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Consulting. Outsourcing. Investments.



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Investing & Saving for Retirement Pension Plan for Faculty, Librarians and Senior Administrative Officers of Mount Allison University

NOT COMPLETE WITHOUT COMMENTARY

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- *Any opinions on or ratings of investment products contained herein are not intended to convey any guarantees as to the future investment performance of these products. In addition:*
- *Past performance cannot be relied upon as a guide to future performance.*
- *The value of stocks and shares, including unit trusts, can go down as well as up and you may not get back the amount you have invested.*
- *The value of bonds, and other fixed income investments including unit trusts can go down as well as up and you may not get back the amount you have invested.*
- *Investments denominated in a foreign currency will fluctuate with the value of the currency.*

Additional Risk Warning

- *Personal finance is ... personal. A group session cannot tailor information to specific situations as well as a personal financial planner can. In addition, the amount of material that can be dealt with in a group session is limited. This session should not be relied on as your only source of financial information*

Agenda

- Saving for Retirement – The Big Picture
- Investment 101
- Your Personal Risk Profile
- Break (Investment Risk Profiler)
- Choosing and Changing Your Investments
- Retirement Planning (Am I on track?)
- Retirement Options



Saving for Retirement

The Big Picture

Saving for Retirement – The Big Picture

Retirement Adequacy

- There are two main questions when it comes to retirement planning
 - How much income do I need in retirement?
 - Where is my retirement income going to come from?

Saving for Retirement – The Big Picture

Retirement Adequacy – How much income do I need?

- The majority of people require less income after retirement than they did prior to retirement
 - No more saving for retirement
 - Reduced housing costs (hopefully mortgage paid off)
 - Children grown and out of the house (hopefully)
 - No more employment expenses
 - Lower taxes
- Most people require between 60% to 80% of their pre-retirement income to maintain their lifestyle after retirement (income replacement ratio)

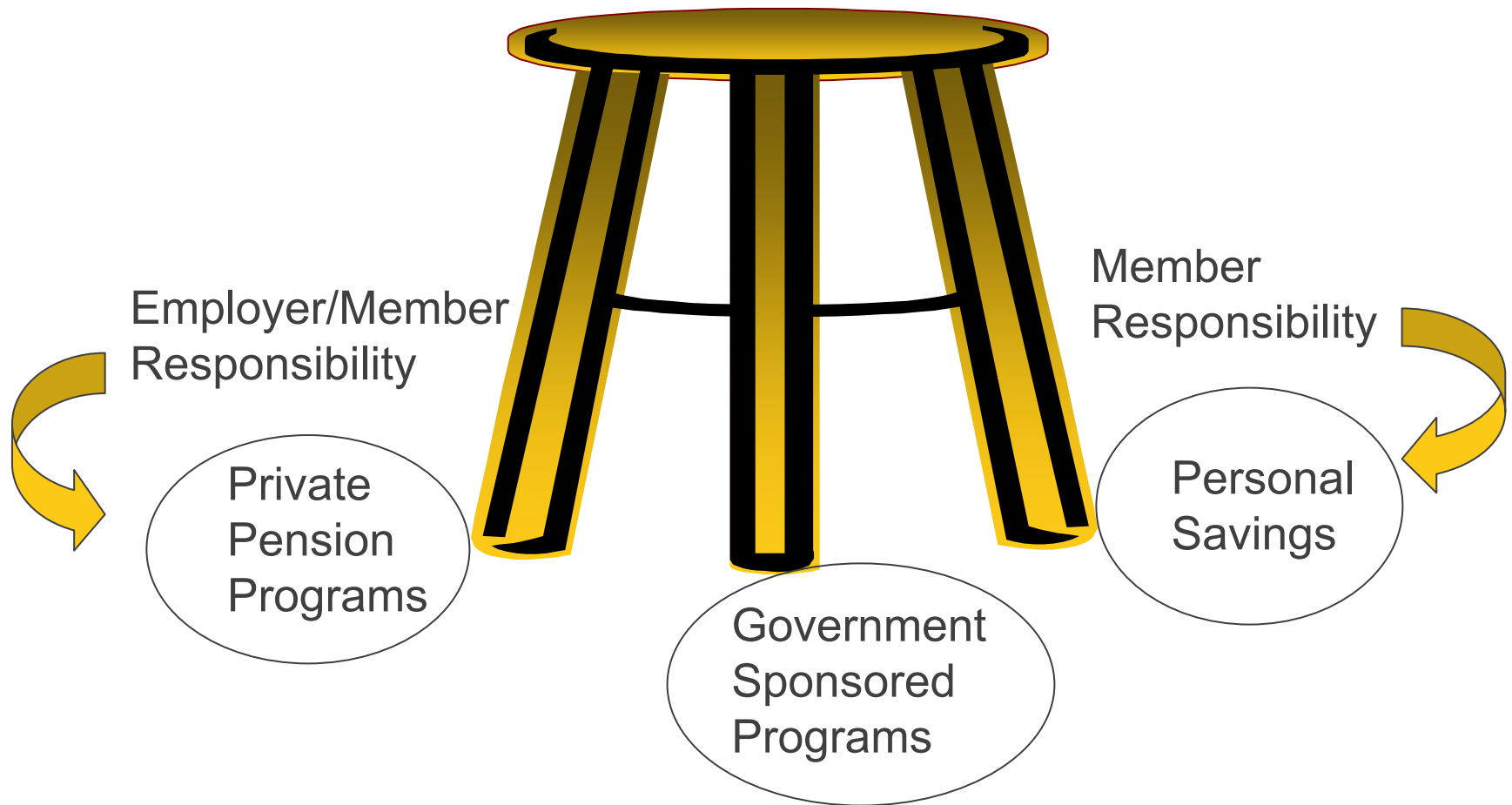
Saving for Retirement – The Big Picture

Retirement Adequacy – How much income do I need?

- Other considerations around replacement ratio
 - 60% to 80% is for the average person
 - Higher for lower incomes, lower for higher incomes
 - Additional expenditures in retirement (travel, boat, etc.)
 - Health care expenses
 - Inflation protection
 - Always examine your personal situation
- Budget should be reviewed as retirement approaches (needs, goals may change)

Saving for Retirement – The Big Picture

Retirement Adequacy – Where will my retirement income come from?



Saving for Retirement – The Big Picture

Retirement Adequacy – Where will my retirement income come from?

- Government Sponsored Programs
 - Canada Pension Plan (CPP)
 - Old Age Security (OAS)
 - Guaranteed Income Supplement (GIS)
 - OAS Allowance and Allowance for the Survivor

You must apply for these benefits (retroactive payment may be approved for a period of no more than one year)

Saving for Retirement – The Big Picture

Retirement Adequacy – Where will my retirement income come from?

■ Canada Pension Plan

- Contributions of 4.95% from \$3,500 to \$44,900
 - Max contribution for 2008: \$2,049
- Amount payable is based on earnings and length of career
- Maximum amount payable is \$10,615 /yr (2008) at age 65
- Designed to provide **25%** replacement ratio of average earnings up to 5-year average YMPE (\$42,460) for full career employee (35 years)
- Reduced by 6% per year if commenced early (as early as age 60)
- Increased by 6% per year if commenced late (as late as age 70)
- Benefit indexed with inflation
- Benefit is taxable
- Income splitting allowed (must apply)

Saving for Retirement – The Big Picture

Retirement Adequacy – Where will my retirement income come from?

- Old Age Security
 - No direct contributions
 - Amount based on residency requirement
 - Maximum \$6,028 /yr (2008) starting at age 65
 - Designed to provide roughly **15%** replacement ratio for average income earner (roughly \$44,000 per year)
 - Lower replacement ratio for higher earners, higher replacement ratio for lower earners
 - Clawback starts at \$64,718 (benefit reduced by 15% of income in excess of \$64,718 and eliminated at \$104,903)
 - Benefit indexed quarterly

Saving for Retirement – The Big Picture

Retirement Adequacy – Where will my retirement income come from?

For more details on Government Benefits contact Service Canada at 1-800-277-9914 or www.servicecanada.gc.ca or visit your local Service Canada Centre

Saving for Retirement – The Big Picture

Retirement Adequacy – Where will my retirement income come from?

- Private Pension Programs
 - Pension Plan for Faculty, Librarians, and Senior Administrative Officers of Mount Allison University
 - You contribute 6% of earnings
 - University contributes 7.5% of earnings
 - Voluntary contributions allowed (no match from University)

Saving for Retirement – The Big Picture

Retirement Adequacy – Where will my retirement income come from?

How much retirement income can I hope to get for these contributions?

Replacement Ratio of future contributions *(Total of 13.5% of pay per year)*

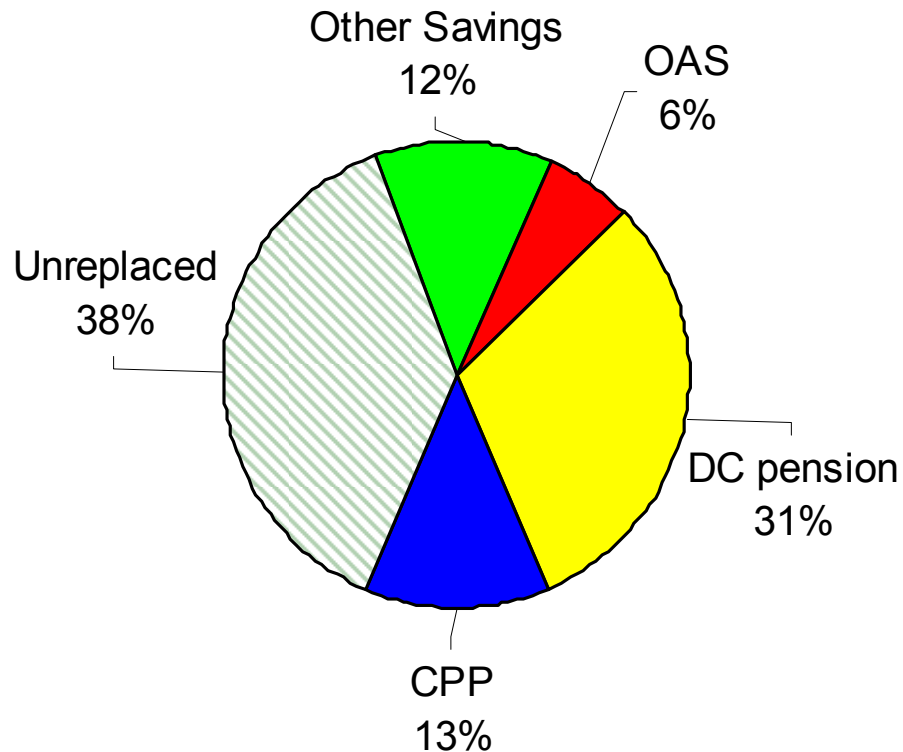
Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
49.2%	39.5%	30.8%	23.1%	16.2%	10.2%	4.8%	0%

Note: Assumptions provided later in this presentation.
Results will vary with assumptions.

Saving for Retirement – The Big Picture

Retirement Adequacy – Where will my retirement income come from?

**Projected Retirement Income
as a Percent of Final 5-Year Average Pay
\$80,000 Salary, Retirement at Age 65 (25 yr with University)**



* This illustration assumes a professor is hired at age 40 for a 25-year career with the University. “Other Savings” in this illustration represent the portion of retirement savings related to the 10 years before the participant joins the University. (Assumptions on page 53.)

Investing 101

Investment 101

Basic Concepts

- Types of investments
- Risk / reward trade off
- Real return
- Tolerance for short-term risk
- Your investment risks
- Asset diversification

Investment 101

Types of Investments (asset classes)

- Short Term (GICs / Money Market Funds)
 - Short term loans and deposits
 - Low expected risk / return characteristics
 - Appropriate for short-term investments
 - Not necessarily low risk for protecting retirement income

- Fixed Income (Bonds)
 - Debt issued by corporations/governments characterized by a fixed interest rate and stated maturity date. Arrangements between a borrower and a lender.
 - Moderate expected risk / return characteristics
 - Potential to “hedge” retiree liability
 - In essence, a low risk investment for retirement income savings program.

Investment 101

Types of Investments (asset classes)

- Equity (Stocks)
 - Investment or ownership interest by shareholders in a corporation
 - Higher risk in return for potentially higher returns
 - Examples of equity types
 - Domestic vs. foreign
 - Large cap vs. small cap
 - Value vs. growth
 - Diversification important
 - May be better placed to protect against inflation over the long term

Investment 101

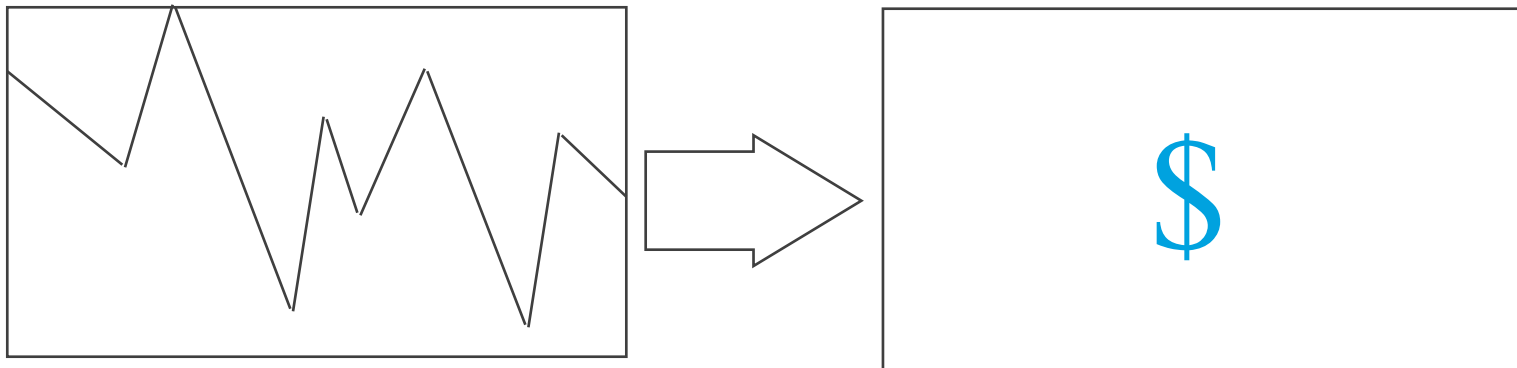
Risk / reward trade off

Short-term risk

- High level of fluctuations
- Possible loss of capital (negative return)

Long-term expected reward

- Larger expected amount of accumulated money
- Better expected protection against inflation



Investments 101

Risk / reward trade off



Investment 101

Tolerance for short-term risk

- How long before the money is needed ?
- How much “cushion” is there in your budget ?
- Are you comfortable enough with risk to stick to the plan?

Investments 101

Silent Risk... Inflation

- Need to counter the long term effect of inflation
- Different asset classes provide different return potential

	Nominal return	Inflation	Real return
Treasury Bills	2.7%	2.3%	0.4%
Canadian Bond	4.4%	2.3%	2.1%
Canadian Equity	7.8%	2.3%	5.5%
Foreign Equity	7.8%	2.3%	5.5%

Investment 101

Real (net of Inflation) Return

Return	15.5%	6.0%
Inflation	12%	2.5%
Real return	3.5%	3.5%

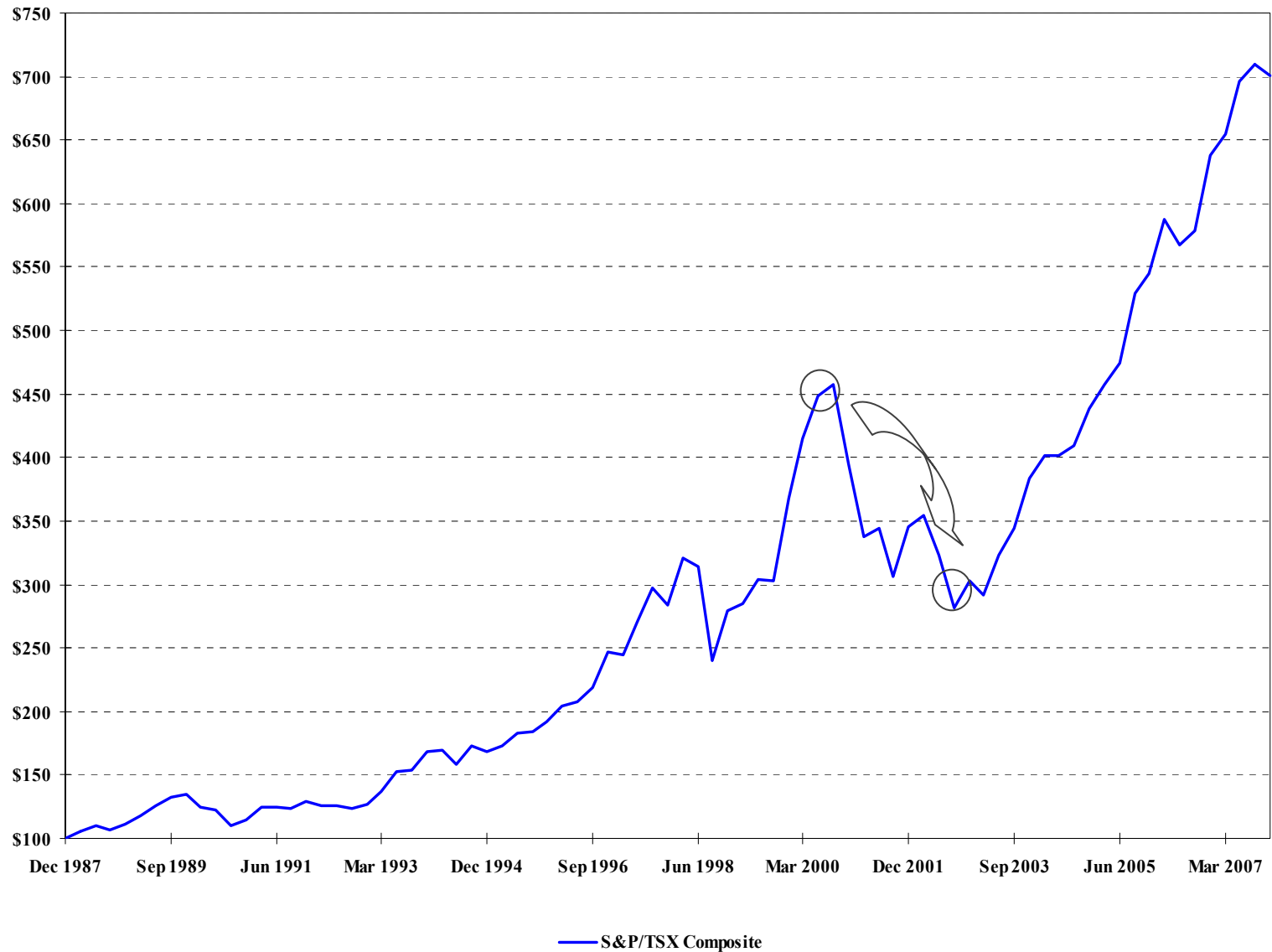
Investments 101

Your Investment Risks

- **Short Term Volatility** – Affects your account balance in the short term. Money market or GIC's provide most protection in the near short term.
- **Interest Rate Risk** – The amount of retirement income affected by account balances and long term interest rate. Bond funds provide best protection against this risk. While bond fund returns may fluctuate, this is mainly due to changes in long term interest rate (which means your projected income should be relatively unaffected.)
- **Inflation Risk** – Inflation erodes the value of your money over time. Real return bonds and equities provide protection against this risk. Equities, however, exhibit greater volatility in returns (and not necessarily in tandem with long term interest rates). Caution against investing too much in equities as you get closer to commencing your retirement income.

Investments 101

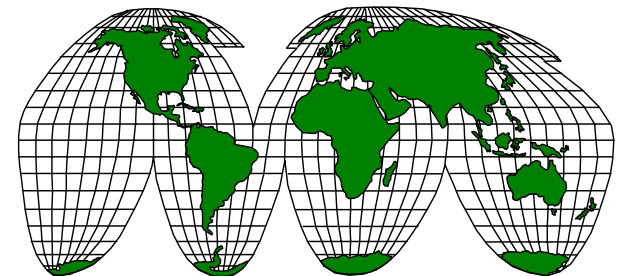
Your Investment Risks



Investment 101

Asset Diversification

- Diversification reduces risk without necessarily reducing expected return
- Diversification by
 - Type of investments (stocks, bonds, short-term investments, etc...)
 - Number of issuers
 - Geographic
- **Risk reduction** without necessarily impeding expected return



Investment 101

Asset Classes and Setting Your Asset Allocation

Explains approximately 90% of total return



Re-balancing important to maintain target mix / risk

Investment 101

Your Investment Options

	Providing Protection Against		
	<u>Volatility Risk</u>	<u>Interest Rate Risk</u>	<u>Inflation Risk</u>
<u>Foreign Equities:</u>			
▪ BGI US Equity Index Fund	---	+	+++
▪ BGI International Equity Index Fund	---	+	+++
▪ TIAA-CREF Transition Fund	---	+	+++
<u>Canadian Equities:</u>			
▪ McLean Budden Canadian Equity Growth Fund	---	+	+++
▪ McLean Budden Canadian Equity Value Fund	---	+	+++
<u>Asset Allocation Funds:</u>			
McLean Budden LifePlan Income Fund	-	+++	+
McLean Budden LifePlan Growth & Income Fund	-	++	++
McLean Budden Balanced Value Fund	--	++	++
McLean Budden LifePlan Growth Fund	--	+	+++
<u>Fixed Income:</u>			
▪ McLean Budden Bond Fund	-	+++	+
<u>Security:</u>			
McLean Budden Money Market Fund	+++	---	---
Sun Life Trust 5-year Guaranteed Investment Account	+++	---	---
Sun Life Assurance 1-5-year Guaranteed Investment Accounts	+++	---	---

Your Personal Risk Profile

Your Personal Risk Profile

2008 is a Sad Year for all Financial Markets...

Financial Market	Year to October 31 (CAD\$)
Treasury Bill (DEX-91 days)	2.8%
Bond (DEX Universe)	1.0%
Canadian Equity (S&P/TSX)	-27.8%
U.S. Equity (S&P 500)	-17.3%
Europe Australasia Far East Equity (MSCI EAFE)	-30.1%
Typical Balanced Fund*	-14.1%

* Mercer Passive Portfolio: 42.5% DEX Universe, 25% S&P/TSX composite, 15% S&P (CAD\$), 15% MSCI EAFE (CAD\$), 2.5% DEX-91 days (monthly rebalanced)

Your Personal Risk Profile

Emotions Drive Investors...

- Investors want to win... but **are afraid to lose**
- Investing **always involves some risk**
- **Greed and fear** can be detrimental to investments



Your Personal Risk Profile

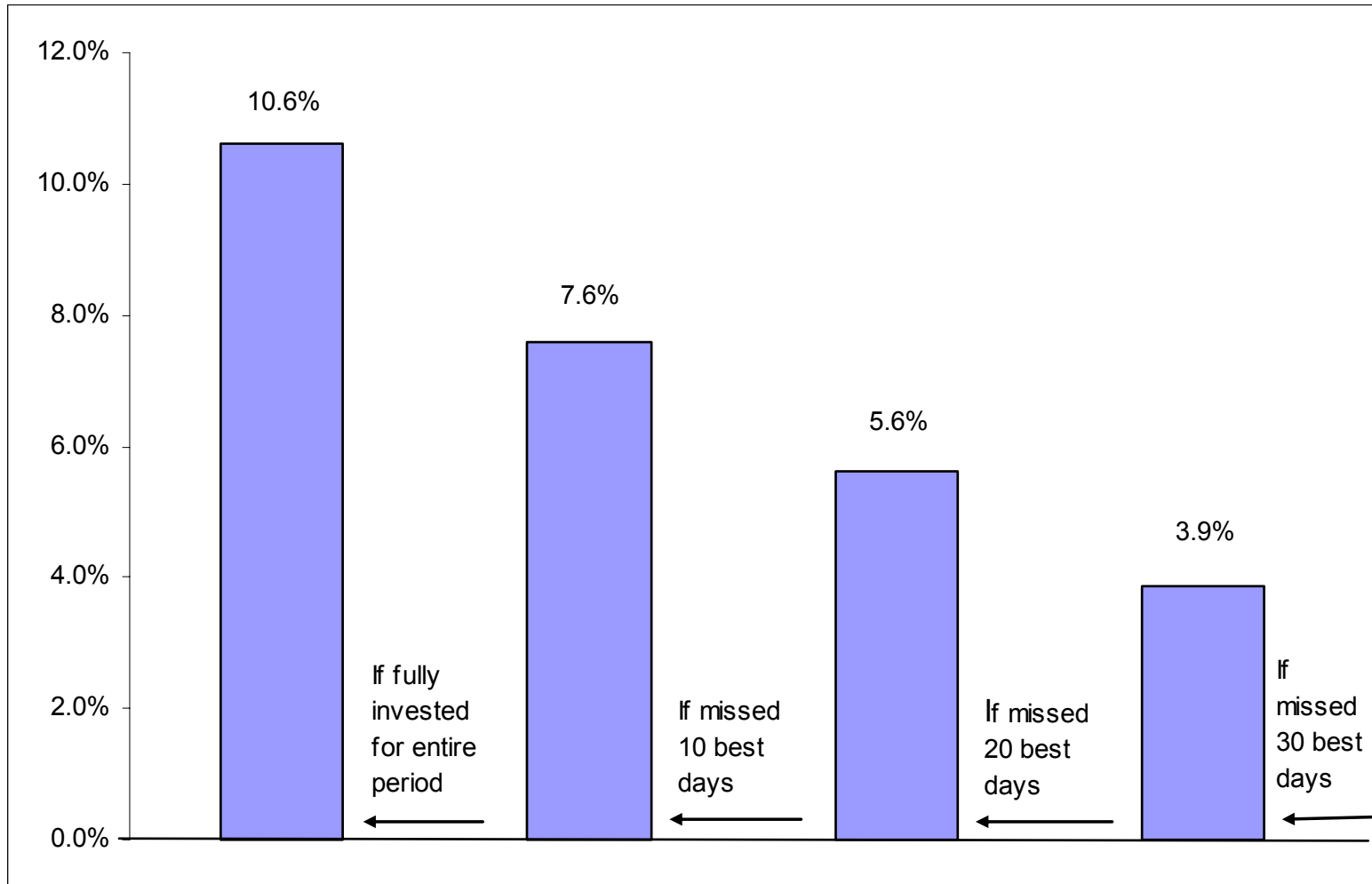
Patience During Crisis Events Has Paid Off...

Event	Bottom	Recovery (months)	Decline
Middle East Crisis	Jun-70	32	-25.4%
1st Oil Crisis	Sept-74	49	-31.9%
2nd Oil Crisis	Oct-81	28	-38.7%
Black Monday	Nov-87	23	-25.4%
Gulf War	Oct-96	39	-20.1%
Russian Crisis	Aug-98	19	-26.8%
IT Bubble Burst Middle/Far East Wars	Sept-02 Mar-03	59	-43.2%

Your Personal Risk Profile

What if you miss the market's best days?

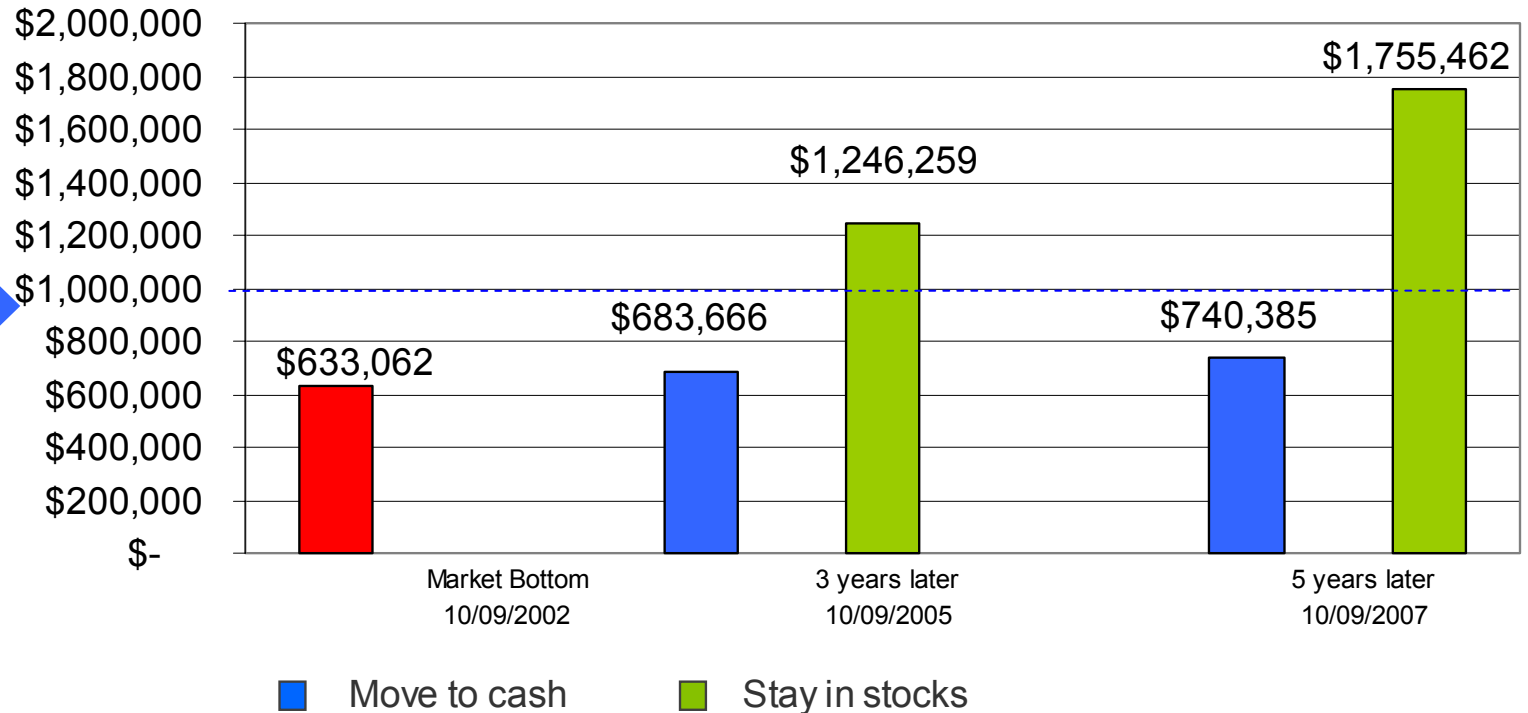
The price of being out of the Canadian Equity market
(October 1993 to September 2008)



Your Personal Risk Profile

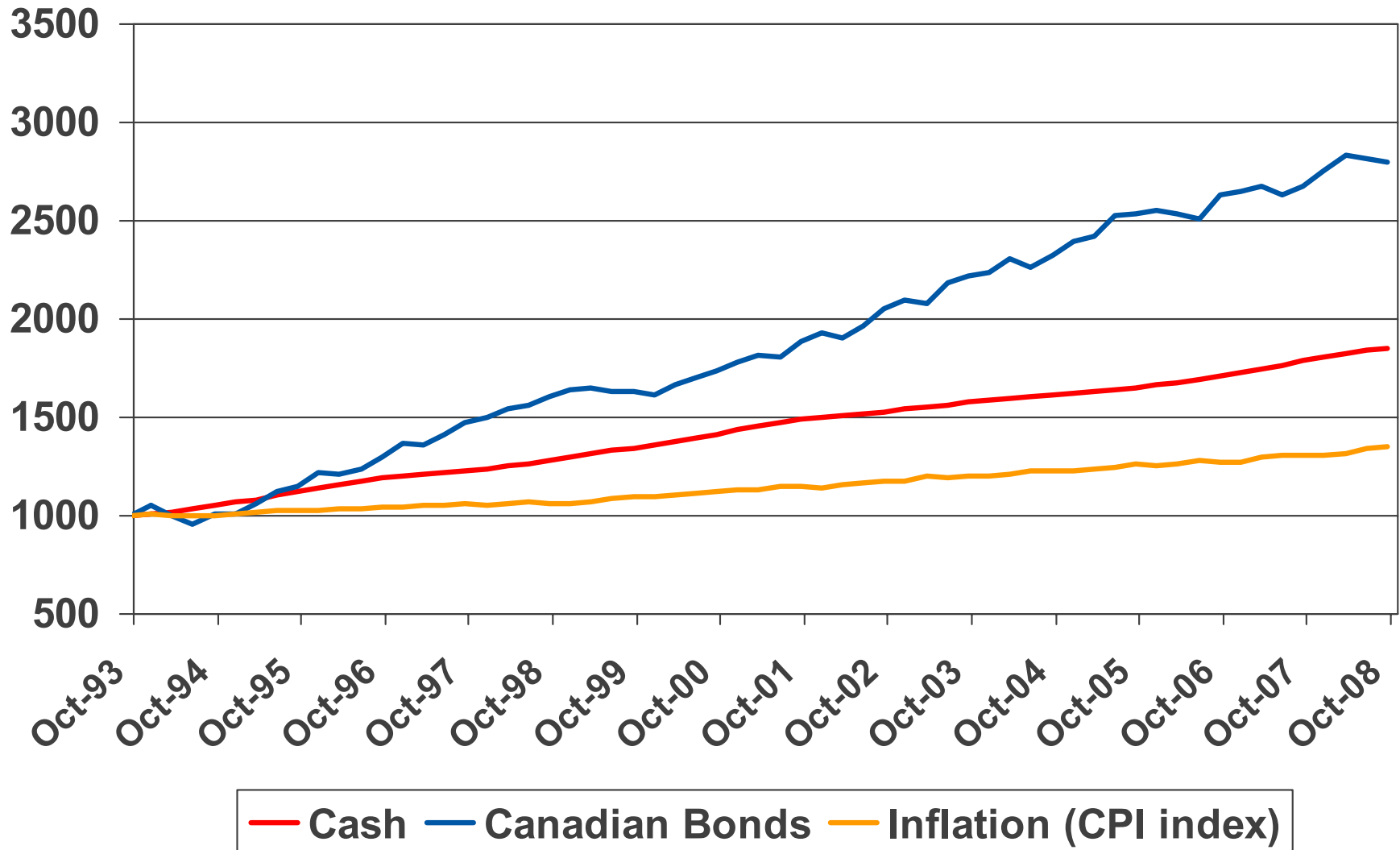
What if you cash-out during crisis?

Remain invested in stocks or move to cash?



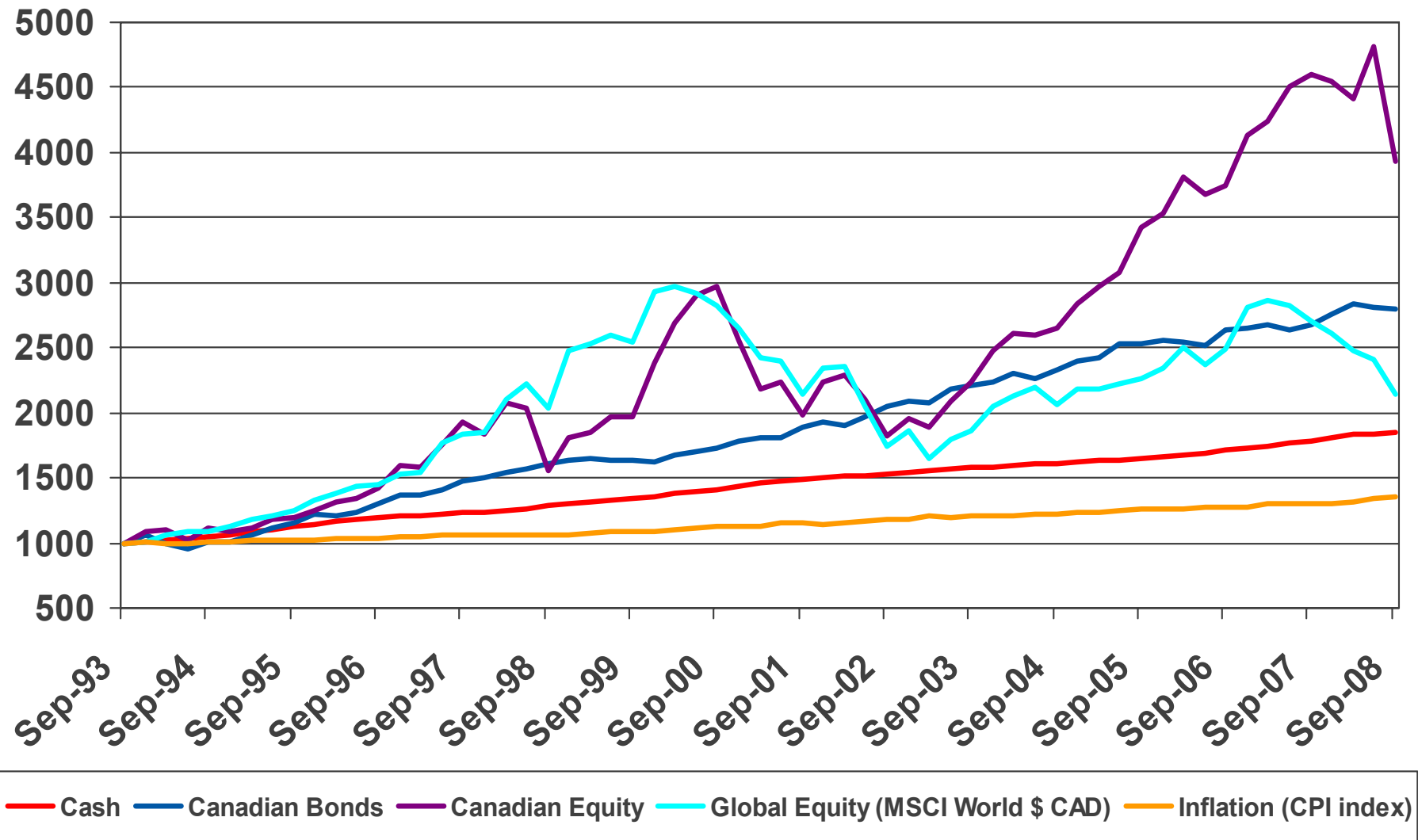
Your Personal Risk Profile

Growth of \$1000 (October 1, 1993 to October 1, 2008)



Your Personal Risk Profile

Growth of \$1000 (October 1, 1993 to October 1, 2008)



Your Personal Risk Profile

www.sunlife.ca

- To determine how much risk you are comfortable with review Sun Life: ***Investment Risk Profiler Worksheet***

1. Which statement best describes your comfort level with fluctuations in the value of your investments?

- a) I'd be very upset if my investments dropped in value over any period of time. (1 point)
- b) I'm willing to accept a lower, more predictable rate of return as long as fluctuations in the value of my investments are small. (10 points)
- c) I'm willing to accept some fluctuations in the value of my investments as I'm seeking a higher rate of return. (20 points)
- d) I want the highest rate of return possible, and understand the value of my investments can fluctuate significantly. (30 points)

Choosing and Changing Your Investments

Choosing and Changing Your Investments

- Add up your score

Points	Category	Portfolio
0-35	Conservative	70% fixed income, 30% equity
36-85	Moderate	50% fixed income, 50% equity
86-145	Balanced	40% fixed income, 60% equity
146-189	Growth	30% fixed income, 70% equity
190+	Aggressive	20% fixed income, 80% equity

- Two options: use pre-built portfolios or build your own.

Choosing and Changing Your Investments

- Pre-Built Portfolios

Point Range	Portfolio
0 - 51	LifePlan Income Fund (35% Equity)
52 – 140	LifePlan Growth & Income Fund (55% Equity) or Balanced Value Fund (60% Equity)
141 and over	LifePlan Growth Fund (75% Equity)

- Advantages: easy to manage, automatically rebalanced
- Disadvantage: risk managed is static, still need to revisit risk tolerance as you get closer to retirement

Choosing and Changing Your Investments

- Build your own portfolio
- This approach works best for the investor who
 - *Has above average investment knowledge*
 - *Reviews the status of their investments regularly*
 - *Understands the terms asset class, style and volatility*
 - *Has a financial advisor (and listens to him/her)*
 - *Reviews and rebalances their portfolio at least annually*

Choosing and Changing Your Investments

- Example of build your own “balanced portfolio”
 - 40% McLean Budden Bond Fund
 - 20% BGI U.S. Equity Index Fund
 - 20% BGI International Equity Index Fund
 - 10% McLean Budden Canadian Equity Value Fund
 - 10% McLean Budden Canadian Equity Growth Fund
- Other variations are possible
- **Very important to rebalance your asset mix periodically (at least annually, preferably quarterly)**

Choosing and Changing Your Investments

Market Ups and Downs

- When Markets move up and down what should I do?
 - Don't panic (remember your investment plan)
 - Rebalance your account
 - Check your progress against your retirement goals
 - Re-visit your risk profile periodically

Choosing and Changing Your Investments

As you Progress in your Career

- Redo your Investment Risk Profiler periodically (no less frequently than every five years)
 - Adjust your investment options as required
- Risk tolerance will reduce as retirement approaches
- Rebalance if required (quarterly / annually)

Choosing and Changing Your Investments

How do I Make a Change

- Easiest way is to go online at www.sunlife.ca/member
- Can also call 1-866-733-8612

Retirement Planning

Am I on track?

Retirement Planning

Am I on track?

The Budget

(for a member earning \$80,000 and spouse earning \$40,000)

Expenses	Before Retirement	After Retirement
Food/Eating Out	\$10,000	\$10,000
Shelter	\$15,000	\$15,000
Household Utilities	\$10,000	\$10,000
Clothing	\$3,000	\$3,000
Transportation	\$16,000	\$9,000
Health/Personal Care	\$2,000	\$2,000
Recreation/Gifts/Vacations	\$15,000	\$9,000
Work-Related Expenses	\$6,000	\$0
Savings	\$16,000	\$0
Income Taxes	\$27,000	\$14,000
Total Expenses	\$120,000	\$72,000

Retirement Planning

Am I on track?

TABLE A

Replacement Ratio of CPP and OAS (Retirement at age 65)

Salary	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
\$40,000	36%	37%	37%	38%	39%	40%	41%	42%
\$50,000	29%	30%	31%	32%	33%	34%	35%	37%
\$60,000	24%	25%	26%	26%	27%	28%	30%	31%
\$70,000	20%	21%	22%	23%	24%	24%	25%	26%
\$80,000	16%	17%	19%	20%	21%	21%	22%	23%
\$90,000	13%	14%	15%	17%	18%	19%	20%	20%
\$100,000	11%	12%	13%	14%	15%	16%	17%	18%
\$110,000	9%	10%	11%	12%	13%	14%	15%	16%
\$120,000	8%	8%	9%	10%	11%	12%	13%	14%

Note: Assumptions shown on p. 53. Results will vary with assumptions.

Retirement Planning

Am I on track?

TABLE B

Replacement Ratio of a \$10,000 account value today

Salary	Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
\$40,000	3.9%	3.5%	3.1%	2.7%	2.4%	2.2%	1.9%	1.7%
\$50,000	3.1%	2.8%	2.5%	2.2%	1.9%	1.7%	1.5%	1.4%
\$60,000	2.6%	2.3%	2.1%	1.8%	1.6%	1.4%	1.3%	1.1%
\$70,000	2.2%	2.0%	1.8%	1.6%	1.4%	1.2%	1.1%	1.0%
\$80,000	1.9%	1.7%	1.5%	1.4%	1.2%	1.1%	1.0%	0.8%
\$90,000	1.7%	1.5%	1.4%	1.2%	1.1%	1.0%	0.8%	0.8%
\$100,000	1.6%	1.4%	1.2%	1.1%	1.0%	0.9%	0.8%	0.7%
\$110,000	1.4%	1.3%	1.1%	1.0%	0.9%	0.8%	0.7%	0.6%
\$120,000	1.3%	1.2%	1.0%	0.9%	0.8%	0.7%	0.6%	0.6%

Note: Assumptions shown on p. 53. Results will vary with assumptions.

Retirement Planning

Am I on track?

TABLE C

Replacement Ratio of future contributions

(Total of 1% of pay per year)

Age 30	Age 35	Age 40	Age 45	Age 50	Age 55	Age 60	Age 65
3.6%	2.9%	2.3%	1.7%	1.2%	0.8%	0.4%	0%

Note: Assumptions shown on p. 53. Results will vary with assumptions.

Retirement Planning

Am I on track?

- Example of Replacement Ratio Calculation
 - Member aged 50 will retire in 15 years
 - Current Earnings \$80,000
 - Current Account Balance \$300,000

Table A (OAS+CPP)		Table B (Current balance)		Table C (Future contributions 1.0%)		Projection at age 65
21%	+	$30 \times 1.2\% = 36\%$	+	$13.5 \times 1.2\% = 16\%$	=	73%

Retirement Planning

Am I on track?

▪ Assumptions used in illustrations

- Retirement at age 65
- Net return (after fees) before retirement – 6% per annum (assumes balanced portfolio approach for most of member's career and fees are roughly 0.5% per year)
- Net real return (after fees and inflation) after retirement – 3% per annum (assumes moderate to conservative investment approach and fees of 1% per annum)
- Basic inflation: 2.25% per annum
- Average Canadian wage inflation: 3.0% per annum
- Salary increases: 3.5% per annum
- Full career (35+ years) for the purposes of determining eligibility for CPP and OAS benefits

Note: Results will vary with assumptions

Retirement Planning

Am I on track?

- Ways to check if you are on track to meet your retirement goals.
 - Calculate your projected replacement ratio
 - Sun Life Financial Tools
 - www.sunlife.ca/member
 - MyInfoCafé
 - Resource Centre
 - My Money Tools
 - Retirement Planner
 - Sun Life Savings Calculator

Retirement Planning

Am I on track?

- If you are not on target you can
 - Save more money (voluntary contributions, RRSPs, Other savings)
 - Consider increasing contributions
 - Retire later / Work in retirement
 - Adjust retirement lifestyle

Retirement Planning

Am I on track?

- If you are on target what can go wrong?
 - **POOR INVESTMENT PERFORMANCE**

(The bigger your account balance and the closer you are to retirement the greater the risk)

Retirement Options

Your Retirement Options

Your pension and RRSP options at retirement
(maximum “maturity” date: end of year of 71st birthday)

- Annuities
 - Life Only
 - Joint and Survivor
 - Term certain to age 90 (RRSP only)
 - Guarantee periods (up to age 90)
 - Indexing
 - CPP / OAS integration
- RRIF for RRSPs – LIF for pension plan account
- Cash (RRSPs only)

Your Retirement Options

Annuities

- Annuities (Pros)
 - Fixed Monthly Income – predictable income stream
 - Guaranteed for life – no fear of outliving retirement funds
 - Good for long life expectancies
 - Can include ancillaries (guarantee period, joint and survivor protection that best suits you)
 - Indexing protects against inflation (may be expensive to purchase)
 - No investment decisions to make
 - Payment amount guaranteed even if markets fall
 - Protection against insurance company failure exists (Assuris)

Your Retirement Options

Annuities

- Annuities (Cons)
 - Limited Flexibility (no lump sum payments)
 - Lower death benefit if you die young
 - Payments will not increase with market gains (for most annuities)
- Amount of pension that can be purchased varies with bond rates and will fluctuate
- Should shop around for best deal

Your Retirement Options

Life Income Funds (LIF)

- Life Income Funds (Pros)
 - Flexible withdrawals (subject to minimums and maximums)
 - Account balance protected on death (remaining assets passed to heirs)
 - Tax sheltered transfer available if heir is spouse, common-law partner or dependent child
 - Can benefit from market gains
 - Maintain control of investment options
- Life Income Funds (Cons)
 - Investment risk (market losses)
 - Longevity risk (can outlive assets)

Your Retirement Options

Life Income Funds (LIF)

- Life Income Funds (other features)
 - Can make one-time additional large withdrawal (lesser of 25% and 3 times maximum annual LIF withdrawal)
- Should shop around for best deal

Your Retirement Options

Life Income Funds (LIF)

Permitted withdrawals (in 2008) from a LIF as a percent of the account balance at the beginning of the year (varies by year)

Age on Jan 1 2008*	Minimum %	Maximum % (New Brunswick)
65	4.00%	7.38%
70	5.00%	8.22%
75	7.85%	9.71%
80	8.75%	12.82%
85	10.33%	22.40%
90	13.62%	100.00%
95 +	20.00%	100.00%

* Unless birthday is actually Jan 1 in which case maximum is slightly less.

Your Retirement Options

Sample Retirement Income Streams

Assuming \$700,000 account balance and retirement at age 65

Age	JS 60% Pension	Minimum LIF %	Maximum LIF %
65	\$37,653	\$0	\$51,659
70	\$42,084	\$37,969	\$50,545
75	\$47,036	\$49,566	\$49,534
80	\$52,571	\$56,863	\$48,693
85	\$58,757	\$54,071	\$48,261
90	\$65,672	\$51,179	\$1,323

These illustrated annuities were estimated using a 2% net real rate of return and a 2% commission. For other assumptions see page 53.

Your Retirement Options

If you retire before age 65

- You will require additional financial resources
- Annuity – may purchase a bridge pension to age 65
- LIF – can take one-time large withdrawal
- CPP – Can start as early as age 60 (with applicable reduction)
- OAS – Cannot start until age 65
- RRSPs or voluntary contributions – these may be helpful to “bridge” you until you reach age 65
- TFSAs (starting in 2009) could also be effective retirement savings vehicles to provide that bridging of income

You must apply for OAS and CPP – www.sdc.gc.ca or
1-800-277-9914

Your Retirement Options

- Who do I call to start my pension
 - Human Resources
 - Sun Life Financial
 - Your personal retirement financial advisor
- Other retirement issues not covered here
 - Estate planning
 - Tax planning
 - Life insurance

QUESTIONS



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