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British Columbia Securities Commission

Alberta Securities Commission

Financial and Consumer Affairs Authority of Saskatchewan

Manitoba Securities Commission

Ontario Securities Commission

Autorité des marchés financiers

Financial and Consumer Services Commission (New Brunswick)

Superintendent of Securities, Department of Justice and Public Safety, Prince Edward Island

Nova Scotia Securities Commission

Securities Commission of Newfoundland and Labrador

Superintendent of Securities, Northwest Territories

Superintendent of Securities, Yukon

Superintendent of Securities, Nunavut

CSA Notice 81-324 and Request for Comment Proposed CSA Mutual Fund Risk Classification Methodology for Use in Fund Facts

 $\underline{http://www.osc.gov.on.ca/documents/en/Securities-Category8/csa_20131212_81-324_rfc-mutual-fund-risk.pdf}$

It is my pleasure to provide an input. I am glad to see that regulators are taking ownership of the risk rating method and reducing the possibility of manipulation. It never made sense to use a method created by an Industry Trade Association. I make this submission with comments that go far beyond statistical commentary. Mis-rated funds can cause serious financial loss. Retirees may never recover from losses due to unduly risky investments . Losing money is always stressful but the human impact is far more than that. For seniors especially , financial losses are life-altering . Increased anxiety/insomnia. Having to take a low paying job at age 75. Forced out of a comfortable retirement home. No money for gifts for grandchildren. Increased medical expenses due to stress. Divorce. No

more RESP contributions for grandchildren. Some elderly couples worry the burden may eventually fall on their children as their carefully laid-out retirement plans vanish. Retirees who are living longer also are wondering if they will outlive their money . [see **The Social impact of Monetary Loss** http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/rep240-published-May-2011.pdf]

This explains why it is critical that Regulators provide a mutual fund risk rating disclosure needs to be meaningful and a robust complaint handling and compensation system for systemic issues.

I have serious concerns for the standard deviation being called risk .Some of the biggest causes of losses have been due to the payment of early redemption penalties and switch fees. It was only recently that I discovered that the reason my so-called advisor sold me expensive funds was the high commissions- if he had recommended low cost Index funds my retirement savings would be miles ahead but the trailer commissions on these types of funds are lower so he didn't recommend them.

It is good that Fund Facts mentions this conflicts-of-inters risk but it could be worded in stronger language. The industry also has an undue number of issues surrounding sales communications that actually act counter to the constructive disclosure intentions of Fund Facts. See *OSC Issues Report on Continuous Disclosure Review of Investment Fund Sales Communications* / Canadian Securities Regulatory Monitor http://www.securitiesregulationcanada.com/2013/07/canadian-securities-law-news-osc-issues-report-on-continuous-disclosure-review-of-investment-fund-sales-communications/

Although the CSA is dealing with some issues relevant to risk rating, it has not addressed the known anomalies that have been reported. The Toronto Star's Ellen Reported on these in *Is a fund that drops 60% only 'medium' risk?*

|http://www.thestar.com/business/personal_finance/2011/10/16/roseman_is_a_fund_that_drops_60_onl_y_medium_risk.html

A 2010 article Fees impact Bond fund risk & return

http://thewealthsteward.com/2010/08/fees-impact-bond-risk-return/ concluded:

"....Two observations. First, the MER reduces the yield-to-maturity by slightly more than the stated level. This is due to the compounding impact of fund fees, which are typically charged daily and paid monthly. Second, fees also nudge duration up because they increase the length of time before the purchase price of the bond is recouped. In other words, fees slightly increase duration risk while also slicing into returns. The result is a double-whammy impact on our risk-return ratio....".

More recently, respected fund analyst Dan Hallett wrote

Industry risk rating failing investors of floating rate note funds highlighting more shortcomings with the prevailing system based solely on SD.

http://thewealthsteward.com/2013/09/industry-risk-rating-failing-investors-of-floating-rate-note-funds/ It is not self evident that using a 10-year SD and adding a sixth risk band solves the core issue with the methodology.

I fear for all of the small risk- averse investors who will look at the FF risk ratings in making decisions about where to invest their RRSPs this year. They are, without a doubt, like deer in headlights about to be hit by a car. Perhaps they will be lucky. Perhaps not. Is this investor protection? [ref According to a May 2011 Ipsos Reid poll Seven in Ten (72%) Canadians Not Fully Confident Their Math and Money Management Skills Will Help them Plan for a Secure Financial Future

http://abclifeliteracy.ca/files/Financial_Literacy_Research-2011.pdf]

If risk means underperformance to a benchmark than I think the MER is the best indicator. **Morningstar research:** *How Expense Ratios and Star Ratings Predict Success* "If there's anything in the whole world of mutual funds that you can take to the bank, it's that expense ratios help you make a better [purchase] decision. In every single time period and data point tested, low-cost funds beat high-cost funds." <u>Reference</u>. http://factualfin.com/blog/blog2.php/how-expense-ratios-and-star-ratings-pred In other words, Fees Count!

For most investors risk means loss of capital. In a paper by Richard Baillie and Ramon DeGennaro https://www.msu.edu/user/baillie/JFQA.1990.pdf they publish the results of an extensive study8 that, contrary to Modern Portfolio Theory, found very little evidence of a positive correlation between portfolio returns and standard deviation . One does not need their scholarly research to see the obvious, however. Most advisors and retail investors intuitively grasp the fact that returns and volatility are not necessarily linked, just as defining risk as volatility runs counter to common sense, regardless of how universal the supposition may be. Any explanation of risk that involves words like standard deviation etc. will be near meaningless. Standard deviation and beta have nothing to do with what a concerned retail investor regards as investment risk: the possibility of suffering losses. I would recommend that before the CSA finalizes this, it should do exhaustive behavioural testing to determine what patterns of variation a small risk averse investor would view as risky on a scale of say 1 to 6. risk etc . Only then will this proposed methodology have validity. The CSA needs to (1) confirm (or deny) whether the small risk- adverse investor thinks like a statistician before it uses SD as a measure of risk and (2) whether the SD or any scale is capable of representing a complex concept such as fund risk.

Understanding the relationship between risk and return well enough to tailor an investment strategy to the individual needs of a client does not require knowledge of complex theoretical constructs such as standard deviation, alpha or beta. Rather than relying on the longitude and latitude of a small dot next to a regression line to evaluate risk, it would be more rational and productive for advisors to just to ask a few simple questions:

☐ What is the client's investment time horizon?
☐ What average returns did the investment alternatives under consideration yield over comparable periods in the past?
☐ What was the probability of a negative return in the past?
☐ Are the investments that are being considered over- or undervalued in absolute and relative terms?
\Box Has the gap between price and value widened to a point where a correction is likely, based on past experience?

While this approach will not completely eliminate the risk of loss, it will certainly reduce it. And you don't need to know any advanced math to use it. As Warren Buffett said, "If you've gone and gotten a PhD and spent years learning how to do all kinds of tough things mathematically, to have it come back to this – it's like studying for the priesthood and finding out all you needed was the Ten Commandments.". This is what the advice component of the MER is supposed to provide. Unfortunately, this basic analysis is not done well enough by advisors. In any event, under the suitability regime, the investor is responsible for the ultimate investment decision.

Accordingly, Quality risk disclosure is therefore key for retail investors, particularly for seniors and pensioners (and RRIF account holders). For the reasons stated, I do not think the standard deviation

depicts risk as it is commonly understood on Main Street although it addresses variability of returns. Variability (Standard deviation) of historical mutual fund performance could, with some education, be used by investors in an attempt to predict a range of returns for various mutual funds. While this is not risk per se, it could be a useful disclosure. For example, if XYZ mutual fund has an average annual return (mean) of 8% and a **standard deviation** of 3%, then an investor may expect the return of the fund to be between 5% and 11% 68% of the time (one standard deviation from the mean -- 8% - 3% and 8% + 3%) and between 2% and 14% 95% of the time (two standard deviations from the mean -- 8% - 6% and 8% + 6%). This has some use but it assumes Fund Facts will provide a 10 year mean. The consultation paper only requires the disclosure/calculation of the 10-year SD to be put into one of 6 buckets with word descriptors. This does not provide much information and can actually mislead. The 10-year SD and mean both must be published since that is how a frequency distribution is described. I realize that some education of investors will be needed but that is what trailer commissions are for. If the CSA published a little Guidebook on how to employ FF's, many policy objectives would be met and the likelihood of better financial outcomes increased.

This presentation of volatility rating could help an investor reassess his tolerance for risk when he/ she sees just how dispersed returns can be over time. A re-labeling therefore is in order -- how volatile is the fund? To further improve risk disclosure I believe that Fund Facts should include a brief listing of the primary risks of the fund in addition to the *Volatility risk scale* (emphasis added). If the actual numerical SD figure was provided in the bar graphic it could lead to a healthy dialogue with the advisor and ultimately help educate retail investors self- protect themselves from conflicted advice. They might not understand it at first but after a few times they will and Fund Facts will be able to take full credit in helping small investors make better investment decisions.

It's OK to post this letter on the internet.

William Schalle

APPENDIX: Relevant Research papers

Historical Commentary

IFIC comment letter re Volatility risk disclosure methodology

https://www.ific.ca/wp-content/uploads/2013/09/Submission-to-CSA-POS-Working-Group-CESR-Risk-Disclosure-Methodology-February-26-2010.pdf/5014/

Always take a second look at mutual fund risk ratings and whether the numerical scales (0-28% and beyond) and ranges are appropriate or, if these should be adjusted in any way. Dave Peterson"..However, I have noticed that with some specialty products, particularly in the precious metals and commodity sectors, the risk ratings quoted by the fund managers do not, at least in my opinion, properly reflect the true risk of the fund. Many of these funds are considering themselves to be "Medium" or in a couple of cases "Low to Medium Risk" funds. For example, BMG Bullion Fund considers itself, according to its prospectus, to be suitable for "low risk investors with a long term time horizon." Allow me to disagree. ""http://www.fundlibrary.com/features/columns/page.asp?id=13725

CSA Fund Facts vs IOSCO standard (Kenmar Associates 2011)

http://faircanada.ca/wp-content/uploads/2011/09/SIPA-research-Fund-Facts-vs-IOSCO-standards.pdf *IOSCO Principles on Point of Sale Disclosure Final Report 01022011* http://www.investorpos.com/documents/IOSCO%20Principles%20on%20Point%20of%20Sale%20Disclosure%20Final%20Report%2001022011.pdf Makes the point that inclusion of the principal risks of a fund is imporatant.

Mutual Fund Cost of Ownership Investor Economics

https://www.ific.ca/wp-content/uploads/2013/08/Canadian-Study-Mutual-Fund-MERs-and-Cost-to-Customer-in-Canada-September-2012.pdf/1655/ " In the case of mutual fund holders who pay either a one-time sales commission at the time of purchase of front-end load mutual fund units or a one-time deferred sales charge on the redemption of back-end load mutual fund units, we have conservatively assumed an average holding period of 4.5 years..." and "Reflecting the growing importance of pre-assembled solutions, fund wraps have captured nearly 80 cents of each dollar flowing into the mutual funds industry between 2007 and 2011. Figure 30 monitors the growing importance of fund wraps to the fund industry's book of business..."

Fund Facts a good start, but risk rating & suitability get thumbs-down « The Wealth Steward http://thewealthsteward.com/2011/07/fund-facts-a-good-start-but-risk-rating-suitability-get-thumbs-down/

Mutual funds for a RRIF

http://www.gordonpape.com/News/FeatureDetails.cfm?NewsletterID=1628&Type=F

Fund Risk Rating methods/disclosure

CESR 10-673 Guidelines KID SRRI methodology for publication

http://www.esma.europa.eu/system/files/10_673.pdf

Morningstar rating of mutual funds

 $\underline{http://corporate.morningstar.com/CA/documents/MethodologyDocuments/FactSheets/MorningstarRatingForFunds_FactSheet.pdf}$

Advisor Risk Ken Kivenko www.canadianfundwatch.com

Submission by the Society of Actuaries in Ireland: *Communicating Investment risk* https://web.actuaries.ie/sites/default/files/event/2011/03/Communicating%20Investment%20Risk%201.pdf

FinaMetrica's investment risk and return guide for Canada

- ".. The past as an indicator of the future Though past investment history is not at all guaranteed to repeat, it can be a very useful guide, especially in seeing the contrast between performance of different portfolio allocations over different time periods, varying through good or poor economic growth, high or low inflation, rising or falling interest rates, wars, recessions and the like. Fortunately, there are several free online resources that allow us to see what happened in the past.
- 1) <u>FinaMetrica's Investment Risk and Return Guide and Reports for Canada</u> The Guide gives the breakdown of 11 portfolios ranging from Very Conservative to High Growth, containing a progressive mix of cash, two types of bonds and three types of stocks. The portfolios are realistic and could be purchased today using index ETFs. The downloadable pdf Reports of five pages for each portfolio describes investment outcomes in very informative tables and charts that really gives a sense of the risk involved for the data period covered of 1973 to 2012. An interesting unique feature is that the reports compare portfolio performance to GICs. Below is a sample image of some of what appears in the report for Portfolio 7 (60% equity, 40% fixed income). The 10-year result for an investment starting in 1973 was decidedly disappointing compared even to one starting in 2003. Recall that inflation raged in the 1970s and the bond holdings took a big hit. Do we want to bet that inflation will remain under control and interest rates won't rise a lot, which would again hit bonds hard?..". Thanks to Jean Lesperance

IOSCO Principles on Point of Sale Disclosure Final Report 01022011

 $\underline{http://www.investorpos.com/documents/IOSCO\%\,20Principles\%\,20on\%\,20Point\%\,20of\%\,20Sale\%\,20Dis\,closure\%\,20Final\%\,20Report\%\,2001022011.pdf}$

Communicating Risks and Benefits: An Evidence-Based User's Guide http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/UCM268069.pdf

Financial Regulatory Disclosure: Embracing New Communications Channels by Neil Mohindra :: SSRN

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2031035

Mutual fund ratings and future performance

http://www.stat.berkeley.edu/~aldous/157/Papers/mutual_funds.pdf

Management Expense Ratios (MER) influence return distribution

http://retirehappy.ca/management-expense-ratios-do-matter/ Respected blogger Jim Yih looked at the impact of actively- managed mutual fund fees for 4 major fund categories. He found" *Fees matter more over longer time frames*. When you look at 5 and 10 year returns, there is a greater correlation

that funds with lower MERs have on average better performance. For example, if we look at the 25 funds with the lowest MERs and compare them to the 25 funds with the highest MERs, the returns on a 5 year basis were on average 50% higher. Over a 10-year period, funds with low MERs performed 25% better than funds with high MERs...." .Thus ,over the long term the risk of underperforming a benchmark increases due to fees; the amount of underperformance is material. During a market downturn ,the risk of losing money will be greater with high fee funds compared to lower cost counterparts.

Vanguard Principle 3: Minimize cost Impact of costs on return and risk of loss

https://personal.vanguard.com/us/insights/investingtruths/investing-truth-about-cost A powerful presentation on how fees impact return profile and risk.

FCA cautions over use of risk-rated funds - New Model Adviser®

http://citywire.co.uk/new-model-adviser/fca-cautions-over-use-of-risk-rated-funds/a711622

Retail investors, financial literacy and attitudes towards risk

2012 IEF Adviser relationships and investor decision-making study

http://www.getsmarteraboutmoney.ca/en/research/Our-

research/Documents/2012%20IEF%20Adviser%20relationships%20and%20investor%20decision-making%20study%20FINAL.pdf "In summary, advisors are the key influence in investor decision-making. Investors rely upon their advisor for planning and asset mix advice, as well as advice on what specific investments to buy. Performance and portfolio mix dominate investment decisions, whether buying or deciding not to buy. Performance relative to similar investments, alternative investments and past earnings are all major considerations. Portfolio mix is a comparable factor. **Risk of loss is a major factor only for deciding NOT to buy, and then, it is the single biggest factor in the decision..."**.

Is Your Risk Tolerance at War With Your Risk

Capacity?http://news.morningstar.com/articlenet/article.aspx?id=630357

Risk management top of mind for investing Canadians | Advisor.ca

http://www.advisor.ca/insurance/living-benefits/risk-management-top-of-mind-for-investing-canadians-29156

Shareholder assessment of Bond fund risk ratings

http://www.ici.org/pdf/rpt_bondfundrisk.pdf

Figuring out how much risk you need to take: HowtoInvestOnline: Risk Need

http://howtoinvestonline.blogspot.ca/2013/12/risk-need-figuring-out-how-much-risk.html

Determinants of Retail Investors Behaviour and its Impact on Investment Decision | Abey Francis

- Academia.edu

http://www.academia.edu/1169465/Determinants of Retail Investors Behaviour and its Impact on Investment_Decision

Do investors care about risk?: Evidence from mutual fund flows

http://www.ou.edu/content/dam/price/Finance/Oklahoma_conference/2011/Chris%20Clifford%20-%20Do%20Investors%20Care%20about%20Risk.pdf Using an extensive database compiled from SEC N-SAR filings, the researchers studied monthly flows to equity funds over the period 1996 to 2009. Unlike most previous studies, they separately examined inflows, outflows, and net flows. They found clear evidence that investor inflows and outflows strongly chase past raw performance without regard to risk. In fact, the best performing funds are typically among the riskiest funds, so return chasing leads to apparent risk-seeking behavior for inflows. This behavior is particularly strong for retail investors the study found, but return chasing is also prevalent for institutional investors.

Volatility measures behavioural risk « The Wealth Steward (Dan Hallett) http://thewealthsteward.com/2010/10/volatility-measures-behavioural-risk/

"...Critics of the investment industry will point to fees as a big culprit. And they have a point. But just like the balanced fund illustration above, the impact of investor behaviour dwarfs the importance of fees. So I was wrong to dismiss standard deviation as a risk measure for all of those years. It's not a measure of investment risk but a measure of behavioural risk. Still, standard deviation measures a type of risk that has potentially damaging consequences...".

Understanding the social impact of investment fraud

http://www.getsmarteraboutmoney.ca/en/research/Related-

research/Documents/2007%20CSA%20Investor%20Study%20Exec%20Summ%20Final%20EN.pdf
This study found that victims of investment fraud experience negative effects on their physical and mental health. Fraud victims in the study reported higher stress levels, increased feelings or displays of anger, depression, and feelings of extreme loss or isolation, as well as physical effects such as panic or anxiety attacks. Financial loss for a senior is a life altering event from which it is difficult or impossible to recover, either financially or emotionally. Losses under the prevailing low suitability standard are not outright fraud, but the devastating effects are the same. Conversely, if advisers worked under a Best Interests / fiduciary standard like professional engineers, doctors, accountants, then they would be trustworthy neutral allies for seniors protecting against all manner of exploitation including family, friends and caregivers and wealth creators. While this research paper focuses on fraud ,the same impact occurs when investors are sold risky investments outside their loss capacity, high cost investments that erode returns, securities that are illiquid or have high exit fees or when unnecessary leveraging is used.

University of Toronto Research Report: Fraudsters Take Aim at the Baby Boomers (May, 2007) http://www.utoronto.ca/difa/PDF/Research_Projects/DIFA2007

In *The dirt on coming clean-the perverse effects of disclosing conflicts-of-interest* http://sds.hss.cmu.edu/media/pdfs/loewenstein/DirtOnComingClean.pdf the protective value of disclosure is challenged. Not surprisingly, the researcher found that compensating the advisers for encouraging a desired Outcome influenced their behaviour. What was surprising is that disclosing the conflict-of-interest actually increased the bias even more. Lowenstein says that "moral licensing" is one of the reasons this happens. Basically this theory says that an advisor with an undisclosed conflict-of-interest will feel guilty enough about it that they will try to "do the right thing" to some degree. By disclosing the conflict-of-interest, it allows the adviser to do whatever they want since they have admitted the conflict and therefore don't have to feel guilty about it anymore. "*Anything goes, as long as you disclose*" doesn't work for Main Street.

Research paper: Financial Knowledge and Rationality of Canadian Investors by Cecile Carpentier,

Jean-Marc Suret :: SSRN "..Canadian investors' financial knowledge is limited. On average, they obtain a mediocre knowledge score; only 5% score above 66%. The vast majority of respondents scored between 40% and 57%. Significant gaps were noted regarding knowledge of risk and return of asset categories. Knowledge of past returns of the main asset categories is abnormally low, particularly for equity, an area where all of the respondents are involved. Mediocre knowledge of the performance of categories and of the concept of risk premium calls into question investors' financial planning ability. One out of five investors is unaware that the return of a small growth company comes not from dividends, but rather from a capital gain. One-third of investors are certain that they will receive future dividends from a company that usually pays them. Almost 30% of respondents are unaware that stock indices are greatly influenced by the returns of the largest capitalization stocks. Three-quarters of investors do not systematically compare the return on their portfolio with that of a stock market index. Half of the investors do not clearly grasp the link between lack of liquidity and share value. Many investors do not know that if they invest in the stocks of small companies listed on the TSX Venture Exchange, they might lose all their capital. The risks associated with shareholding are largely underestimated" http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2038930

Loss aversion - Wikipedia, the free encyclopedia

http://en.wikipedia.org/wiki/Loss_aversion "In economics and decision theory, loss aversion refers to people's tendency to strongly prefer avoiding losses to acquiring gains. Some studies suggest that losses are twice as powerful, psychologically, as gains.[citation needed] Loss aversion was first demonstrated by Amos Tversky and Daniel Kahneman.[1] .."

The 2012 CSA Investor Index shows that the overall investment knowledge of Canadians is low -, 40% of respondents failed when they were asked 7 questions on concepts of simple and real compound interest, investment risk and diversification, mutual fund returns, warning signs of fraud, and the relationship between interest rates and bonds. Yet more than half (57 %) of Canadians indicated that they are confident when it comes to making investment decisions and 81% believe they understand how risky their investments are today. Yet, the majority of Canadians have unrealistic expectations of market returns. When asked what they think the annual rate of return on the average investment portfolio is today, only 12 % of Canadians gave a realistic estimate, while 29 % provided an unrealistic estimate and 59 % explicitly chose not to hazard a guess. http://www.securities-

administrators.ca/uploadedFiles/General/pdfs/2012%20CSA%20Investor%20Index%20-%20Exec%20Summary%20-%20FINAL%20_EN_.pdf

Does Simplified Disclosure Affect Individuals' Mutual Fund

Choices?http://www.nber.org/digest/jul09/w14859.html Review of SEC mandated Summary Prospectus disclosure effectiveness.

Risk, Volatility and statistics

Volatility is not Risk | RiskologyTM

"...While it's true that funds with higher volatility are considered "riskier" than funds with lower volatility, the point is that volatility is inherently a measure of what happens on typical days. It is a measure of the width of the return distribution. In other words, it measures how much returns typically swing. Sure, putting your money into a fund that has a low volatility makes it more likely that you

won't suffer a big loss *most of the time* as compared to a fund with a higher volatility, but the important thing to keep in mind is that real risk is what happens once in a decade or 'out of the blue' and has a profound impact on the fund. It's <u>not</u> what happens "most of the time." And beta/volatility tell you nothing about these outliers..." http://risk-ology.com/2011/11/22/volatility-is-not-risk/

How To Measure Mutual Fund Risk - Forbes

http://www.forbes.com/2009/10/15/risk-ownership-disclosure-intelligent-investing-mutual-funds.html

What is the Risk in risk- adjusted mutual fund returns?

http://pages.nes.ru/agoriaev/papers/stutzer%20mutual%20fund%20ratings-%20what%20is%20the%20risk%20in%20risk-adjusted%20fund%20returns-.pdf

The mutual fund graveyard

https://advisors.vanguard.com/iwe/pdf/ICRMFG.pdf?cbdForceDomain=true Discusses the fund survivorship issue in detail and its impact on published data.

Sortino ratio: A better measure of risk

http://www.futuresmag.com/2013/02/01/sortino-ratio-a-better-measure-of-risk

Non-normality of market returns

http://www.jpmorganinstitutional.com/blobcontent/42/35/1159384839488_Non_normality_long.pdf

Fat tailed distribution: The Cauchy distribution

http://en.wikipedia.org/wiki/Fat-tailed_distribution

The tail events are rarer for the Cauchy than for the Gaussian, but their values are more extreme. Sometimes a single event can comprise 99% of total variation, hence the "undefined variance".

Volatility vs. Tail Risk: Which One is Compensated in Equity Funds? by James X. Xiong, Thomas Idzorek, Roger G. Ibbotson :: SSRN <u>James X. Xiong</u> Ibbotson Associates, a Morningstar company; <u>Thomas Idzorek</u> Ibbotson Associates - A Morningstar and Company and <u>Roger G. Ibbotson</u> Yale School of Management; Zebra Capital Management, LLC (May 30, 2013)

Abstract: Research that has led to what is known as the "low volatility anomaly" in cross-sectional stocks from a similar universe indicates that volatility is not compensated with a "volatility" premium. We find evidence of a risk premium, but it depends on the definition or measure of risk. "Tail risk" measures the probability of having significant losses and should be what investors care about the most. We investigated several risk measures, including volatility and tail risk, and found that volatility is not compensated but tail risk is compensated with higher expected return in both U.S. and non-U.S. equity funds. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2274295

Fake Alphas, Tail Risk and Reputation Traps by Marco Di Maggio ,Columbia Business School (December 12, 2013)

http://www0.gsb.columbia.edu/faculty/mdimaggio/papers/fake_alphas_dec11.pdf Abstract This paper presents a model in which the investment funds' desire to enhance their reputation is decisive in determining the severity of aggregate shocks. Fund managers can generate active returns at a disutility or try to time the market, while investors learn about the managers' skill by observing past returns. During booms, star funds exploit their status by extracting higher rents from investors, while poor performers may end up in a reputation trap, limiting their ability to attract investment. In a crisis,the

funds exploit their reputation more frequently and tend to exacerbate fluctuations insofar as in the search for higher short-term returns they expose investors' capital to tail risk. The model's predictions on the effect of volatility, skewness of returns and inflows of funds, are all supported by recent empirical evidence on fund managers' behavior.

Separate risk rating required for currency hedged funds: The Investment Funds Practitioner - November 2013

http://www.osc.gov.on.ca/en/InvestmentFunds_ifunds_20131128_practitioner.htm

You have to wonder why the OSC has to tell fund managers the obvious. This is why we continue to be dubious of any risk rating system that gives leeway to fund manufacturers - the track record of integrity/ competency needs to be earned.

SIPA speaks out on Investor Protection

 $\underline{https://www.osc.gov.on.ca/documents/en/Securities-Category1-Comments/com_20110426_11-\underline{765_buells.pdf}}$

Standard deviation and portfolio jargon risk jargon and practice http://people.stat.sfu.ca/~weldon/papers/29.sdrisk.pdf

CARP helps mutual fund dealers understand what the average older investor looks like - CARP Canada

 $\underline{http://www.carp.ca/2013/10/18/carp-help-mutual-fund-dealers-understand-what-the-average-older-investor-looks-like/}$

SPIVA Canada-year-end-2012 performance data

http://www.spindices.com/documents/spiva/spiva-canada-year-end-2012-2.pdf

Fund Category	Period	Count at Beginning of Period	Survivorship (%)
Canadian Equity	One Year	51	88.24
	Three Years	52	86.54
	Five Years	58	68.97
Canadian Small/MidCap Equity	One Year	31	96.77
	Three Years	37	81.08
	Five Years	47	59.57
Canadian Div & Income Equity	One Year	32	96.88
	Three Years	34	91.18
	Five Years	36	86.11
U.S. Equity	One Year		84.62
	Three Years	71	74.65
	Five Years	87	57.47
International Equity	One Year	34	97.06
	Three Years	40	82.50
	Five Years	45	68.89
Global Equity	One Year	98	93.88
	Three Years	108	84.26
	Five Years	116	71.55
Canadian Focused Equity	One Year	58	81.03
	Three Years	65	70.77
	Five Years	73	61.64

Source: S&P Dow Jones Indices, Fundata. Data as of December 31, 2012 CIFSC categorizations. Financial information provided by Fundata Canada Inc. © Fundata Canada Inc. All Rights Reserved. There has been no reduction of fund expenses from index returns. Tables are provided for illustrative purposes. Past performance is not a guarantee of future results.

If one projects the 5-year data to 10 years, say for Canadian small/Mid cap, just 36 % (approximately) of funds would have 10-year records.

Real world Market behaviour

Moving beyond traditional Markowitz asset allocation

http://www.soa.org/files/pd/2012-ny-invest-sym-r5.pdf

Volatility and Mutual Fund Manager Skill by Bradford D. Jordan, Timothy B. Riley:: SSRN Abstract: Low volatility mutual funds outperform high volatility funds to a remarkable degree, and, in a standard four factor framework, past volatility is a reliable, persistent, and powerful predictor of future abnormal returns. Analyses patterned after Kosowski, Timmerman, Wermers, and White (2006) and Fama and French (2010) indicate that low volatility fund managers have significant skill. However, the addition of a factor contrasting returns on diversified portfolios of low and high volatility stocks eliminates differences in risk-adjusted performance. We conclude that either our volatility measure is associated with a pervasive, systematic pricing factor, or else the volatility effect is a market inefficiency of extraordinary size. Either way, failure to account for the volatility effect can lead to

substantial mismeasurement of fund manager skill. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2365416

Low volatility funds and mutual fund wraps

TD Low Volatility Funds Rethinking Risk & Reward

https://www.cifps.ca/Public/Media/PDF/Conference2013_SpeakerPresentations/Babak_Rafat_Rethinking_Risk_&_Reward.pdf

Wrap accounts: The Real story

http://www.buildingwealth.ca/News/FeatureDetails.cfm?NewsletterID=3507&Type=F "...

"Let's get my bias up front quickly: Like principal protected notes (PPNs) and DSC mutual funds, wrap accounts in my view are the work of the devil, assuming he works in the investment industry ("Hey, I think he does!" I hear someone saying). Before I am accused of hyperbole, let me point out that in March 2007 the U.S. Court of Appeals for the District of Columbia ruled wrap accounts illegal, basing their decision on brokers who replaced sales commissions with fixed annual fees ranging from one to three percent. Such brokers, the court decreed, "...have only converted an irregular income stream (the periodic sales commissions) into a regular income stream (the fixed annual fee). The customer's interest can still be sacrificed to the business interests of the firm."