A Professor Retires by Commuting His Defined Benefit Pension

John Ambrose, CFA 416-203-8139

8/26/2010
John Ambrose, P.Eng., CFA

- Started MD Private Trust,
  - AUM $2 billion for 80,000 doctors
- Chair, Banting Research Foundation
- VP Citibank, corporate finance
- Governor, University of Toronto
- Rotman School of Management
- Started Ambrose Investment Counsel in 2003
- B.A.Sc., M.Sc. (Aerospace), M.B.A.
- Chartered Financial Analyst
What You Want & Need

- Retire happily without worry
- Feel valuable
- Safe home
- Take care of the kids now
- Take care of the kids later
How We Help You

• Build a strong team of excellent investment, law and tax advisors
• Develop novel solutions to handle your special situation
• Reduce anxiety from volatile markets for those without an income
• Enjoy your retirement
Our Strong Team

- Experienced estate lawyers:
  - Roberta McGill of Cassels Brock & Blackwell LLP
  - Janet Sim of Osler, Hoskin & Harcourt LLP

- Experienced tax advisors:
  - Rachel Gervais, BDO Canada LLP

- Experienced portfolio manager:
  - John Ambrose

- Strong custody
  - TD Waterhouse (Canada) Inc.

- Strong Audit process
  - Grant Thornton LLP
Managing A Portfolio Relies on These Parts

- Estate Law Advice
- Tax Advice
- Financial Plan & Policy Statement
- Strong Custody
- Tax
- Portfolio Management & Trading
Role: Custodian and Safety

- Custody client accounts – all types offered (personal, corporate, registered)
- Execute trades on all exchanges – Canada, United States, International
- Perform account maintenance – Modifications, deposits, withdrawals
- Provide the investment counsellor with trade authorization only
- Withdrawals can ONLY be sent via:
  - Electronic funds transfer to the bank account enrolled during account opening with the same name of the account holder
  - Cheque in the name of the account holder – must be requested in writing

CIPF and Strength of TD Waterhouse and TDBFG:

- All accounts are covered by the Canadian Investment Protection Fund (CIPF)
- Financial security of the TDBFG, guarantees each account above CIPF coverage
- International TD presence with TD Waterhouse UK, TD Bank and TD Ameritrade
Satisfied Clients

- Retired Professor Emeritus
  - Liberated pension with the lump-sum option, created estate
  - Plan to reduce debt, simplify assets
  - Started new hobby business
- Professional & family
  - Used inheritance to start a new wine business
  - Now bottling first production
- Doctor & family
  - Created a new professional corporation to defer taxes
  - Plan to repay debt, build estate
Defining a Few Terms
Talk to the Pension Department

University of Toronto Pension Plan:
• Pension Benefit = RPP + SRA
• RPP under the ITA: Register Pension Plan under the Income Tax Act
• SRA: Supplemental Retirement Arrangement
• Joint & Survivor Pension, e.g. 60%
• Lump-sum Option
• Commuted Value

Outside the University:
• LIRA: Locked-in Retirement Account
• LIF: Life Income Fund
• Taxable Account
Two Choices of Retirement Flows

- Monthly Pension
  - RPP+ SRA
- Lump-sum Option
  - RPP Max to LIRA
  - RPP Excess + SRA to Taxable Account

Retire?
Benefits of The Lump-sum Option

- Lump-sum option:
  - Present value of future benefits into LIRA, taxable account
  - Active control of investments with associated market risk
  - Choice of deferral of taxable income
  - Choice of timing and amount of income
  - Choice of special withdrawal
  - Remaining capital to beneficiary or estate

- Monthly Pension Plan:
  - Defined benefit for life of annuitant
  - 60% benefit for life of annuitant’s surviving spouse
  - Nothing for estate
Lump-sum Option is Ideal for Some Professors

200 Retiring Professors at the University of Toronto
Parallel Coverage Is Ideal
Ideal Client

- Family has two incomes
- Family has two defined benefit pension plans
- Family has two health plans
- Annuitant has second earned income after retirement
- Family wants to actively manage estate
- Family has estate lawyer, tax advisor and investment manager
Comparing Two Choices for the Retiring Client

- **Choice #1**: Accept the normal monthly pension, or
- **Choice #2**: Take the “Lump-Sum Option.”

**Method of Evaluation**

- Estimates the accumulated future after tax value at the end of each year for each choice subtracting all current and deferred tax liabilities.
- Collapses the tax-deferred LIRA and pays deferred taxes.
- Adds investment returns at a constant annual rate of 6% before tax.
- Does not subtract any management or other fees listed in slide 31.
- Forecasts hypothetically; does not subtract any living expenses.
Key Assumptions Common to Both Choices

- Life expectancy for the male pensioner is 20 years, 23 years for his wife.
- Pension benefit escalates at 1.5% p.a.
- Spousal benefit is 60% after pensioner dies.
- Management fees and other fees on slide 33 are excluded.
- Income tax rate ranges from 30% for smaller withdrawals to 40% for larger withdrawals such as collapsing the LIRA.
- Fixed annual investment return of 6% p.a. before tax or 4% p.a. after tax.
- Wealth from income accumulates without living expenses.
Risks to Choosing the Pension Benefit

- Pensioner and his wife die before 20 years and 23 years respectively without saving the full benefit for their expected life spans.
- Pensioner and his wife die without having an estate for their children from the proceeds of the pension.
- Pensioner will not have capital from his future pension benefits to start a business today.
- Pensioner spends too much on a monthly basis.
- Terms of the University Pension Plan change reducing the benefits to pensioners.
Risks to Choosing the Lump-Sum Option

- Client and his wife live longer than the pension expected life span and do not receive the extra pension benefits.
- Investment returns are inadequate to pay for retirement expenses.
- Owner of custodian holding the client portfolio goes bankrupt.
- Client spends too much especially from the taxable portion.
The Normal Pension

- Valued annually after taxes paid
- Monthly payment $6,000 before tax with pension & SRA
- 60% spousal benefit
- 0% after both die
- Tax paid at an average 30%
- After tax return averages 4% p.a.
- No consumption of wealth
- Age 62, 20-year life span for male pensioner, 23 years for wife
- Total value in 2029 is $2.1 million

Note: Past results do not guarantee future performance.
The Lump-Sum Option

- Valued annually after taxes paid
- #1 payment to LIRA/LIF
  - Tax-deferred
  - Return 6% before tax
  - Withdraw at 6% p.a.
  - Tax of 40% if collapsed
- #2 payment for SRA,RPP surplus
  - Taxed at 30%
- After tax return averages 4% p.a.
- 20-year life span, 23 years for wife
- Total value in 2029 is $2.3 million

Note: Past results do not guarantee future performance.
Results from Comparison of Two Choices

- Lump-Sum Option shows higher future value for until actuarial life expectancies of 23 years for both pensioner and wife.
- Normal Pension Option shows a higher value at longer life expectancies than actuarial expectations.
- Normal Pension Option shows higher future value if the average annual return in the Lump-Sum Option is less than 4.5% p.a. before tax.

**Annual Market Returns 1940-2005 for S&P 500 Total Return Index $C**

- Median return: 7.05%
- # years above 6%: 35
- # years below 6%: 29

Source: Global Financial Data
IC/PM is Different

- **Stock broker:**
  - Client decides on suitability
  - Client chooses to buy or sell
  - Commissions from transactions
  - Regulated by Investment Industry Regulatory Organization of Canada

- **Investment Counsellor/Portfolio Manager (IC/PM):**
  - Client delegates to manager
  - Manager chooses to buy or sell
  - Fees based on assets
  - Regulated by Ontario Securities Commission
Asset Mix Policy is Job #1

- **Asset Mix:**
  - blends cash, bonds and stocks
  - instead of high equity

- **Criteria:**
  - Investment time horizon
  - Risk-tolerance
  - Need for income
Performance During the Market Crisis

- Asset mix is the #1 decision
- Equity is volatile
- Bonds are less volatile
- Policy asset mix favours bonds
- The benchmark is a blend as shown in next slides 25, 26, 27
- Investment management agreement specifies benchmark
- Performance and benchmark exclude management, other fees

Note: Past results do not guarantee future performance.
1. The Income/Growth Registered benchmark blends 5% of the 91-day t-bill plus 55% of the DEX Universe Bond Index plus 25% of the S&P/TSX Composite Total Return Index plus 15% of the S&P 500 Total return Index in $C.

2. The Investment Management Agreement for the client’s account specifies the blended benchmark formula as a particular weighting of basic market benchmarks.

Note: Past results do not guarantee future performance.
The Blended Benchmark: Income/Growth Registered

<table>
<thead>
<tr>
<th>Basic Asset Classes</th>
<th>Client’s Weighting in the Blended Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>5%</td>
</tr>
<tr>
<td>Canadian Bonds</td>
<td>55%</td>
</tr>
<tr>
<td>Canadian Equities</td>
<td>25%</td>
</tr>
<tr>
<td>United States Equities</td>
<td>15%</td>
</tr>
<tr>
<td>International Equities</td>
<td>0%</td>
</tr>
<tr>
<td>The Blended Benchmark</td>
<td>100%</td>
</tr>
</tbody>
</table>

We call this particular blended benchmark the “Income/Growth Registered” benchmark as specified in this particular client’s Investment Management Agreement.
Benchmark Information for The Basic Asset Classes

1. The Canadian Equity benchmark is the Standard and Poor’s (S&P) / TSX Composite Total Return Index.
2. The U.S. Equity benchmark is the S&P 500 Composite Total Return Index in Canadian dollars.
3. The International Equity benchmark is the Morgan Stanley Capital International EAFE (Europe, Australia and Far East) Total Return Composite Index net of withholding taxes in Canadian dollars.
4. The Canadian Fixed Income benchmark is the DEX Universe Total Return Bond Index (formerly the Scotia Universe Total Return Bond Index).
5. The Income/Growth Registered benchmark blends 5% of the 91-day t-bill plus 55% of the DEX Universe Bond Index plus 25% of the S&P/TSX Composite Total Return Index plus 15% of the S&P 500 Total return Index in $C.

Note: Past results do not guarantee future performance.
Overcoming Temptation for Quick Returns

Client started here

Note: Past results do not guarantee future performance. Graph for Canadian Bonds is the DEX Universe Bond Index, for Canadian Equity is the S&P/TSX Total Return Index, for U.S. Equity is the S&P 500 Total Return Index in $Canadian.
# Investment Performance for the Income/Growth Registered Portfolio

3-year returns p.a. gross of fees as at July 30, 2010

<table>
<thead>
<tr>
<th>$Canadian</th>
<th>Client</th>
<th>Benchmarks</th>
<th>Rank</th>
<th># Globefund competitors</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cdn. Equity (1)</td>
<td>-1.8%</td>
<td>-2.6%</td>
<td>#3</td>
<td>37</td>
<td>-4.64%</td>
</tr>
<tr>
<td>U.S. Equity (2)</td>
<td>-6.9%</td>
<td>-8.0%</td>
<td>#4</td>
<td>41</td>
<td>-9.03%</td>
</tr>
<tr>
<td>Int'l. Equity (3)</td>
<td>-9.5%</td>
<td>-10.9%</td>
<td>#12</td>
<td>49</td>
<td>-12.01%</td>
</tr>
<tr>
<td>Fixed income (4)</td>
<td>7.2%</td>
<td>7.0%</td>
<td>#5</td>
<td>30</td>
<td>6.01%</td>
</tr>
<tr>
<td>Blended (5)</td>
<td>1.8%</td>
<td>2.4%</td>
<td>#1</td>
<td>27</td>
<td>-1.39%</td>
</tr>
</tbody>
</table>

Note: Past results do not guarantee future performance. See slide 27 for benchmarks.
Methodology to Compare the Relative Performance in slide 29

- Source is [www.globefund.com](http://www.globefund.com) that compares 13,278 funds in different classifications. We use specific classes of these public funds as a comparison for our client’s relative investment results for each of the basic asset classes.

- The Median is the return of the middle ranked fund.

- Canadian Equity compares the client’s Canadian Equity portfolio total returns with the 37 Canadian Focused Equity Funds larger than $500 million in assets under management after fees in Globefund.

- U.S. Equity compares the client’s U.S. Equity portfolio total returns in $Canadian with the 41 U.S. Equity Funds larger than $500 million in assets under management after fees in Globefund.
Methodology to Compare the Relative Performance in slide 29

- **Source is** [www.globefund.com](http://www.globefund.com)
- **International Equity** compares the client’s International Equity portfolio total return in $Canadian with the 49 International Equity Funds larger than $100 million in assets after fees in Globefund.
- **Fixed Income** compares the client’s Canadian fixed income portfolio total return with Canadian Fixed Income Funds larger than $1 billion in assets after fees in Globefund.
- **Blended** represents the Income/Growth Registered portfolio from slides 25, 26 and 27.
- **Blended** compares the total return of the client’s portfolio including all asset classes from slide 26 with the 27 Canadian Equity Balanced Funds larger than $500 million in assets after fees in Globefund.
Prudent Asset Mix

100-Year Horizon

10-Year Horizon

Fees
Excluded from this analysis

- Investment Management Fees:
  - 1.25% on first $2 million of Assets Under Management
  - 0.75% on next $3 million
  - Negotiable beyond $5 million
- Trading commissions: institutional rates paid by client
- Mutual fund management fees: paid by client, institutional rates
- Custody fees: 0.2% paid by client
- Legal advice: negotiated with independent lawyer
- Tax advice: negotiated with independent accountant
Call now and we can talk.

- Timing is good now to retire and have us manage your retirement:
  - Interest rates are low so the Lump-sum Option value is high
- Perhaps you want to travel without worrying
- Perhaps you want to start a small business
- Call John Ambrose at 416-203-8139