



2015 Annual Investment Report

The City of Calgary

Chief Financial Officer's Department

Finance / Treasury

AC2016-0327 2015 Annual Investment Report ISC: UNRESTRICTED

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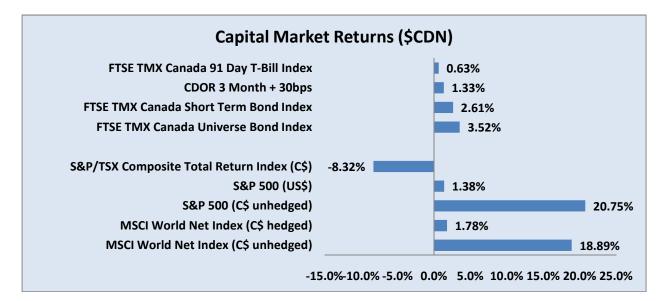
I - Investment Overview

- As at December 31, 2015, total investments under management were \$4.37 billion, up from \$3.96 billion in 2014 and generated \$96.6 million of realized investment income for The City.
- Investments (including both internally and externally managed assets), returned 1.95% on a market value basis, compared to the benchmark return of 1.11%.
- 2015 was a very volatile and generally weaker year for Canadian and global equity market returns. Total equities posted a small negative return of -0.75%. Global equities outperformed Canadian equities and returned 2.19% compared to -4.05% for Canada.
- Canadian short and longer term bonds provided positive returns of 2.99% and 2.68% respectively in 2015, as interest rates continued to trend lower during the year.
- Short-term interest rates declined throughout 2015 and The City's internally managed portfolios returned an average yield of 1.78%.
- Asset class returns outperformed their respective benchmarks during the year.

2015 Capital Market Review

2015 was characterized by a period of slow global economic growth and low inflation that had a dampening effect on interest rates. Except for the U.S. which raised short term interest rates for the first time in almost a decade, most developed nations including Canada provided aggressive stimulative monetary policy measures to lower interest rates and spur economic growth. For example, Europe and Japan embarked on zero interest rate policies while the Bank of Canada lowered short term rates to 0.50% during the year.

Exhibit 1: 2015 Capital Market Returns



As highlighted in Exhibit 1 above, bonds outperformed equities in 2015 and generated moderate returns of 2.6% to 3.5% during the year. In contrast, global and Canadian equity markets posted smaller returns of 1.78% and -8.32% respectively.

Appendix 1 on page 16 contains several graphs illustrating important factors that impacted capital market performance in 2015.

Graph 1 highlights the historical relationship (2000 to 2015) between the world price of oil and the value of the Canadian dollar (CAD) vis a vis the US dollar (USD). As can be seen, the CAD (blue line) has traded in lock-step with the price of oil (orange line) over this period. Oil prices as measured by WTI (West Texas Intermediate) declined by 30% from \$53 US to \$37 US in 2015. The loonie depreciated by 16% versus the US dollar, falling in 2015 from 0.8605 CAD/USD and hitting a low of 0.7226 as at December 31, 2015.

In contrast to 2014, global equity market performance was generally lacklustre in 2015. While stock markets in local currency terms were flat in the U.S. and up about 3% in Europe, Canada's S&P/TSX Composite Price Index lost 11.0% during the year. In addition, market volatily increased driven by factors including weak energy prices, a stronger U.S. dollar, and uncertainty over the level of China's future economic growth.

In Canada, weakness in the Canadian dollar allowed Canadian investors to enjoy favourable returns in unhedged foreign denominated investments and offset the underperformance of Canadian equities which were negatively impacted by a large selloff in the energy and mining sectors.

Canadian bond markets outperformed equities during the year. While Government of Canada yields fell to near historical lows, wider corporate credit spreads resulted in corporate bonds underperforming governments on a relative basis.

In 2015, the S&P 500 index (USD) returned 1.38% while the MSCI World Index (local currency) returned a slightly higher 1.78%. In contrast, due to a depreciating Canadian dollar, Canadian investors that left their foreign currency exposure unhedged, were able to generate strong returns such as 20.75% on the S&P 500 Index and 18.89% on the MSCI World Index (Graph 2 and 3).

In 2015, the Canadian economy faced strong headwinds from plummeting energy and commodity prices and the S&P/TSX Composite Total Return Index generated a return of -8.32% (Graph 4).

As illustrated in Graph 5, Canadian bonds, particularly government bonds had a relatively good year compared to equities in 2015. Deteriorating credit conditions resulted in a widening of credit spreads (higher yields) for corporate bonds whose performance lagged government bonds on a market value/total return basis.

The expectation for higher interest rates at the beginning of 2015 (Graph 6), didn't materialize as the Bank of Canada lowered short term rates as the prospect for Canadian economic growth was muted. This boosted bond prices and returns during the year.

II - Investment Objectives

• Preservation of Capital

- Primary objective for total investment portfolio

- Risk Mitigation
 - Diversification (asset class and security holdings by sectors and geography)
 - Policy constraints and limits

Investment Returns

- Maximize returns relative to risk
- Liquidity and investment time horizon considerations

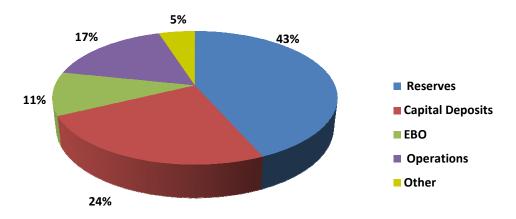
In keeping with The City's investment objectives, investments generated a total return of 1.95% in 2015, which exceeded the portfolio's benchmark return of 1.11% and generated \$96.6 million of realized investment income for the City.

III - Source of Investments

The City of Calgary invests funds that stem primarily from the following sources:

- Reserves (operating & capital)
- Capital Deposits (off-site levies and government grants)
- Funded Employee Benefit Obligations (EBO)
- General Operations; and
- Other (Trusts & affiliated entities)

Exhibit 2: Source of Investments



City Funds are invested in a diversified portfolio of financial assets consisting of money market securities, short term and long term government and corporate bonds, and global and Canadian equity investments, to meet the investment objectives of City Funds. This includes return and liquidity requirements, as well to match funds with longer-term time horizons.

IV-Investment Governance

The City's Investment Governance Policy articulates the governance framework for the management of City investments. It sets out the accountability, reporting, and disclosure requirements for all investment activity. The Governance Policy establishes the roles and responsibilities of Council, the Investment Advisory Committee (IAC), Administration, and investment managers regarding management of portfolio investments.

The IAC oversees The City's investment program, to ensure that investments are effectively managed in accordance with legislation and Council approved policy. In 2015, the IAC undertook a major examination of The City's investments and strategy to optimize returns in the low return environment. Additional recommendations have to be conveyed before deciding on next steps.

Environmental, Social, and Governance (ESG) Considerations

The City applies prudent investment management practices to achieve its designated investment objectives to preserve capital and maximize investment returns subject to an appropriate level of risk.

It is believed that by acting as an engaged and responsible investor, The City is able to enhance the long term sustainable return/risk performance of its investment portfolios.

ESG refers to environmental, social, and corporate governance factors relevant to a company or investment that can financially impact the investment's value. Investment managers seek to integrate ESG factors into the investment process to derive a better assessment of a company's fundamental value. This involves examining ESG considerations and enhances analysis and risk considerations of a company, industry or government.

While managers don't screen out companies on non-financial ESG factors alone, as this unduly narrows the universe of potential investment opportunities, they do focus on ESG measures in their investment decisions. The belief is that companies and governments that follow leading ESG principles are expected to provide superior long term financial performance.

Also, an important component of ESG and sustainable investing is corporate engagement with company management including proxy voting, to encourage sound ESG practices

Active proxy voting is an essential aspect of engagement that adds value to managing portfolios. As a shareholder, The City has the right to vote on corporate policies and initiatives which are exercised via the proxy voting process.

Risk Management

The City manages investment risk through a sound governance framework and a comprehensive Investment Policy. The Investment Policy incorporates the requirements of the Alberta Municipal Government Act and its Investment Regulations and establishes industry best practice guidelines and controls for management of The City's investment portfolios. This includes defining investment objectives; appropriate diversification requirements; eligible asset classes and security instruments; investment strategies; and quality and quantity constraints.

Investment managers apply rigorous investment analysis and practices and invest in investment grade securities that are diversified among security types, maturity dates, issuers, industry sectors, and geographically by country and regions. The portfolio diversification reduces the overall impact on the portfolio, if performance from any one category is adversely impacted.

Compliance

Compliance statements from investment managers are received quarterly. During the year, all investments were in compliance with the Municipal Government Act and The City of Calgary Investment Policy.

V- Summary of City Investments

As at December 31, 2015 the market value of The City's total investment portfolio was \$4.37 billion, up from \$3.96 billion in 2014 (Exhibit 3).

The City's investment structure consists of internally and externally managed portfolios. Internal portfolios are managed to provide shorter term liquidity for City Funds and, as such, are invested primarily in money market securities and shorter term bonds. In addition to the Working Capital portfolio, the Treasury group also manages a \$205 million short term laddered bond Portfolio, specifically structured to fund the capital cash flow requirements of the recreation centres' construction project.

Funds that are suitable for investment over longer time horizons are invested in the externally managed Short Term Bond, Long Term Bond, and Equity portfolios.

The City's external bond managers are Franklin Templeton Investment (Bissett), Connor Clark & Lunn Investment Management (CC&L), Phillips Hager & North Investment Management (PH&N) and Pacific Investment Management Company (PIMCO).

The equity portfolio managers include Fidelity Investments Canada, Brookfield Investment Management, TD Asset Management (TDAM) and Pavilion Advisory Group (PAG).

Market Value as at December 31, 2015 (000,000s)								
(includes cash & accrued interest)	Working Capital	ST Bonds	LT Bonds	Equities	Total 2015	Total 2014		
Internal Management:								
Working Capital	\$1,925				\$1,925	\$1,835		
ST Bonds		\$205			\$205	\$236		
Trust Investments	\$89				\$89	\$92		
External Management:								
Bonds		\$804	\$986		\$1,790	\$1,535		
Equities				\$359	\$359	\$264		
Total	\$2,014	\$1,009	\$986	\$359	\$4,368	\$3,962		

Exhibit 3: Investment Portfolios under Management

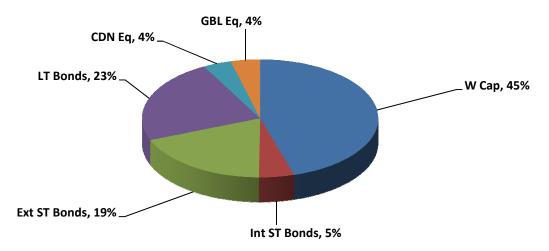
Exhibit 4 and 5 below highlight The City's current Asset Mix at year end:

Investment Asset Mix

Exhibit 4: Asset Mix

Asset Class	Current Mix	Policy Mix Range	Long Term Target
Working Capital	45%	30-50%	35%
Short Term Bonds	24%	0-30%	20%
Long Term Bonds	23%	25-40%	35%
Equities	8%	5-10%	10%
Total Portfolio	<u>100%</u>		<u>100%</u>

Exhibit 5: Asset Mix as at December 31, 2015



VI - Investment Performance

As illustrated in Exhibit 6, The City of Calgary's total portfolio (including internally and externally managed portfolios), returned 1.95% on a market value basis, compared to the benchmark return of 1.11% and generated \$96.6 million of investment income in 2015. While interest rates remained low throughout 2015, the internally managed portfolios returned a higher average yield of 1.78% in 2015 compared to 1.54% in 2014.

Canadian longer term bonds (Universe and Non-Universe bonds) returned 2.68% and underperformed short term bonds (2.99%) in 2015. Both the short and long term bond portfolios exceeded their performance benchmarks over all time horizons during the past 5 years as illustrated in Exhibit 7 below (with exception of Long Term Universe bonds in 2015).

The City's Global equity portfolio generated modest returns of 2.19% in 2015, while the Canadian equity portfolio ended the year on a negative note with a return of -4.05%. However, both Global and Canadian equity asset classes outperformed their respective benchmarks in 2015, and over five years.

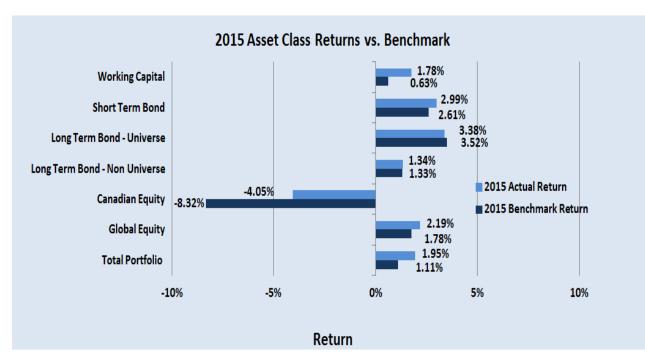


Exhibit 6: 2015 Asset Class Returns vs. Benchmark

Exhibit 7: Historical Annualized returns

Annualized Rates of Return As at December 31, 2015 (%)								
	1 Year	2 Years	3 Years	4 Years	5 Years			
Working Capital Return	1.78*	1.66	1.55	1.48	1.43			
Working Capital Benchmark	0.63	0.77	0.85	0.89	0.91			
*includes Recreation Centre bonds								
Short Term Bond Return	2.99	3.33	2.88	2.86	3.10			
Short Term Bond Benchmark	2.61	2.84	2.47	2.35	2.81			
Long Bond Return – Universe bonds	3.38	6.21	3.91	4.03	5.01			
Long Term Bond Benchmark	3.52	6.12	3.63	3.62	4.80			
Long Bond Return – Non Universe	1.34	1.80	-	-	-			
Benchmark	1.33	1.57	-	-	-			
Canadian Equity Return	-4.05	3.34	7.14	7.64	3.79			
Canadian Equity Benchmark	-8.32	0.68	4.62	5.26	2.30			
Global Equity Return	2.19	6.82	13.83	15.03	10.05			
Global Equity Benchmark	1.78	6.02	13.34	13.98	9.76			
Return on Total Portfolio	1.95	2.64	2.53	2.50	2.45			
Benchmark	1.11	1.94	1.95	1.95	1.97			

Performance Measurement Benchmarks

The investment performance of all funds is reported to the Chief Financial Officer and the Investment Advisory Committee on a quarterly basis and presented annually to The City's Audit Committee. Investment benchmarks are used for comparison purposes to assess the actual performance of The City's investment managers versus their respective performance benchmarks. Investment managers are expected to generate higher returns than the benchmark measured over a business cycle.

The designated asset class benchmarks are:

Working Capital:	FTSE TMX Canada T-bill 91 day Index				
Short-term Bond:	FTSE TMX Canada Bond Short Index				
Long Bond - Universe:	FTSE TMX Canada Bond Universe Index				
Long Bond – non Universe: CDOR* 3 months + 30 basis points (bps)					
Canadian Equity:	S&P/TSX Composite Total Return Index				
Global Equity:	MSCI World Index (hedged to \$CAD)				
*Canadian Dollar Offered Ra	te				

Working Capital / Short Term Portfolio

Manager: The City of Calgary, Treasury Division

Mandate: To generate investment income while preserving capital and providing liquidity for the cash flow requirements of all City Funds.

The portfolio is invested in a combination of corporate and bank paper, term deposits, and short term government and corporate bonds with the majority of investments maturing in less than two years. In addition to the Working Capital Portfolio, Treasury also manages a \$205 million laddered bond portfolio structured to fund the cash flow requirements of the recreation centres' construction project.

Working Capital Portfolio Annualized Rates of Return

As at December 31, 2015 (%)								
1 Year 2 Years 3 Years 4 Years 5 Years								
Working Capital Portfolio	1.78*	1.66	1.55	1.48	1.43			
FTSE TMX Canada T-bill 91 day Index	0.63	0.77	0.85	0.89	0.91			
*includes Recreation Centre bonds								

In 2015, the internally managed portfolio generated a return of 1.78% compared to 1.54% in 2014.

Short Term Bond Portfolio

Managers: Phillips, Hager & North Connor Clark & Lunn

Mandate: Investment in a diversified portfolio of short term fixed income securities with an average term to maturity of three to five years.

The combined portfolio dollar balance among the two managers was \$804 million in 2015. The portfolio is invested in a combination of government, corporate bonds, and commercial mortgages.

Short Term Bond Annualized Rates of Return

As at December 31, 2015 (%)									
1 Year 2 Years 3 Years 4 Years 5 Years									
City of Calgary	2.99	3.33	2.88	2.86	3.10				
FTSE TMX Canada Bond Short Index	2.61	2.84	2.47	2.35	2.81				

The portfolio generated a one year return of 2.99% for 2015. On a combined manager basis, the portfolio exceeded the return of the benchmark over all periods reviewed.

Long Term Bond Portfolio

Managers:	Franklin Templeton Investment (Bissett)
	Connor Clark & Lunn
	Phillips, Hager & North
	PIMCO

Mandate: Investment in a diversified portfolio of fixed income securities with an average term to maturity of seven to ten years.

The combined portfolio balance among the four bond managers was \$986 million in 2015.

Long-term Bond Annualized Rates of Return

As at December 31, 2015 (%)									
Universe Bonds1 Year2 Years3 Years4 Years5 Years									
City of Calgary	3.38	6.21	3.91	4.03	5.01				
FTSE TMX Canada Bond Universe Index	3.52	6.12	3.63	3.62	4.80				

Longer term bond government yields declined while corporate spreads widened in 2015, resulting in a 1 year return of 3.38%. Due to an overweight in the corporate bond sector, the portfolio underperformed the benchmark by 0.14%.

As at December 31, 2015 (%) *mandate started in May 2013								
Non-Universe Bonds1 Year2 Years3 Years4 Years5 Years								
City of Calgary	1.34**	1.80	-	-	-			
CDOR 3 month + 30 bps	1.33	1.57	-	-	-			

**This is a tactical bond strategy managed by PIMCO to outperform money market returns without taking significant interest rate risk. The manager is able to extend duration at its discretion.

Canadian Equity Portfolio

- Managers: Pavilion Advisory Group Fidelity Investments Canada TD Asset Management
- Mandate: To seek long-term capital appreciation by investing in a diversified portfolio of large capitalized Canadian equities.

Canadian Equity Annualized Rates of Return

As at December 31, 2015 (%)								
1 Year 2 Years 3 Years 4 Years 5 Years								
City of Calgary	-4.05	3.34	7.14	7.64	3.79			
S&P/TSX Composite Index -8.32 0.68 4.62 5.26 2.30								

Although Canadian equities posted negative returns in 2015, the managers collectively outperformed the benchmark with an annual return of -4.05% versus the benchmark return of -8.32%. Total Canadian equities under management totaled \$166 million.

Global Equity Portfolio

- Managers: TD Asset Management Fidelity Investments Canada Brookfield Investment Management
- Mandate: Investment in a diversified portfolio of large capitalized international equities located in developed markets.

Global Equity Annualized Rates of Return

As at December 31, 2015 (%)							
1 Year 2 Years 3 Years 4 Years 5 Years							
City of Calgary	2.19	6.82	13.83	15.03	10.05		
MSCI World Index (hedged to \$CAD)	1.78	6.02	13.34	13.98	9.76		

2015 was a weaker year for foreign equity returns than 2014. The global equity market as measured by the MSCI World Index (\$CAD hedged) generated a modest return of 1.78% during the year. The City's global equity portfolio returned 2.19%, outperforming the benchmark by 0.41%. Brookfield Investment Management was retained in March 2015 to manage a Global Infrastructure equity mandate.

Portfolio	Initial Investment (000's)	Market Value (000's) December 31, 2015
Canadian Equities	*\$120,000	\$165,547
Global Equities	**\$150,000	\$192,842
Total	\$270,000	\$358,389

Equity Portfolio allocations since Inception in 2009

*initial \$50M 2009, additional \$20M July 2011, \$25M August 2013, and \$25M December 2015. **initial \$50M 2009, additional \$25M August 2013, \$50M March 2015, and \$25M December 2015

VII – Capital Market Outlook

Global economic growth is projected at 3.4% in 2016 according to the International Monetary Fund, up slightly from 3.1% in 2015. The global economy is expected to be influenced by three main factors in 2016:

- the slowdown in China's economy as it rebalances the economy away from exports and investment towards consumption and services;
- lower inflation from the sharp drop in energy and commodity prices; and
- different monetary policies by central banks around the world.

Over the past decade, China has been a growth leader driving global commodity and trade cycles. This is slowing as China transitions from an export-based economy to a consumeroriented economy. The US is expected to be the engine for growth among advanced economies while the rest of the advanced economies experience marginal growth.

The sudden and significant decline in oil and commodity prices has been a major headwind for Canada. However the negative impact on Canadian economy should moderate in 2016 due to a weaker currency, government fiscal stimulus and a stronger US economy.

Global inflation is moderating due to slow economic growth and lower commodity prices and there is small evidence of global inflationary pressure in 2016. Although, Canada's economy has been lagging the US, the rising costs of imports, due to the depreciating Canadian dollar will put upward pressure on domestic inflation.

In Europe and Japan, interest rates and bond yields have fallen below zero as a result of the aggressive monetary easing pursued by their central banks. In Canada, yields on 10-year Government of Canada bonds hit all-time lows and another rate cut from the Bank of Canada in 2016 is a real possibility. Also, many market participants are expecting the pace of rate hikes in the US to be modest and gradual because of the uncertain outlook for the global economy and capital markets in 2016.

In this low interest rate / return environment, bond strategies that search for yields with minimal interest rate risk will be prominent themes for fixed income investors. As such, the global bond market is expected to offer recession hedging and diversification benefits in 2016.

Equity markets got off to a poor start in 2016. World economic growth and corporate profits are uneven and this will have ramifications for future global equity performance. Equities appear to be trading at full valuations and it is expected that there will be higher return dispersion across countries and sectors.

On one hand, stronger economic activity in the US and UK coupled with the massive monetary stimulus in Europe and Japan, will likely have a modest positive effect on equity markets in these developed regions. On the other side, slowing growth in China and struggling emerging economies and challenging debt overhang are placing downside pressures on these markets.

While Canadian equities are expected to benefit from a growing US economy, domestic headwinds from weak commodity prices are still present. The Bank of Canada remains concerned about the oil price shock and the negative impact it is having on the economy. Normally at this stage of the business cycle, Canadian manufacturing and export sectors would be significantly benefiting from the stronger US economy and weak Canadian dollar.

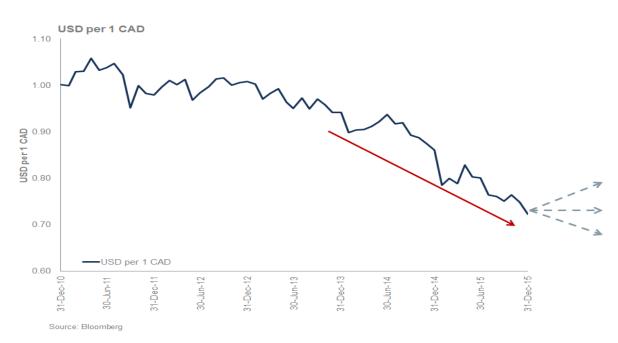
Two key factors will be determinant on how the Canadian economy and capital markets perform in 2016. The lower value of the Canadian dollar (Graph 7) will hopefully boost Canadian exports and partially offset the impact of lower oil prices (Graph 8).

A rebound in oil prices coupled with additional monetary stimulus by the Bank of Canada, and anticipated fiscal stimulus via increased government spending and investment should provide a needed thrust to the Canadian economy in 2016.

In summary, given the uncertain economic outlook for world growth and the prospect of low equity and bond returns in 2016, underscores the importance of maintaining a well-diversified investment portfolio that consists of both public and private market investments and asset classes to sustain returns and minimize volatility in global capital markets.

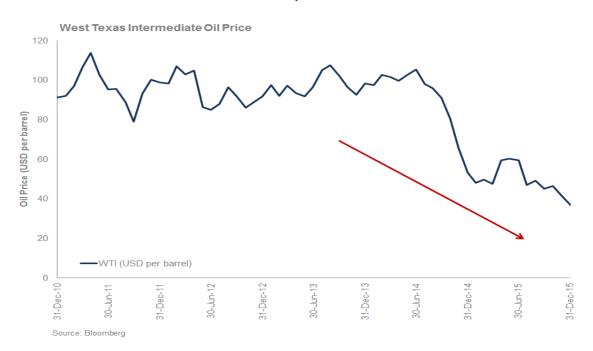


CAD weakness continues



Graph 8

Oil's decline Future prices uncertain



VIII - Investment Advisory Committee Members

Eric Sawyer (Chair), Chief Financial Officer Brad Stevens, Deputy City Manager Stuart Dalgleish, General Manager Beng Koay, Director Finance and City Treasurer Vern Malcolm, External Member - Investment Executive Sandy McPherson, External Member - Investment Executive

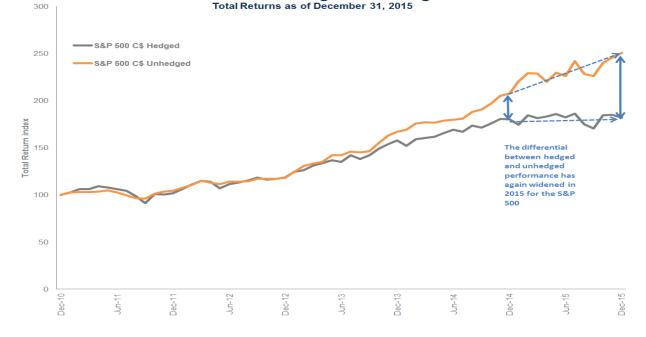
Appendix 1 – Capital Market Review Graphs 1-6

Graph 1: Relationship of Oil and CAD (2000-2015)

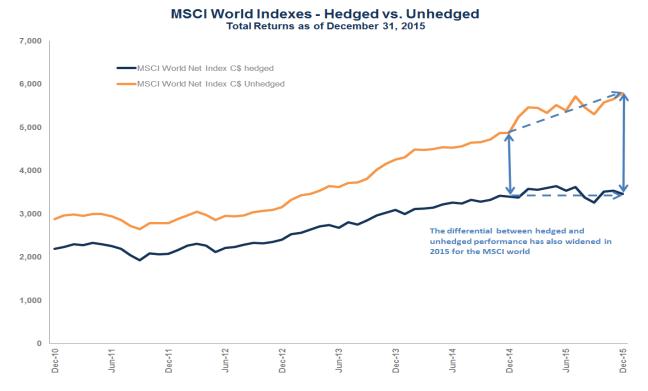


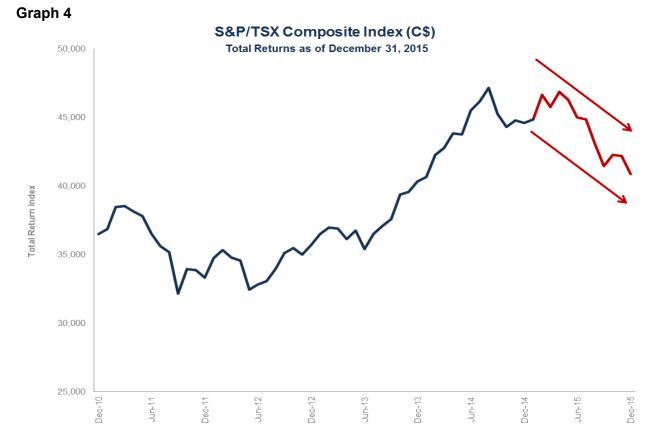
Graph 2

S&P 500 Index - Hedged vs. Unhedged Total Returns as of December 31, 2015

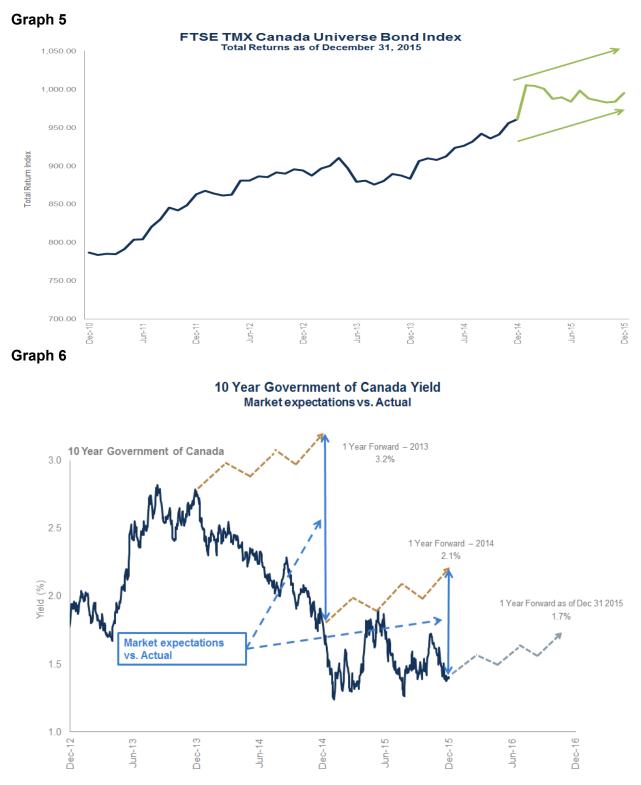








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Source: FTSE TMX Global Debt Capital Markets Inc., BondLab

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