

Mid-Year Investment Review

University of Toronto Business Board Meeting
September 21st, 2015



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Assets Under Management

(millions at quarter-end)

	Q2/2014	Q3/2014	Q4/2014	Q1/2015	Q2/2015
LTCAP	2,119	2,207	2,293	2,379	2,410
Pension	3,605	3,668	3,784	4,040	4,060
EFIP	1,111	1,426	1,352	1,302	1,175
Total	6,874	7,301	7,429	7,721	7,646

- **Assets under management increased by 11.2% in the last year.**

Portfolio Performance vs. Benchmarks

Performance Summary - June 30, 2015								
	Net Return							
	Q1 2015	Q2 2015	CY 2015 YTD	1 Year	2 Years	4 Years	5 Years	10 Years
Actual Portfolio Return:								
LTCAP	6.60%	0.52%	7.16%	12.15%	14.79%	10.52%	11.00%	4.95%
Pension	6.60%	0.41%	7.04%	11.88%	14.62%	10.42%	10.86%	4.75%
EFIP	0.69%	0.29%	0.98%	1.88%	1.99%	1.93%	1.96%	2.47%
Benchmark Portfolio Return:								
LTCAP ¹	5.87%	-1.25%	4.55%	7.65%	11.69%	8.08%	8.97%	4.80%
Pension ²	5.87%	-1.25%	4.55%	7.65%	11.69%	8.20%	9.00%	4.65%
EFIP ³	0.71%	0.24%	0.96%	1.74%	1.70%	1.70%	1.77%	2.82%
University Targets:								
CPI + 4%	1.48%	1.71%	3.12%	4.96%	5.66%	5.47%	5.80%	5.75%
365 day T-bill + 0.50%	0.71%	0.24%	0.96%	1.74%	1.70%	1.70%	1.77%	2.82%

1. New Reference Portfolio is effective March 2012; BM portfolio also becomes the new Reference Portfolio.

2. New Reference Portfolio is effective May 2012; BM portfolio also becomes the new Reference Portfolio.

3. BM and Reference portfolio are the 365-day Cdn. T-Bill Index return plus 50 basis points.

- **2015 YTD portfolio performance quite favorable versus University Targets (LTCAP: +404 bps) and Benchmark portfolio (LTCAP: +261 bps) but recent months more challenging versus Target return.**
- **Outperformance reflects both the investing environment (see Benchmark Portfolio) and active management decisions(see extra return of Actual Portfolio versus Benchmark Portfolio).**



How Much Did the Capital Markets' Environment Contribute?

Selected Market Benchmarks							
Gross Return							
	Q1 2015	Q2 2015	CY 2015 YTD	1 Year	2 Years	4 Years	5 Years
Market Benchmarks:							
Equity:							
S&P/TSX (CAD)	2.58%	-1.63%	0.91%	-1.16%	12.77%	5.34%	8.28%
S&P 500 (USD)	0.95%	0.28%	1.23%	7.42%	15.70%	14.22%	17.34%
MSCI EAFE (Local)	10.85%	-1.82%	8.82%	11.78%	14.80%	10.76%	11.27%
MSCI EM (Local)	4.90%	0.70%	5.63%	6.23%	9.92%	4.61%	6.94%
Fixed Income:							
FTSE TMX Universe (CAD)	4.15%	-1.71%	2.37%	6.25%	5.79%	5.17%	5.07%
FTSE TMX Government (CAD)	4.40%	-1.89%	2.42%	6.79%	5.89%	5.02%	4.89%
FTSE TMX Corporate (CAD)	3.55%	-1.27%	2.23%	4.96%	5.54%	5.56%	5.54%
Foreign Exchange:							
US Dollar	9.35%	-1.43%	7.79%	17.21%	8.79%	6.65%	3.28%
Euro	-2.95%	2.26%	-0.75%	-4.62%	0.72%	-0.15%	1.34%

- Regional stock market performance quite uneven coupled with weak Q2; YTD Canadian bond market performance better than expected .
- As usual, significant portion of LTCAP and Pension performance (approx. 65%) is the result of both the capital markets environment and the diversified asset mix utilized in the Benchmark Portfolio (return of 4.55% YTD).



How Did the University's Private Markets' Investments Perform?

Private Markets Investments -- June 30, 2015						
Local Return (after Fees)						
	Penson CY 2015 YTD	LTCAP CY 2015 YTD	LTCAP			
			1 Year	2 Years	4 Years	5 Years
Private Equity	8.0%	7.3%	13.5%	14.1%	12.7%	13.8%
Buyout	10.3%	11.6%	20.3%	17.3%	14.7%	15.9%
Distressed Debt	5.3%	3.4%	8.8%	11.5%	10.7%	12.1%
Venture Capital	15.5%	10.9%	3.9%	12.0%	7.8%	7.6%
Real Assets	7.0%	6.9%	16.8%	14.3%	11.9%	12.3%
Real Estate & Infrastructure	10.4%	10.0%	23.5%	18.9%	15.7%	16.1%
Commodities	-1.7%	-1.6%	2.5%	4.7%	3.9%	4.5%

- YTD 2015 Private Markets results contributed to positive performance; note that results are lagged by one quarter.
- Over longer term, performance comparison with Public Markets remains favorable.



Did Active Management Decisions Add Value?

Performance Attribution - CY 2015 YTD		
	LTCAP	Pension
Benchmark Portfolio (CAD):	4.55%	4.55%
<i>Asset Mix Differences</i>	0.03%	0.04%
<i>Style Tilts</i>	0.31%	0.27%
<i>Manager Selection</i>	1.66%	1.69%
<i>Different FX Exposure</i>	0.60%	0.57%
<i>Residual</i>	0.01%	-0.08%
Actual Portfolio (CAD)	7.16%	7.04%
Value-Add	2.61%	2.49%

- Solid value-add from 'active' management decisions in YTD 2015 results.
- Main contributor was manager selection but other components contributed as well, especially currency decisions.



Style Tilts & Manager Selection Added Value

(in basis points)

Style & Manager Value-Add (bps) -- CY 2015 YTD--		
	LTCAP	Pension
Cdn. Equity	6	21
U.S. Equity	43	39
EAFE Equity	56	56
EM Equity	50	44
Credit	3	1
Rates	3	3
Absolute Return	37	31
Value-Add	197	196

- Restructured slate of managers outperformed asset class benchmarks – adding nearly 200 bps.
- All asset segments contributed as did both public and private assets.



A Longer Perspective on Active Management Performance

Value-Add vs. Benchmark Portfolio					
	CY 2015 YTD	1 Year	2 Years	4 Years	5 Years
LTCAP:					
Actual Portfolio	7.16%	12.15%	14.79%	10.52%	11.00%
Benchmark Portfolio	4.55%	7.65%	11.69%	8.08%	8.97%
Difference	2.61%	4.50%	3.10%	2.44%	2.03%
Pension:					
Actual Portfolio	7.04%	11.88%	14.62%	10.42%	10.86%
Benchmark Portfolio	4.55%	7.65%	11.69%	8.20%	9.00%
Difference	2.49%	4.23%	2.93%	2.22%	1.87%

- **Benchmark Portfolio is a mixture of the old Policy asset mix and the new Reference Portfolio asset mix.**
- **Value-added from UTAM ‘active’ management decisions has been meaningful over the last several years.**



Current Asset Allocation and Limits

(Percentages)

LTCAP - June 30, 2015						
	Reference Portfolio		Actual Portfolio	Outside Band	----- Bands -----	
	%		%	Band	Min.	Max.
					%	%
Equity:						
Canadian	16		14.8	N	11	21
US	18		17.4	N	13	23
EAFE	16		15.3	N	11	21
EM	10		10.1	N	5	15
Total	60		57.5	N	50	70
Credit:	20		21.9	N	10	25
Rates:	20		10.1	N	10	30
Other:						
Absolute Return			10.2			
Cash			0.2			
Total	0		10.4	N	0	15
	100		100.0			
FX Exposure:	21.9		25.5	N	14	30

➤ All exposures within bands.



Current Asset Allocation and Limits

(Percentages)

Pension - June 30, 2015						
	Reference Portfolio		Actual Portfolio	Outside Band	----- Bands -----	
	%		%		Min.	Max.
					%	%
Equity:						
Canadian	16		14.9	N	11	21
US	18		17.1	N	13	23
EAFE	16		15.4	N	11	21
EM	10		10.1	N	5	15
Total	60		57.5	N	50	70
Credit:	20		21.9	N	10	25
Rates:	20		10.2	N	10	30
Other:						
Absolute Return			9.9			
Cash			0.5			
Total	0		10.5	N	0	15
	100		100.0			
FX Exposure:	21.9		25.6	N	14	30

➤ All exposures within bands.



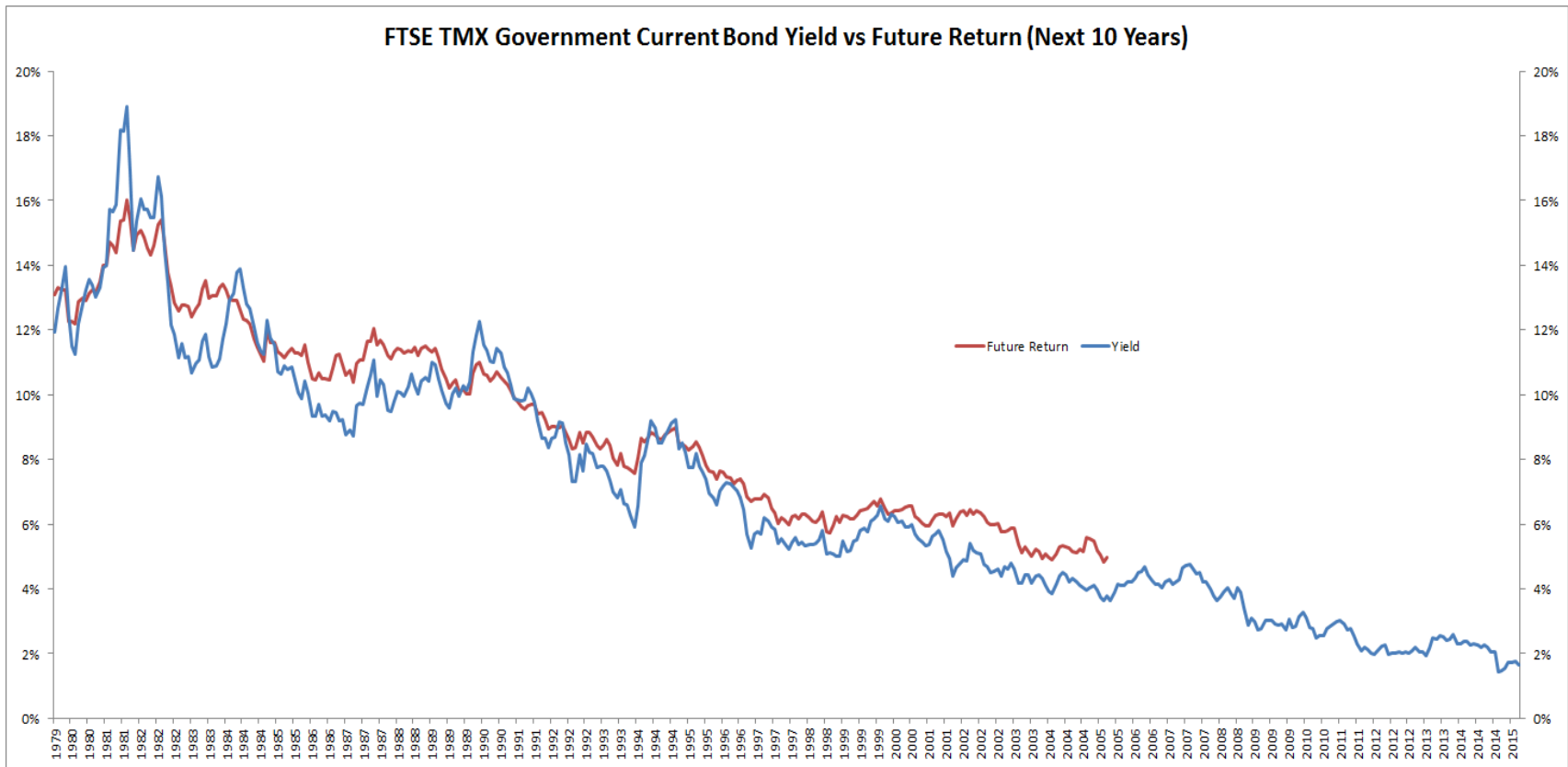
Portfolio Risk vs. Reference Portfolio

	Volatility %	VaR % (1 Month)	CVaR% (1 Month)
Reference Portfolio	5.56	(2.49)	(2.85)
Actual Portfolio	5.91	(2.88)	(3.22)
Actual less Reference	0.35	(0.39)	(0.36)

- **Absolute level of measured portfolio volatility is quite low relative to history.**
- **Actual LTCAP portfolio volatility exceeds that of Reference Portfolio by 35 basis points; LTCAP excess is 34 basis points.**
- **Important to appreciate that this analysis may overstate short-term risk versus Reference Portfolio as all private market investments treated as if they were public markets investments.**
- **Liquidity levels remain adequate.**

Understanding the Challenges Ahead

-- Fixed Income --

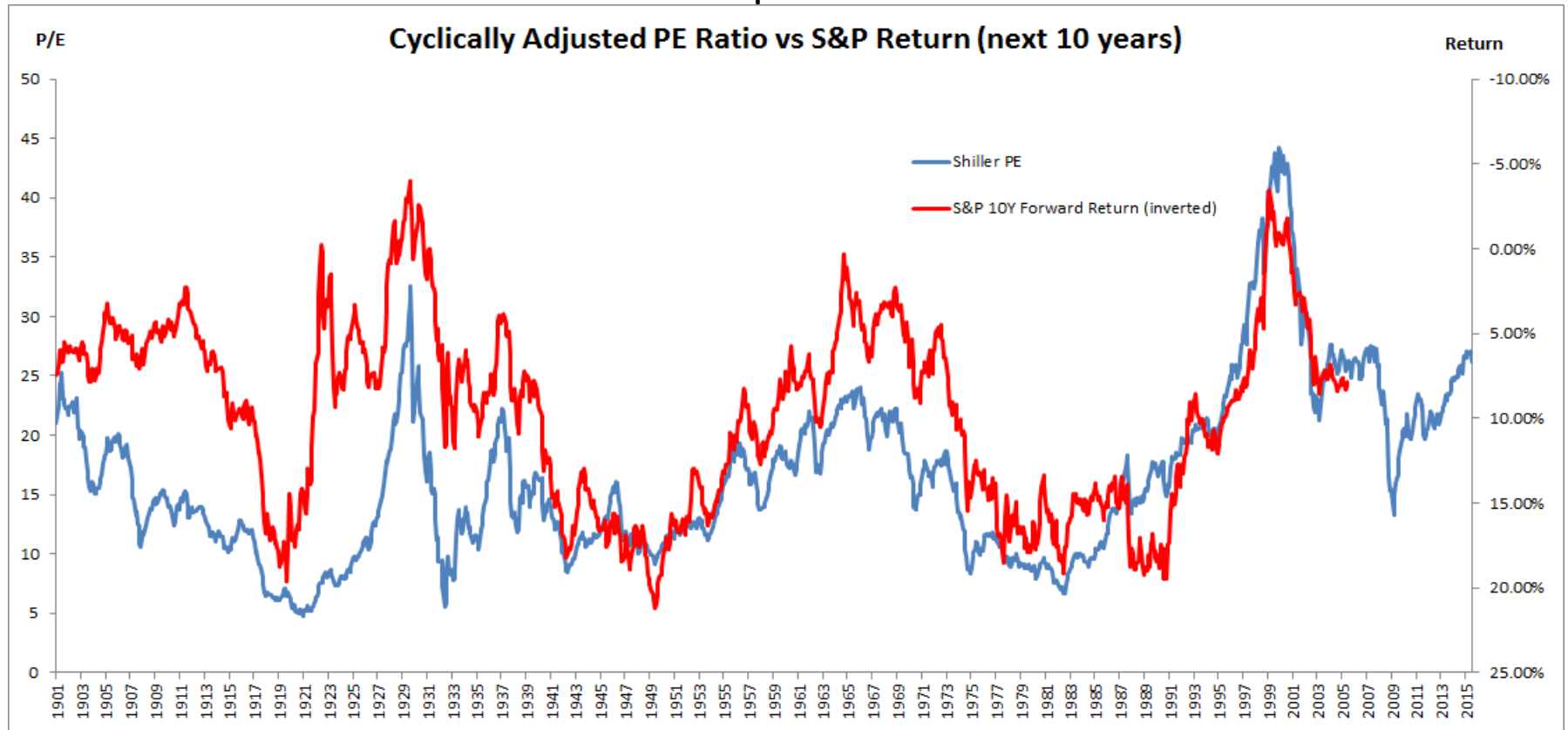


- **Level of current yield (1.7%) provides a very good estimate of future return from bonds.**
- **As such, bonds provide not only meager return prospects but also much more limited protection against market and economic turbulence. Very different situation than during the last 30 years.**



Understanding the Challenges Ahead

-- Equities --



- **Cyclically adjusted price / earnings ratio of US market higher than 90% of historical readings.**
- **Valuations suggest considerably more moderate returns ahead; this simple valuation model currently implies an annual return of only 4.9% over next 10 years.**



Current Investment Environment

- Economic conditions around the world remain uneven and growth is expected to generally remain below historical trend.
- Inflation pressures should remain moderate.
- Significantly higher interest rates are unlikely but fixed income returns expected to be quite moderate.
- Select alternative credit strategies still attractive.
- Currency considerations will remain an important factor in returns.
- US equities not as expensive as in 2000 but definitely not cheap in a long term context.
- Current rich valuations in stocks and bonds imply elevated risk and volatility with the likelihood of only moderate returns from 'passive' portfolios or portfolios comprised solely of traditional assets and long-only strategies.
- The additional return offered by efficient diversification and 'active' management should represent a significant part of overall portfolio returns going forward.

Questions?



Glossary

Absolute Return	An absolute return fund seeks to make positive returns in all market environments by employing investment management techniques that differ from those employed by traditional fund managers that only buy securities (i.e., long only). Absolute return investment strategies may include using short selling, options, derivatives, arbitrage, leverage, etc and may be applied across various assets.
Active Investing	An investment approach that purposely shifts funds between asset classes, strategies, sectors or individual securities in order to seek superior returns.
Benchmark Portfolio	A standard which reflects the asset owners objectives and against which an 'actual' portfolio's performance and risk can be measured. Benchmark portfolios are generally comprised of a predetermined set of asset exposures with returns based on various published market indexes such as the S&P 500 Index.
FTSE TMX Universe	The Universe index is the broadest and most widely used measure of the performance of Canadian government and corporate bonds.
FTSE TMX Government	This index measures the performance of marketable government bonds in the Canadian market. It includes Federal, Provincial and Municipal bonds.
FTSE TMX Corporate	This index is a measure of the performance of Canadian investment-grade Corporate bonds.
FX Exposure	This measures the amount of foreign currency owned as a result of having assets in currencies other than the home currency (i.e., the Canadian dollar) and is net of any hedges employed.
MSCI EAFE	This index is designed to measure the equity market performance of 21 developed economies excluding the US & Canada. EAFE stands for Europe, Australasia and the Far East.
MSCI EM	This index is designed to measure the equity market performance of 23 emerging economies. It includes Brazil, Russia, India and China.

Passive Investing	Buying a portfolio which replicates a broad-based market index without attempting to search out mispriced securities or assets.
PE Ratio	A valuation measure which compares a company's share price to its per-share earnings.
Private Equity	Consists primarily of equity securities of companies that are not publicly traded on a stock exchange.
Real Assets	Assets such as land and buildings, infrastructure, commodities, etc.
S&P/TSX Composite	The headline index for the Canadian equity market. It is an index of the equity prices of the largest companies on the Toronto Stock Exchange as measured by market capitalization.
S&P 500	A U.S. stock market index based on the market capitalization of 500 large companies having common stock listed on the NYSE or NASDAQ.
Volatility	A statistical measure of the dispersion of returns for a given security or portfolio. Volatility is generally measured by using the standard deviation of returns over some period. Commonly, the higher the volatility, the riskier the security or portfolio.
VaR	Value-at-Risk is a common measure of the market risk of an investment portfolio over a specific time frame. As used in this report, it indicates the level of loss that one might expect would only be exceeded once in twenty months. The calculation can be sensitive to the time period analyzed. The values shown in this report are based on an analysis of performance over the last 5 years.
CVaR	A risk measure derived by assessing the likelihood (at a specified confidence level) that a loss will exceed the value-at-risk level. CVaR is the expected loss should this occur (it is derived by taking a weighted average between the value-at-risk and losses exceeding the value-at-risk. It is calculated using the same time period used for VaR).