Global equities: Balancing home bias and diversification

Advisor brief

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Canadian investors should consider the potential diversification benefits of investing in other countries' equity markets. Less-than-perfect correlation of other economies' equity markets with the Canadian equity market produces returns that can vary from the returns of Canadian stocks alone. This paper summarizes existing Vanguard research Global equities: Balancing home bias and diversification — A Canadian investor's perspective (Philips, et. al 2014.)

Equities outside Canada, including those of developed and emerging markets, account for 96% of global market capitalization.

However according to the most recent survey from the International Monetary Fund, Canadian investors only allocate about 40% of their total equity investments outside Canada.[1]

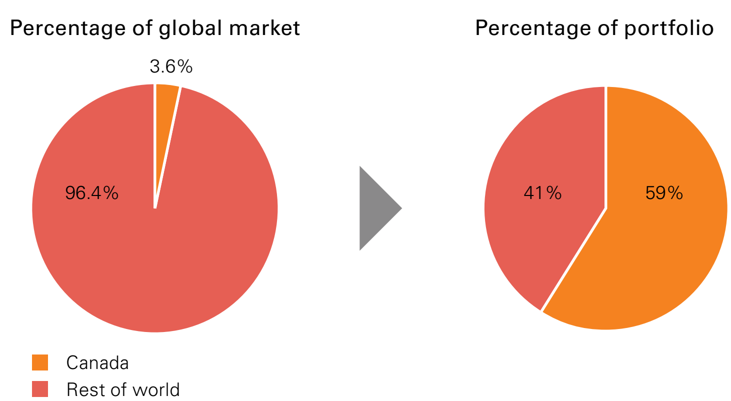
While a specific recommendation would be highly client-specific, we feel confident in recommending that most Canadian investors consider increasing their allocation to global stocks to reduce the embedded home bias in their portfolios.

The case for investing in non-Canadian stocks

Canada's equity market is significantly more concentrated than the global equity market. The top 10 holdings in Canada make up nearly 36% of the Canadian equity market, but only account for 1.2% of the global market.

Figure 1 illustrates how holding a sizeable overweight in Canadian equities means an investor is betting on Canadian equities to outperform the global market. Investors too heavily invested in Canadian equities are considerably more exposed to the risks associated with Canadian organizations than a more globally diversified investor.

Figure 1: Canadian equity is a relatively small part of the global equity market



Sources: International Monetary Fund's Coordinated Portfolio Investment Survey (2012) and FactSet. Market cap data as of February 28, 2014; holdings data as of December 31, 2012.

Notes: The IMF's Coordinated Portfolio Investment Survey was used in conjunction with market-cap information to determine domestic and foreign investment. The investment holdings data for Canada can be categorized as either "foreign investment by domestic investors" or "domestic investment by domestic investors." The sum of these equals "total investment by domestic investors." The percentage allocated to domestic securities divides "domestic allocation by domestic investors" by the "total investment by domestic investors."

1 Philips, Christopher B. 2012. The role of home bias in global asset allocation decisions. Valley Forge, Pa.: The Vanguard Group, Inc.

Sector concentration

Portfolios focused on Canadian equities are likely to be concentrated in a few sectors or industries. **Figure 2** displays the weight of 10 Canadian equity sectors relative to their weights in the global market.

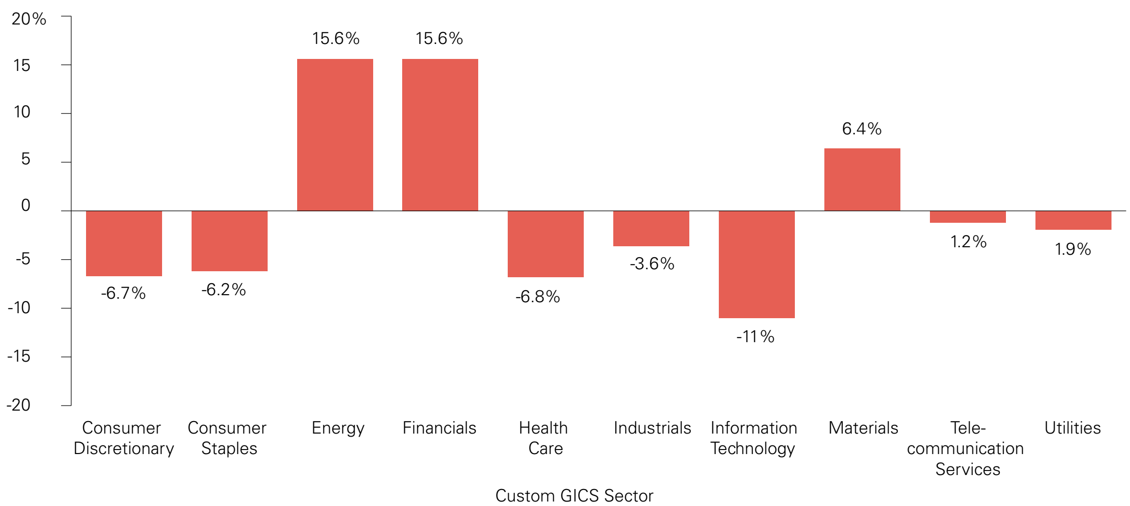
The Canadian equity market is overweight in the energy and financials sectors, with a more modest overweight in materials. As a result, information technology, health care, consumer discretionary and consumer staples are all underweight relative to the global equity market.

Security and sector concentrations resulting from home bias in the Canadian equity market cause investors to add risk to their portfolios that they could have reduced through diversification.

Diversification matters

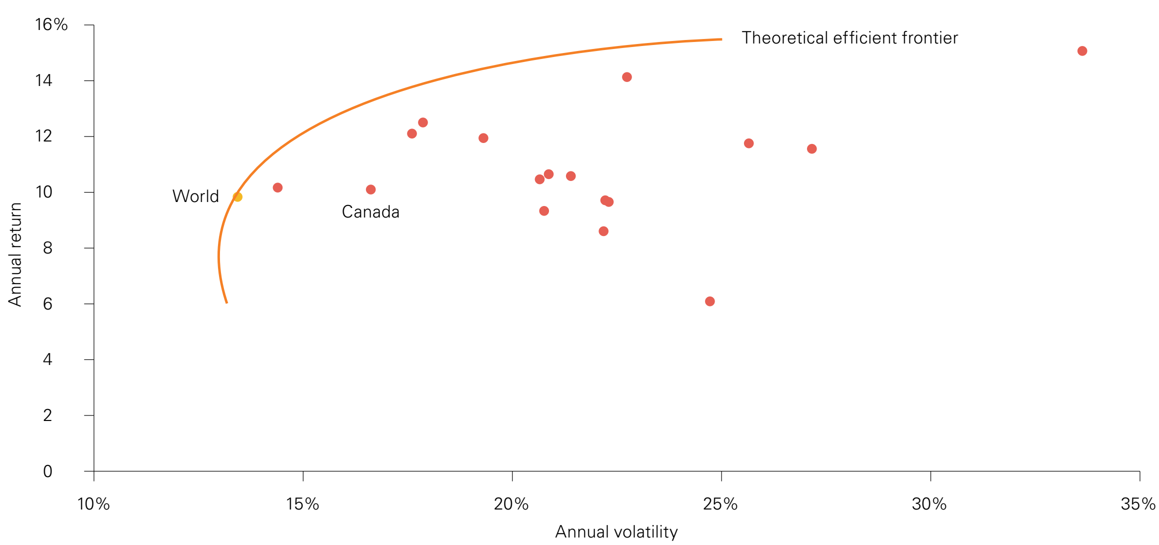
Figure 3 illustrates the historical risk and return of the global equity market (yellow point) along with the global index's constituent countries' returns and volatilities (red points). The orange line represents a forward-looking efficient frontier.

Figure 2: Canadian equity market has sector biases



Notes: Canada equities represented by MSCI Canada Index; global equities represented by MSCI All Country World Index. Data as of February 28, 2014.
Sources: Vanguard calculations, using data from FactSet.

Figure 3: Portfolios concentrated in Canadian stocks (or any single country) are inefficient



Notes: Index returns reflect the MSCI World Index and the respective MSCI indexes for each country in the World index. The efficient frontier does not reflect actual data or returns, and is theoretical in nature. Return data covers the period December 31, 1969, through March 31, 2014. All returns in Canadian dollars. The return points are historical, while the curve is purely theoretical and forward looking.
Source: Thomson Reuters Datastream

The Canadian stock market had greater volatility than the world market historically, but without reasonably higher return. In a long-term framework, any portfolio that diverges from the global market is, by definition, inefficient. Individual securities, sectors and countries can be combined into portfolios that can have lower levels of risk per level of return than the individual assets held in isolation. By diversifying, investors can create an efficient portfolio out of the global set of securities that can maximize expected return for each level of expected risk. This type of portfolio is plotted on the orange line in **Figure 3**.

A fully market-proportional equity portfolio is likely beyond the scope of most Canadian investors' comfort. Most investors choose a set allocation to securities outside their home country and maintain it through time. Such an approach represents a reasonable trade-off between the opportunity for diversification and the realities of investor preferences.

Determining an appropriate global equity allocation

One way to determine a reasonable allocation to global equities is to conduct an analysis evaluating the diversification impact of various combinations of Canadian and global equities over time. **Figure 4** shows the results of a minimum-variance analysis since 1985.

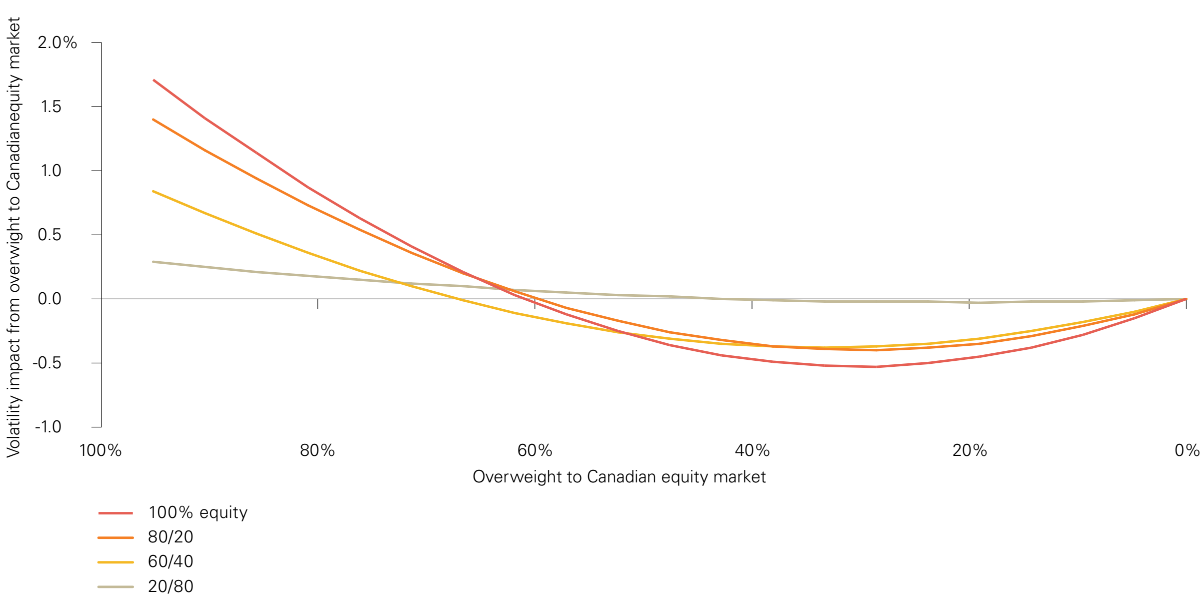
We can see from the illustration that the average home bias of Canadian investors (59% allocation to Canadian stocks) has not been the least volatile mixture over time. Although Canadian investors have in fact collectively maintained exposures that are less risky than the Canadian market in isolation, history shows that due to correlation differences between Canadian stocks and global stocks, Canadian investors would have experienced less volatility than the world index had they incorporated less home bias.

What about overweighting outside of Canada?

Some investors may consider overweighting their allocations to specific countries or regions depending on expected growth rates, returns or correlations. An example would be emerging markets like Brazil, Russia, India and China. Prior Vanguard research found that contrary to conventional wisdom, average cross-country correlations between long-term GDP growth and long-term stock returns have been effectively zero.[2] Investors should be cautious when basing their allocation decisions on expectations of economic growth.

Single-country mutual funds and ETFs have also attracted attention. When considering these vehicles, investors should take into account that the market capitalization of individual countries, especially those characterized by relatively small markets, can be concentrated in a few sectors or even just a few companies.[3]

Figure 4: An overweight to Canadian equities can increase risk



Notes: Canadian equities are represented by the MSCI Canada Index; global equities are represented by MSCI World Index through 1987 and MSCI All Country World Index thereafter. Canadian bonds are represented by the Citigroup WGBI Canada All Maturities Index through September, 2002 and Barclays Canadian Issues300MM Index thereafter. All data are through February 28, 2014.
Sources: Vanguard calculations, using data from Thomson Reuters Datastream and Barclays Live.

2 Davis, Joseph H., and Roger Aliaga-Diaz, Julieann Shanahan, Charles J. Thomas, Joanne Yoon, Ravi Tolani, 2013. The outlook for emerging market stocks in a lower-growth world. Valley Forge, Pa.: The Vanguard Group Inc.

3 Zilbering, Yan and David T. Kwon, 2012. Assessing concentration risk in individual countries. Valley Forge, Pa.: The Vanguard Group Inc.

We do not believe that the higher risks represented by specific countries or regions outside Canada offer adequate compensation to warrant an overweight. This is especially true considering the relationship between economic growth and market performance and the higher degree of concentration risk typically found in individual country or regional funds.

Consider real-world factors

Real-world considerations may support a lower allocation to global equities than what is suggested by market weighting proportions. Barriers to investment—such as limitations on the return of investment income, potentially higher transaction and friction costs like commissions, opportunity costs and market-impact costs—may make investors weary to invest outside of the Canadian market. Although barriers to cross-border investments have fallen over time, transaction and investment costs generally remain proportionally higher in many markets. This is primarily a result of liquidity differences and relatively low market participation. Investors should also take into account that dividends from Canadian corporations receive more favourable tax treatment in Canada than dividends from foreign companies.

Conclusion

While a specific recommendation would be highly client-specific, we feel confident in recommending that most Canadian investors consider increasing their exposure to global equities. Strict adherence to guidelines would indicate an allocation to Canadian equities close to 4%, but we have demonstrated that diversification benefits can be achieved through less than fully market-proportional allocations. A higher allocation to Canadian equities may also be more reasonable, because it would allow Canadian investors to benefit from exposure to both global and Canadian equities while remaining sensitive to their preferences.

Vanguard®

Vanguard Investments Canada Inc.

155 Wellington Street West
Suite 3720
Toronto, ON M5V 3H1

Connect with Vanguard™ > vanguardcanada.ca
> 888-293-6728

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