

UBC FACULTY PENSION PLAN PENSION FORUM

MR. JOOST BLOM, CHAIR, BOARD OF TRUSTEES
MS. ORLA COUSINEAU, EXECUTIVE DIRECTOR, PENSIONS
MR. MIKE LESLIE, EXECUTIVE DIRECTOR, INVESTMENTS
MAY 10, 2017



Agenda

- **Welcome by Chair**
- **50 years!**
- **2017 Board Initiatives and Projects**
- **Plan's Financial and Membership Update**
- **2016 Operations Update and 2017 Operations Objectives**
- **Investment Review for 2016 and First Quarter 2017**
- **Board of Trustees**
- **Questions**



50 Years

- Brief history of FPP prepared for this anniversary
- From 1924 UBC and faculty members paid into pension funds at TIAA-CREF
- In 1964 the UBC BoG and the Faculty Association created a joint committee to review pension arrangements
- Committee's March 1966 report became basis for the FPP, which was approved by BoG in November 1966 and formally commenced April 1, 1967
- Debt we members owe to all those who helped build the FPP over the 50 years



50 Years - Continued

- Major features of the FPP, then and now
 - 5% employee + 10% UBC, minus CPP contributions (original)
 - Defined contribution plan (original, with minimum benefit provision - removed in 1991)
 - Board of Trustees as administrator (original)
 - Investment options
 - Balanced Fund (original, though modified)
 - Equity, Bond, STIF (all 1993, separate Canadian and Foreign Equity 2005), GICs (2012)
 - Retirement options
 - Variable Payment Life Annuity (original)
 - RRIF, LIF-type payments (from 2004)
 - Using funds to purchase on market (from 1982)



2017 Board Initiatives and Projects

- Investment Structure Review in 2016 resulted in changes to foreign equity manager structure which affected the Balanced Fund and Foreign Equity Fund options
- Increasing member engagement and awareness through new Plan website launched last year, new tools available through Sun Life and webcast of this event



2017 Board Initiatives and Projects

- Continued oversight of Plan's investment managers including how they consider/implement ESG factors in their investment process
- Variable payout life annuity (VPLA) implemented a new mortality table as members are living longer, reflected in monthly amounts effective April 1, 2017



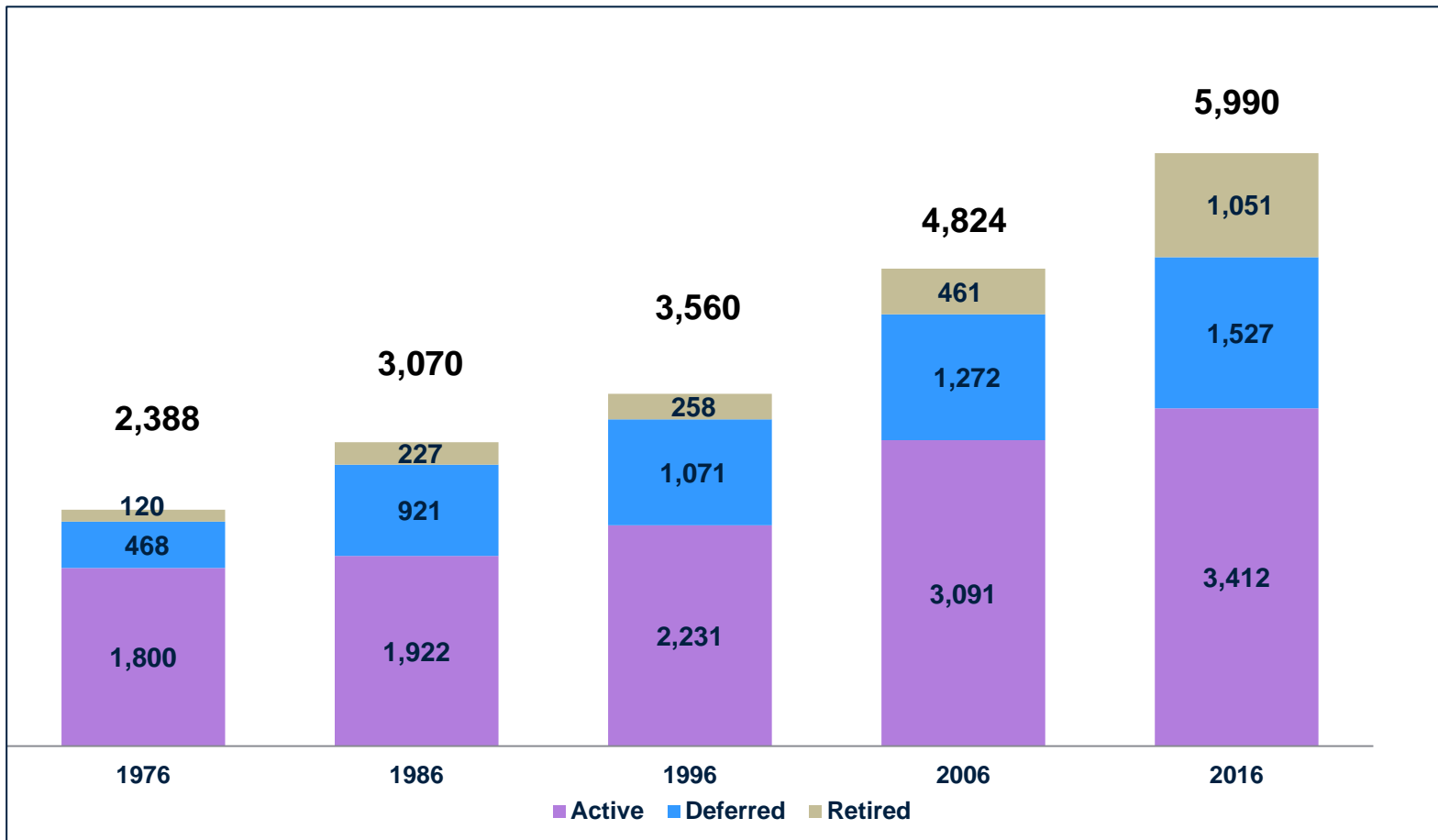
Plan Statistics December 31, 2016



	Active	Deferred	Retired	Total
Members	3,412	1,527	1,051	5,990
	57%	25%	18%	100%
Assets (millions)	\$1,173	\$270	\$696	\$2,139
	55%	13%	32%	100%

Total assets of \$2.1 billion

Membership Growth – to December 31, 2016



2016 Operations Update

- Launched new Plan website
- Improved transparency of fees – August 2016 Newsletter
- Changed to bi-weekly remittance of contributions effective January 1, 2017
- Significant benefit of UBC FPP is low management fees, and in fact the administration fee was reduced effective March 1, 2017



2017 Operations Objectives

- Quarterly Member Statements
 - Moving from paper to online, unless you opt for paper statements
- Work with Sun Life to promote awareness of tools available
 - Asset Allocation Tool
 - Retirement Income Estimator
- More information about fees
 - April newsletter – How to calculate your Investment Fees
 - On quarterly member statements



2017 Operations Objectives

- Ensure Plan members approaching retirement contact the Pension Administration Office for information
- UBC and the FPP do not endorse any financial planners
 - Certain financial planners or advisers target UBC Faculty and their invitations and communications are often misleading





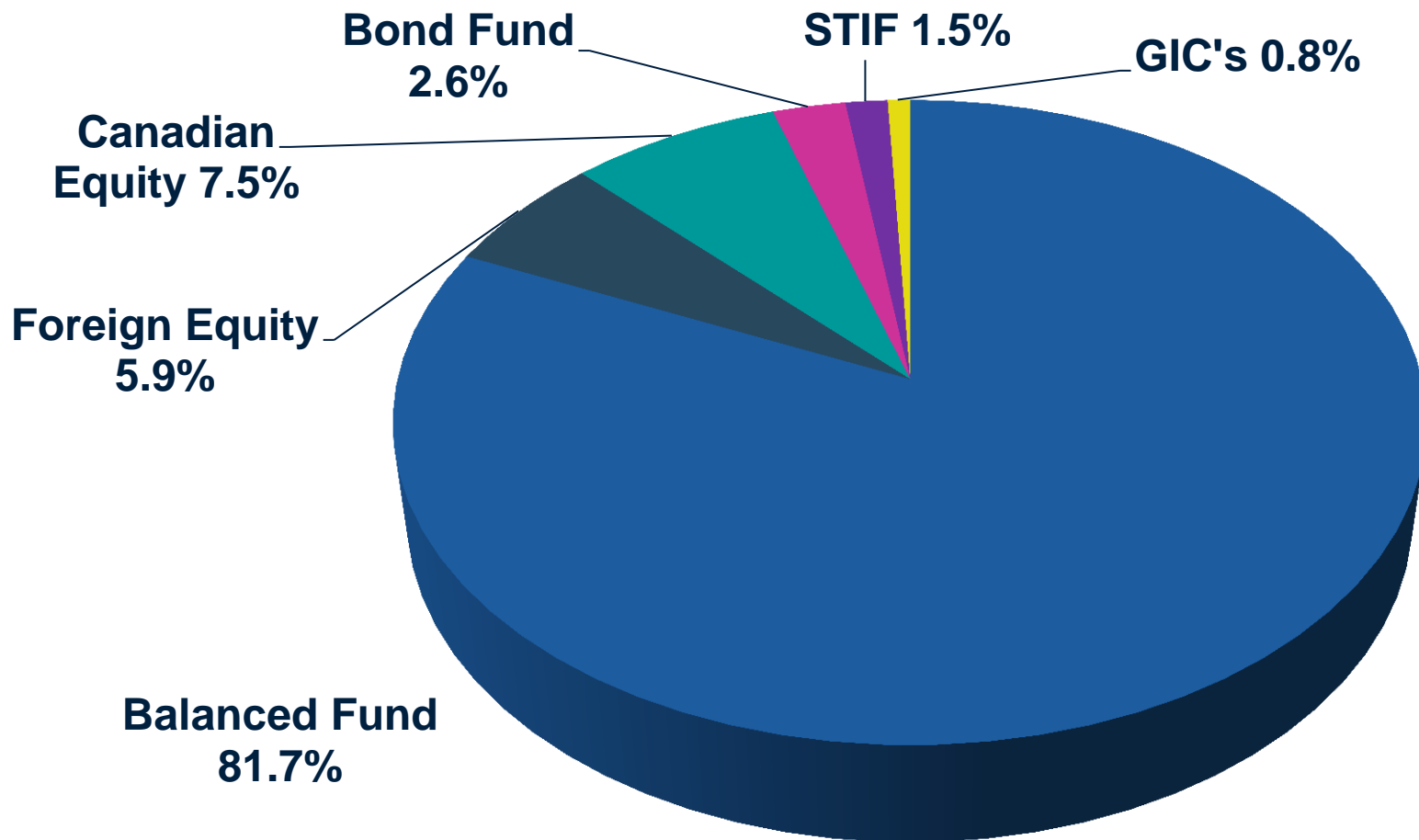
Investment Review of 2016

Agenda

- Plan – Fund Weightings & Asset Mix
- Fund Returns
- Investment Market Update
- Question Period



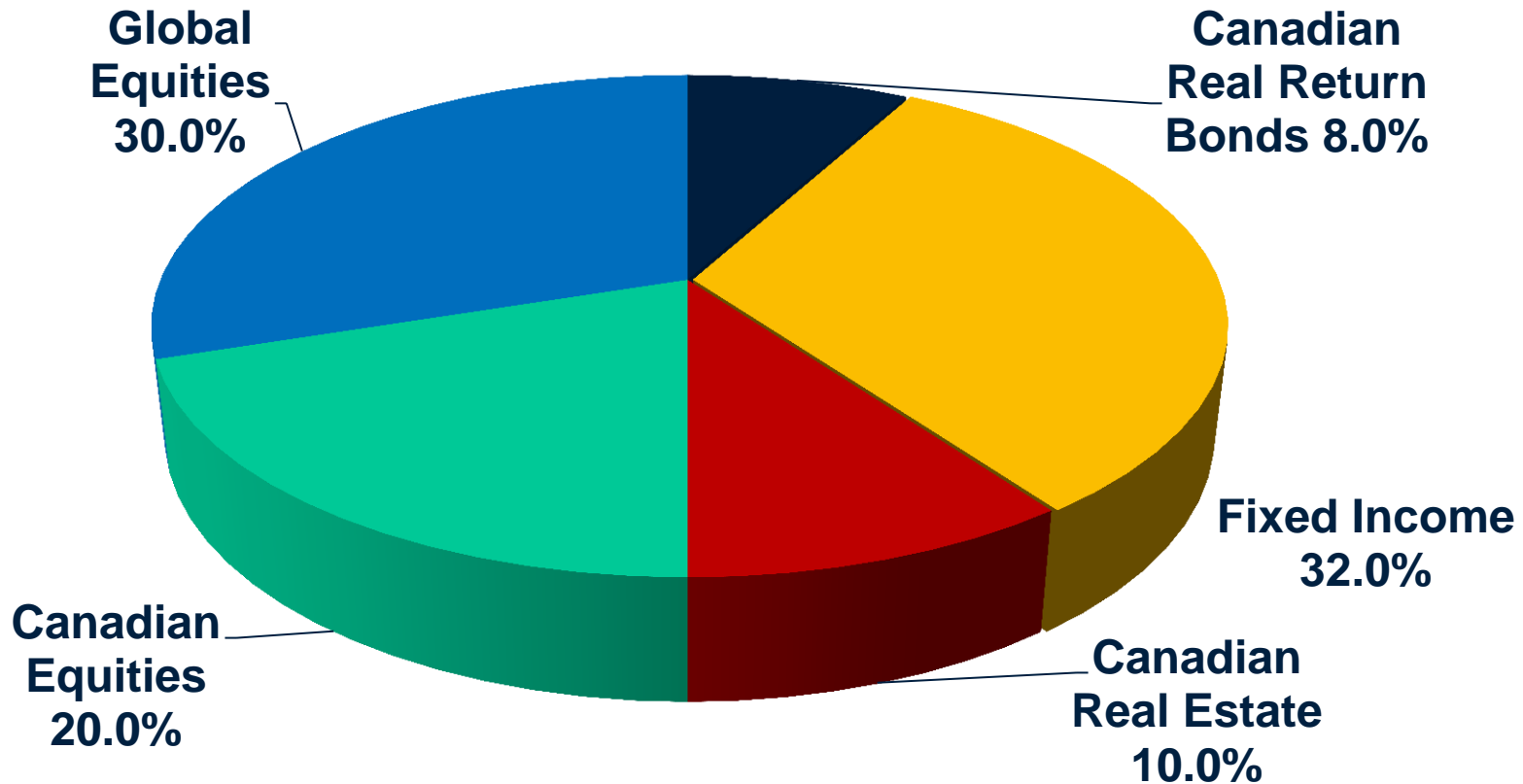
Plan's Fund Weightings as of December 31, 2016



*Total Assets \$2.1 Billion



Balanced Fund – Policy Asset Mix



* Global Equities includes investments in both U.S. Equities and Non-North American Equities

2016 Fund Returns / Peer Rankings

Fund	Returns (%)			Return Ranking (percentile)*		Risk** Ranking (percentile)*
	1 Yr	5 Yr	10 Yr	1 Year	10 Years	4 Years
Balanced	6.1	9.6	6.1	80 th	39 th	77 th
Bond	1.8	3.1	5.1	80 rd	35 th	5 th
Canadian Equity	21.3	10.9	6.3	20 th	30 th	31 st
Foreign Equity	3.2	18.0	5.7	65 th	48 th	30 th
Short Term	0.7	1.1	1.5	56 th	63 th	N/A

Gross returns to Dec. 31/16

* 1st percentile – highest ranking best performance, 100th percentile – lowest ranking

** Risk - as measured by annual standard deviation of returns

- a lower ranking number (say 80th percentile) means less risky



Investment Changes in 2016

1. Canadian Equity

- Terminated PCJ, reallocated to other 3 managers

2. Foreign Equity

- Replaced U.S. Equity only mandate with Global Equity mandate
- Hired new Global Minimum Volatility equity manager (BlackRock)

3. Changed Target Objective in Investment Policy

- Was “achieve a reasonable income replacement ratio (i.e. 60-70%)”
- Changed to “50% or higher”
- Based on 30 years service, retiring at 65, invested in the Balanced Fund



Key Themes In 2016

- **Global Monetary Policy still very accommodative**
 - However Fed started to hike rates in US
- **Canadian bond yields declined for most of the year then moved up in Q4**
- **Energy prices improved**
 - WTI – January 2016 – \$27
 - WTI – December 2016 – \$53
- **Commodity prices improved**
- **Brexit**
- **Trump**

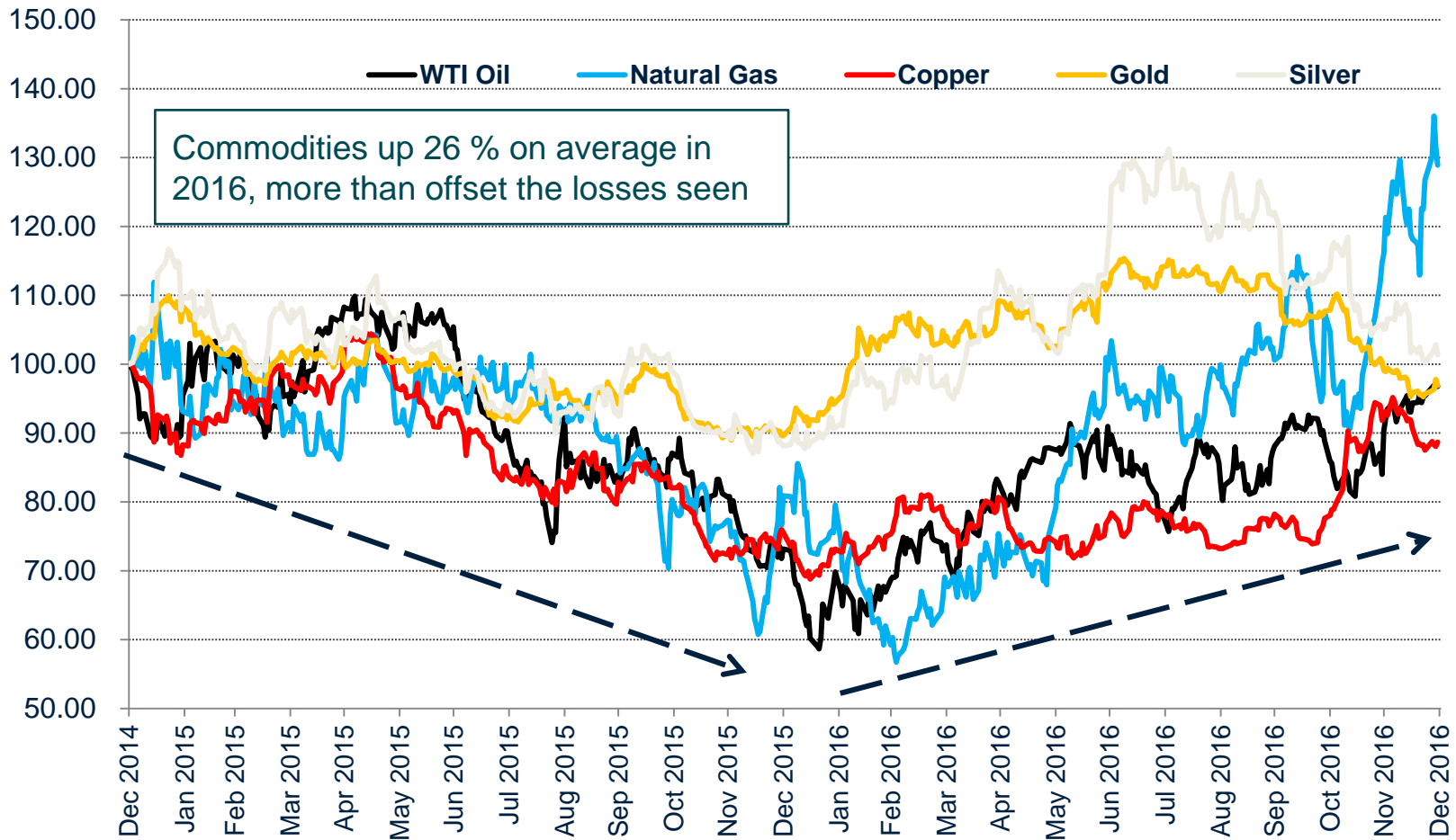


Review Of 2016



	Q1	Q2	Q3	Q4	1 Year
Canadian Equities	4.5%	5.1%	5.5%	4.5%	21.1%
U.S. Equities (C\$)	-5.0%	2.8%	4.7%	6.3%	8.6%
International Equities (C\$)	-9.1%	-1.2%	7.3%	1.6%	-2.0%
Bonds	1.4%	2.6%	1.2%	-3.4%	1.7%

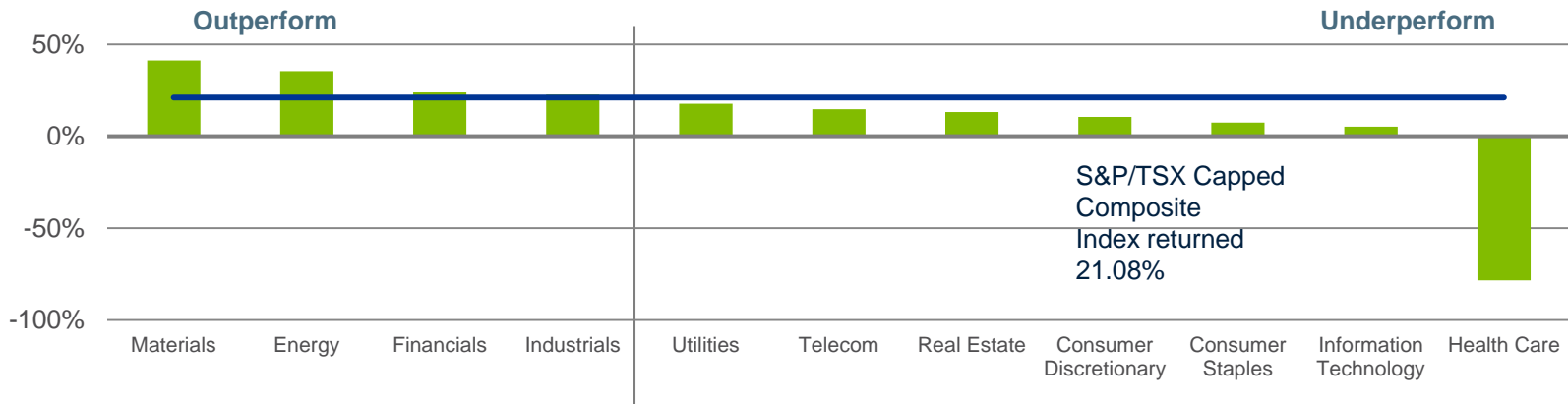
Commodities Prices Increased During 2016



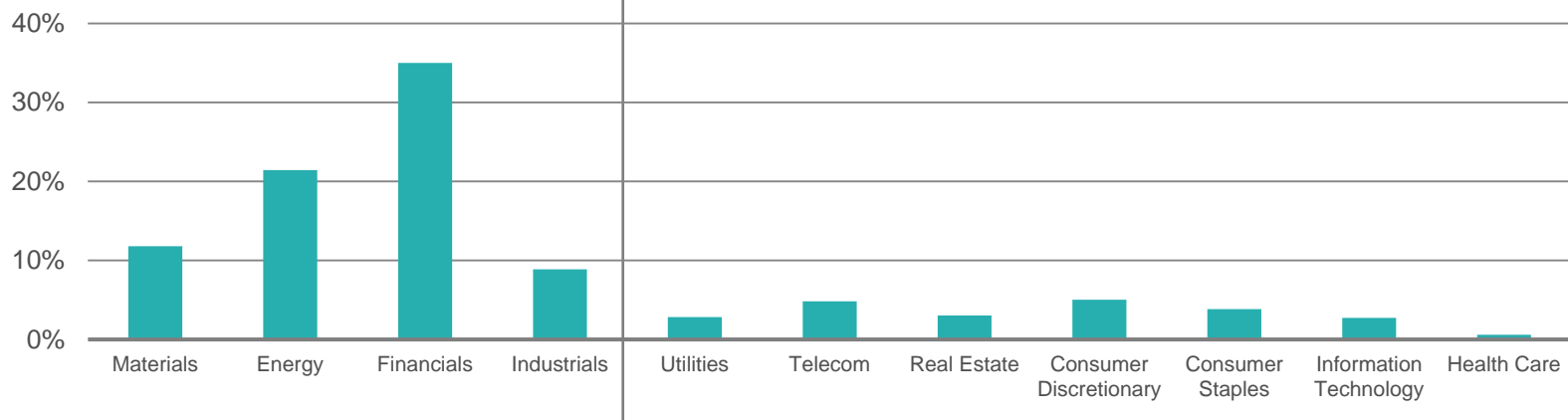
S&P/TSX Capped Composite Index

Sector returns vs. Sector weights

Sector returns



Sector weights



1 year ending 31 December 2016

Past performance is not necessarily indicative of future performance

Sources: FactSet Research Systems Inc., BlackRock



2016 Global Market Performance

- After significantly enhancing foreign equity returns in 2015, currency detracted from performance in 2016
- The British Pound fell significantly post-Brexit
- Japan and Europe underperformed during the year
- Emerging markets substantially outperformed developed markets

Stock Market	Local Currency	Canadian Dollars
Canada	20.3%	20.3%
United States	10.9%	7.6%
Pacific (Ex. Japan)	8.3%	4.6%
Japan	-0.7%	-0.7%
United Kingdom	19.2%	-3.1%
Europe (Ex. U.K.)	2.3%	-3.5%
MSCI World	9.0%	4.3%
Emerging Markets	9.7%	7.9%

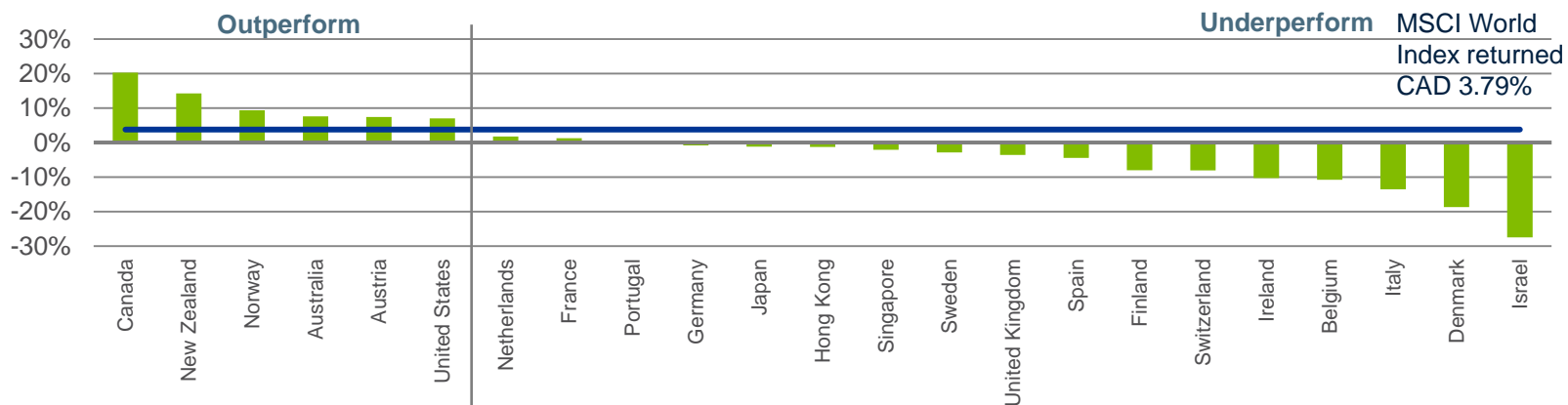
* Source: MSCI Developed & Emerging Market Indices



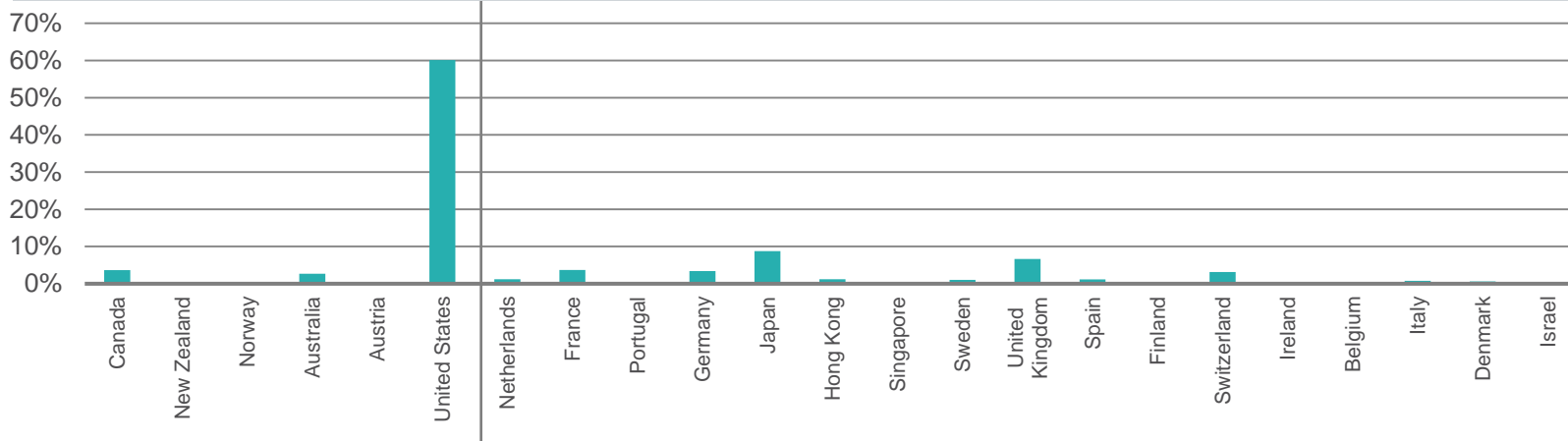
MSCI World Index

Country returns vs. country weights

Country returns



Country weights



1 year ending 31 December 2016

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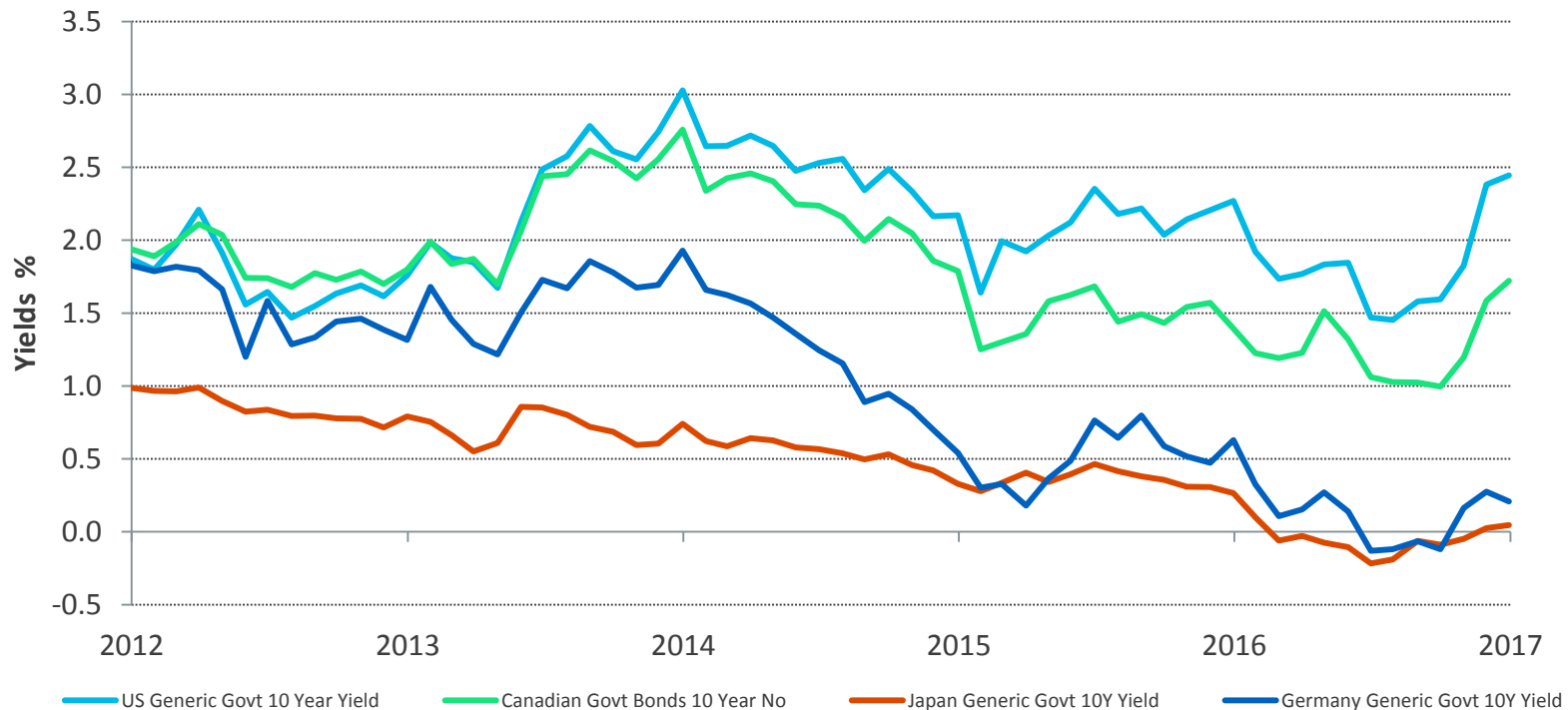
Sources: FactSet Research Systems Inc., BlackRock



Global Bond Yields Have Moved Higher

Global 10 Year Yields

Source: Bloomberg, Leith Wheeler Investment Counsel



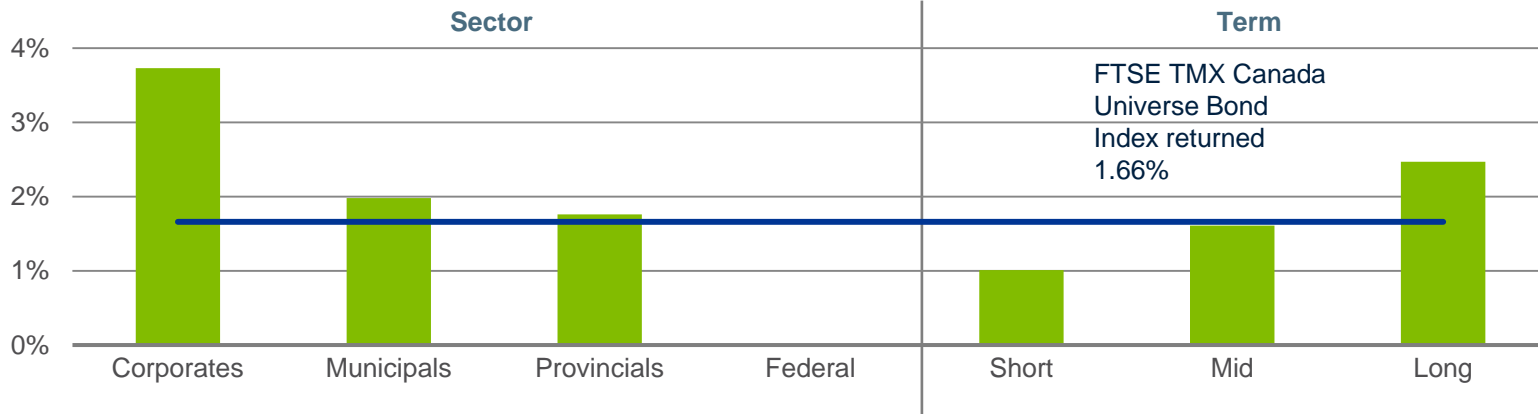
- *Global bond yields have started to rise, led by the United States.*
- *Canada has followed, although yields in Europe and Japan remain extremely low.*



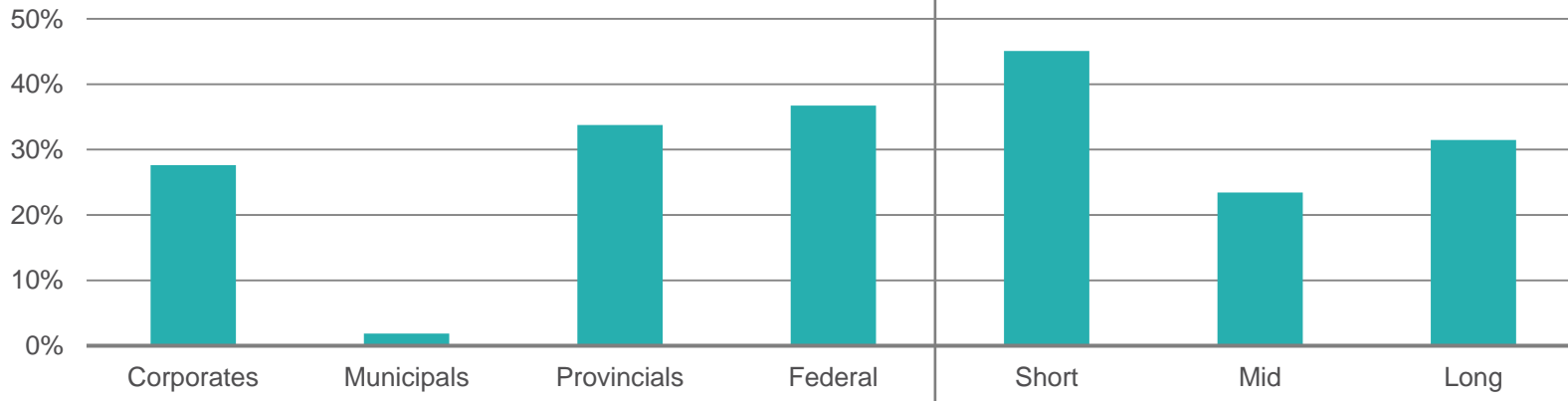
Canadian bond market

Sector returns vs. sector weights

Sector & term returns



Sector & term weights



1 year ending 31 December 2016

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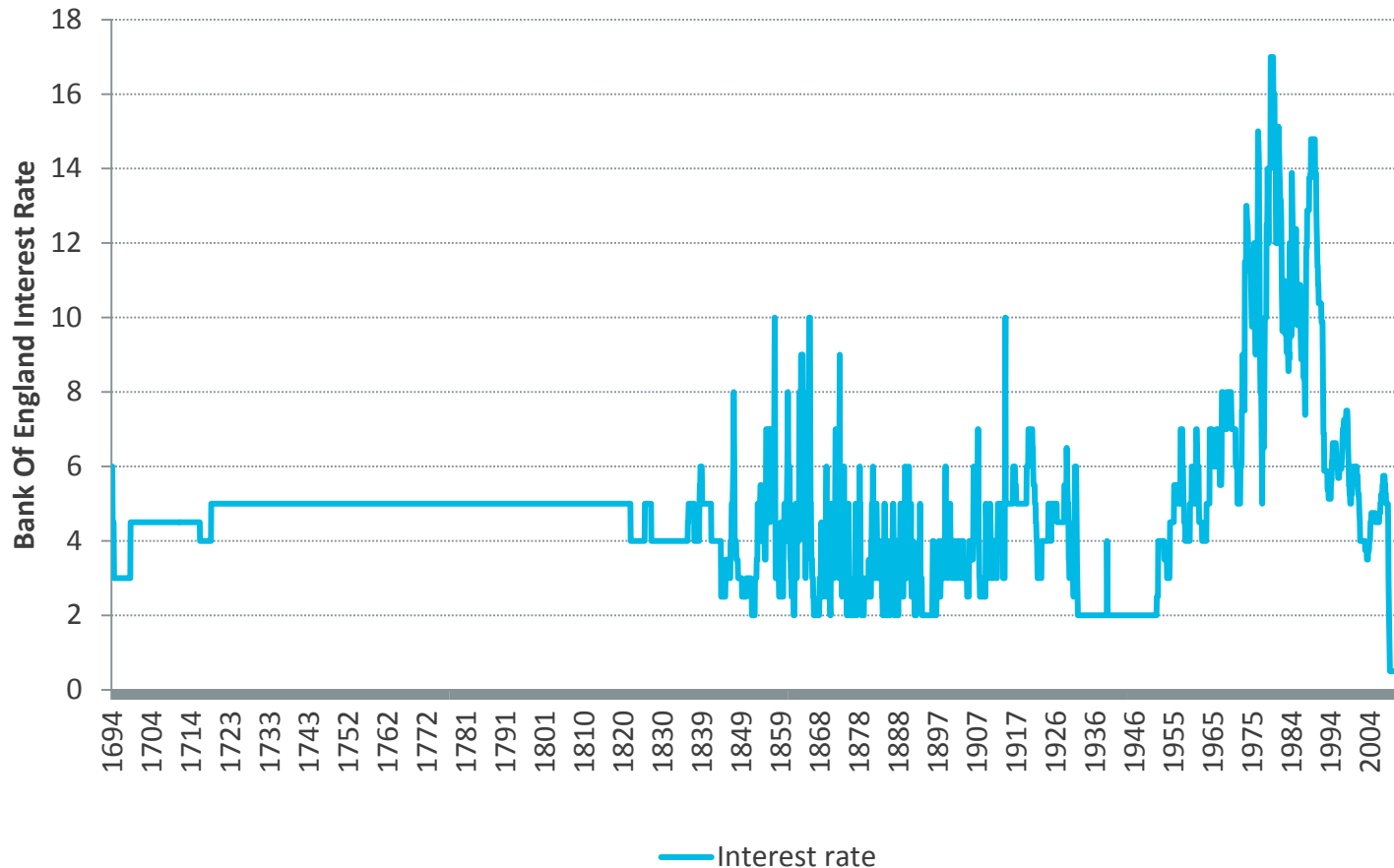
Sources: BlackRock; FTSE TMX Global Debt Capital Markets Inc.



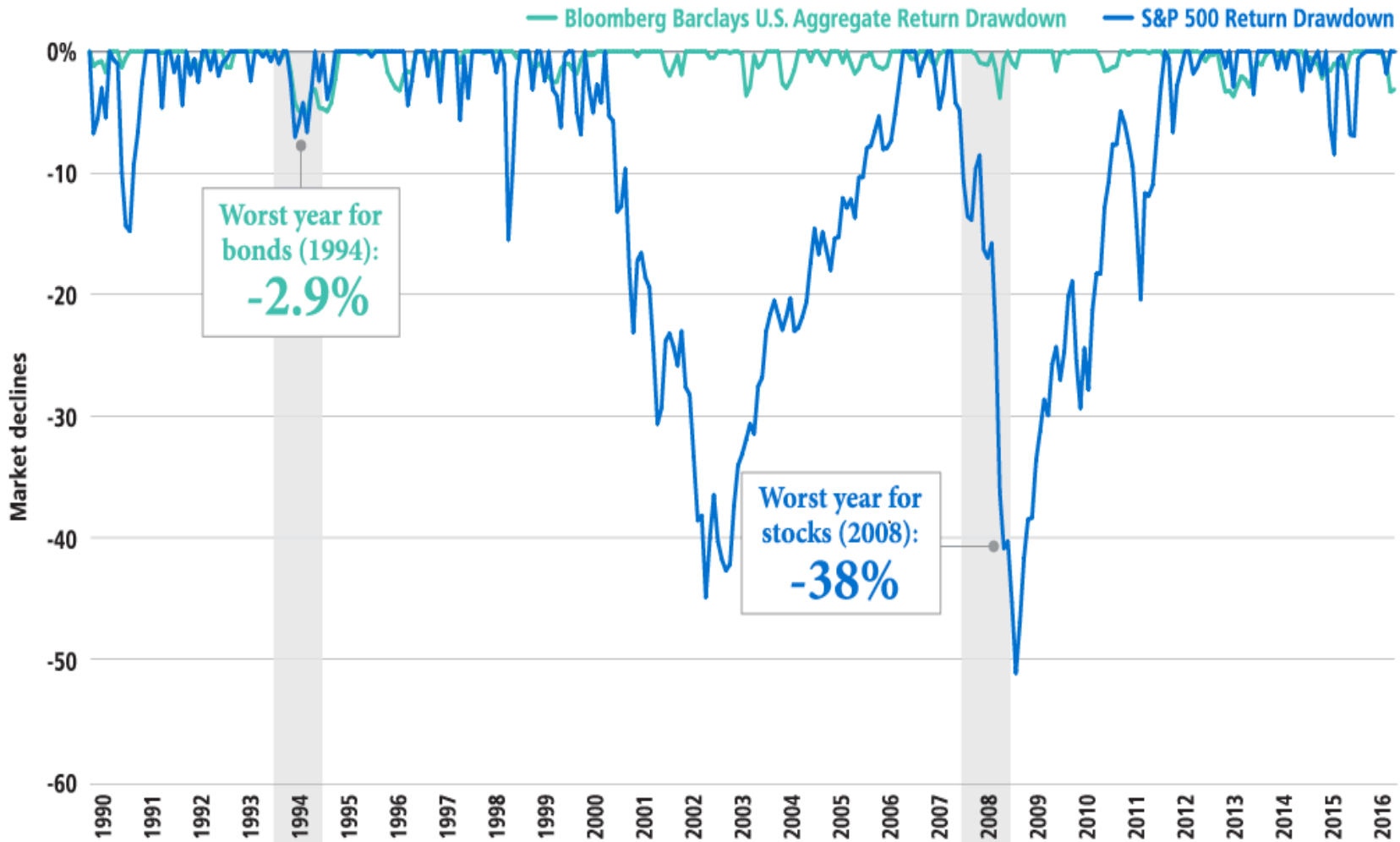
History Of Interest Rate Settings

Long-Term Central Bank Interest Rate

Source: Bank of England, The Guardian



Stocks VS Bond Returns



Performance quoted represents past performance. Past performance is not a guarantee or a reliable indicator of future results.

Source: Morningstar Direct. Chart shows U.S. stock and bond declines beginning December 1989 and ending December 2016. Stocks are represented by the S&P 500 Index, bonds by the Bloomberg Barclays U.S. Aggregate Index. Worst years are calendar years.



Real Estate

(Note: Approximately 10% of Balanced Fund)

Returns to December 31, 2016			
	<u>1 Year</u>	<u>5 Year</u>	<u>10 Year</u>
Gross	5.7%	7.7%	7.8%
Net	4.9%	6.9%	7.0%

Property Type (Overall) as at March 31, 2016	
Office	38.0%
Retail	24.5%
Industrial	18.4%
Residential	14.5%
Other	4.6%

By Region	
BC	24%
Prairies	27%
Ontario	43%
Quebec/Man	6%



FPP Fund Option Fees (as of April 2017)

(basis points) 1bp = 0.01%

	Administration	Investment Manager	Operating Expenses of I. M.	Total Fee
Balanced	14	19	14	0.47%
Bond	14	16	5	0.35%
Canadian Equity	14	24	6	0.44%
Foreign Equity	14	23	11	0.48%
STIF	14	2.5	0.5	0.17%

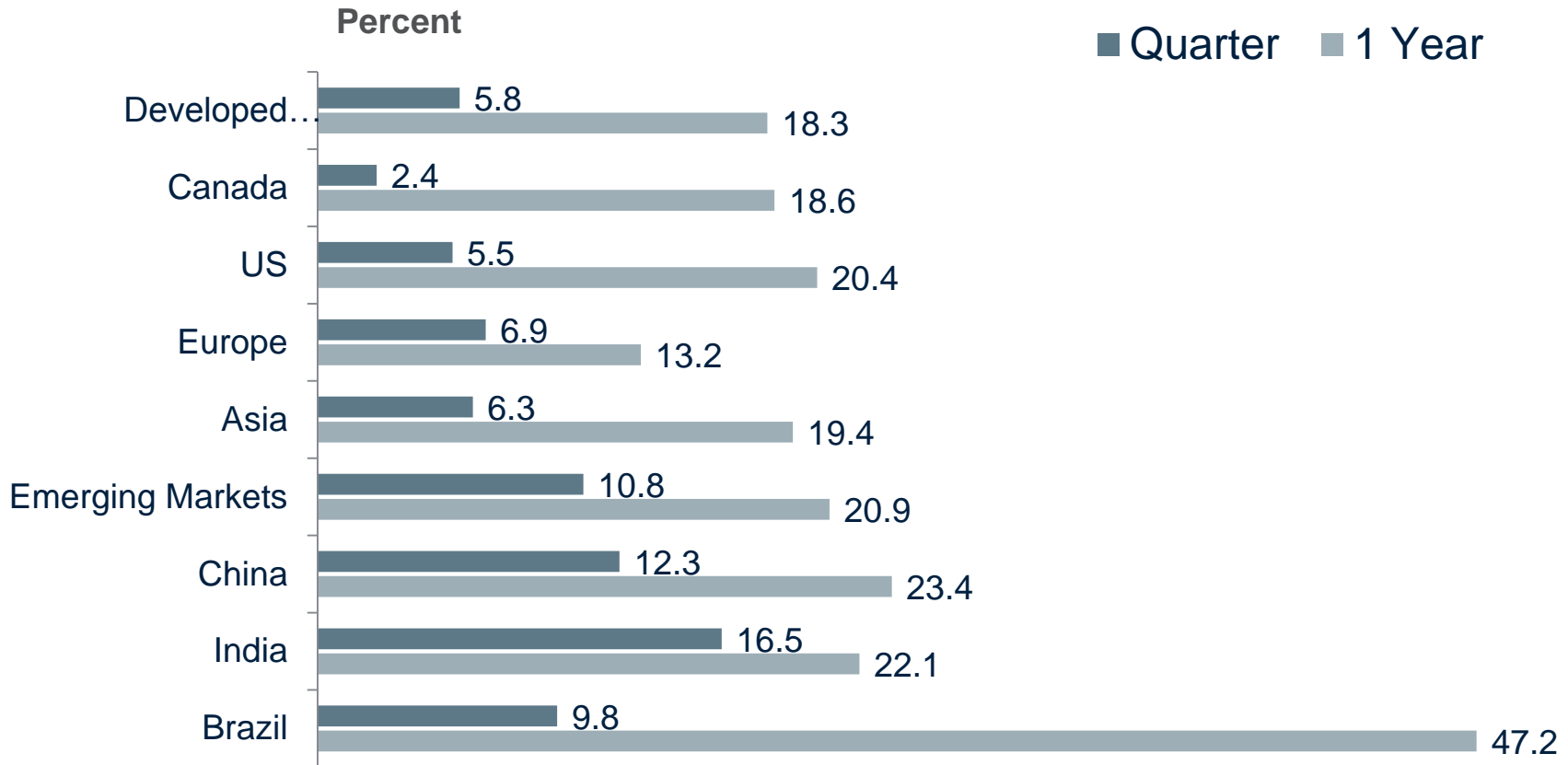
Note: The Administration Fees were reduced from 16 bps to 14 bps as of March 1, 2017.



Results to March 31, 2017



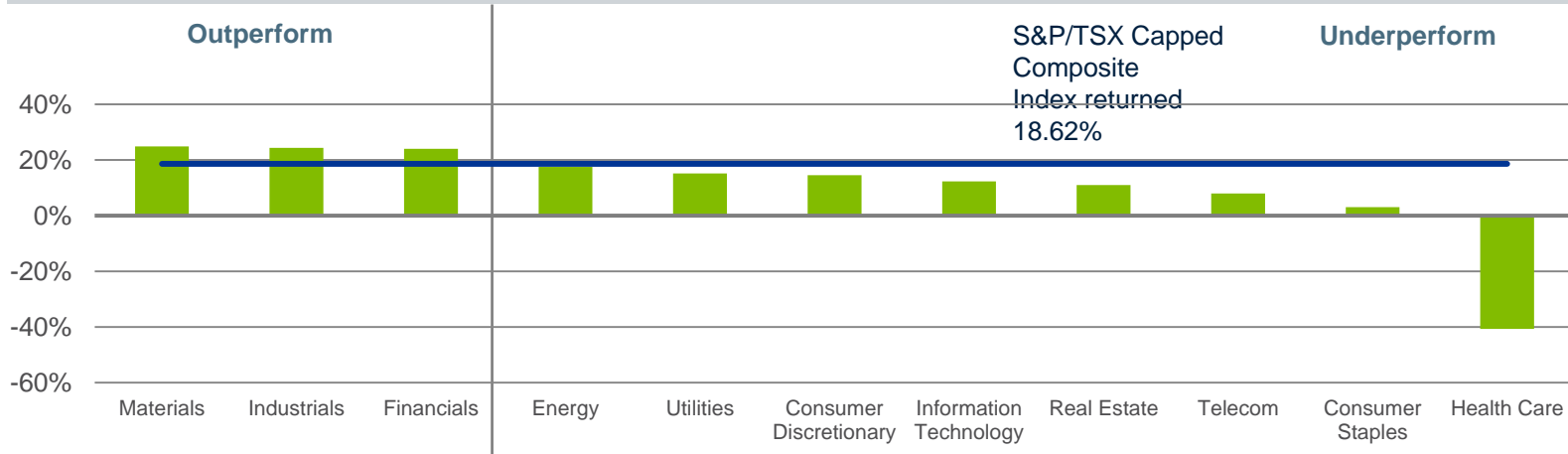
Equity Markets – Good Quarter, Great Year



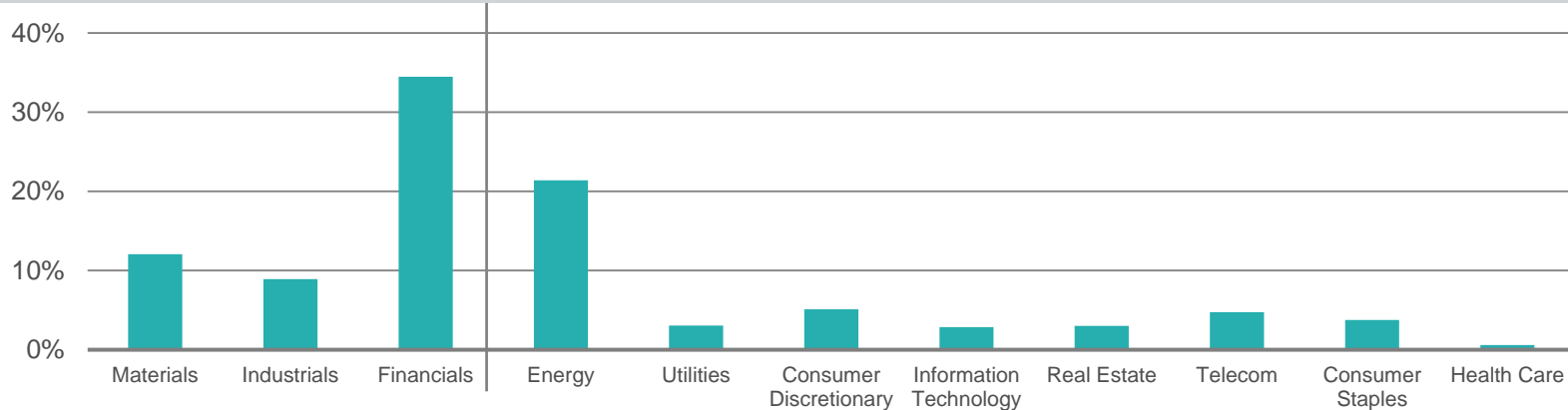
*Note: Preliminary un-reconciled returns, subject to change. All returns in Canadian dollars. All returns are MSCI Index returns, except Canada, which is S&P/TSX Equity Index.

S&P®/TSX® Capped Composite Index Sector Returns Vs. Sector Weights

Sector returns



Sector weights



1 year ending 31 March 2017

Past performance is not necessarily indicative of future performance

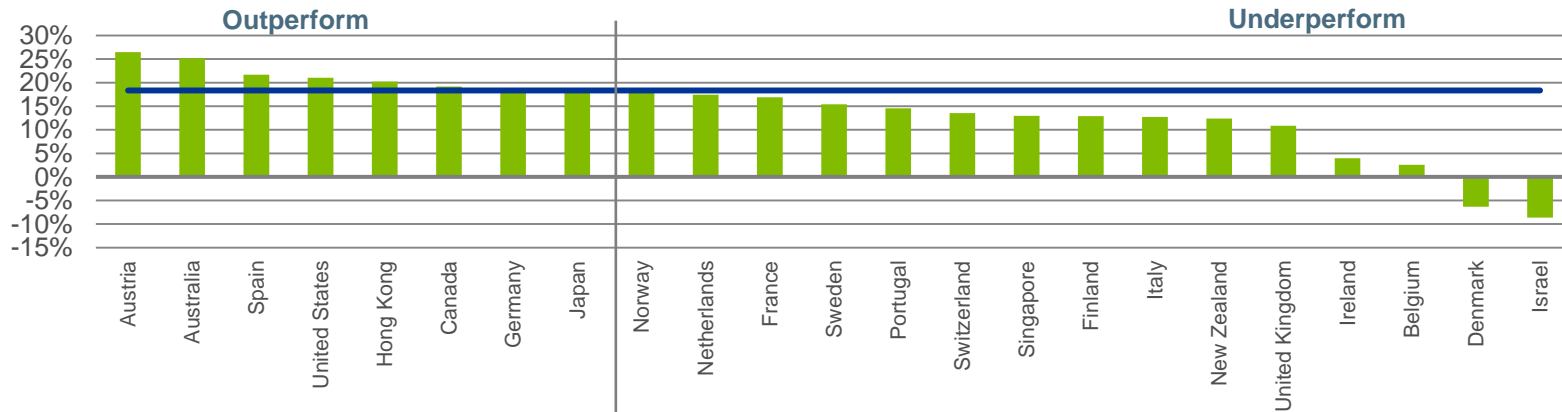
Sources: FactSet Research Systems Inc., BlackRock



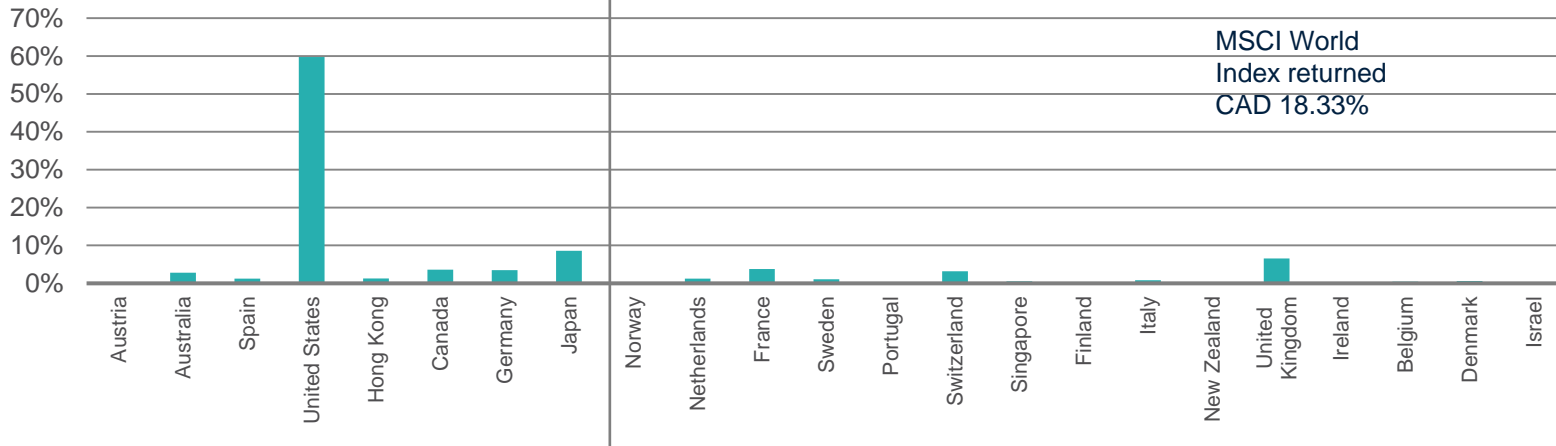
MSCI World Index

Country returns vs. Country weights

Country returns



Country weights



1 year ending 31 March 2017

Past performance is not necessarily indicative of future performance.

Sources: FactSet Research Systems Inc., BlackRock



Fund Rates of Return* to March 31, 2017

Fund	Q1/2017	1 Yr.	5 Yrs.	10 Yrs.
Balanced Fund	3.1%	10.4%	9.4%	6.3%
Bond Fund	0.9%	1.9%	3.4%	5.2%
Canadian Equity Fund	2.9%	19.7%	10.5%	6.2%
Foreign Equity Fund	6.0%	16.6%	16.9%	6.2%
Short Term Investment Fund	0.2%	0.7%	1.1%	1.4%

* Before investment manager and administration fees



Asset Class Winners And Losers



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Highest	14.2	33.9	28.3	39.2	37.7	31.7	13.7	8.8	11.3	26.7	14.5	24.1	26.3	9.8	6.2	35.1	20.6	18.8	14.8	48.4	24.0	21.0	21.1
	7.4	26.3	23.4	27.7	28.5	19.7	7.4	5.7	2.5	20.5	12.0	14.0	18.3	4.4	3.3	14.4	17.6	4.4	13.8	41.5	17.9	18.3	17.7
	5.4	25.0	17.5	18.6	15.0	14.3	5.5	4.7	-7.1	13.4	10.2	10.4	17.3	4.4	-15.6	12.6	12.1	1.0	13.5	31.3	14.4	14.0	8.6
	4.0	19.9	16.9	16.2	13.4	14.1	3.4	-3.7	-12.4	12.4	10.2	10.0	15.7	0.9	-17.9	8.7	9.5	1.0	8.3	14.8	11.4	6.0	7.2
	1.8	14.5	14.1	15.0	4.7	12.8	0.8	-6.5	-16.6	8.0	9.0	2.6	13.0	-5.7	-21.9	8.1	9.3	-2.0	7.2	13.0	10.6	4.5	1.3
	-0.2	8.2	6.4	6.2	4.4	4.7	-5.5	-12.6	-21.1	5.3	3.3	1.6	4.0	-10.5	-29.8	1.2	2.4	-8.7	4.0	1.0	3.7	0.6	0.5
Lowest	-7.8	7.4	5.0	3.2	-1.6	-6.2	-10.8	-16.6	-22.7	2.9	2.3	1.3	3.9	-16.5	-33.0	0.6	0.5	-10.2	1.0	-7.0	0.9	-8.3	-2.0

Small Cap: Russell 2000 (C\$)	Large Cap: S&P 500 (C\$)	Large Cap: TSX Composite	International: MSCI EAFE - Net (C\$)	Long Term Gov't Bonds: FTSE TMX Canada Long Gov't	Treasury: 91 Day T-Bills	Diversified
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* Diversified: 25% TSX Composite, 20% S&P 500 (C\$), 15% MSCI EAFE – Net (C\$), 40% FTSE TMX Canada Universe Bond Index

Conclusions

- **Political uncertainty and policy risks still abound**
- **Our large plan size (\$2.2 billion) allows for low fees and broad diversification by asset classes and managers**
- **Returns have been reasonably good over the last 5-10 years**
- **Changes in interest rate policies may affect bond returns going forward**



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Thank You!

Questions?

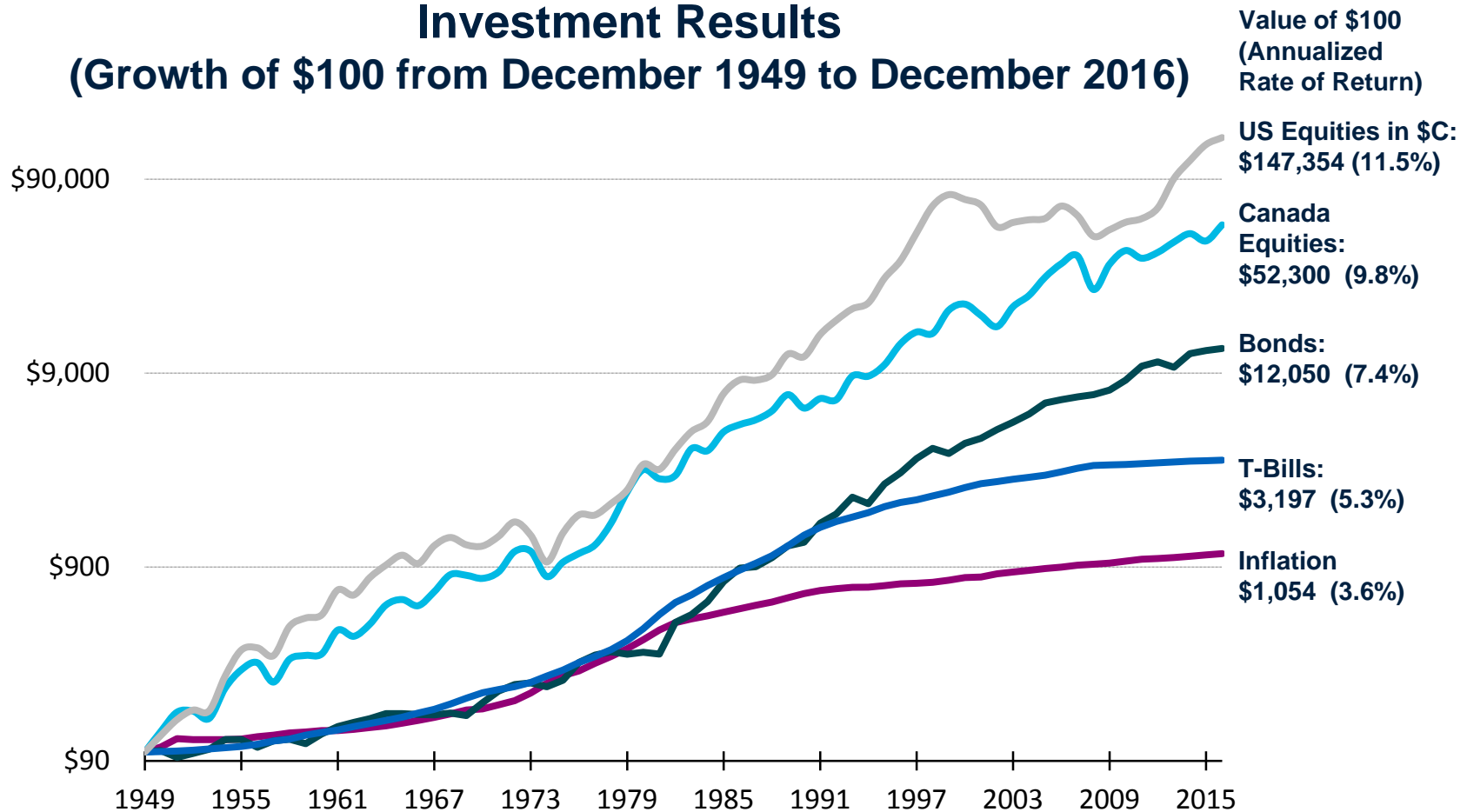


Appendix



Long Term Asset Class Returns

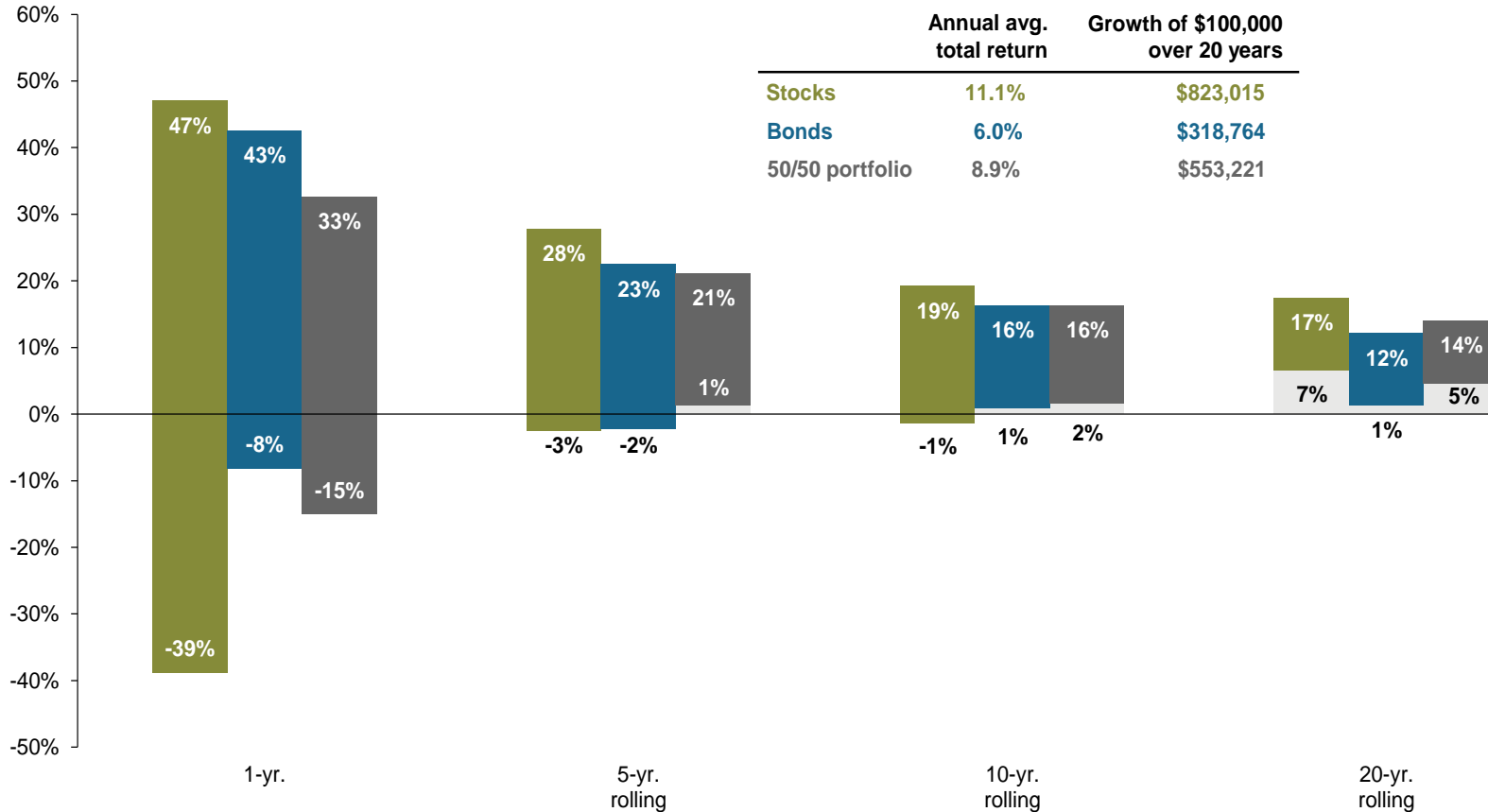
Investment Results (Growth of \$100 from December 1949 to December 2016)



Time, Diversification and the Volatility of Returns

Range of stock, bond and blended total returns

Annual total returns, 1950-2016



Source: Barclays, FactSet, Federal Reserve, Robert Shiller, Strategas/Ibbotson, J.P. Morgan Asset Management. Returns shown are based on calendar year returns from 1950 to 2016. Stocks represent the S&P 500 Shiller Composite and Bonds represent Strategas/Ibbotson for periods from 1950 to 2010 and Barclays Aggregate thereafter. Growth of \$100,000 is based on annual average total returns from 1950 to 2016. *Guide to the Markets – U.S.* Data are as of December 31, 2016.



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Executive Director – Investments

Associate Director

Systems Analyst

Systems Analyst

Faculty Pension Plan Manager

Member Services Specialist

Member Services Associate

Pension Clerk

Pension Plan Accountant

Communications Manager

Communications Assistant

Project Coordinator

Office Administrator



Plan Considerations

- Lower risk through broad diversification
 - 12 Managers, 14 Mandates
- Provide flexibility regarding contribution, investment, retirement and withdrawal options
- Low cost
- High level of member service
- One part of member's overall retirement plan

