Pension News

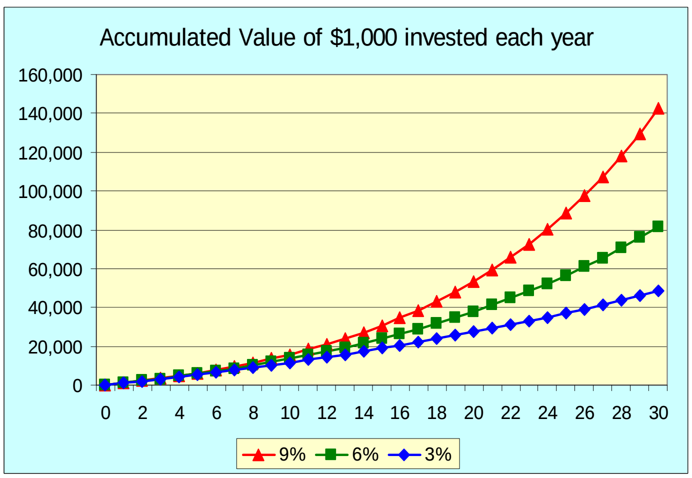
UBC Faculty Pension Plan
Second Quarter 2008 Edition

Future Rates of Return...What to Expect

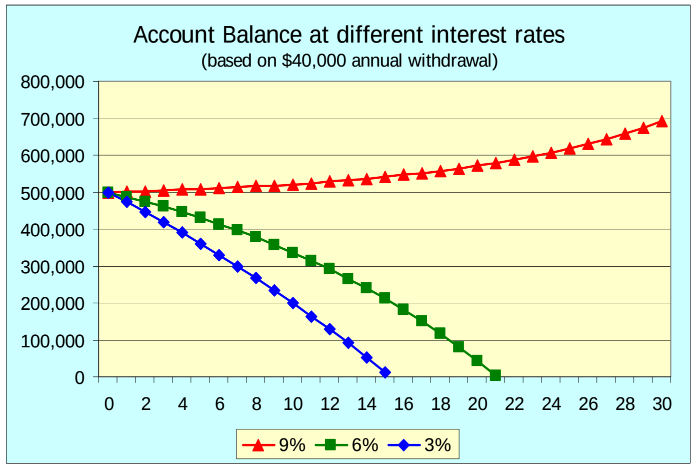
The rate of return on your investments substantially determines the amount of income you will receive at retirement. This article examines the components of the rate of return, and develops a realistic estimate of the future rate of return.

The Importance of Rate of Return

Graph 1 shows the accumulated value of $1,000 invested each year for 30 years at 3%, 6% and 9%, illustrating the very large impact of small differences in rate of return. With a capital investment of $30,000 over 30 years, the accumulated value varies from a low of $48,000 to a high of $143,000.



During retirement, assuming you did not purchase an annuity, the rate of return continues to be important. Graph 2 shows an account balance starting with $500,000 and annual withdrawals of $40,000 at different rates of return. With a rate of return of 3% the account reduces to 0 after 15 years; at 6%, the account reduces to 0 after 21 years; with a return of 9%, the account balance is still growing after 30 years.



Investment Funds, Markets and Individual Investments

The rate of return of a fund depends to a large extent on the choice of asset classes and the performance of the financial markets, and to a lesser extent, the success of the investment managers in selecting securities.

The FPP Balanced Fund is invested in stocks, bonds and real estate. The investments in each asset class are well diversified. With a broadly diversified fund, what determines the performance of a fund is primarily the performance of the financial markets as a whole.

Building Blocks

A common approach for estimating the rate of return of a fund is to build from the current rate of return for bonds, which is their expected rate of return. The expected rate of return on the equity portion is estimated by adding the "equity risk premium" to the expected rate of return on the bonds. An additional percentage is added for value that can be earned by investing in some of the smaller allocations of assets, such as real estate, and for active investment management.

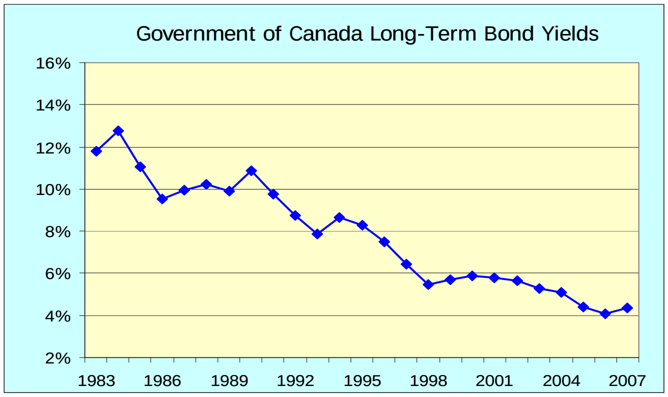
Pension News

UBC Faculty Pension Plan

Second Quarter 2008 Edition

Interest Rates

Graph 3 shows long-term interest rates over the past 25 years.

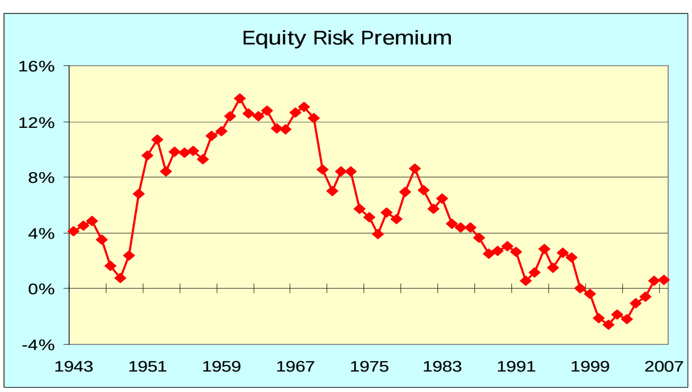


The decline in interest rates has a profound impact on the long-term rate of return of an investment portfolio containing bonds: 25 years ago interest rates were more than 10%; interest rates are now 4%, so the expected rate of return on bonds is only 4%.

Equity Risk Premium

Stocks (equities) have much more volatile performance than bonds. Financial theory states that investors who are willing to accept the additional volatility of the stock market should be rewarded over the long term with a higher rate of return. The theory is supported by empirical evidence: over the past 84 years, Canadian stocks have outperformed bonds by an average of 5.3% each year. This difference between the rate of return of the stock market and the rate of return of bonds is referred to as the "equity risk premium" – the reward for taking the risk.

The equity risk premium isn't constant or guaranteed; there have been many periods in which stocks have underperformed bonds. Graph 4 shows the equity risk premium over moving 20-year periods.



Graph 4 can be explained as follows: The first point at the left of Graph 4 – at 1943 – shows that stocks outperformed bonds by 4% for the previous 20 years (from 1924 to 1943). This period had very volatile results, from the market bubble in the mid/late 1920s culminating in the market crash in 1929, followed by the recession in the 1930s. Moving to the right of that point, the graph shows the impact of moving beyond the market bubble of the mid/late 1920s, with the graph declining to close to 0%, and then increasing sharply in the early post-war years as the economy expanded rapidly, exceeding 8% for many years.

The magnitude of the equity risk premium in the future is a topic of considerable debate by academics and practitioners. Although the equity risk premium has averaged 5.3% over the past 84 years, that rate has not been seen for any 20-year period ending after 1983. This article uses a future equity risk premium of 4%, which should be considered an optimistic estimate.

Balanced Fund Rate of Return

The FPP Balanced Fund is invested approximately 40% in fixed income, 50% in equities and 10% in real estate. With bonds expected to earn 4% and with an equity risk premium of 4%, the total rate of return of an equity portfolio is estimated to be 8%. Assuming real estate earns the same return as equities, the total expected rate of return is calculated as:

Bonds	**40% x 4% = 1.6%**
Equities	**60% x 8% = <u>4.8%</u>**
Total	**6.4%**

To earn additional value, the FPP Balanced Fund invests in a broad range of investments including foreign equities and market neutral hedge funds. The FPP Balanced Fund also employs active investment management for most of the fund. Adding 1% to the total fund return for these sources of value gives a total of 7.4%. But again, this estimate is based on an optimistic equity risk premium.

Relating the Expected Rate of Return to Historical Rates

Many funds have earned more than 7.5% over the past 5, 10 or 20 years. For instance, the FPP Balanced Fund has earned 10.8% for the 5 years ending March 31, 2008.

The crucial point of this article is that with current low interest rates, the expected rate of return of a balanced fund is lower than it was in the past. In projecting your retirement income, the choice of 7.4% is likely too high because it depends on the optimistic 4% equity risk premium and 1% additional earnings from specialty asset classes and active management. In using retirement projection analysis and software, a rate higher than 6% may be too optimistic. Although 6% may appear to be low, especially relative to historical results, and perhaps less than future results touted by some financial advisors, it is better to underestimate and have more than you expected than to overestimate and be disappointed.

This article was prepared by Satanove & Flood Consulting Ltd. Comments should be sent to: fpp@hr.ubc.ca

Investment Allocation and Withdrawal Fees

Effective January 2008, the $50 fee for investment allocation changes and withdrawals over the maximum of four per annum, was rescinded by the trustees. Members may now make unlimited allocation changes and withdrawals without penalty.

Trustee Election

Annually, in November, an election is held to select two trustees for the upcoming two-year period. A Notice of Election is sent to all members in September, asking for candidates. If you are interested in running or nominating a candidate, the forms must be in the Pension Administration Office by October 3, 2008.

FPP Workshops

The Faculty Pension Plan offers two regularly scheduled seminars – one provides general information about the Faculty Pension Plan, and is of interest to new and existing members. The other provides information about the Plan's retirement options and is suited to members who are approaching retirement. To register or learn more about these seminars, please contact Jim Loughlean at (604) 822-8987 or jim.loughlean@ubc.ca

Faculty Pension Plan Board Members

Faculty Pension Plan Staff

Executive Director – Investments
Ms. Diane Fulton........................ 604-822-6429

Executive Director – Operations & Secretary to the Board
Ms. Cheryl Neighbour..................604-822-8112

Correspondence/Queries:

UBC Faculty Pension Plan
#235 – 2075 Wesbrook Mall
General Services Admin. Building
Vancouver, B.C. V6T 1Z1

Sarah Halvorson 604-822-8100
Jim Loughlean 604-822-8987
Louise Mah................................ 604-822-6015
Frances Lu................................. 604-822-8647
Jill Smith 604-827-3286
Fax Line 604-822-9471
Email: .... fpp@hr.ubc.ca

Web:
http://www.pensions.ubc.ca/faculty

Pension News

UBC Faculty Pension Plan

Second Quarter 2008 Edition

Market Commentary

Global equity markets were strong during the start of the second quarter, but results were tempered by rising inflation concerns and slowing economic growth towards the end of the quarter. Unlike other global markets, the Canadian market had strong quarterly results, led by energy and materials. On May 20, the S&P/TSX composite index broke through its all-time record high of 15,000 and ended the quarter with a three month gain of 9.1%. This return was led by the Energy (22.9%), Materials (17.6%) and Utilities (6.5%) sectors.

U.S. stocks finished the quarter lower, with the S&P 500 index (Canadian dollars) returning -3.8%. Financials, industrials and consumer discretionary were the weakest performing sectors. The MSCI EAFE index also fell during the second quarter, with a return of -3.4% (Canadian dollars).

On April 22, the Bank of Canada cut rates by 50 b.p., however on June 10 the Bank kept rates unchanged, as focus shifted to inflation concerns. Fixed income markets did not do well in the quarter, as inflation concerns shifted yields higher and the DEX Universe index had a -0.7% return for the quarter. Short term bonds had the best results with a return of -0.4%. Real return bonds had a strong quarterly return of 4.5%.

The Canadian dollar strengthened during the quarter and closed the quarter at 98.28 cents U.S. versus an opening exchange rate of 97.24 cents.

Performance of Funds for periods ending June 30, 2008

	3 Months	1 year	3 years	5 years	10 years
Balanced Fund - gross	1.64%	1.17%	8.08%	9.87%	6.56%
Balanced Fund - net	1.49%	0.57%	7.57%	9.38%	6.12%
Composite Index 1	1.05%	0.88%	7.16%	9.35%	6.26%
Canadian Equity Fund - gross	8.34%	5.61%	16.63%	18.83%	10.37%
Canadian Equity Fund - net	8.23%	5.17%	n/a	n/a	n/a
Composite Index 2	9.53%	7.66%	16.53%	18.37%	9.34%
Foreign Equity Fund - gross	-1.93%	-15.63%	1.86%	6.21%	1.53%
Foreign Equity Fund - net	-2.06%	-15.92%	n/a	n/a	n/a
Composite Index 3	-3.41%	-15.14%	2.07%	6.37%	1.83%
Bond Fund - gross	0.12%	8.43%	3.89%	5.08%	5.94%
Bond Fund - net	0.04%	8.14%	3.66%	4.83%	5.68%
Composite Index 4	-0.03%	7.89%	3.59%	5.16%	6.04%
Short Term Investment Fund - gross	0.78%	4.09%	3.89%	3.37%	4.19%
Short Term Investment Fund - net	0.74%	3.96%	3.72%	3.19%	3.92%
Composite Index 5	0.54%	3.76%	3.74%	3.24%	3.76%

Composite Index 1: *33% DEX Universe, 10% S&P/TSX Capped, 5% S&P/TSX, 5% S&P/TSX 60 Capped, 15% S&P 500, 15% MSCI-EAFE, 2% DEX 91-Day TB, 10% IPDCPI, 5% DEX Real Return Bonds*
Composite Index 2: *50% S&P/TSX Capped, 25% S&P/TSX, 25% S&P/TSX 60 Capped*
Composite Index 3: *48% S&P 500, 48% MSCI-EAFE, 4% DEX 91-Day TB*
Composite Index 4: *86.8% DEX Universe, 13.2% DEX Real Return Bonds*
Composite Index 5: *DEX 91-Day TB Index until August 2007, DEX 30-Day TB Index commencing Septmenber 2007*

Composition of Funds as at June 30, 2008

	Market Value ($ Millions)	% of Fund
Balanced Fund		
Equities - Canada	236.9	21.9%
Equities - U.S.	144.3	13.4%
Equities - EAFE	139.4	12.9%
Absolute Return Hedge Fund	22.7	2.1%
Real Estate - Canada	103.9	9.6%
Fixed Income - Canada	366.7	33.9%
Real Return Bonds - Canada	52.2	4.8%
Cash & Short term	15.0	1.4%
Total Balanced Fund	1,081.1	100.0%
Canadian Equity Fund	86.2	100.0%
Foreign Equity Fund		
Equities - U.S.	15.5	48.9%
Equities - EAFE	14.9	47.0%
Absolute Return Hedge Fund	1.3	4.1%
Total Foreign Equity Fund	31.7	100.0%
Bond Fund		
Fixed Income	29.8	87.6%
Real Return Bonds - Canada	4.2	12.4%
Total Bond Fund	34.0	100.0%
Short Term Investment Fund	46.3	100.0%

Pension News is a publication of the UBC Pension Administration Office and is produced four times per year. The publication provides current information about the Faculty Pension Plan, including topical financial and investment information. Pension News is distributed to each individual member and is archived at: http://www.pensions.ubc.ca/faculty/library.html

***Editor/Production**: Rahima Nathoo, Pensions Communications*