PRESENTERS

Mike Leslie
Executive Director, Investments
Faculty Pension Plan

Neil Watson
Vice President
Leith Wheeler Investment Counsel
AGENDA

• Introductions
• Plan – Fund Weightings & Asset Mix
• Fund Returns
• Investment Market Update
• Question Period
Plan’s Fund Weightings as of December 31, 2016

- Balanced Fund: 81.7%
- Foreign Equity: 5.9%
- Canadian Equity: 7.5%
- Bond Fund: 2.6%
- STIF: 1.5%
- GIC's: 0.8%

*Total Assets $2.1 Billion
Global Equities includes investments in both U.S. Equities and Non-North American Equities.

* Global Equities includes investments in both U.S. Equities and Non-North American Equities
# Fund Rates of Return*
(to December 31, 2016)

<table>
<thead>
<tr>
<th>Fund</th>
<th>1 Yr.</th>
<th>5 Yrs.</th>
<th>10 Yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balanced Fund</td>
<td>6.1%</td>
<td>9.6%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Bond Fund</td>
<td>1.8%</td>
<td>3.1%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Canadian Equity Fund</td>
<td>21.3%</td>
<td>10.9%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Foreign Equity Fund</td>
<td>3.2%</td>
<td>18.0%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Short Term Investment Fund</td>
<td>0.7%</td>
<td>1.1%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

*Before Fees
Proposed Agenda

- Review of 2016
- Outlook for the Next 3 to 5 Years
- Conclusion
- Questions?
Key Themes in 2016

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

Annualized Returns
As of December 31, 2016

<table>
<thead>
<tr>
<th></th>
<th>1 Year</th>
<th>4 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Passive Balanced Portfolio*</td>
<td>7.8%</td>
<td>9.0%</td>
<td>5.1%</td>
</tr>
<tr>
<td>CPI</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

* 5% Cash, 35% Bonds, 30% Canadian Equities, 15% U.S. Equities (C$), 15% International Equities (C$). Index Returns.
# Review of 2016

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Equities</td>
<td>4.5%</td>
<td>5.1%</td>
<td>5.5%</td>
<td>4.5%</td>
<td>21.1%</td>
</tr>
<tr>
<td>U.S. Equities (C$)</td>
<td>-5.0%</td>
<td>2.8%</td>
<td>4.7%</td>
<td>6.3%</td>
<td>8.6%</td>
</tr>
<tr>
<td>International Equities (C$)</td>
<td>-9.1%</td>
<td>-1.2%</td>
<td>7.3%</td>
<td>1.6%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Bonds</td>
<td>1.4%</td>
<td>2.6%</td>
<td>1.2%</td>
<td>-3.4%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
Global Policy Interest Rates

Global Policy Rates
Source: Bloomberg

![Chart of Global Policy Rates](chart.png)

- United States
- Canada
- Europe
- Australia
- Sweden
- Norway
- New Zealand
- Japan
How Pervasive Are Negative Yields?

Source: BofA
Which Countries Have Negative Policy Rates?

<table>
<thead>
<tr>
<th>Country</th>
<th>Inflation</th>
<th>Currency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>European Central Bank</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Switzerland</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>
Are Negative Policy Rates A Tax?

- Banks reluctant to pass on negative interest rates to depositors for fear of customer backlash.

<table>
<thead>
<tr>
<th>Deutsche Bank Interest Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time Deposit</strong></td>
</tr>
<tr>
<td><strong>Savings Accounts</strong></td>
</tr>
<tr>
<td><strong>Loans</strong></td>
</tr>
<tr>
<td><strong>Home Loans</strong></td>
</tr>
<tr>
<td><strong>Personal Loans</strong></td>
</tr>
</tbody>
</table>

- Result has been:
  - lower bank profits, and
  - higher (not lower) borrowing costs
The Global Manufacturing PMIs have reached 3-year highs in December, driven by a sharp uptick in Developed Markets manufacturing surveys.
Global Confidence Is Materially Rising

- Both consumer and business confidence globally has improved significantly in developed market economies over the past year.
Global Yields Have Moved Higher

- **Global bond yields have started to rise, led by the United States.**
- **Canada has followed, although yields in Europe and Japan remain extremely low.**
Commodities Prices Increased During 2016

Commodities up 26% on average in 2016, more than offset the losses seen in
S&P/TSX Composite Index Sector Performance – 2016

As of December 31, 2016

<table>
<thead>
<tr>
<th>Sector</th>
<th>Performance</th>
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<tbody>
<tr>
<td>Materials</td>
<td>41.2%</td>
</tr>
<tr>
<td>Energy</td>
<td>35.5%</td>
</tr>
<tr>
<td>Financials</td>
<td>24.1%</td>
</tr>
<tr>
<td>Industrials</td>
<td>22.8%</td>
</tr>
<tr>
<td>S&amp;P/TSX Composite Total Return</td>
<td>21.1%</td>
</tr>
<tr>
<td>Utilities</td>
<td>17.7%</td>
</tr>
<tr>
<td>Telecommunication Services</td>
<td>14.7%</td>
</tr>
<tr>
<td>Consumer Discretionary</td>
<td>10.7%</td>
</tr>
<tr>
<td>Consumer Staples</td>
<td>7.5%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>5.2%</td>
</tr>
<tr>
<td>Health Care</td>
<td>-78.5%</td>
</tr>
</tbody>
</table>

Note: Real Estate sector effective September 1, 2016. Performance not available for 12 months.
Utilities, Real Estate and Telecom sectors have all been affected by a rotation out of defensive stocks.

### Defensive Stocks

<table>
<thead>
<tr>
<th>Defensive Stocks</th>
<th>2016 H1 Total Return</th>
<th>2016 H2 Total Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities</td>
<td>+17.3%</td>
<td>+0.3%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>+10.6%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Telecom</td>
<td>+14.8%</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>

### Economically Sensitive

<table>
<thead>
<tr>
<th>Economically Sensitive</th>
<th>2016 H1 Total Return</th>
<th>2016 H2 Total Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Info Tech</td>
<td>-5.7%</td>
<td>+11.5%</td>
</tr>
<tr>
<td>Banks</td>
<td>+7.9%</td>
<td>+20.7%</td>
</tr>
<tr>
<td>Industrials</td>
<td>+5.3%</td>
<td>+16.6%</td>
</tr>
<tr>
<td>Cons. Discretionary</td>
<td>+0.1%</td>
<td>+10.6%</td>
</tr>
</tbody>
</table>

| TSX Composite         | 9.8%                 | 10.4%                |
S&P 500 Sector Performance (C$) in 2016

- Energy: 23.5%
- Telecomm Services: 19.8%
- Financials: 19.1%
- Industrials: 15.3%
- Materials: 13.2%
- Utilities: 12.8%
- Information Technology: 10.4%
- S&P 500 Index: 8.6%
- Consumer Discretionary: 2.9%
- Consumer Staples: 2.2%
- Health Care: -5.6%
2016 Global Market Performance

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

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

* Source: MSCI Developed & Emerging Market Indices
MSCI EAFE Sector Performance (C$) in 2016

- Energy: 22.4%
- Materials: 20.0%
- Industrials: 3.0%
- Information Technology: 0.0%
- MSCI EAFE Index: -2.0%
- Financials: -2.1%
- Consumer Discretionary: -4.7%
- Consumer Staples: -6.2%
- Utilities: -8.7%
- Telecom Services: -10.5%
- Health Care: -14.8%
• Our Outlook for the Next 3-5 Years
Canada Full-Time Job Growth Has Been Limited

- Limited growth in full-time jobs (excluding one strong report last month) suggests that slack remains in the labor market and wage pressures are likely to remain limited for Canada in 2017.
Weaker Employment Growth Has Constrained Canadian Wage Gains

- Canadian average hourly earnings growth remains weak due to the rotation of from higher-paying energy sector jobs. This is in stark contrast to emerging tightness in US jobs data.

Source: Stat Canada, Bureau Of Labor Statistics
Canada Hasn’t Deleveraged

Household Debt to Disposable Income

Source: Bloomberg, Bank Of Canada

• U.S. households materially delevered following 2008. Canadian household leverage, by contrast, has continued to increase and will provide a headwind to future consumption-led growth.
• The Canadian economy has become increasingly dependent on residential investment and as a share of GDP and is now at extreme levels versus the long term average.
Where Do Interest Rates Go From Here?

- The surprise result in the US election has led to a belief that Trump’s policies will lift US inflation and growth.

- Our view is that the US Federal Reserve will likely continue to increase interest rates at a measured pace (they have communicated three rate hikes this year).

- The path for the Bank of Canada is less clear as the Canadian Economy continues to deal with the fallout from lower commodity prices, an inflated housing market/indebted consumer and a disappointing recovery in exports.

- We continue to believe that interest rates will trend higher but at a very gradual rate over the next several years.
Canada
Long Term Yield Curve Forecast

Benchmark Canadian Government Bond Yield

Maturity

Dec-19 LW Forecast
Current Spot Curve
Themes Looking Forward

Low interest rates remain
- Last 10 years have seen unprecedented monetary policy rates
- Fed has started to increase interest rates, accompanied by strong dollar

Global GDP growth is improved but not robust
- US economy is recovering gradually with low unemployment
- Canadian economic growth is a concern
  - Consumer debt
  - Housing
  - US policy proposal impacting Canadian exports
- Europe several years behind US economic recovery
- China has stable GDP growth at 6.7%
  - Steady retail sales growth
  - Capital investment has slowed
  - Modest risk in trade deficit in 2017
- Developing markets are struggling with weak productions and challenging demographics
Market Concerns

Brexit

US policy

- Impact on global trade
- Tax cuts/deficits
- Infrastructure spending
- Political instability

Other?
Long Term Asset Class Returns

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

Value of $100 (Annualized Rate of Return)

- US Equities in $C: $147,354 (11.5%)
- Canada Equities: $52,300 (9.8%)
- Bonds: $12,050 (7.4%)
- T-Bills: $3,197 (5.3%)
- Inflation: $1,054 (3.6%)
Conclusion

Inflation
• We expect inflation to remain low around 1-2% p.a

Consumer and Government Debt
• U.S. consumers in good shape with low unemployment
• High levels of Canadian debt

Strength and Recovery
• Global growth is recovering but below trend… and not in recession

Return Potential
• Bond returns look like they will be 1-2% p.a.
• Equity returns in Canada and the U.S. around 5-6% p.a.
2017 UBC Faculty Pension Plan Forum

- Wednesday, May 10, 2017
- Commons Block Ballroom, Marine Drive Residence
- 2205 Lower Mall
- 10:00 a.m. to 1:00 p.m.
- More information will be forthcoming
2017 UBC Faculty Pension Plan Forum

Presentation begins at 10:30 a.m.
• Plan performance in 2016
• Review 2016 and 2017 Initiatives

Information Tables & Guest Exhibitors – 11:45 a.m. to 1:00 p.m.
• New to the Plan table
• Retirement
• UBC Retirement & Survivor Benefits
• Faculty Relations
• EFAP
• Association of Professors Emeriti
Thank you!

Questions?
APPENDIX
## Asset Class Winners and Losers

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<tbody>
<tr>
<td>Highest</td>
<td>14.2</td>
<td>33.9</td>
<td>28.3</td>
<td>39.2</td>
<td>37.7</td>
<td>31.7</td>
<td>13.7</td>
<td>8.8</td>
<td>11.3</td>
<td>26.7</td>
<td>14.5</td>
<td>26.3</td>
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<td>21.0</td>
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<td></td>
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<td>5.7</td>
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<td>14.0</td>
<td>18.3</td>
<td>4.4</td>
<td>3.3</td>
<td>14.4</td>
<td>17.6</td>
<td>4.4</td>
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<tr>
<td></td>
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<td>18.6</td>
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<td>5.5</td>
<td>4.7</td>
<td>-7.1</td>
<td>13.4</td>
<td>10.2</td>
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<td>17.3</td>
<td>4.4</td>
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<td>1.0</td>
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<td>31.3</td>
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<td></td>
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<td>16.2</td>
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<td>-12.4</td>
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<td>15.7</td>
<td>0.9</td>
<td>-17.9</td>
<td>8.7</td>
<td>9.5</td>
<td>1.0</td>
<td>8.3</td>
<td>14.8</td>
<td>11.4</td>
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<td>1.8</td>
<td>14.5</td>
<td>14.1</td>
<td>15.0</td>
<td>4.7</td>
<td>12.8</td>
<td>0.8</td>
<td>-6.5</td>
<td>-16.6</td>
<td>8.0</td>
<td>9.0</td>
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<td></td>
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<td>8.2</td>
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<td>4.4</td>
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<td>-12.6</td>
<td>-21.1</td>
<td>5.3</td>
<td>3.3</td>
<td>1.6</td>
<td>4.0</td>
<td>-10.5</td>
<td>-29.8</td>
<td>1.2</td>
<td>2.4</td>
<td>-8.7</td>
<td>4.0</td>
<td>1.0</td>
<td>3.7</td>
<td>0.6</td>
<td>0.5</td>
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<tr>
<td>Lowest</td>
<td>-7.8</td>
<td>7.4</td>
<td>5.0</td>
<td>3.2</td>
<td>-1.6</td>
<td>-6.2</td>
<td>-10.8</td>
<td>-16.6</td>
<td>-22.7</td>
<td>2.9</td>
<td>2.3</td>
<td>1.3</td>
<td>3.9</td>
<td>-16.5</td>
<td>-33.0</td>
<td>0.6</td>
<td>0.5</td>
<td>-10.2</td>
<td>1.0</td>
<td>-7.0</td>
<td>0.9</td>
<td>-8.3</td>
<td>-2.0</td>
</tr>
</tbody>
</table>

* Diversified: 25% TSX Composite, 20% S&P 500 (C$), 15% MSCI EAFE – Net (C$), 40% FTSE TMX Canada Universe Bond Index
Summary

HOW TO TURN THE ECONOMY AROUND

Step 1  Step 2  Step 3

Brown.
Investment performance returns are presented before investment management fees, but after the deduction of brokerage commissions. Returns are calculated on a time weighted, total return basis which includes all dividends (except non-cash stock dividends), interest, and realized and unrealized gains and losses after the deduction of applicable withholding taxes. Past performance is not an indicator of future results.

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