

1962 - Prof. Neil Bartlett demonstrates the first reaction 1993 - Prof. Michael Smith awarded a Nobel Prize in Chemistry 2007 - Prof. Susan Murch developes a Faculty Prof. Neil Bartlett demonstrates the first reaction of a noble gas. 1908 - UBC B developes a Faculty Prof. Neil Bartlett demonstrates the first reaction of a noble gas. 1908 - UBC B propagate Faculty Prof. Neil Bartlett demonstrates the first reaction of a noble gas. 1908 - UBC B propagate Faculty Prof. Neil Bartlett demonstrates the first reaction of a noble gas. 1908 - UBC B propagate Faculty Prof. Neil Bartlett demonstrates the first reaction improving food security in tropical regions

2007 san Murch ew way to it, proving in tropical

1993 - Prof. Michael Smith awarded a Nobe

2010 - Prof. Peter Klein and UBC stud awarded an Emmy for investigative journalism.

Michael

in Chemistry

Prof. Susan Murch developes a new way to propagatebreadfruit, improving food security in tropical regions PO03 Prof. Michael Smith awarded rof. Peter Klein and UBC 1962

udents awarded an Emmy for vestigative iournalism. **1962** -Prof.Neil Bartlett demonstrate: he first reaction of a noble gas.

- UBC Begins av

UBC Okanagan TODO Not Anti-Report of a noble gas OCTODER 4, 2016 Subar Anti-Report of Anti-Report Subar Anti-

1908 - UBC Begins

Agenda

- 1. Welcome
- 2. About the Plan
- 3. Investment Principles
- 4. Investment Options
- 5. Your Responsibilities
- 6. Options at Retirement



About the Plan

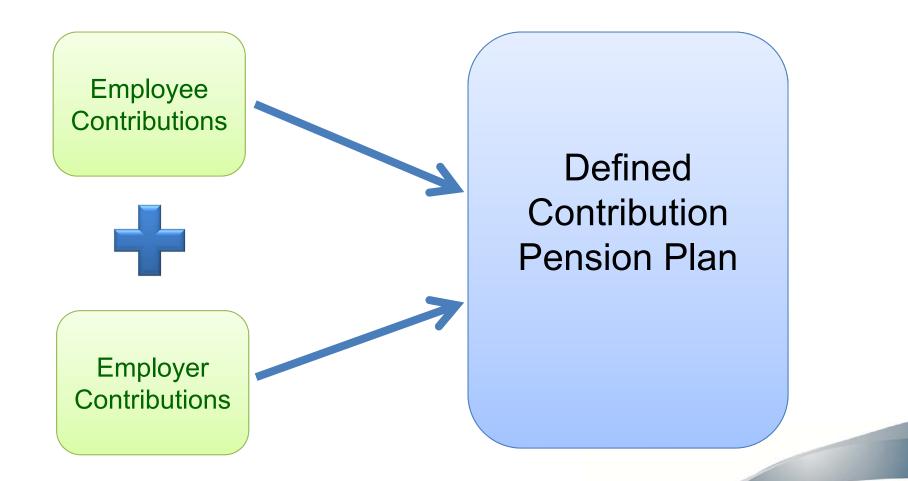
UBC Faculty Pension Plan

Defined Contribution Pension Plan Regulators:

- British Columbia Pension Benefits Standards Act
- Canada Revenue Agency (Income Tax Act)



Pension Contributions







Board of Trustees

Mr. Joost Blom, Chair Faculty of Law

Dr. Robert Heinkel, Vice-Chair Sauder School of Business

Dr. Joy Begley Sauder School of Business

Dr. Joyce Boon Barber Arts & Sciences, UBCO **Dr. R. Kenneth Carty** Political Science, Professor Emeritus

Dr. Joanne Emerman Department of Cellular and Physiological Sciences, Professor Emeritus

Dr. Lorenzo Garlappi Sauder School of Business

Mr. Vijay Verma Researcher Emeritus, TRIUMF



Plan's Mission Statement

The main purpose of the Plan is to provide a well-managed, costeffective retirement plan, designed to assist members in meeting their financial responsibilities, both leading up to retirement and, if the member chooses, through retirement.



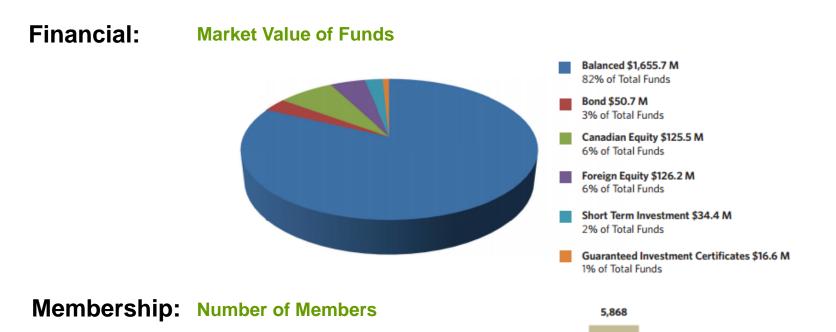


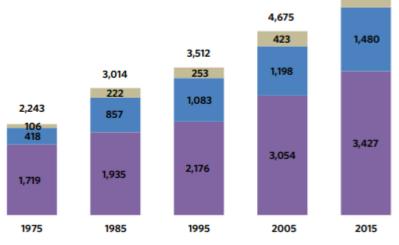
Plan Considerations

- Lower risk through broad diversification
 - 12 Managers
 - 13 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



Statistics as at December 31, 2015





961

Active Deferred Retired

2015 Annual Report

Visit <u>faculty.pensions.ubc.ca</u> > Plan
 Governance > Annual Reports & Financial
 Statements







What if...

- I take a leave of absence
- I take parental leave
- I leave the university before retirement?
- I am totally disabled before retiring?
- I die before retiring?





Am I able to...

make voluntary contributions?

Yes, if you have room

- ☑ Sign into your account online
- ☑ Under *Requests*:
 - select Contribute
- Send your inquiry to the Pension Administration Office
- Voluntary Contribution Enrolment
 Form





e
nvestments
-

FPP contribution estimator

This tool will **estimate** your required and voluntary contributions to the Faculty Pension Plan (FPP) and if applicable, the UBC Supplemental Arrangement for the current tax year. The results provided by this estimator assume you are enrolled in the plan **for the full calendar year**.

Contributions made during your last pay period may not yet have processed on the Sun Life recordkeeping system. Your year to date contribution amounts may not include the latest contributions.

Contribution year	2015	
Annual pensionable earnings 😢	\$	
Maximum FPP contributions	\$	
Results		
	Yearly amounts	Year-to-date contributions
Required contributions Member required contributions UBC required contributions	\$ \$ \$	\$ \$ \$
	Available room	Year-to-date contributions
Voluntary contributions 🙆	\$	\$0.00
You may still have voluntary contribution room available!		

Click here to receive verification of your contribution room from the UBC Pension Administration Office and/or to set up payroll deductions for Voluntary Contributions



Am I able to...

transfer in external registered plans?

Yes

- ✓ Registered plans held at an external financial institution (RRSPs, LIRAs)
 - □ Transfer out fees
 - □ Application for Direct Transfer of Assets Form
- ✓ Registered Pension Plans from another employer





Am I able to...

 take my account balance in cash if I leave the university before retiring?

Depends

✓ Small Benefits Rule

✓ Non-Resident





Investment Principles







Cost of Investing

- Management Expense Ratios (MER)
- Manager expertise, research, custodial charges, operating expenses, etc.
- How are these fees charged?





Impact of Fees

Example: \$100,000 @ 5.75% annual return for 20 years

MER	0.50%	1.50%	2.50%
Average annual cost	\$923	\$2,785	\$4,666
Net Value after fees	\$287,451	\$250,224	\$212,601



Fund Management Fees

As at August 31, 2016

Fund	Annualized Percentage
UBC FPP Balanced Fund	0.49%
UBC FPP Bond Fund	0.37%
UBC FPP Canadian Equity Fund	0.47%
UBC FPP Foreign Equity Fund	0.51%
UBC FPP Short Term Investment Fund	0.19%

Access FPP fund management fee information by signing into the your account at mysunlife.ca/ubcfpp and selecting *my financial centre* > Accounts > Account fees.



Inflation takes a bite





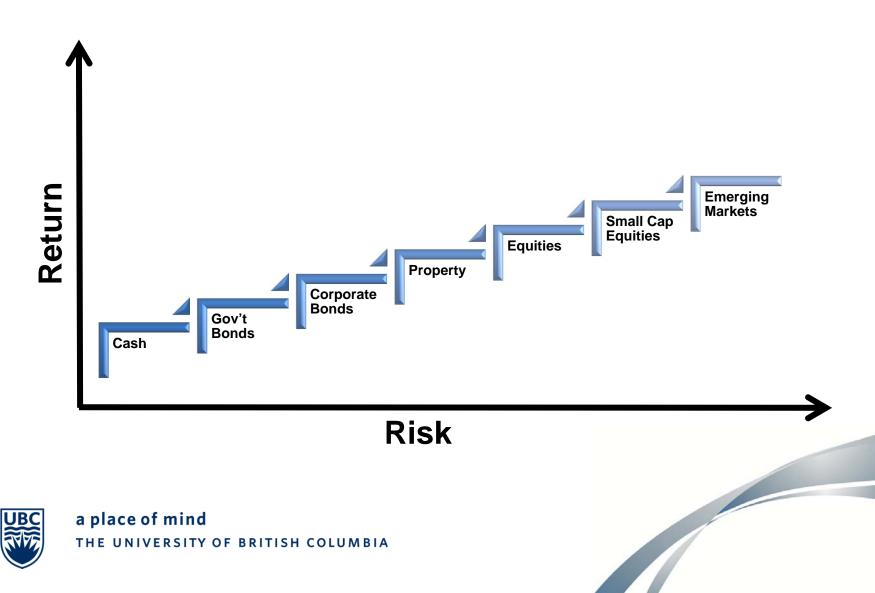
Asset Classes

Asset Type	Risk Profile	Potential Returns
Cash	Low risk	Lowest returns
Bonds	Low to medium risk	Low returns
Property	Medium risk	High returns
Equity	Higher risk	Highest returns





Risk and return are related



Diversification







Asset Allocation

Defined:

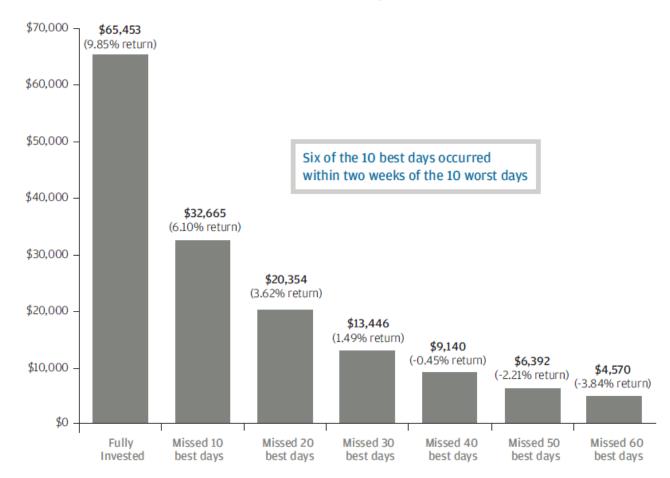
Asset allocation is an investment strategy that aims to balance risk and reward by apportioning a portfolio's assets according to an individual's goals, risk tolerance and investment horizon.





Look to the long term

Performance of a \$10,000 investment between January 3, 1995 and December 31, 2014



This chart is for illustrative purposes only and does not represent the performance of any investment or group of investments.

Source: Prepared by J.P. Morgan Asset Management using data from Lipper. 20-year annualized returns are based on the S&P 500 Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 31, 2014.

Annual Return of Asset Classes (Cdn\$)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Best	BRIC	U.S. LARGE CAPS	EUROPEAN EQUITIES	BRIC EQUITIES	U.S. Bonds	U.S. BONDS	GLOBAL BONDS	BRIC	EMERGING MARKETS EQUITIES	BRIC	BRIC	BRIC	U.S. Bonds	CANADIAN SMALL CAPS	CANADIAN SMALL CAPS	U.S. BONDS	EUROPEAN EQUITIES	U.S. SMALL CAPS	U.S. LARGE CAPS	U.S. LARGE CAPS
t t	33.09%	39.24%	38.36%	72.10%	15.52%	15.25%	15.32%	56.81%	16.78%	40.84%	56.01%	34.90%	31.64%	75.10%	38.53%	10.51%	17.27%	48.14%	23.93%	21.59%
	CANADIAN LARGE CAPS	BRIC	U.S. LARGE CAPS	EMERGING MARKETS EQUITIES	CANADIAN BONDS	GLOBAL HIGH YIELD BONDS	U.S. BONDS	CANADIAN SMALL CAPS	GLOBAL SMALL CAPS	EMERGING MARKETS EQUITIES	EUROPEAN	EMERGING MARKETS EQUITIES	GLOBAL BONDS	BRIC	U.S. SMALL CAPS	CANADIAN BONDS	EMERGING MARKETS EQUITIES	U.S. LARGE CAPS	U.S. Bonds	U.S. Bonds
	31.53%	37.08%	38.01%	57.23%	10.24%	12.44%	9.12%	42.74%	15.17%	31.17%	33.84%	18.59%	31.07%	64.34%	20.24%	9.67%	16.00%	41.27%	15.52%	20.59%
	CANADIAN SMALL CAPS	EUROPEAN EQUITIES	GLOBAL EQUITIES	CANADIAN LARGE CAPS	CANADIAN LARGE CAPS	U.S. SMALL CAPS	CANADIAN BONDS	EMERGING MARKETS EQUITIES	CANADIAN SMALL CAPS	CANADIAN LARGE CAPS	EMERGING MARKETS EQUITIES	CANADIAN LARGE CAPS	CANADIAN BONDS	EMERGING MARKETS EQUITIES	GLOBAL SMALL CAPS	GLOBAL BONDS	GLOBAL SMALL CAPS	GLOBAL SMALL CAPS	GLOBAL EQUITIES	GLOBAL
	28.66%	29.67%	33.94%	34.21%	7.99%	8.92%	8.73%	27.83%	14.12%	26.29%	32.05%	11.14%	6.42%	52.03%	20.10%	8.26%	16.00%	37.84%	15.01%	19.55%
	U.S. LARGE CAPS	U.S. SMALL CAPS	FOREIGN	GLOBAL SMALL CAPS	CANADIAN SMALL CAPS	CANADIAN BONDS	GLOBAL HIGH YIELD BONDS	CANADIAN LARGE CAPS	CANADIAN LARGE CAPS	CANADIAN SMALL CAPS	FOREIGN	CANADIAN BONDS	GLOBAL HIGH YIELD BONDS	CANADIAN LARGE CAPS	CANADIAN LARGE CAPS	GLOBAL HIGH YIELD BONDS	FOREIGN	GLOBAL	U.S. SMALL CAPS	FOREIGN
	23.57% EUROPEAN	27.75% GLOBAL	29.16% GLOBAL	22.64% CANADIAN	7.31%	8.08%	2.04%	25.51% GLOBAL	13.84% EUROPEAN	19.68% GLOBAL	26.37% GLOBAL	3.68% CANADIAN	-7.65% U.s.	31.94%	13.84% EMERGING	8.08% U.S.	15.29% GLOBAL	35.91% EUROPEAN	14.35% CANADIAN	19.46%
	EQUITIES	EQUITIES	BONDS	SMALL CAPS	BONDS	BONDS	SMALL CAPS	SMALL CAPS	EQUITIES	SMALL CAPS	SMALL CAPS	SMALL CAPS	SMALL CAPS	HIGH YIELD BONDS	MARKETS	LARGE CAPS	EQUITIES	EQUITIES	LARGE CAPS	SMALL CAPS
	22.17% U.S.	21.35%	22.04%	20.29%	6.78%	7.95%	-0.93%	23.75%	12.55% FOREIGN	13.01% FOREIGN	20.92%	2.01% EUROPEAN	-17.18%	30.97% GLOBAL	12.98%	4.64%	13.96%	34.41% FOREIGN	12.27%	19.18%
	SMALL CAPS 17.08%	LARGE CAPS 19.95%	BONDS	EQUITIES 20.28%	SMALL CAPS 0.37%	MARKETS EQUITIES 3.76%	MARKETS EQUITIES -6.97%	SMALL CAPS 20.45%	EQUITIES	EQUITIES	EQUITIES 20.19%	EQUITIES	LARGE CAPS -21.20%	SMALL CAPS 28.49%	LARGE CAPS 9.06%	SMALL CAPS -1.80%	SMALL CAPS 13.77%	EQUITIES	SMALL CAPS 11.41%	EQUITIES
	GLOBAL EQUITIES	GLOBAL HIGH YIELD BONDS	GLOBAL SMALL CAPS	GLOBAL EQUITIES	GLOBAL HIGH YIELD BONDS	CANADIAN SMALL CAPS	GLOBAL SMALL CAPS	FOREIGN EQUITIES	U.S. SMALL CAPS	GLOBAL EQUITIES	CANADIAN LARGE CAPS	FOREIGN EQUITIES	GLOBAL EQUITIES	EUROPEAN EQUITIES	GLOBAL HIGH YIELD BONDS	GLOBAL EQUITIES	U.S. LARGE CAPS	GLOBAL HIGH YIELD BONDS	GLOBAL HIGH YIELD BONDS	GLOBAL BONDS
	14.57%	17.59%	9.82%	18.44%	-1.90%	3.44%	-12.37%	13.84%	9.71%	7.27%	19.16%	-5.32%	-25.37%	16.18%	8.45%	-2.67%	13.43%	14.75%	11.04%	16.15%
	GLOBAL HIGH YIELD BONDS	U.S. BONDS	CANADIAN BONDS	U.S. SMALL CAPS	EUROPEAN	GLOBAL SMALL CAPS	BRIC	EUROPEAN	BRIC	EQUITIES	U.S. SMALL CAPS	GLOBAL EQUITIES	FOREIGN EQUITIES	FOREIGN	CANADIAN BONDS	EUROPEAN EQUITIES	BRIC EQUITIES	CANADIAN LARGE CAPS	GLOBAL BONDS	U.S. SMALL CAPS
	12.98%	14.48%	9.18%	14.58%	-4.93%	-0.49%	-13.52%	13.82%	8.59%	7.18%	17.92%	-7.08%	-28.78%	12.49%	6.74%	-8.29%	12.34%	13.26%	9.65%	14.64%
	CANADIAN BONDS	CANADIAN BONDS	GLOBAL HIGH YIELD BONDS	U.S. LARGE CAPS	U.S. LARGE CAPS	U.S. LARGE CAPS	CANADIAN LARGE CAPS	GLOBAL EQUITIES	CANADIAN BONDS	CANADIAN BONDS	CANADIAN SMALL CAPS	GLOBAL BONDS	GLOBAL SMALL CAPS	GLOBAL	GLOBAL EQUITIES	GLOBAL SMALL CAPS	GLOBAL HIGH YIELD BONDS	CANADIAN SMALL CAPS	CANADIAN BONDS	GLOBAL HIGH YIELD BONDS
	12.26%	9.63%	7.96%	14.37%	-5.93%	-6.35%	-14.00%	9.41%	7.15%	6.46%	16.64%	-7.15%	-29.23%	11.07%	6.48%	-8.75%	12.17%	7.76%	8.79%	14.02%
	GLOBAL SMALL CAPS	GLOBAL BONDS	U.S. SMALL CAPS	EQUITIES	GLOBAL SMALL CAPS	BRIC	FOREIGN	CANADIAN BONDS	GLOBAL	U.S. LARGE CAPS	U.S. LARGE CAPS	GLOBAL SMALL CAPS	CANADIAN LARGE CAPS	U.S. SMALL CAPS	BRIC	CANADIAN LARGE CAPS	CANADIAN LARGE CAPS	U.S. BONDS	EMERGING MARKETS EQUITIES	BRIC
	8.55% FOREIGN	8.35% CANADIAN	4.60%	9.82%	-7.01% GLOBAL	-8.62%	-16.53%	6.69% U.S.	6.85%	2.29% U.S.	15.35% GLOBAL	-9.09% U.S.	-31.17% EUROPEAN	8.00% U.s.	4.05% FOREIGN	-9.08% FOREIGN	8.07% CANADIAN	4.55% EMERGING	7.03% BRIC	4.04%
	EQUITIES	SMALL CAPS	LARGE CAPS	BONDS	EQUITIES	EQUITIES	EQUITIES	LARGE CAPS	HIGH YIELD BONDS	SMALL CAPS	HIGH YIELD BONDS	BONDS	EQUITIES	LARGE CAPS	EQUITIES	EQUITIES	BONDS	MARKETS	EQUITIES	BONDS
	6.89%	6.97%	1.37%	-1.14%	-9.88%	-11.28%	-18.94%	5.26%	3.80%	1.94%	11.49%	-9.28%	-32.55%	7.39%	2.56%	-9.55%	3.60%	4.29%	6.22%	3.52%
	EMERGING MARKETS EQUITIES	FOREIGN	CANADIAN SMALL CAPS	GLOBAL HIGH YIELD BONDS	FOREIGN	EQUITIES	GLOBAL EQUITIES	GLOBAL HIGH YIELD BONDS	U.S. LARGE CAPS	U.S. Bonds	GLOBAL BONDS	U.S. LARGE CAPS	EMERGING MARKETS EQUITIES	CANADIAN BONDS	U.S. BONDS	CANADIAN SMALL CAPS	CANADIAN SMALL CAPS	GLOBAL BONDS	FOREIGN	EMERGING MARKETS EQUITIES
	6.56%	6.56%	-17.90%	-2.41%	-10.95%	-14.59%	-20.37%	4.65%	2.81%	-0.14%	6.23%	-10.53%	-41.44%	5.41%	0.98%	-14.17%	2.46%	3.94%	4.12%	2.42%
	GLOBAL BONDS	GLOBAL SMALL CAPS	EMERGING MARKET EQUITIES	U.S. BONDS	BRIC	CANADIAN LARGE CAPS	U.S. SMALL CAPS	GLOBAL BONDS	GLOBAL BONDS	GLOBAL HIGH YIELD BONDS	CANADIAN BONDS	GLOBAL HIGH YIELD BONDS	CANADIAN SMALL CAPS	GLOBAL BONDS	GLOBAL BONDS	EMERGING MARKETS EQUITIES	GLOBAL BONDS	BRIC	EUROPEAN	CANADIAN LARGE CAPS
	5.43%	2.98%	-19.86%	-6.28%	-18.48%	-14.82%	-21.31%	-7.97%	1.31%	-0.30%	4.06%	-12.94%	-46.61%	-9.19%	0.04%	-16.15%	2.01%	3.24%	2.82%	-7.76%
¥	U.S. BONDS	EMERGING MARKETS EQUITIES	BRIC EQUITIES	GLOBAL BONDS	EMERGING MARKETS EQUITIES	FOREIGN EQUITIES	U.S. LARGE CAPS	U.S. BONDS	U.S. BONDS	GLOBAL BONDS	U.S. BONDS	U.S. SMALL CAPS	BRIC EQUITIES	U.S. BONDS	EQUITIES	BRIC EQUITIES	U.S. BONDS	CANADIAN BONDS	CANADIAN SMALL CAPS	CANADIAN SMALL CAPS
Worst	4.15%	-7.69%	-40.34%	-10.40%	-28.19%	-16.26%	-22.91%	-14.84%	-3.26%	-6.88%	3.94%	-16.52%	-49.14%	-10.04%	-0.96%	-20.76%	1.91%	-1.19%	-0.09%	-13.75%

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www.franklintempleton.ca

Source: Morningstar Research Inc., December 31, 2015.

Annual Return of Asset Classes (Cdn\$)

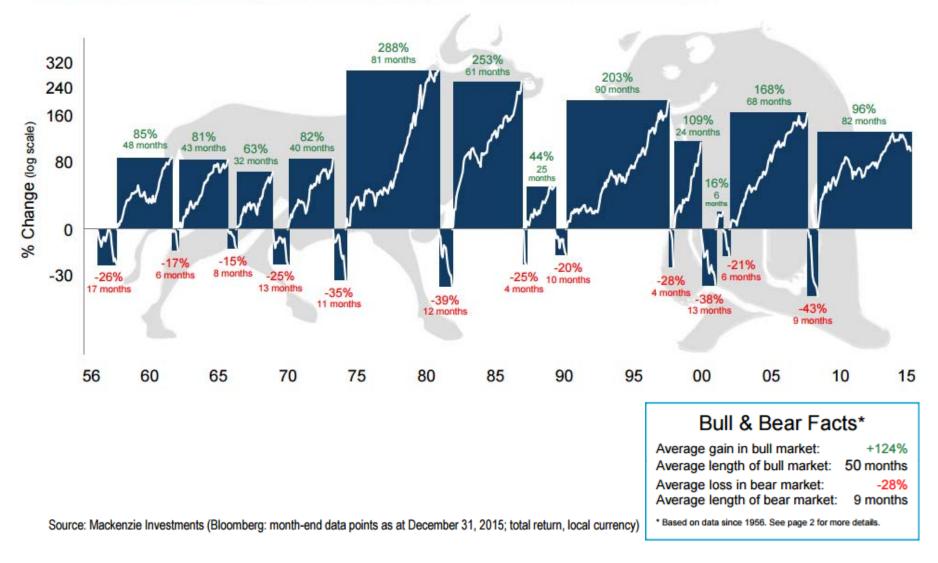
Legend:

- Canadian Large Caps S&P/TSX 60 TRI Canadian Small Caps BMO Nesbitt Burns Small Cap TRI U.S. Large Caps S&P 500 TRI U.S. Small Caps Russell 2000 TRI Global Equities MSCI World GRI Global Small Caps MSCI ACWI Small GRI Foreign Equities MSCI EAFE GRI European Equities MSCI Europe GRI
- Emerging Markets Equities MSCI EM GRI
- BRIC Equities MSCI BRIC GRI
- Canadian Bonds FTSE TMX Canada Universe Bond Index[†]
- U.S. Bonds Barclays U.S. Aggregate Bond TRI
- Global Bonds Barclays Global Aggregate Bond TRI
- Global High Yield Bonds Credit Suisse First Boston High Yield Return Index



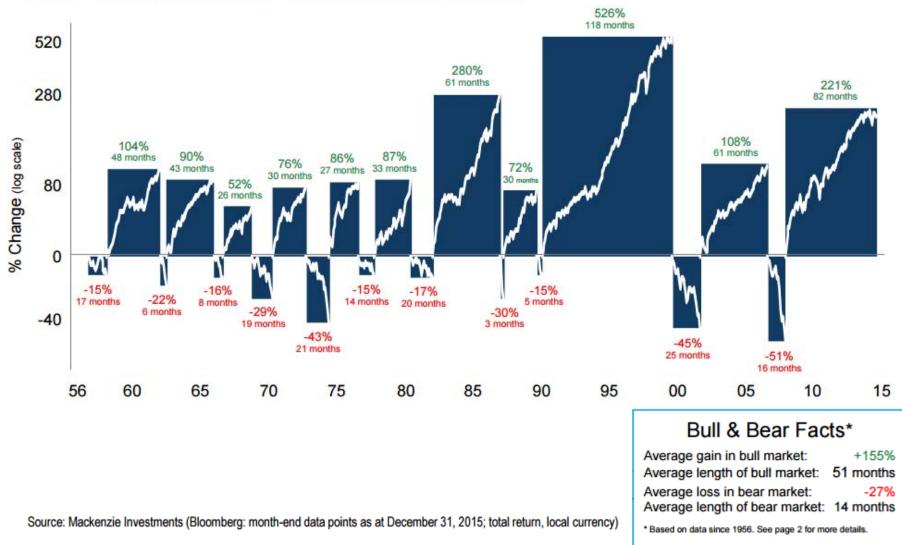
Bull & Bear Markets

S&P/TSX Composite Index to December 2015



Bull & Bear Markets

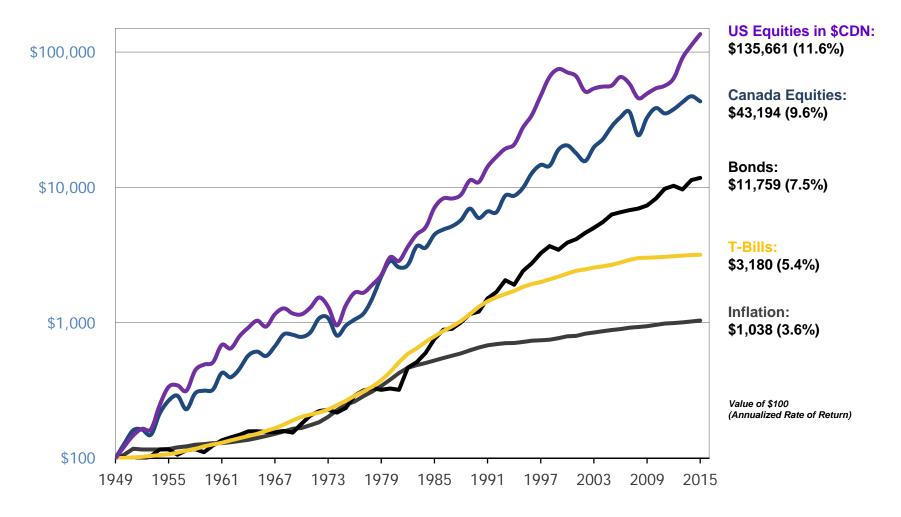
S&P 500 Index to December 2015



Long Term Asset Class Returns

Investment Results

(Growth of \$100 from December 1949 to December 2015)



Investment Options

Investment Funds

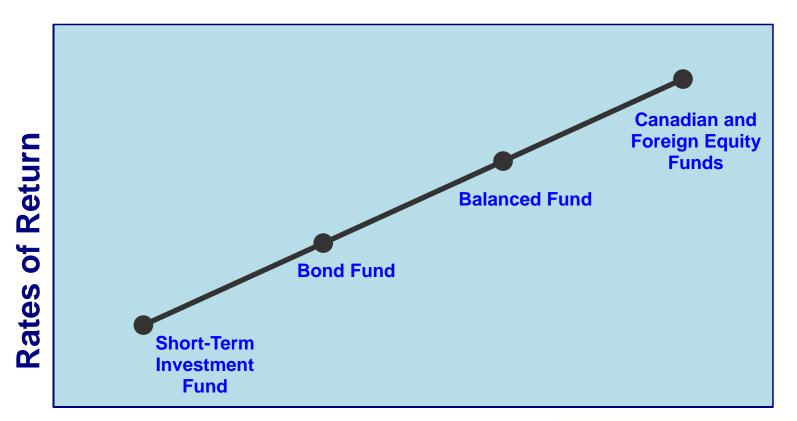
- UBC FPP Balanced
 Fund
- UBC FPP Bond Fund
- UBC FPP Canadian Equity Fund
- UBC FPP Foreign Equity Fund
- UBC FPP Short Term
 Investment Fund

and GIC's

- Sun Life Financial
- Terms 1 to 5 years
- Redeemable, subject to market value adjustment
- Fund rates of return and GIC rates are available by signing into your account online and selecting Accounts > Investment Performance.



Variability versus Returns



Variability of Returns



Investment Policy Asset Mix

Asset Class	Balanced Fund	Bond Fund	Canadian Equity Fund	Foreign Equity Fund	Short-Term Investment Fund (STIF)	GICs
Canadian Equities	20%		100%			
Foreign Equities	30%			100%		
Real Estate (CAD)	10%					
Government, corporate and real return bonds	40%	100%				
Treasury bills and short-term paper					100%	
Assets (Millions) June 30, 2016	\$1,670.0	\$55.4	\$139.2	\$112.5	\$35.1	\$18.3



a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

Faculty Pension Plan

Is this indicative of your investment portfolio?

Copyright 2002 by Randy Glasbergen. www.glasbergen.com



"Yes, our investments are diversified: 20% out the window, 65% down the drain, and 15% gone with the wind."

Your Responsibilities







What approach do you take to fund your future?

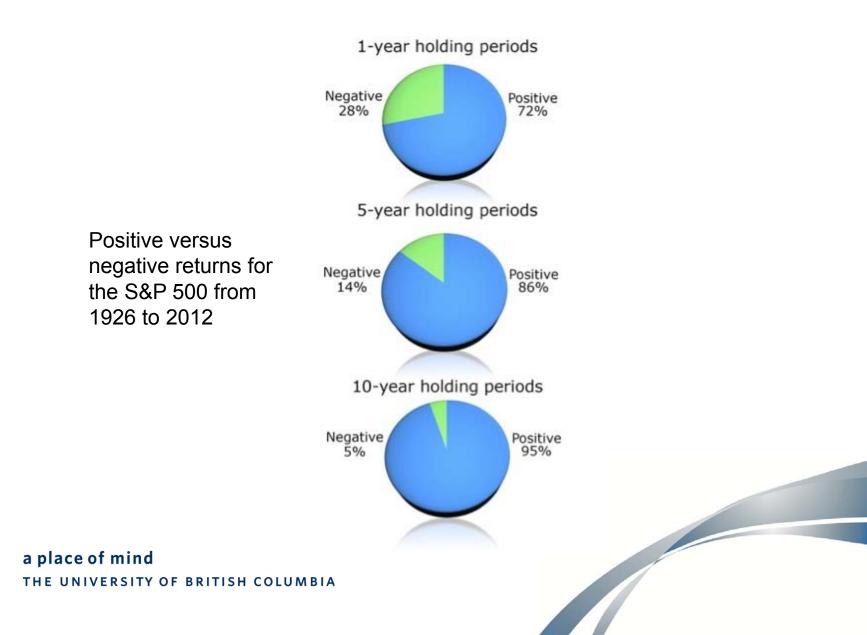
 How many Canadians play the lottery? • How many people invest in RRSPs?



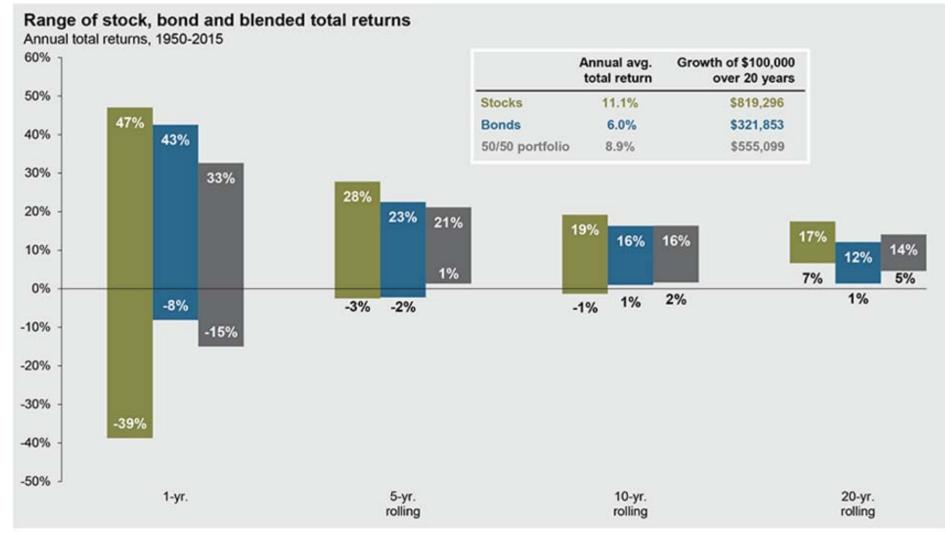
 What are the odds of winning 6/49? Odds of a portfolio earning positive returns over 10 years



It's about the time in the market...



Historical Returns by Holding Period



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 2015. Stocks represent the S&P 500 and Bonds represent Strategas/Ibbotson for periods from 1950 to 1980 and Barclays Aggregate after index inception in 1980. Growth of \$100,000 is based on annual average total returns from 1950 to 2015. Guide to the Markets – U.S. Data are as of December 31, 2015.

Key Strategies

- 1. Understand limits of our own knowledge
- 2. Determine your investment objective(s)
- 3. Take view consistent with your time horizon
- 4. Take risk consistent with your tolerance
- 5. Take a holistic view and consider your total assets
- 6. Clearly document your strategy
- 7. Asset allocation and rebalancing
- 8. Take advantage of expert advice
- 9. Keep fees low



Establish the right mix

"The only investors who shouldn't diversify are those who are right 100% of the time "

- Sir John Templeton





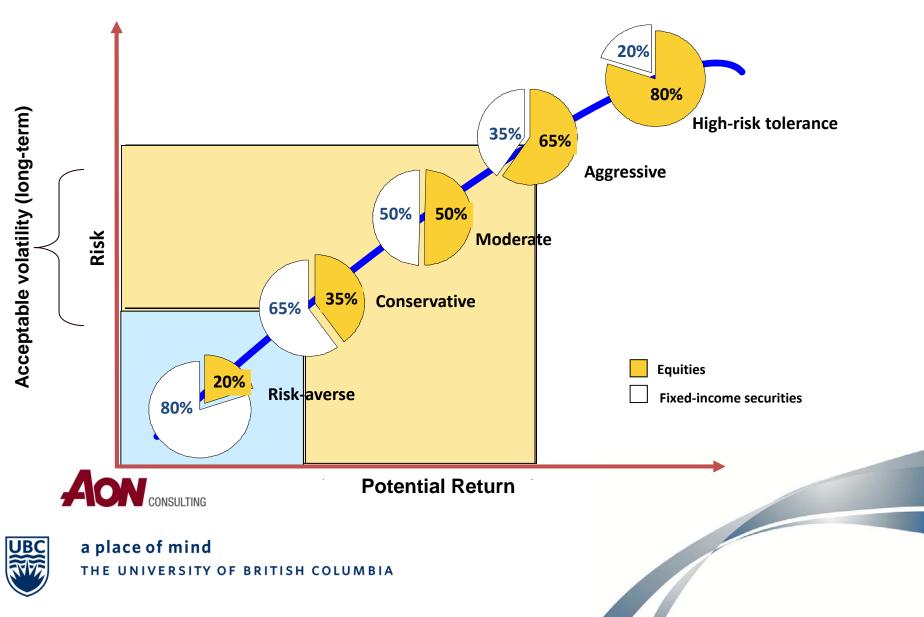
Establish the right mix

- Right mix depends on your personal profile and objectives
- Your profile reflects your age, time horizon, risk tolerance, investment knowledge and financial situation
- Optimal mix also reflects market expectations
- Consider the nature of the UBC Faculty Pension Plan investments





Sample Asset Mixes



Sample Life Cycle Investing

Age	Asset Mix		Equity %
20-40	Balanced Canadian Equity Foreign Equity	50% 25% 25%	75%
40-50	Balanced Canadian Equity Foreign Equity	70% 15% 15%	65%
50-60	Balanced Bond Fund	90% 10%	45%
60-70	Balanced Bond GIC	80% 10% 10%	40%
70+	Balanced Bond GIC	60% 30% 10%	30%



Asset Allocation Tool

Investment Risk Profiler

- ☑ Sign into your account online
- ☑ Under *Resource Centre*:
 - select my money tools
 - Asset allocation
- ☑ Eight questions
- Five Risk Profiles
- ☑ Asset Allocation recommendations





Investment Risk Profiler

Investment risk profiler				
Step 1 of 4:				

For plan:

FPP Account (FPP)

The Investment risk profiler will help you determine your comfort with investment risk and help you choose the investment options that are right for you.

Answer each of the following questions, keeping your objective for this plan in mind.

- Which statement best describes your comfort level with fluctuations in the value of your investments?
 - I'd be very upset if my investments dropped in value over any period of time.
 - I'm willing to accept a lower, more predictable rate of return as long as fluctuations in the value of my investments are small.
 - I'm willing to accept some fluctuations in the value of my investments as I'm seeking a higher rate of return.

I want the highest rate of return possible, and understand the value of my investments can fluctuate significantly.

- 2. How long will you leave this money invested before you'll need a significant portion of it for your stated objective?
 - Less than 5 years
 - 5-10 years
 - 11-20 years
 - More than 20 years
- 3. How likely is it that you'll need access to a large portion of this money earlier than expected? (E.g. taking early retirement, which is defined by pension legislation and can vary by province).
 - Very likely
 - Somewhat likely
 - Unlikely
 - I won't need access to any of the money in this plan early.

Investment Risk Profiler

 Which of the following pattern of returns would you be most comfortable with? Assume an initial amount of \$5,000 invested for 10 years.

Your investment grows without losses to \$8,100. However, in one of the years the value of your portfolio does not increase.

- Your investment grows to \$10,100 in year 10, but slightly declines in value in two of the years.
- Your investment grows to \$12,400, but significantly declines in value in three of the years and was worth only \$3,500 after the first year.

5. With the four results below, how would you invest \$10,000?

- A guaranteed return of \$500.
- The potential of earning \$800 but the risk of earning only \$300.
- The potential of earning \$1,200 but the risk of earning nothing.
- The potential of earning \$2,500 but the risk of losing \$1,000.

6. If your investment dropped in value by 20% in one month, how would you react?

- I'd cash in my investment immediately.
- I'd make no changes until the value recovers and then re-evaluate.
- I'd do nothing. I understand my investments will fluctuate from day to day, but believe they will grow over the long term.
- I'd invest more while the prices are low.

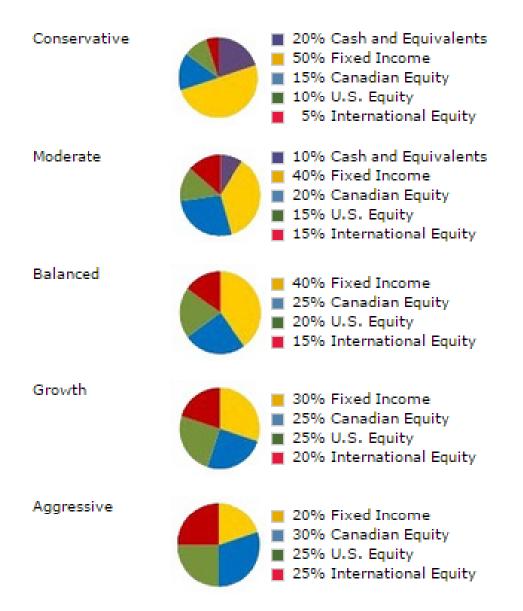
7. How would you describe your investing personality?

- I don't like risk and can only tolerate moderate losses.
- I'm willing to take some risk and can tolerate one year of poor returns.
- I can tolerate more than one year of poor returns.

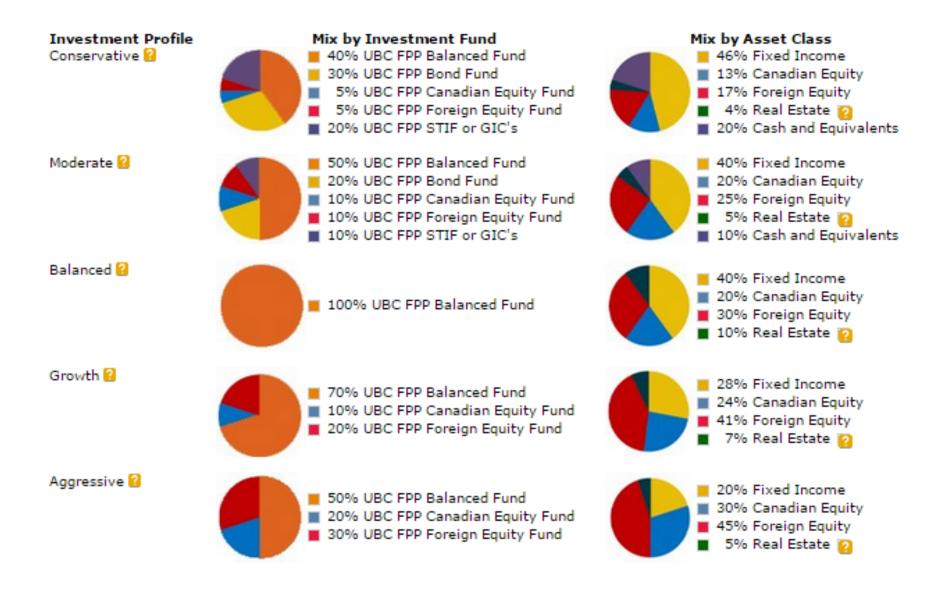
8. Which of the following statements best describes your investment knowledge?

- I'm a novice investor.
- I have some knowledge.
- I have good working knowledge.
- I consider myself an investment pro.

Your Results



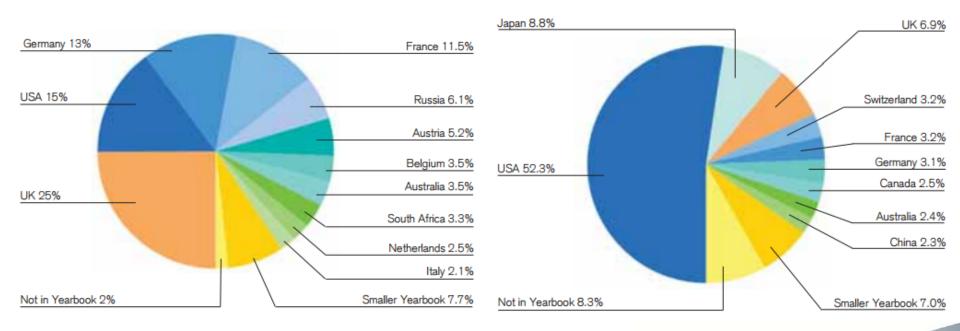
Asset Mix



World Stock Market Capitalization

Relative sizes of world stock markets, end-1899

Relative sizes of world stock markets, end-2015



Source: Elroy Dimson, Paul Marsh and Mike Staunton, Credit Suisse Global Investment Returns Sourcebook 2016.



World Stock Market Capitalization

Pax Americana

The world according to free-float equity market capitalization (\$bn)

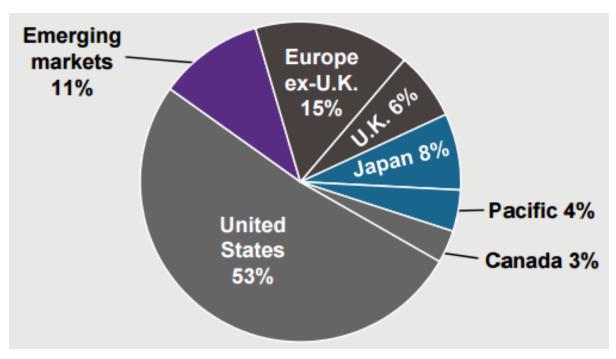


Source: Mapping Worlds, Bloomberg

Bank of America Merrill Lynch

Weight in MSCI All Country World Index

% global market capitalization as at August 31, 2016



Source: FactSet, MSCI, Standard & Poor's, J.P. Morgan Asset Management. All return values are MSCI Gross Index (official) data. Chart is for illustrative purposes only.



Top 3 Sector Weightings

As at August 31, 2016

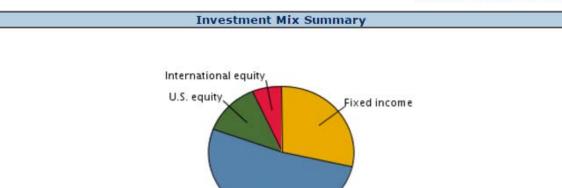
TSX		S&P 500		MSCI EAFE	
Financials	35.8%	Information Technology	21.0%	Financials	23.4%
Energy	20.0%	Financials	16.3%	Industrials	14.0%
Materials	12.7%	Health Care	14.6%	Consumer Staples	12.6%
Total	68.5%	Total	51.9%	Total	50.0%



My current portfolio mix:

Home	Group Retirement Services	Accounts	Requests	Resource Centre	Quick Links
UBC Faculty Pension Plan Account No: 36033 1234567 - 02 : AS A		Balances			
		Statements			
		View account	S		
		Transaction history			
		Account fees	1. State 1.		
Tnve	estment mix - cha	Investment n	nix - charts		
	content mix end	Investment p	erformance		
Select a plan to review :		Personal rates of return			
1	ccount (FPP) Y				

View page in black and white



The investment mix summary shows how your assets in this plan are split between major asset classes. The assets within investment options that invest in more than one asset class, such as balanced funds, are allocated to the underlying major asset classes based on their benchmark asset mix.

Canadian equity

NOTE: Your actual current asset mix may differ slightly from what is shown above because the percentages here are based on your funds' benchmark investment mix. Fund investments may differ from the benchmark asset mix.

Investment Type	Value (\$)	Percent of Total	
Cash & equivalents	\$ 0.00	0.00%	
Fixed income	\$286.20	28.62%	
Canadian equity	\$518.60	51.86%	
U.S. equity	\$130.10	13.01%	
International equity	\$65.10	6.51%	
Total	\$1000.00	100 %	

NOTE: The values are subject to verification.

Investment Allocation Changes

- □ Online at <u>mysunlife.ca/ubcfpp</u>
- Contact Sun Life Financial's Customer Care
 Centre at 1-844-822-3131, option 2
- Daily cut-off at 1:00pm PT
- □ Short-term Trading Fees





Portfolio Rebalancing

- Resetting the proportions of each asset class back to their original percentage
- □ Stay on track
- □ Keeping your portfolio's risk in check
- □ How do I rebalance my portfolio?
 - $\checkmark \quad Move \ existing \ funds$
 - Change allocation of future contributions
 - Dollar-cost averaging
 - ✓ Auto rebalancing feature (end on January)
- How often and when should I rebalance my portfolio?



Rebalancing your account

Under *Requests* >

Change investments

FPP				
Plan Summary Plan: FPP Account (F	:pp)			
Asset Allocation				
View/Update:	Incomplete You should complete the asset allocation exercise; it will help you understand your risk tolerance regarding your investment instructions.			
Automatic Asset Mix Re-balance				
	ording to a desired asset mix (between e.g. stocks, segregated funds and guaranteed funds). Periodically o maintain this mix. Your current re-balancing instructions are:			
Frequency: Contributions:	Annually Member: No Employer: No Update			

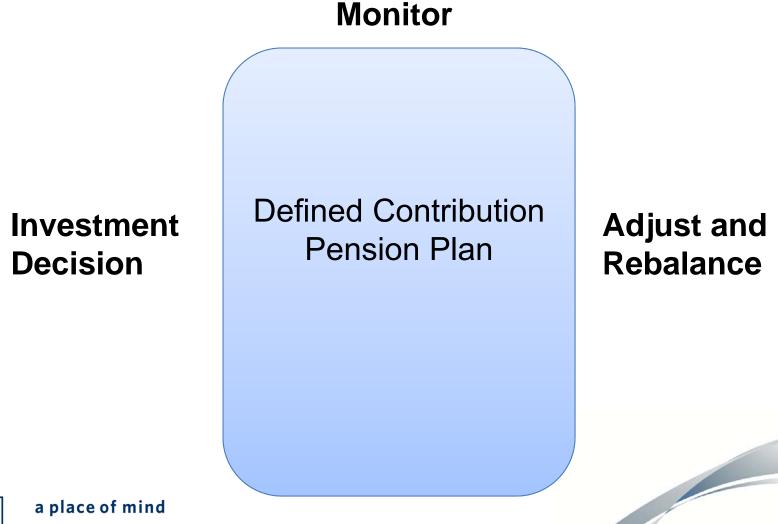
I want to:

- Both move my money to different funds and change how my future contributions will be invested
- Change how my future contributions will be invested
- Move my money to different funds

View Only:

See how my future contributions will be invested

Wealth creation is a process . . . not an event



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Tune out the "noise"

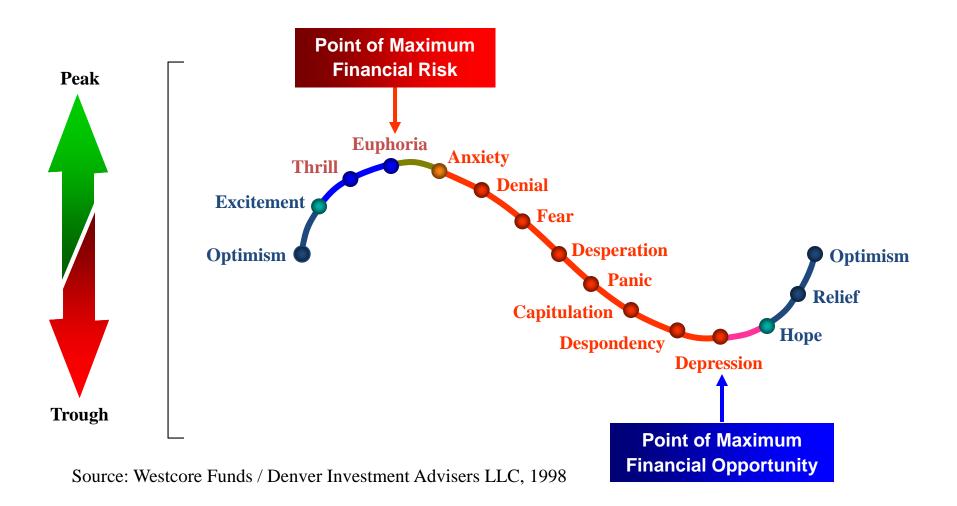






Beware of Market Emotions

Stock Market Cycle + Market Emotions



Stick to a plan (don't flee or speculate)

"When faced with a bear, survivalists recommend you stay calm, don't make any sudden moves and don't try outrunning it. Such actions will only make things worse."

- National Post





Seeking Expert Advice

- Investment and Retirement planning
- Tax planning
- Estate Planning
- Debt management
- Knowledge and experience with employee benefit plans
- Assist you in pension decisions in the context of an overall financial plan
- Interview 2 or 3





Retirement...



- Early retirement from age 55
- Mandatory retirement age abolished
- Revenue Canada requires pension income to start by age 71





Options at Retirement

Faculty **Pension** Plan



Retirement Income Options

Choice and flexibility

 You can use all or part of your account balance for any of your retirement options

UBC Retirement Income Options:

- Variable Payment Life Annuity (VPLA)
- Non-locked funds: RRIF-Type Payment Account
- Locked-in funds: LIF-Type Payment Account
- Transfer out of the Plan
 - Purchase External Life Annuity
 - Non-locked: Cash, RRSP, RRIF
 - Locked-in: LI-RRSP, LIF

Retirement Income Estimator:

- mysunlife.ca/ubcfpp
- <u>faculty.pensions.ubc.ca</u>





Government Benefits

Old Age Security

- \$570.52 per month at age 65*
- **Residency requirements**
- Indexed quarterly

Clawback on OAS Income

- Starting at \$72,809
- Ending at \$118,055

* gradually increases to age 67 for those born after March 31, 1958

Canada Pension Plan

- Maximum = \$1,092.50 per • month
- Indexed annually •
- Available from age 60
- Split payment with your spouse

www.servicecanada.gc.ca



a place of mind

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Avoid the common pitfalls...

- ✗ Neglecting to develop a plan
- Contributing too little, too late
- Not diversifying investments
- Doing no tax planning
- ✗ Not considering the impact of fees
- ✗ Investing on one's own

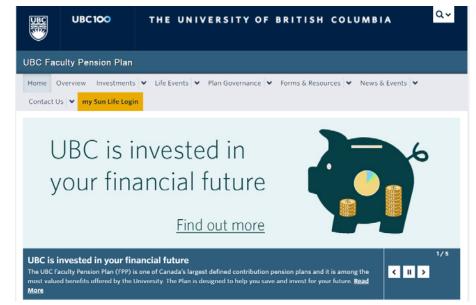






Resources

- Member Services at the UBC Pension Administration Office
- FPP Website: <u>faculty.pensions.ubc.ca</u>



• E-mail fpp@hr.ubc.ca



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Resources

mysunlife.ca/ubcfpp





Websites

- The Investor Education Fund <u>www.getsmartaboutmoney.ca</u>
- The Globe and Mail

www.theglobeandmail.com/globe-investor/personal-finance

Investing Calculators: <u>www.theglobeandmail.com/globe-investor/personal-</u> <u>finance/investing-calculators/</u>

 Financial Planning Standards Council <u>www.fpsc.ca</u>



