



City of Burlington Employees Retirement Plan

Pension Investment Analysis

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Goals and Risks

- The goal of the plan is to provide contractual retirement benefits for covered employees
- The risk to the plan is that sufficient money will not be available to pay those benefits
- The goal of the investment portfolio is to earn the actuarially assumed rate of return
- The risk of investing is that the actual return will fall short of the assumed return over a meaningful period of time

BERS History

- BERS suffered poor returns, high fees under Morgan Stanley
- In October 2007, BERS transferred 90% of its assets to VPIC
- The transfer had three goals
 - Reduce fees relative to what Morgan Stanley had been charging
 - Manage the fund in a professional, arms-length manner
 - Mitigate risk with more sophisticated asset allocation
 - Improve return to close funding gap
- First three goals have been achieved, the fourth has not
 - Fees have been reduced
 - Fund management is professional and arms-length
 - Risk has (probably) been mitigated (we are analyzing this now)
 - Return has been disappointing

VPIC Return History

Year	VPIC Return	VPIC Rank	Median Return	Mystery Portfolio Return	PIMCO Modeled Return ~
• 2008	- 30.4%	98 th	- 27.0%	-21.6%	- 32.5
• 2009	+28.0%	4 th	+18.5%	+18.4%	+ 28.0
• 2010	+15.0%	8 th	+12.7%	+12.1%	+ 12.5
• 2011	+ 2.3%	24 th	+ 1.0%	+ 4.7%	+ 6.5
• 2012	+13.2%	45 th	+13.0%	+11.3%	+ 11.5
• 2013	+ 8.4%	95 th	+16.5%	+17.6%	+ 10.5
• 6-Year	+4.3%	86 th	+5.3%	+ 6.1%	+ 4.1
• 4-Year*	+9.6%	77 th	+10.6%	+11.3%	+ 10.2

* Period reflecting current VPIC risk posture

Risk Mitigation Failed in 2008

- Portfolio lost 30.4% in 2008, explained by taking equity risk in the fixed income portfolio
- Fixed income, real estate, tactical and hedge fund strategies totaled 43% of portfolio, should have mitigated risk
- Fixed income portfolio returned -13.7% when core domestic bonds returned +5.2%
- VPIC had 30% in fixed income and 10% in real estate, but actually had equity risk in both portfolios

VPIC Performed Well in 2009-2012

- VPIC maintained risk in 2009, regained some lost ground
- VPIC then instituted changes
 - Staff and structure changed
 - Portfolio was de risked in 2010
- VPIC staff has provided exemplary service
 - Responded promptly to all requests
 - Attended BERS meetings whenever asked
 - Provided clear, concise answers to all questions
 - Gave help in dealing with vendors, NEPC and custodial banks
 - Encouraged monthly meeting by all interested parties
- Portfolio posted excellent returns in 2010-2012

Poor Relative Return 2013

- Portfolio returned half of what the median portfolio returned in 2014
- Long-term returns for all 6 years, or a shortened 4-year period, are below median
- Better returns in an up market may be a necessary component of Burlington's long-term solution
- Rerisking portfolio now could have disastrous results

Mystery Portfolio

- Mystery portfolio out performed VPIC 3 of 6 years and for both longer periods, 4 and 6
- Losses in 2008 were much lower than VPIC
- Mystery portfolio also beat median return 3 of 6 years, and for both longer periods, 4 and 6
- Rank for 6-year period is 23rd

Investment Choices

- Retain VPIC for all current and future investments;
Wind down non-VPIC assets
- Take portfolio back, invest in simple index-based portfolio
 - Keep the strategies to 12 or fewer
 - Use active management sparingly
 - Keep fees at or below those paid to VPIC now
- Run a significant portfolio (\$50mn-100mm) alongside VPIC
Try to achieve better returns on a competitive basis
- Run a significant portfolio supplemental to VPIC
Take a more aggressive risk posture to supplement return

Getting There

Our Recommendation

- Five years of mostly up markets increase risk of decline
 - VPIC likely to do well in a down market (we are studying this now)
 - Reversion to mean also suggests VPIC likely to do well near term
 - Fed draining liquidity from the system could be catalyst
- Task BERS committee to perform asset allocation study
 - Do study as if BERS were going to take back the money
 - Compare theoretical study with modeled VPIC return
 - Continue to monitor VPIC in the interim
 - Immediate action always option
- Task committee to make recommendation after study complete

Cost on a Relative Basis

Comparison VPIC and Alternative Portfolio

- To model cost, we created an alternative portfolio similar to VPIC
- For VPIC, investment and administrative costs annualized from second quarter
- For Alternative Portfolio, we used simplified allocation employing index funds where possible
- We counted fees whether they were reported gross or net

	<u>Investment</u>	<u>Admin</u>	<u>Total Fees*</u>	<u>Cash Fees</u>
VPIC	\$660,510	\$45,426	\$705,936	\$657,922
Alternative	\$551,265	\$77,160	\$628,425	\$81,122

* Difference near zero if Alternative uses active real estate managers; VPIC fees exclude hedge fund incentive fees

BERS Non-VPIC Assets

- At time of VPIC investment, BERS made separate investment
- Dahab recommended investing these assets to compliment VPIC
 - 5% in timber as a fixed-income surrogate (VPIC had no timber)
 - 5% in private equity as a return enhancer (VPIC had no private equity)
 - Trustee wanted emerging market equity (which VPIC already had)
 - Final decision: 4% timber, 4% private equity, 2% emerging markets
- Originally the split was to be 90% VPIC, 10% non-VPIC
- Non-VPIC portion has declined to 6.9% awaiting VPIC decision

BERS Non-VPIC Assets

Results, Amounts, Termination

	START	LIKELY END	AMOUNT (MM)	% TOTAL ASSETS	RETURN ASSET	RETURN S&P 500	RETURN BC AGG
TIMBER	1Q09	2017- 2021	\$3.3	2.2%	4.2%	21.9%	4.7%
HL II	1Q09	Aug 2019 +2	\$2.2	1.5%	20%	21.9%	4.7%
HL VIIA	3Q11	Dec 2023 +2	\$0.7	0.5%	11%	27.2%	1.4%
HL VIIB	3Q11		\$0.5	0.4%	7%	27.2%	1.4%
EM EQUITY	1Q09	AT BERS REQUEST	\$3.4	2.3%	15.2%	21.9%	4.7%
TOTAL	1Q09		\$10.1	6.9%	13.5%	VPIC RETURN 15.6%	

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Conclusions Non-VPIC Assets

- Timber under performed core bonds but has done better recently
 - Under performance thru 2012 due to poor housing market, declining interest rates
 - Both reversed in 2013, timber returned 9.8% vs. -2.0% for BC Aggregate
- Mature private equity has performed in line with traditional equity
 - Private equity struggles to keep up in a raging bull market like 2009-2013
 - Valuations for equity likely to flow thru to private equity in coming years
 - Less mature strategies should reap higher returns as they enter mid life
- Emerging market equity has struggled in the last five years relative to domestic
 - Liquidity has flowed to the US market, the “least dirty shirt” in the pile
 - Various international problems (Euro crisis, China slowdown, etc.) have hurt
 - Emerging markets now most attractively valued, fundamentals have not changed