Performance of Canadian hybrid mutual funds ☆

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ABSTRACT

The risk-adjusted selectivity performance (alphas) of a comprehensive and survivorship-free sample of Canadian hybrid funds after (before) management-related costs is negative (neutral) and deteriorates when we control for fixed-income exposures and not for conditioning information. Fund performance is positively related with the asset allocation to Canadian Equity and with whether the fund family's orientation is tilted more to equity or bond funds. Examination of funds in the tails of the performance distribution using the block-bootstrap method suggests that "good luck" explains the before and after costs outperformance of extreme right-tail funds and no fund possesses truly superior management skills.

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1. Introduction

Performance measurement and evaluation of actively managed funds is a central issue in the academic literature and among practitioners. While balanced or hybrid funds represent an important and attractive group in the mutual fund industry, they have received little academic attention compared to equity and bond (fixed-income) categories.[1] This class of funds is a major component of the Canadian mutual fund industry where the total AUM (assets under management) exceeds $575 billion at the end of December 2014, representing over 50.4% of all industry assets.[2]

Based on a survey of those investors holding mutual funds, PwC reports that balanced funds (followed by equity funds) are the most popular fund strategy across all household income categories (Pwc, 2014; also see IFIC, 2010). Reasons given for their popularity include: (1) Balanced funds provide a base investment portfolio by including equities for long-term capital

[1] For example, see Ayadi and Kryzanowski (2005), Ayadi and Kryzanowski (2008), Ayadi and Kryzanowski (2011), Blake, Elton, and Gruber (1993), Chen and Knez (1996), Elton, Gruber, and Blake (1995), Farnsworth, Ferson, Jackson, and Todd (2002), Ferson and Schadt (1996), Ferson, Kisgen, and Henry (2006), Grinblatt and Titman (1993), Grinblatt and Titman (1994) and Lehmann and Modest (1987).

[2] The domestic balanced group is the leading class in the industry with 48.0% (i.e., 575.2 ÷ 1141.0, both in billions of Canadian dollars) market share at the end of December 2014 using the revised figures (see www.ific.ca).

appreciation potential and fixed income securities for income and safety, and (2) Balanced funds provide lower volatility and greater downside protection from asset-class diversification than pure equity growth or dividend funds for investors with lower risk tolerances. According to IFIC (2010), the demand for income-generating funds accelerated due to the aging profile of the Canadian household population and the two equity market downturns of the 2000s. Since funds arguably are sold and not bought, hybrid funds also are appealing from the perspective of fund sponsors since they provide their managers with much greater flexibility in their choices of investment strategies compared to pure equity or pure bond funds.

The few existing papers in the balanced funds literature tend to rely on multi-factor asset pricing models adapted to equity and fixed-income pricing. Comer, Larrymore, and Rodriguez (2009a) recommend using bond indices along with equity factors to evaluate the performance of managed equity portfolios with substantial holdings in fixed-income securities. Herrmann and Scholz (2013) assess the performance of 520 hybrid funds using daily data with two extended Carhart models with fund-specific style benchmarks over a ten-year period. They provide no evidence of funds outperforming their benchmarks, partial positive in-quarter abnormal performance and style-shifting abilities, and significant short term persistence only in in-quarter abnormal performance. Using fund returns and asset allocations, Dass, Nanda, and Wang (2013) report significant differences in both the investment strategies and performances of sole- and team-managed hybrid funds.[3]

Most of these papers obtain performance metrics by comparing the portfolio's average excess return to that implied by a benchmark model that reflects the risks related to equity and fixed-income exposures. These models fail to deliver reliable measures of performance and sometimes generate misleading inferences where rankings can change essentially due to the choice and efficiency of the chosen benchmarks. Other potential sources of false performance inferences include possible misspecifications of the proposed return dynamics. Basing inferences on unconditional performance metrics may fail to produce reliable measures of abnormal performance when expected returns and/or risk are time-varying, since these metrics are not able to isolate the impact of the superior abilities of portfolio managers from inherent time-variation in the underlying assets or shifts in the equity/bond mixes of these funds. All of these problems suggest the need to use the most appropriate benchmark model to assess the performance of hybrid types of mutual funds.

More importantly, all studies in the balanced funds literature also develop performance inferences based on individual funds that do not control for the cross-correlation structure in fund returns. Standard performance tests do not properly account for the presence of funds in the tails of the cross-sectional performance distribution with genuine positive or negative alphas and hence may be misleading. Kosowski, Timmermann, Wermers, and White (2006) and Kosowski, Naik, and Teo (2007) extend the bootstrap methodology of Efron (1979) to adjust the performance significance levels for the presence of luck in the estimation of alphas. Their method is based on various schemes of fund returns/residuals resampling and uses fund rankings to obtain bootstrapped statistics for specific quantiles of the cross-section of estimated performance. This approach is used by Cuthbertson, Nitzsche, and O'Sullivan (2008) who report much evidence of the outperformance of UK equity funds. Fama and French (2010) use a special cross-sectional bootstrap (based on individual equity fund observations) to refute (confirm) the results of Kosowski et al. (2006) for positive- (negative-) alpha funds. They explain their findings by the use of an alternative cross-section bootstrap and not due to the inclusion of different funds included, minimum data requirements or different data periods. Recently, Ayadi and Kryzanowski (2011) examine Canadian funds in the tails of the fixed-income fund performance distribution using the block-bootstrap method and find that "bad luck" causes the before costs underperformance of extreme left-tail funds and no fund possesses truly superior management skills.

With its many similarities and differences with that in the U.S. and other countries, the Canadian fund environment provides an ideal alternative laboratory for examining the effect (if any) of costs and managerial ability from the perspective of retail investors in hybrid funds. Unlike the U.S. and like most countries, the Canadian investment opportunity set is less diversified with a larger proportion of small firms, firms involved in financial services or natural resources, and firms with concentrated or controlling shareholdings (e.g., Gadhoum, Lang, & Young, 2005), and the Canadian distribution model uses financial advisors selling and servicing no-load funds (Alpert & Rekenthaler, 2011, p. 13). Unlike most countries but like the U.S., fund competition is restricted since foreign-domiciled funds cannot register for sale domestically in Canada. Unlike the U.S. and most countries, Boards of Directors occur at the family and not fund level in Canada, benefits from scale economies are lower due to the much smaller size of assets under management (AUM) at both the fund and family level, and fees and expenses continue to be ranked as being the highest internationally (Alpert, Rekenthaler, & Suh, 2013, p. 13). Unlike at least the U.S., retail investor are at substantial disadvantage in the Canadian fixed income market due to its fewer regulatory requirements and much lower regulatory scrutiny than the Canadian equity market and the U.S. fixed-income and equity markets (Patel & Yang, 2015).

To further extend this literature, this paper has two major objectives. The first objective is to provide extensive and robust evidence on the selectivity performance and the sensitivity of performance inferences based on (un)conditional linear multi-factor benchmark models for large samples of Canadian active and terminated hybrid mutual funds over the period 1991–2011. The benchmark models accommodate the stock and fixed-income features embedded in these portfolios such as size, value/growth, momentum investing, time-variation in their expected returns and risks, default risk, maturity differences, and fixed-income exposures. The frameworks used herein are suitable to perform evaluations of fixed-weight and

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[3] Other studies include Aragon (2005) who finds positive (negative) timing (selection) abilities of balanced funds over the period 1976–2004 based on new performance measures derived from a theoretical model with multiple market exposures, and Comer (2006) who reports significant timing performance over the period 1992–2000 for a large sample of US hybrid and asset allocation mutual funds using a multifactor benchmark specification.