CSA Read The ETF Facts First](#)

CONCLUSION AND RECOMMENDATIONS

ETFs provide investors with a cost-effective way to diversify their investment portfolios, invest in hard to replicate strategies and generally have been shown to enjoy strong liquidity. In some situations however, critics argue that these products potentially have risks that could impact individual underlying investments and those risks could negatively impact the broader financial system. In particular, ETFs that are based on less liquid and riskier underlying assets may experience amplified volatility in times of market stress.

Additionally, while not a major portion of the ETF market in Canada, synthetic ETFs that use derivatives potentially have additional counterparty and collateral risks. Proponents of ETFs would argue however, that they have multiple layers of liquidity in the primary and secondary markets and regulators have increased their surveillance and are tracking developments in this important and rapidly growing sector.

While ETFs have not been tested in a protracted bear market there is no past evidence of a system wide issue emanating from the ETF sector in recent market downturns. The real test will be when there are heavy redemptions across multiple sectors and how ETFs perform, particularly in less liquid sectors of the market.

RECOMMENDATIONS:

- ETF providers need to keep current on changes in regulations, tax and accounting rules and provide this information to investors and adjust their suite of offerings to take into account effects of these changes.
- ETF providers need to be willing to retire products and strategies that underperform and, in their place, develop new products.
- Because the ETF structure is well suited to product development and distribution through traditional and digital advice platforms in a cost-effective manner, the ETF sector will likely continue to experience strong growth into the foreseeable future. However, with this anticipated growth in the total size of the market, including some riskier strategies and a greater number of ETF providers and APs, investors and regulators must remain informed and diligent when evaluating the risks and benefits of new products.

NEXT STEPS

- Explore how ETFs can be used institutionally as a hedging instrument and as an investment by the dealer community.
- Explore how easily ETFs can be borrowed and lent through repo and securities lending to facilitate these alternative uses.