



THE INVESTMENT  
FUNDS INSTITUTE  
OF CANADA

L'INSTITUT DES FONDS  
D'INVESTISSEMENT  
DU CANADA

# VOLUNTARY GUIDELINES FOR FUND MANAGERS REGARDING FUND VOLATILITY RISK CLASSIFICATION

July 2015

Data Updated to December 31, 2014

## IMPORTANT NOTICE TO FUND MANAGERS AND DEALERS:

The following voluntary guidelines may be used by Fund Managers to complement their risk disclosure requirements under National Instrument 81-101F1. Note that this document is only intended for use by Fund Managers to help disclose information to their unitholders regarding the historic volatility of the mutual funds that they manage. It is not intended for use as a substitute for undertaking a proper and complete suitability assessment by advisors, compliance officers or retail investors.

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# CONTENTS

<b>I.</b>	<b>INTRODUCTION .....</b>	<b>2</b>
<b>II.</b>	<b>A NOTE ABOUT THIS UPDATE .....</b>	<b>3</b>
<b>III.</b>	<b>FREQUENTLY ASKED QUESTIONS .....</b>	<b>3</b>
<b>IV.</b>	<b>INTENDED USE OF GUIDELINES.....</b>	<b>5</b>
<b>V.</b>	<b>APPLICATION OF THE GUIDELINES .....</b>	<b>6</b>
	Methodology.....	6
	Annual Review .....	7
	Decision Tree for Applying Guidelines.....	7
	Qualitative Factors .....	8
	Use of Discretion .....	8
	Maintenance of the Guidelines.....	9
<b>VI.</b>	<b>COMMUNICATING USE OF THE GUIDELINES .....</b>	<b>10</b>
	Statement of Use.....	10
	<b>Appendix 1: Volatility Classification and Asset Categories .....</b>	<b>11</b>
	Notes to volatility classifications .....	16
	<b>Appendix 2: Standard Deviation – Annual (Avg) at Dec. 31, 2014 .....</b>	<b>17</b>
	<b>Appendix 3: Standard Deviation – Index at Dec. 31, 2014 .....</b>	<b>18</b>
	<b>Appendix 4: Standard Deviation - Benchmark (Avg Rolling 3/5 Year) at Dec. 31, 2014 ... ..</b>	<b>19</b>
	<b>Appendix 5: Example of Appropriate Use of IFIC Guidelines .....</b>	<b>20</b>
	<b>Disclaimers: .....</b>	<b>22</b>

## I. INTRODUCTION

Risk is inevitable in all investing. In its simplest form, risk refers to the uncertainty of returns. This uncertainty can be impacted by numerous factors. Common types of risk include: inflation rate risk, business risk, political risk, liquidity risk, interest rate risk, foreign exchange risk and default risk. Generally speaking, risk and return are interrelated, with higher potential returns associated with higher risk or uncertainty. Each investor has a different risk profile, with some investors willing to take on more risk than others in the pursuit of higher returns. Accordingly, there is a broad range in the relative riskiness of available funds.

Securities regulation requires mutual fund companies to disclose all aspects of risk in a prospectus, the legally required document that details the investment objectives and strategies of a fund and other information related to fees and management practices. There are two types of risk that must be disclosed in a prospectus: the risks of investing in mutual funds generally; and, risks associated with investing in the particular fund being offered.

In addition to these requirements, fund companies must disclose the volatility of mutual funds in a Fund Facts document. Fund Facts are designed to give investors key information about a mutual fund in language that they can easily understand. Presently, dealers are required to deliver the Fund Facts within two days of a purchaser buying a conventional mutual fund. Beginning May 30, 2016, dealers will be required to deliver the Fund Facts to a purchaser before accepting an instruction for the purchase of a mutual fund.

The volatility measure that is reported in the Fund Facts document is a specific aspect of risk and it measures the extent of the variation in a fund's return over time. The greater the fluctuations, either up in value or down in value, the greater the volatility. The volatility is measured using standard deviation – this measures how much the return on the fund rises and falls during a given period in relation to the fund's expected normal returns. While any single risk measure has limitations, standard deviation was chosen as an unambiguous and relatively well-established and well-understood measure of volatility risk.

Once the volatility is quantitatively established, it is converted and identified in a Fund Facts document as fitting into one of five potential risk categories: Low, Low to Medium, Medium, Medium to High and High. The Fund Facts documents also refer readers to the prospectus for more information about general and specific risks that can affect the fund's returns.

**The guidelines presented in this document are intended to help fund managers apply a consistent volatility classification methodology and provide risk disclosure for each fund.** The guidelines provide an explanation of the methodology, the categories of classification, and the associated volatility classification for each fund category.

## II. A NOTE ABOUT THIS UPDATE

The IFIC Guidelines are reviewed on an annual basis by the Fund Risk Classification Task Force and the benchmark data in the appendices is refreshed yearly.

This year, the following additional changes were made to the Guidelines:

- Section I (Introduction) has been revised and is now geared towards a wider audience;
- Section III (Frequently Asked Questions) has been added;
- Section V (Application of the Guidelines):
  - Language has been strengthened in the ‘Methodology’ sub-section;
  - ‘Annual Review’ sub-section has been added;
  - ‘Flowchart’ has been changed to a ‘Decision-Tree’

- Appendix 1 (Volatility Classification and Asset Categories):

Modifications have been made to Appendix 1. The previous version of Appendix 1 included Standard Deviation (SD) bands for each volatility classification (i.e. Low: 0 – 6; Low to Medium: 6 – 11; etc). Under this previous version, fund managers could simply classify their funds according to the SD bands when only looking at a fund’s short-term volatility. For example, a scenario occurred in the past where a fund manager reclassified an Asian Growth Fund from ‘High’ volatility to ‘Medium’ volatility by simply looking at the short-term standard deviation figures and assigning them to a volatility classification based on the SD bands in Appendix 1.

The modified version of Appendix 1 aims to avoid these types of occurrences – it includes ‘Point in Time’ and ‘Rolling Averages’ standard deviation figures to give fund managers an appreciation for the different SD band ranges that are possible.

The ‘Point in Time’ column illustrates that during periods of low market volatility, SD Band ranges may be lower than the ‘Rolling Averages’ SD Band ranges which are based on a longer set of historical benchmark data.

### **III. FREQUENTLY ASKED QUESTIONS**

#### ***1. What is risk?***

In an investment context, risk refers to the uncertainty of future returns. For example, we might expect a return of 8% next year from an investment in an equity market, but the actual return on the equity market might be much higher than 8% or indeed much lower. Common types of risk when investing in funds can include: market risk, sector risk, corporate risk, interest rate risk, currency risk, etc.

#### ***2. What is volatility?***

Volatility is the degree and speed of changes in an investment's value over a given period of time. Investments that change in value gradually, or minimally, are said to have lower volatility than those that change rapidly or significantly and frequently during the same time period. Volatility is usually measured historically – how an investment has acted in the past – and that behaviour suggests how the investment may behave in the future, although no one can predict the future.

#### ***3. How is volatility measured?***

Volatility can be measured in a variety of ways. Standard deviation is one commonly used measure of volatility. In simple terms, standard deviation measures how much the value of a fund rises and falls during a given period in relation to the fund's average value. A low standard deviation means that the value of the fund has fluctuated less.

#### ***4. Who created the IFIC Guidelines? How often are the IFIC Guidelines updated?***

IFIC's Fund Risk Classification Task Force (the "Task Force") was established in 2003 and tasked with the development and ongoing revision of the IFIC Guidelines. The IFIC Guidelines are reviewed on an annual basis to ensure they remain meaningful and relevant – particularly to ensure that the fund categories and volatility classifications continue to accurately reflect the industry.

#### ***5. What is the purpose of the IFIC Guidelines?***

Over the last ten years, the IFIC Guidelines have assisted fund managers regarding the classification and comparisons of the volatility risk associated with different types of mutual fund categories. The IFIC Guidelines are designed to assist with standardizing terminology, categories, and volatility risk descriptions of funds.

## IV. INTENDED USE OF GUIDELINES

Fund companies are required by National Instrument 81-101F1 – Mutual Funds Prospectus Disclosure (in the ‘Who Should Invest in This Fund?’ section of the Simplified Prospectus) to set out the “*risk*” classification for each fund in the fund’s prospectus. The guidelines presented in this document, developed and maintained by the Investment Funds Institute of Canada are only intended to help **fund managers** apply consistent volatility classification methodology and provide risk disclosure for each fund.

Specifically, the guidelines are intended to:

- Introduce a consistent methodology for volatility risk classification by mutual fund managers;
- Improve comparability of volatility risk classification across fund companies;
- Improve volatility risk disclosure in the fund prospectus; and
- Provide a quantitative framework that may be used for assessing historical fund volatility.

The guidelines should not be used by dealers and their staff in substitution of comprehensive suitability reviews or for portfolio construction purposes. **It is not the volatility of a single fund, but that of the investor’s entire portfolio, that should be the focus of the investor, dealer or advisor**

These guidelines are not mandatory; however, fund managers that have used these guidelines in the past and intend to continue using them should implement the new classification process shown in this update as soon as it is feasible to do so. **Fund managers are reminded to seek their own legal counsel when determining their obligations of disclosure under NI 81-101F1.**

### ***Message to Dealers and Compliance Officers***

**These guidelines are not intended to be a substitute for a fund dealer’s due diligence and know-your-client best practice procedures. Dealers and salespersons must continue to apply those best practices to assess and ensure the suitability of each investment recommended for each client.**

## V. APPLICATION OF THE GUIDELINES

### *Methodology*

The following steps detail how to implement the guidelines\*:

1. If the fund in question does not have at least three years of monthly return history, assign the fund to the volatility classification of the relevant CIFSC category (see Appendix 1).
2. Determine the fund's average annual standard deviation for each cumulative period going back 10 years (if available) using the formula below. Compare these results to the appropriate index<sup>†</sup> in **Appendix 2**. If the fund's standard deviation for each period does not differ materially from the appropriate index, categorize the fund using the risk band that contains the appropriate CIFSC category.

$$\sigma = \sqrt{\frac{1}{n-1} \sum (R_i - \bar{R})^2} \times \sqrt{12}$$

$\sigma$  = annual standard deviation

n = number of months

$R_i$  = investment return in month i

$\bar{R}$  = average monthly investment return

3. If the fund's standard deviation for each period differs materially from the appropriate index, determine the average (since inception) of the rolling three- and/or five-year standard deviations for the fund. Use of the average (since inception) of rolling five-year standard deviations should result in a more stable volatility risk classification over time. Even if the fund's standard deviation for each period does not differ materially from the appropriate index, we suggest that fund managers complete this step.
4. Compare the fund's average (since inception) three- and/or five-year standard deviation to the SD Bands as presented in **Appendix 1** in order to determine the appropriate volatility classification.
5. Placing the fund in a higher or lower volatility classification than that determined by applying the method above.
  - a) A fund should be classified into a higher volatility classification if the fund has a higher volatility level than the SD Band ranges as presented in Appendix 1, or if there are qualitative factors (described below) which may lead the fund to have high volatility characteristics which are not captured in the fund's historical returns;
  - b) A fund may be classified into a lower volatility classification only in circumstances where it can be readily demonstrated that the fund has a lower

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\* Please refer to Appendix 5 for examples of appropriate use of the Guidelines.

<sup>†</sup> A broad range of market indices and comparative benchmarks was selected to represent the different asset categories available to investors. For consistency, all non-Canadian indices are denominated in Canadian dollars.

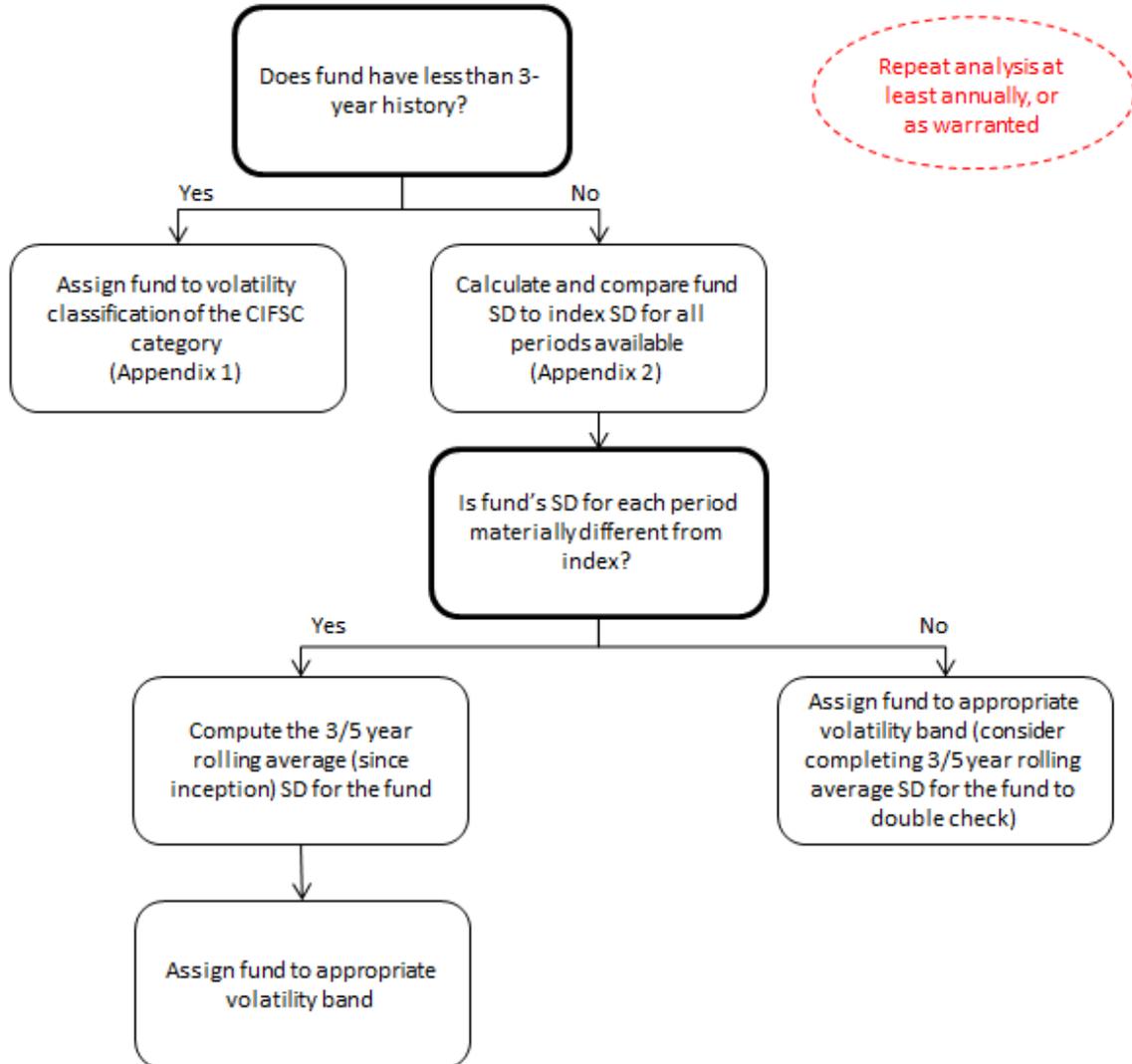
volatility than other funds in the CIFSC category for like periods and that the lower volatility is a result of the fund's management style.

Fund managers must document the reasons for classifying the fund into a higher or lower volatility classification, and consider including that rationale in the fund's prospectus.

### **Annual Review**

1. Repeat this analysis each year prior to prospectus renewal to ensure that fund volatility risk classifications remain up-to-date and appropriate. This analysis should be repeated earlier if there has been a material change to the fund's investment strategy and/or investment objective.
2. Fund managers should be consistent with the methodology that they use each year to classify their funds.

### **Decision Tree for Applying Guidelines**



## **Qualitative Factors**

There are a number of other risk factors that may be considered, in addition to the volatility risk measure, to obtain a complete assessment of a fund's risk. For example, alternative asset classes are subject to special risks – they may be more difficult to price and are likely to experience large changes in valuation during periods of market instability.

Other risks that may be considered when classifying funds include (but are not limited to): market risk, credit risk, sector risk, corporate risk, interest rate risk, currency risk, political risk, counterparty risk, liquidity risk, regulatory risk, and inflation risk, among others.

The following qualitative factors should be considered and may lead a fund manager to change a fund's risk rating (note: these are not the only factors and are intended only as an illustration):

- Illiquidity risk (i.e. fund would take a number of days or even years to trade to cash);
- Sector concentration (e.g. two GIC sectors comprising greater than 70% of a broad based fund);
- Volatility target: the fund is designed to achieve a lower (or higher) standard deviation profile than the broad market;
- Ability of the fund to short-sell securities;
- Ability of the fund to use leverage;
- Ability of the fund to use derivatives that are in line with the NI 81-102 definition of hedging (excluding currency hedging).

### ***Use of Discretion and Full, True and Plain Disclosure***

In order to ensure full, true and plain disclosure, Fund managers need to analyse and assess qualitative factors of a fund in addition to using quantitative analysis. Therefore, Fund managers need the ability to classify a fund either higher or lower than the volatility category indicated by a strict application of the methodology described above. However, this should be done only in a situation where applying the methodology would result in a classification that is contrary to providing full, true and plain disclosure of all material facts relating to the mutual funds being offered.

*Example: Fund manager understands that an aggressively-managed Canadian equity fund is likely to be more volatile, or more risky than the average Canadian equity fund or the Canadian equity benchmark. For full, plain and true disclosure, it may be appropriate to classify that fund at a higher volatility category than that suggested by these guidelines. A fund manager should examine the style, security selection process, or other qualitative factors of their fund in addition to the standard deviation in order to make this determination.*

***Maintenance of the Guidelines:***

- This document will be reviewed annually and updated as appropriate.
- IFIC's Industry Analytics Working Group will direct the Fund Risk Classification Task Force to ensure that the fund categories, volatility classifications and standard deviation bands continue to accurately reflect the industry.
- The Task Force will assess the continued applicability and reasonableness of the SD Bands as defined.
- The Task Force will assess the continued applicability and reasonableness of the three- and five-year time periods.

## VI. COMMUNICATING USE OF THE GUIDELINES

Fund managers are not required to incorporate these guidelines as a component of their internal fund risk assessment processes. Fund managers who fully adopt these guidelines into their risk classification methodologies must use the Statement of Use shown below when referring to these guidelines in addition to other required disclosures. **Fund managers who adopt these guidelines only in part are not permitted to reference these guidelines to determine volatility classification.** It is each fund manager's responsibility to ensure full, true and plain disclosure in compliance with all applicable regulatory requirements.

### ***Statement of Use (Samples of Appropriate Reference)***

#### **a) Prospectus**

*"The methodology used to determine the volatility risk ratings of the funds for purposes of disclosure in this prospectus is the methodology recommended by the Investment Funds Institute of Canada (IFIC). IFIC recommends that the most easily understood form of risk in this context is historical volatility risk as measured by the standard deviation of fund performance. However IFIC recognizes that other types of risk, both measurable and non-measurable, may exist. It is also important to note that a fund's historical volatility may not be indicative of its future volatility."*

#### **b) Press Releases**

*"[Firm X] chooses to follow the risk classification methodology recommended by the Investment Funds Institute of Canada (IFIC Voluntary Guidelines for Fund Managers Regarding Fund Volatility Risk Classification – version with data updated to December 31, 2014) using both quantitative and qualitative considerations conducted on an annual basis."*

**Fund managers that do not use the IFIC Guidelines as set out in this document are not permitted to reference these guidelines to determine volatility classification.**

## Appendix 1: Volatility Classification and Asset Categories

The standard deviation figures included in the table below are taken from Appendices 2 and 3. The 'Point in Time' figures and 'Rolling Averages' figures have both been included to give fund managers an appreciation for the different standard deviation band (SD Band) ranges that are possible. The 'Point in Time' column illustrates that during periods of low market volatility, SD Band ranges may be lower than the 'Rolling Averages' SD Band ranges which are based on a longer set of historical benchmark data. The 'Point in Time' SD Band ranges will be re-evaluated and updated (if necessary) on an annual basis.

Volatility Classification	Asset Categories <sup>3</sup>	Point in Time (from Appendix 2)		Rolling Averages (from Appendix 3)	
		3 yr avg annual SD	5 yr avg annual SD	3 yr rolling avg SD	5 yr rolling avg SD
<b>Low</b>	Canadian Money Market (must have fixed unit price)	0.054	0.080	0.38094	0.47858
	U.S. Money Market (must have fixed unit price)	0.007	0.013	0.29623	0.39438
	Canadian Synthetic Money Market (must have fixed unit price)	0.054	0.080	0.38094	0.47858
	Canadian Fixed Income	3.100	3.182	5.52369	5.43355
	Canadian Short-Term Fixed Income	1.061	1.440	3.34753	3.31929
	<b>SD Band Range (Low)</b>	<b>0 – 3.5</b>		<b>0 – 6</b>	

<sup>3</sup> Asset categories come from the Canadian Investment Funds Standards Committee as of March 31, 2014 ([www.cifsc.org](http://www.cifsc.org)). Both a rolling historical average of three- and five year measures of standard deviation were used to analyze the volatility of benchmark indices in order to determine the 'Rolling Averages' SD Bands.

Volatility Classification	Asset Categories <sup>3</sup>	Point in Time (from Appendix 2)		Rolling Averages (from Appendix 3)	
		3 yr avg annual SD	5 yr avg annual SD	3 yr rolling avg SD	5 yr rolling avg SD
Low to Medium	2015 Target Date Portfolio <sup>1</sup>	n/a	n/a	n/a	n/a
	2020 Target Date Portfolio <sup>1</sup>	n/a	n/a	n/a	n/a
	2025 Target Date Portfolio <sup>1</sup>	n/a	n/a	n/a	n/a
	2025+ Target Date Portfolio <sup>1</sup>	n/a	n/a	n/a	n/a
	Canadian Equity Balanced	4.842	5.775	9.55907	9.65374
	Canadian Fixed Income Balanced	3.002	2.995	6.33591	6.35799
	Canadian Inflation Protected Fixed Income	8.019	7.628	7.63720	7.61264
	Canadian Long Term Fixed Income	6.194	6.211	7.48900	7.71614
	Canadian Neutral Balanced	3.922	4.385	8.04111	8.09170
	Global Equity Balanced	4.272	5.118	8.02022	8.37749
	Global Fixed Income	5.293	6.706	8.74286	9.29854
	Global Fixed Income Balanced	3.610	4.115	6.59298	7.11590
	Global Neutral Balanced	3.682	4.210	6.96246	7.39897
	High Yield Fixed Income	4.802	5.352	8.70580	9.19693
Tactical Balanced <sup>1</sup>	n/a	n/a	n/a	n/a	
	<b>SD Band Range (Low to Medium)</b>	<b>3 – 8</b>		<b>6 – 11</b>	

Volatility Classification	Asset Categories <sup>3</sup>	Point in Time (from Appendix 2)		Rolling Averages (from Appendix 3)	
		3 yr avg annual SD	5 yr avg annual SD	3 yr rolling avg SD	5 yr rolling avg SD
<b>Medium</b>	Canadian Dividend & Income Equity	8.742	10.988	15.11358	15.44360
	Canadian Equity	8.310	10.229	14.98936	15.34008
	Canadian Focused Equity	6.929	8.866	13.50224	13.81415
	European Equity	11.001	13.702	15.69951	16.03084
	Global Equity	6.740	8.710	13.00463	13.31769
	International Equity	9.130	11.035	15.28571	15.61773
	North American Equity	6.585	8.217	13.56333	13.92584
	U.S. Equity	6.912	8.343	12.91310	13.12361
	<b>SD Band Range (Medium)</b>	<b>6 – 14</b>		<b>11 – 16</b>	
<b>Medium to High</b>	Asia/Pacific Equity <sup>2</sup>	8.752	9.233	17.45290	17.47344
	Canadian Focused Small/Mid Cap Equity <sup>2</sup>	10.567	12.649	15.34262	15.87569
	Canadian Small/Mid Cap Equity	14.435	15.921	17.97257	18.65045
	Financial Services Equity	9.998	13.014	17.30262	17.91450
	Global Small/Mid Cap Equity <sup>2</sup>	8.614	10.704	14.50870	14.86230

Volatility Classification	Asset Categories <sup>3</sup>	Point in Time (from Appendix 2)		Rolling Averages (from Appendix 3)	
		3 yr avg annual SD	5 yr avg annual SD	3 yr rolling avg SD	5 yr rolling avg SD
	Health Care Equity <sup>2,3</sup>	8.200	9.056	12.82213	13.19874
	Real Estate Equity <sup>2</sup>	9.477	10.695	15.04994	15.34877
	U.S. Small/Mid Cap Equity	11.128	13.125	17.10395	17.26555
	<b>SD Band Range (Medium to High)</b>	<b>8 – 16</b>		<b>16 – 20</b>	
<b>High</b>	Asia Pacific ex-Japan Equity	9.951	12.179	21.65788	22.30330
	Emerging Markets Equity	11.537	12.924	20.36285	20.56371
	Greater China Equity	14.798	15.605	30.44561	31.71129
	Labour-Sponsored Venture Capital <sup>4</sup>	n/a	n/a	n/a	n/a
	Precious Metals Equity	32.921	30.627	33.01961	33.82284
	Natural Resources Equity <sup>5</sup>	11.562	13.743	15.88052	16.26755
	Energy Equity <sup>5</sup>	n/a	n/a	n/a	n/a
	<b>SD Band Range (High)</b>	<b>&gt; 9</b>		<b>&gt; 20</b>	
<b>N/A</b>	Alternative Strategies <sup>6</sup>	n/a	n/a	n/a	n/a
	Japanese Equity <sup>7</sup>	10.728	11.194	20.08574	20.44506
	Miscellaneous – Income & Real	n/a	n/a	n/a	n/a

Volatility Classification	Asset Categories <sup>3</sup>	Point in Time (from Appendix 2)		Rolling Averages (from Appendix 3)	
		3 yr avg annual SD	5 yr avg annual SD	3 yr rolling avg SD	5 yr rolling avg SD
	Property <sup>8</sup>				
	Passive Inverse/Leveraged	n/a	n/a	n/a	n/a
	Commodity	n/a	n/a	n/a	n/a
	Geographic Equity <sup>8</sup>	n/a	n/a	n/a	n/a
	Sector Equity <sup>8</sup>	n/a	n/a	n/a	n/a
	Miscellaneous – Other <sup>8</sup>	n/a	n/a	n/a	n/a
	Miscellaneous – Undisclosed Holdings <sup>8</sup>	n/a	n/a	n/a	n/a

## **Notes to volatility classifications**

*Fund managers have a duty to ensure that the classification of their fund represents all facts (i.e. any element of risk of which they are aware that is not captured in the fund's historical volatility), and have an obligation to classify accordingly.*

*It is recognized that managers must be given the latitude to classify a fund either higher or lower than the volatility category indicated by the guidelines, in the interest of making full, true and plain disclosure of all material facts relating to the mutual funds being offered.*

- 1 Target-Date Portfolios and Tactical Balanced funds should be compared to the most relevant benchmark depending on the asset allocation of the particular fund. Fund managers should also consider utilizing a custom benchmark for these funds.
- 2 Although the data for these categories suggests that they should be placed in the Medium volatility risk band, the Task Force recommended that, due to the narrow focus – either in terms of market cap or sector - of the funds in these categories, placement in the Medium to High volatility risk band would be more appropriate.
- 3 As of March 31, 2014, CIFSC voted to terminate the Health Care Equity category. Funds will be reclassified into the Sector Equity category.
- 4 Labour-Sponsored Venture Capital — while a suitable benchmark for this category does not exist, these funds are typically regarded as high volatility vehicles due to the nature of the investments and the inherent risk in venture capital investments.
- 5 Although the data for the Natural Resources Equity category suggests that it should be placed in the Medium to High volatility risk band, the Task Force recommended that, due to the narrow focus – either in terms of market cap or sector - of the funds in this category, placement in the High volatility risk band would be more appropriate. As of March 31, 2014, a new Energy Equity category was split out of the Natural Resources Equity category (due to the clear divide between funds focused primarily on the energy sector versus more diversified natural resources funds).
- 6 Alternative Strategies — due to the wide variation in fund types within this category, these funds, by default, should be classified as High volatility. If a fund company wishes to classify an alternative strategies fund in a lower volatility category, an explanation should accompany the disclosure.
- 7 As of March 31, 2014, CIFSC voted to terminate the Japanese Equity category. Funds will be reclassified into the Geographic Equity category.
- 8 Miscellaneous Sub-Categories — due to the wide variation in fund types within these categories, these funds should not be classified according to this guideline. Fund companies must accompany the volatility category selected for such a fund with an explanation. As of March 31, 2014, CIFSC has removed the 'Miscellaneous' label from 'Miscellaneous – Sector Equity' and 'Miscellaneous – Geographic Equity'.

## Appendix 2: Standard Deviation – Annual (Average) at December 31, 2014 <sup>4</sup>

CIFSC Category	Benchmark	1Year	2Years	3Years	4Years	5Years	6Years	7Years	8Years	9Years	10Years
2015 Target Date Portfolio	Benchmarked to the relevant balanced fund category benchmark depending on the fund	n/a									
2020 Target Date Portfolio	Benchmarked to the relevant balanced fund category benchmark depending on the fund	n/a									
2025 Target Date Portfolio	Benchmarked to the relevant balanced fund category benchmark depending on the fund	n/a									
2025+ Target Date Portfolio	Benchmarked to the relevant balanced fund category benchmark depending on the fund	n/a									
Alternative Strategies	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Asia Pacific Equity	MSCI AC Asia Pacific Index	6.096	7.322	8.752	9.205	9.233	10.730	13.033	12.454	12.480	12.394
Asia Pacific ex-Japan Equity	MSCI AC Far East ex Japan Index	8.262	8.539	9.951	12.485	12.179	13.813	17.152	16.655	16.569	16.517
Canadian Dividend & Income Equity	S&P/TSX Equity Index & S&P/TSX Composite Dividend	n/a	7.802	8.742	10.419	10.988	12.941	16.048	15.321	14.896	14.606
Canadian Equity	S&P/TSX Composite Index	8.018	7.753	8.310	9.687	10.229	12.056	15.025	14.467	14.083	13.890
Canadian Equity Balanced	S&P/TSX Composite Index & MSCI World Index & DEX Universe Bond Index (50:15:35)	4.597	4.567	4.842	5.511	5.775	6.982	8.953	8.503	8.295	8.150
Canadian Fixed Income	FTSE TMX Canada Universe Bond Index	2.901	3.446	3.100	3.145	3.182	3.191	3.410	3.327	3.322	3.293
Canadian Fixed Income Balanced	S&P/TSX Composite Index & MSCI World Index & DEX Universe Bond Index (20:15:65)	3.030	3.317	3.002	2.934	2.995	3.823	4.965	4.679	4.592	4.520
Canadian Focused Equity	S&P/TSX Composite Index & MSCI World Index (60:40)	5.656	6.127	6.929	8.231	8.866	10.402	12.876	12.204	11.954	11.673
Canadian Focused Small/Mid Cap Equity	S&P/TSX SmallCap Index & MSCI World Small Cap Index (60:40)	10.888	9.643	10.567	12.323	12.649	13.856	17.295	16.600	16.143	15.783
Canadian Inflation Protected Fixed Income	FTSE TMX Canada Real Return Bond Index	6.351	8.972	8.019	8.216	7.628	8.278	9.656	9.199	8.904	8.614
Canadian Long Term Fixed Income	FTSE TMX Canada Long Term Overall Bond Index	5.859	6.872	6.194	6.486	6.211	6.205	6.787	6.543	6.533	6.439
Canadian Money Market	FTSE TMX Canada 91 Day T-Bill Index	0.034	0.041	0.054	0.052	0.080	0.096	0.305	0.419	0.451	0.433
Canadian Neutral Balanced	S&P/TSX Composite Index & MSCI World Index & DEX Universe Bond Index (40:10:50)	3.946	3.914	3.922	4.250	4.385	5.427	7.078	6.713	6.548	6.455
Canadian Short Term Fixed Income	FTSE TMX Canada Short Term Bond Index	0.885	1.119	1.061	1.123	1.440	1.535	1.796	1.766	1.723	1.716
Canadian Small/Mid Cap Equity	S&P/TSX SmallCap Index	17.248	14.035	14.435	15.976	15.921	17.157	21.058	20.352	19.690	19.260
Canadian Synthetic Money Market	FTSE TMX Canada 91 Day T-Bill Index	0.034	0.041	0.054	0.052	0.080	0.096	0.305	0.419	0.451	0.433
Emerging Markets Equity	MSCI Emerging Markets Index	9.152	9.359	11.537	13.083	12.924	14.575	18.034	17.309	17.596	17.666
European Equity	MSCI Europe Index	9.434	10.136	11.001	12.428	13.702	14.758	16.375	15.467	15.168	14.611
Financial Services Equity	MSCI World Financials Index	4.337	7.171	9.998	12.249	13.014	18.270	20.076	19.099	18.382	17.618
Global Equity	MSCI World Index	4.775	5.871	6.740	7.892	8.710	10.425	12.143	11.550	11.398	11.046
Global Equity Balanced	MSCI World Index & Citigroup WBIG Index (65:35)	3.317	4.014	4.272	4.622	5.118	6.981	7.918	7.778	7.803	7.675
Global Fixed Income	Citigroup World Broad Investment Grade	6.295	5.428	5.293	5.906	6.706	8.099	9.762	10.038	9.670	9.589
Global Fixed Income Balanced	MSCI World Index & Citigroup WBIG Index (35:65)	4.006	3.822	3.610	3.625	4.115	5.984	6.859	7.121	7.069	7.063
Global Neutral Balanced	MSCI World Index & Citigroup WBIG Index (50:50)	3.431	3.704	3.682	3.762	4.210	6.151	6.949	7.037	7.062	7.014
Global Small/Mid Cap Equity	MSCI World Small Cap Index	8.152	8.072	8.614	9.991	10.704	12.726	14.829	14.296	14.246	13.821
Greater China Equity	MSCI China Index	13.819	13.491	14.798	16.562	15.605	16.855	21.847	22.422	22.828	22.272
Health Care Equity	MSCI World Health Care Index	9.120	8.477	8.200	8.345	9.056	10.820	11.458	11.714	11.425	11.323
High Yield Fixed Income	Bank of America Merrill Lynch Global High Yield Index	5.401	5.313	4.802	5.092	5.352	7.012	9.032	9.121	8.903	8.823
International Equity	MSCI EAFE Index	6.333	7.716	9.130	10.094	11.035	12.416	14.179	13.418	13.281	12.856
Japanese Equity	MSCI Japan Index	7.644	10.044	10.728	11.921	11.194	12.506	13.101	13.048	12.884	12.925
Geographic Equity	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Commodity	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Miscellaneous – Income & Real Property	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Passive Inverse/Leveraged	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Miscellaneous – Other	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Sector Equity	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Energy Equity</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Miscellaneous – Undisclosed Holdings	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Natural Resources Equity	MSCI World Energy & Materials Index & S&P Global Natural Resources (60:40)	10.729	10.106	11.562	13.004	13.743	13.624	16.108	15.285	15.613	15.683
North American Equity	MSCI North America Index	4.759	6.204	6.585	7.525	8.217	10.053	11.628	11.192	10.979	10.730
Precious Metals Equity	S&P/TSX Global Gold Index	39.979	36.680	32.921	31.139	30.627	31.990	36.989	35.305	35.121	34.113
Real Estate Equity	S&P Developed Property Index	8.906	10.175	9.477	10.405	10.695	14.934	17.781	17.426	17.265	16.781
Tactical Balanced	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
U.S. Synthetic Money Market	US 3 Month Treasury Bills CAD	5.000	0.007	0.007	0.010	0.013	0.017	0.163	0.436	0.544	0.539
U.S. Equity	S&P 500 Index	5.002	6.595	6.912	7.710	8.343	10.438	11.878	11.492	11.259	11.017
U.S. Money Market	US 3 Month Treasury Bills CAD	n/a	0.007	0.007	0.010	0.013	0.017	0.163	0.436	0.544	0.539
U.S. Small/Mid Cap Equity	Russell 2000 Index	13.206	11.652	11.128	12.463	13.125	15.487	16.841	16.265	16.124	15.804

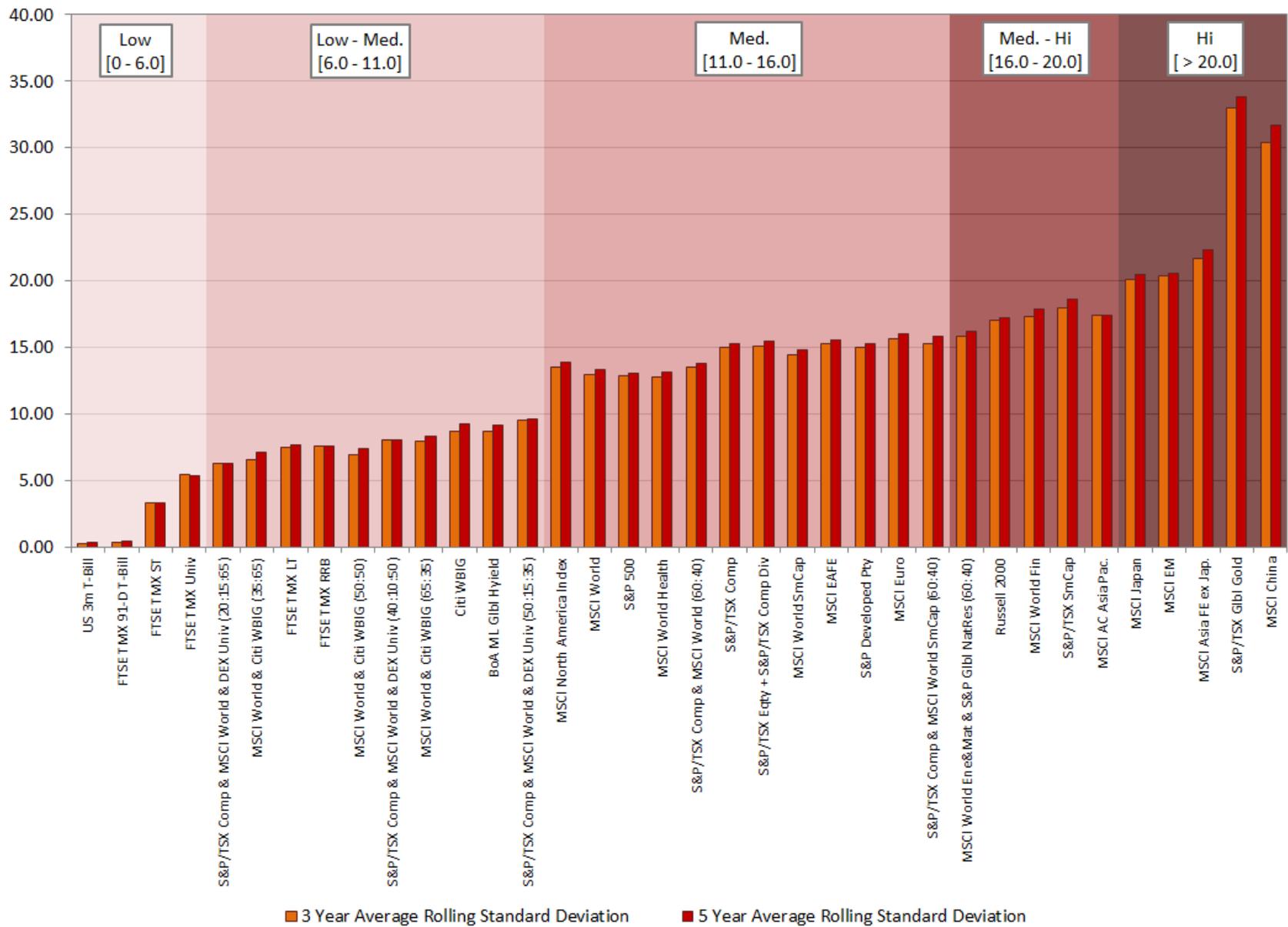
<sup>4</sup> Data used in this table has been computed from data provided by index providers directly. For Sources and Disclaimers please go to page 18.

### Appendix 3: Standard Deviation – Index at December 31, 2014 <sup>5</sup>

CIFSC Category	Benchmark	3 Year Average Rolling Standard Deviation (%)	5 Year Average Rolling Standard Deviation (%)	Number of months of data used
2015 Target Date Portfolio	Benchmarked to the relevant balanced fund category benchmark depending on the f	n/a	n/a	n/a
2020 Target Date Portfolio	Benchmarked to the relevant balanced fund category benchmark depending on the f	n/a	n/a	n/a
2025 Target Date Portfolio	Benchmarked to the relevant balanced fund category benchmark depending on the f	n/a	n/a	n/a
2025+ Target Date Portfolio	Benchmarked to the relevant balanced fund category benchmark depending on the f	n/a	n/a	n/a
Alternative Strategies	n/a	n/a	n/a	n/a
Asia Pacific Equity	MSCI AC Asia Pacific Index	17.45290	17.47344	324
Asia Pacific ex-Japan Equity	MSCI AC Far East ex Japan Index	21.65788	22.30330	324
Canadian Dividend & Income Equity	S&P/TSX Equity Index & S&P/TSX Composite Dividend	15.11358	15.44360	695
Canadian Equity	S&P/TSX Composite Index	14.98936	15.34008	707
Canadian Equity Balanced	S&P/TSX Composite Index & MSCI World Index & DEX Universe Bond Index (50:15:35)	9.55907	9.65374	421
Canadian Fixed Income	FTSE TMX Canada Universe Bond Index	5.52369	5.43355	421
Canadian Fixed Income Balanced	S&P/TSX Composite Index & MSCI World Index & DEX Universe Bond Index (20:15:65)	6.33591	6.35799	421
Canadian Focused Equity	S&P/TSX Composite Index & MSCI World Index (60:40)	13.50224	13.81415	540
Canadian Focused Small/Mid Cap Equity	S&P/TSX SmallCap Index & MSCI World Small Cap Index (60:40)	15.34262	15.87569	179
Canadian Inflation Protected Fixed Income	FTSE TMX Canada Real Return Bond Index	7.63720	7.61264	276
Canadian Long Term Fixed Income	FTSE TMX Canada Long Term Overall Bond Index	7.48900	7.71614	805
Canadian Money Market	FTSE TMX Canada 91Day T-Bill Index	0.38094	0.47858	744
Canadian Neutral Balanced	S&P/TSX Composite Index & MSCI World Index & DEX Universe Bond Index (40:10:50)	8.04111	8.09170	421
Canadian Short Term Fixed Income	FTSE TMX Canada Short Term Bond Index	3.34753	3.31929	421
Canadian Small/Mid Cap Equity	S&P/TSX SmallCap Index	17.97257	18.65045	179
Canadian Synthetic Money Market	FTSE TMX Canada 91Day T-Bill Index	0.38094	0.47858	744
Emerging Markets Equity	MSCI Emerging Markets Index	20.36285	20.56371	324
European Equity	MSCI Europe Index	15.69951	16.03084	540
Financial Services Equity	MSCI World Financials Index	17.30262	17.91450	240
Global Equity	MSCI World Index	13.00463	13.31769	540
Global Equity Balanced	MSCI World Index & Citigroup WBIG Index (65:35)	8.02022	8.37749	192
Global Fixed Income	Citigroup World Broad Investment Grade	8.74286	9.29854	192
Global Fixed Income Balanced	MSCI World Index & Citigroup WBIG Index (35:65)	6.59298	7.11590	192
Global Neutral Balanced	MSCI World Index & Citigroup WBIG Index (50:50)	6.96246	7.39897	192
Global Small/Mid Cap Equity	MSCI World Small Cap Index	14.50870	14.86230	192
Greater China Equity	MSCI China Index	30.44561	31.71129	264
Health Care Equity	MSCI World Health Care Index	12.82213	13.19874	240
High Yield Fixed Income	Bank of America Merrill Lynch Global High Yield Index	8.70580	9.19693	204
International Equity	MSCI EAFE Index	15.28571	15.61773	540
Japanese Equity	MSCI Japan Index	20.08574	20.44506	540
Geographic Equity	n/a	n/a	n/a	n/a
Commodity	n/a	n/a	n/a	n/a
Miscellaneous – Income & Real Property	n/a	n/a	n/a	n/a
Passive Inverse/Leveraged	n/a	n/a	n/a	n/a
Miscellaneous – Other	n/a	n/a	n/a	n/a
Sector Equity	n/a	n/a	n/a	n/a
<b>Energy Equity</b>	n/a	n/a	n/a	n/a
Miscellaneous – Undisclosed Holdings	n/a	n/a	n/a	n/a
Natural Resources Equity	MSCI World Energy & Materials Index & S&P Global Natural Resources (60:40)	15.88052	16.26755	145
North American Equity	MSCI North America Index	13.56333	13.92584	540
Precious Metals Equity	S&P/TSX Global Gold Index	33.01961	33.82284	171
Real Estate Equity	S&P Developed Property Index	15.04994	15.34877	305
Tactical Balanced	n/a	n/a	n/a	n/a
U.S Synthetic Money Market	US 3 Month Treasury Bills CAD	0.29623	0.39438	793
U.S. Equity	S&P 500 Index	12.91310	13.12361	348
U.S. Money Market	US 3 Month Treasury Bills CAD	0.29623	0.39438	793
U.S. Small/Mid Cap Equity	Russell 2000 Index	17.10395	17.26555	348

<sup>5</sup> Data used in this table has been computed from data provided by index providers directly. For Sources and Disclaimers please go to page 18.

**Appendix 4: Standard Deviation - Benchmark (Average Rolling 3/5 Year) at December 31, 2014 <sup>6</sup>**



<sup>6</sup> Data used in this chart has been computed from data provided by index providers directly. For Sources and Disclaimers please go to page 18.

### **Appendix 5: Example of Appropriate Use of IFIC Guidelines**

In Example 1 and Example 2, we consider a fictional fund – the XYZ Canadian Equity Fund – to illustrate appropriate use of the IFIC Guidelines.

**Example 1:**

The fund has only three years of monthly return history. We compare these results to the appropriate benchmark index in Appendix 2.

	<b>Fund: XYZ Canadian Equity Fund (standard deviation)</b>	<b>Benchmark: S&amp;P / TSX Composite Index (standard deviation)</b>
1 year	8.132	8.018
2 year	7.924	7.753
3 year	8.251	8.310

Since the results are similar to the benchmark index, the fund manager should assign the fund to the same risk category as the benchmark index – in this case, the ‘Medium’ risk category.

**Example 2:**

The fund has ten years of monthly return history. We compare these results to the appropriate benchmark index in Appendix 2. (Note: this fund has the ability to use leverage)

	<b>Fund: XYZ Canadian Equity Fund (standard deviation)</b>	<b>Benchmark: S&amp;P / TSX Composite Index (standard deviation)</b>
1 year	8.132	8.018
2 year	7.924	7.753
3 year	8.251	8.310
4 year	8.563	9.687
5 year	9.184	10.229
6 year	10.113	12.056
7 year	11.564	15.025
8 year	11.874	14.467
9 year	12.452	14.083
10 year	12.213	13.890

Some fund managers may interpret the average annual standard deviation of the XYZ Canadian Equity Fund to be materially different from the benchmark index for the 7 year, 8 year, 9 year and 10 year average annual standard deviation.

In such a case, we determine XYZ Canadian Equity Fund’s 3 year and 5 year rolling average standard deviation. These are compared to the ‘Rolling Averages’ SD bands presented in Appendix 1 to determine the appropriate volatility classification.

<b>Fund: XYZ Canadian Equity Fund (3-year rolling avg standard deviation)</b>	<b>SD Bands (Appendix 1)</b>
8.652	Low to Medium risk

Fund: XYZ Canadian Equity Fund (5-year rolling avg standard deviation)	SD Bands (Appendix 1)
13.216	Medium risk

We ultimately use the average of the rolling 5-year standard deviation since it results in a more stable volatility risk classification over time.

The 5-year rolling average standard deviation of the fund indicates Medium risk, which is in line with the risk category of the benchmark index (i.e. Medium).

However, in this case the fund manager would assign a higher risk rating (i.e. Medium to High risk) and include the ability to use leverage as justification in the relevant disclosures.

Example 3:

In this example, we consider the launch of a new International Equity fund with a very aggressive investment style, and no historical data. As the fund has less than three years of returns history, the Guidelines suggest selecting the benchmark index that most closely resembles the investment mandate or strategy of the fund. In this case, the relevant CIFSC category – International Equity – has a volatility classification of ‘Medium’.

However, the fund manager intends to use an aggressive strategy with potential volatility significantly higher than a broad International Equity fund. Therefore, the fund manager would categorize the fund in a higher risk category (Medium to High, or High, depending on the level of additional volatility associated with the investment strategy).

## **Disclaimers:**

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**Index: Bank of America Merrill Lynch Global High Yield Index**

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**Index: Citigroup World Broad Investment Grade Index**

Source: Citigroup Global Markets Inc.

**Indices: S&P Developed Property Index, S&P 500 Index, S&P Global Natural Resources, S&P/TSX Equity Index, S&P/TSX Composite Index, S&P/TSX Composite Dividend Index, S&P/TSX SmallCap Index, S&P/TSX Global Gold Index**

Source: Standard & Poors. TSX Inc.

**Index: Russell 2000 Index**

Source: Russell Investments.