SUSAN CHRISTOFFERSEN

RESEARCH IN MUTUAL FUNDS

The increasing complexity of mutual funds makes it difficult for unsophisticated investors to navigate where to invest. Consequently many rely on broker intermediaries to provide advice. The recent regulatory reform in the Dodd-Frank Act (in the US) calls for better alignment of incentives between brokers and mutual fund investors where regulators are concerned that payment incentives to the broker may skew advice. Consistent with this, we find that third-party brokers will direct more money towards mutual funds paying them a larger portion of the one-time upfront load, and even more concerning, the resulting performance for these investors is worse than the benchmark. The findings also suggest that the relation between payment and flows is more aggravated in third-party brokerage channels rather than in-house brokers since funds compete so aggressively for investor attention when they are compared directly with other mutual fund families offered by the same third-party broker.

While the relation between upfront loads and flows confirms regulatory concerns, there is some positive news in that a change in the structure of compensation may help to align incentives. Numerous fund families have moved to paying brokers on an ongoing basis, through trailer fees or revenue-sharing arrangements, where brokers are paid a percent of the assets each year rather than a one-time upfront commission. Although the practice of revenue-sharing is less transparent than upfront loads, the ongoing nature of the payment implies that brokers are exposed to the long-term performance outcomes of investors. Consequently,

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while higher on-going payments to the broker serve to attract more dollars to the fund, the resulting returns are at least on par with (and not worse than) the benchmark.

Aside from relying on intermediaries to attract flows, funds also need to build size through better performance, based on trades and securities lending programs to implement profitable strategies. In this regard, the research support from the CSIRF was instrumental in helping to create a unique database on Canadian mutual fund trades where we see that active managers deliver both cheaper trades and better subsequent performance than index managers. Given index managers are often considered uninformed, the lower trading costs of active managers is somewhat surprising. Our research points to the ability of active managers to more patiently wait to build positions as a key contributing factor to their lower costs, while index funds are forced to trade to maintain small tracking errors with their index. The trade-by-trade nature of the data provides important insights that cannot easily be picked up when comparing aggregate fund returns. Most importantly, the analysis enables us to separate the positive effect of skilled active management on performance from the negative drag on performance of higher trading costs amongst larger funds. Aggregate fund returns mix these two effects and often interpret the effects of large fund size as unskilled active management.

BIOGRAPHY

DR. SUSAN CHRISTOFFERSEN joined the Rotman School of Management in 2010. Prior to joining, she was an Associate Professor at the Desautels Faculty of Management at McGill and has over twelve years of experience teaching courses on capital markets and corporate finance at the undergraduate and graduate level. In recognition of teaching excellence, she received the Desautels Faculty of Management Teaching Award for Graduate Teaching in 2006. Professor Christoffersen's research focuses on mutual funds and more generally on the role of financial institutions in capital markets. Given the topical nature of her research, it has been published in top finance publications such as the Journal of Finance, Journal of Financial Economics, and the Review of Financial Studies and has been cited in well-known media outlets such as the New York Times, International Herald Tribune, Bloomberg News Service, CBS Marketwatch, and the Wall Street Journal. In recognition of her work, Susan has received several grants from SSHRC, IFM2, and FQRSC and numerous paper awards from various international agencies (Q-Group, Bank of Canada, BSI Gamma Foundation, INQUIRE, and the Swiss Finance Institute). In 2005, Susan was awarded the Limited Term Professorship by the CSIRF for her work on mutual fund trading and trading execution.

TESTIMONIAL

THE SUPPORT FROM THE **CSIRF** was fundamental to my continued research on mutual funds and instrumental in providing the necessary resources to create a unique database on Canadian mutual fund trades. The CSIRFs generous investment in Ph.D.s and academic researchers help ensure we have excellent research in Canada on topics which are important and relevant to practitioners, enabling researchers to compete with the very best in the US. The Limited Term Professorship is one of the largest academic prizes offered in Canada and carries with it considerable recognition in bridging the gap between academics and practitioners.

While there is a benefit to active management, investors often have difficulty choosing an active manager and the reliance on a third party broker, as shown above, can result in investors being directed to funds which pay more to the broker rather than ones which are best for the investor. For this reason, index funds are attractive and their ability to engage in securities lending programs can significantly help these funds boost their returns to overcome trading costs. In addition to improving performance through lending fees, securities lending is also an effective tool to manage tax inefficiencies amongst its investors.

Unlike Canada, the US mixes retirement and taxable money in the same mutual fund and this leads to severe tax inefficiencies which can be mitigated by securities lending. Take, for example, an international index fund. The fund invests in cross-border assets whose dividends are subject to a withholding tax–15% seems to be the norm–so, for example, only $0.85 of a $1 dividend paid from a Canadian company would reach a US mutual fund investor. To offset this loss and encourage foreign investment, taxable investors receive a tax credit and non-taxable investors (like pension plans) can apply for exemption from the withholding tax. However, the mixed tax-base of mutual funds is excluded from exemption so without securities lending, the retirement money in these funds simply loses the 15% of foreign dividends, or in other words, a typical retiree in these funds would lose about 4% of their consumption at retirement.

To get around this, US mutual fund managers can engage in dividend arbitrage where the securities are lent temporarily to a Canadian entity, not subject to withholding. The 15% savings is split between the US mutual fund and Canadian entity through lending fees and we estimate that about 10% is recaptured by the US mutual fund. Therefore through arbitrage, the US mutual fund is able to return a $0.95 dividend to retirees rather than $0.85 without arbitrage. Another way to help the non-taxable retirees would be to avoid dividends and withholding tax all together and in fact we find more evidence of both dividend arbitrage and avoidance as the pool of retirement money in the fund increases, suggesting managers try to maximize the after-tax returns of their investors.

Two important lessons for Canada arise from this research. First, the separation of RRSP from taxable money in Canadian mutual funds makes our mutual funds better able to manage the tax needs of their constituents. Second, the withholding tax discourages foreign mutual funds from investing in Canadian stocks paying high dividends, an outcome with important implications for corporate policy.