February 13, 2012

Insight beyond the rating.

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The Next Big Test for Universities: Addressing Pension Deficits

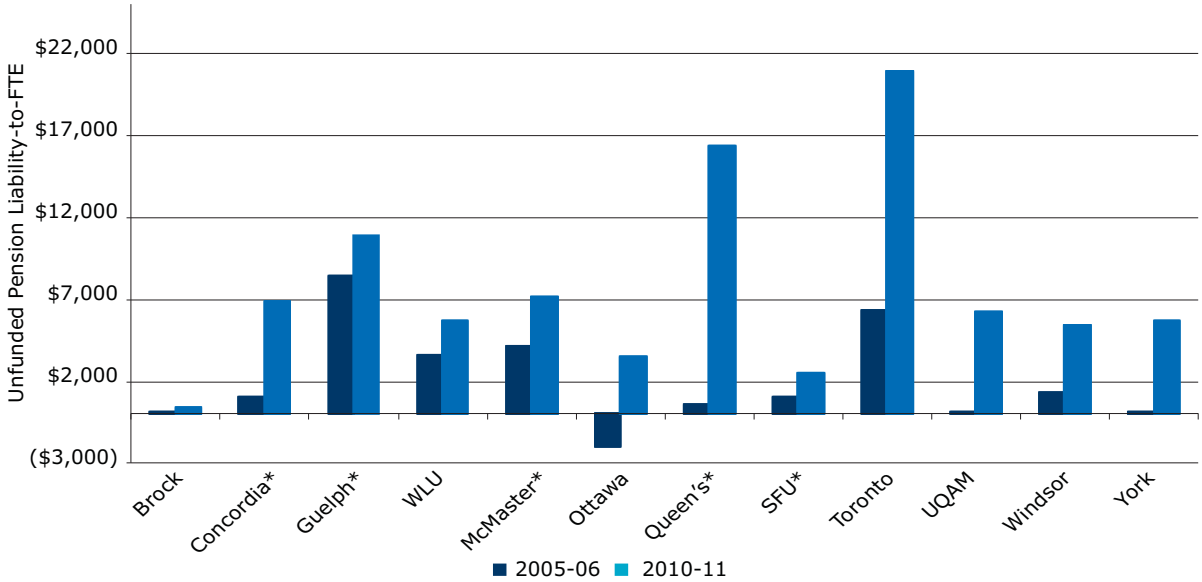
The university sector has been under growing budgetary pressures in recent years. Increased demand for university education has led to greater operating expenses vis-à-vis rising labour costs and capital expansion projects to accommodate higher student enrolment. On the revenue side, universities remain constrained by a tightening provincial funding environment and limited fee setting autonomy, although most have managed to maintain sound operating results.

However, low interest rates and a difficult investment environment have brought pension deficiencies to the forefront of the challenges faced by universities. The rapid growth in university unfunded pension liabilities has also become a concern for DBRS, as the increasing annual funding requirements are putting an added strain on operating positions. A look at the 13 DBRS-rated universities reveals that all have faced erosions in their plan funding status, and many have taken actions to address the challenge. However, solving the issue will take time.

Main Drivers of Increased Unfunded Pension Plan Deficiencies

In general, pension plan assets are funded through two sources: contributions from employers and employees, and investment returns. As is common across the university sector, employers pay a greater share of pension contributions than employees, even when compared to other public sector entities. The economic downturn of 2008–2009 triggered unprecedented pension plan funding shortfalls as sizable swaths of pension assets were wiped out. The ensuing market volatility has made it ever more difficult for many plans to fully rebuild their asset bases. To exacerbate matters, monetary authorities have reduced interest rates to historically low levels to combat the sluggish economy, which has further dampened plan discount rates and boosted plan liabilities. Since the financial crisis, the average DBRS-rated university's plan discount rate declined from roughly 7.5% in 2008–2009 to 5.5% in 2010–2011. Over this short period, total aggregate unfunded pension liabilities for DBRS-rated universities ballooned from approximately $680 million to $3.2 billion. Unfunded deficiencies are more of an issue for universities with defined benefit (DB) plans, under which the investment risk is borne by the employer, although universities with hybrid plans, which provide a high level of guaranteed minimum benefits to retired members, face similar challenges.

Unfunded Pension Liability per FTE of DBRS-Rated Universities, F2006 versus F2011



*Reported on a solvency basis. All others shown on an accounting basis.
Note: Graph excludes UOIT, as it has no unfunded pension liabilities on its DC plan.
Source: University financial statements and pension valuation reports.

On a full-time-equivalent (FTE) student basis, as university obligations are commonly measured by DBRS to ascertain relativity across the sector, the University of Toronto (UofT) shows the largest pension deficiency among DBRS-rated universities, followed by Queen's University and the University of Guelph. The University of Guelph's pension deficiency was in fact a key factor in DBRS's February 2011 downgrade of the university. In contrast, Brock University, Simon Fraser University and the University of Ottawa have the lowest shortfalls on a per-FTE basis, while the University of Ontario Institute of Technology is the only DBRS-rated university with a strictly defined contribution plan, and as such does not have a pension deficiency.

Actions Sought But Securing Significant Plan Changes Will Be Difficult

Governments are starting to pay attention to the problem, especially in Ontario where the temporary pension solvency relief program, announced by the government in August 2010, presents an opportunity for those with the most acute challenges to alleviate some of their immediate cash flow pressures, provided meaningful adjustments are made to plans. Under the two-stage program, universities will be allowed to defer solvency payments for three years while they implement strategies to ensure the long-term sustainability of their plans. After three years, if approved to proceed to the next stage, the university could amortize its deficiency over a ten-year period rather than the current five, which would substantially decrease the annual required solvency payments and allow the university to benefit from potential improvements in interest rates and investment returns, the prime drivers of the current challenge.

Many universities are seeking actions to put their pension plans on more sustainable footing. Nevertheless, DBRS notes that material changes to pension plans tend to be very challenging to secure. Benefits for retired plan members, which represent a large proportion of accumulated liabilities, are nearly impossible to scale back, and changes affecting current active or future plan members require difficult negotiations with union groups. Furthermore, plan maturity erodes the effectiveness of amendments, as a higher ratio of retired-to-active plan members makes contribution increases less effective. Lastly, increased life expectancy, spurred by advancements in medical innovation, has lengthened the time that pensioners receive benefits.

These factors illustrate the difficult task that university administrators face in restructuring their pension plans. However, as illustrated in the Appendix, some DBRS-rated universities have made significant gains to date. Specifically, McMaster University has increased employee contributions and retirement dates, as well as closed DB plans to new entrants of certain employee groups, electing instead for new group registered retirement savings plans. Two of the universities with the largest deficiencies, UofT and Queen's University, have also taken significant actions to improve their current deficit positions. In 2011, UofT made a large $150 million lump sum payment and plans to make a second similar payment by June 2014 into its pension plans. Additionally, two large employee groups have agreed to increase member contributions, and annual pension special payments will be increased considerably. Queen's has also increased employee contributions and pensionable contributions from all its departments. These changes are expected to expedite the universities' paths toward alleviating their pension challenges. Yet for most, achieving meaningful structural changes to their pension plans will be a gradual process.

Conclusion

As western economies likely settle into an extended period of slower growth and low interest rates, DBRS expects that the path toward plan sustainability will be a long and challenging one, as it will involve difficult negotiations with employee groups. The pension deficiency challenge will also be compounded by the limited ability of universities to offset these pressures on their already stretched budgets. As a result, the agreements that come out of these negotiations may affect the ability of universities to take on new debt and address operating challenges. The necessity of structural changes to university pension plans is unquestionable, and the actions taken now may be key determinants in the credit profiles of some universities over the medium term.

Note: An upcoming study of DBRS-rated universities will explore the challenge further, particularly in the context of other opportunities and challenges faced by Canadian universities.

APPENDIX

DBRS Ratings	Brock	Concordia	Guelph	Laurier	McMaster	Ottawa
Long-term debt	A	A	A	A	AA (low)	AA
Trend	Stable	Stable	Stable	Stable	Stable	Stable
Last update	Mar. 30, 2011	Apr. 1, 2011	Dec. 14, 2011	Mar. 25, 2011	May 31, 2011	Mar. 23, 2011
Type of pension plan (DB, DC or hybrid)	Hybrid (DC, with DB component that provides minimum level of pension benefits	DB	DB	Hybrid (DC with a minimum guarantee supplement)	DB	DB
Number of plan members (active/ retired/ deferred)	1,506/275/239	3,723/1,382/1,335	3,251/1,878/260	1,520/326/401	3,966/1,956/868	3,309/1,726/750
Unfunded pension liability ($millions)[1]	(7.2)	(184.6)	(220.7)	(89.2)	(182.7)	(147.2)
Basis (accounting, solvency)	Accounting	Solvency	Solvency	Accounting	Solvency	Accounting
Discount rate[2]	5.75%	4.48%	5.3%	5.50%	6.0%	5.75%
Contribution rates[3]:						
University	7.4% up to YMPE, plus 9.0% thereafter	9.66% of payroll, plus amortization payments	169% of employee contributions	7.0% of earnings	University pays current service, plus amortization, totaling: **Salary plan (SP)**: 2.8% of unfunded liability **Original plan (OP)**: 4.85% of unfunded liability **Hourly plan (HP)**: slightly more than 2.32% of unfunded liability	12.19% of salary mass
Employee	4.4% up to YMPE plus 6.0% thereafter	4.5% up to YMPE plus 6.0% thereafter	4.8% up YMPE, plus 6.5% thereafter	7.0% of earnings	**SP and OP**: 6.50% up to YMPE; plus 8.75% thereafter **HP**: 5.50% up to YMPE; plus 7.0% thereafter	4.25% up to YMPE plus 6.55% thereafter
Measures taken to address shortfall	• Additional payments made to the Minimum Guarantee Fund to fund the going concern deficit in accordance with actuarial valuation	• Adoption of a new Funding Policy • Seeking to align Investment Policy with new Funding Policy framework	• Increased employee contribution rates; • Eliminated early retirement benefits for certain groups	• Negotiating with employee groups to increase employee contributions and reduce future benefits (indexing, early retirement subsidies)	• Increased employee contributions; • Increased early unreduced retirement dates; • Increased vesting dates; new (reduced) plan benefit formula for new hires into largest group (CAW); • Closed DB plans to certain groups & replaced with Group RRSP for new hires	• Formal actions yet to be approved
Enrolment (FTEs) (F2011)	18,180	26,777	20,651	15,551	25,399	42,211
Unfunded pension liability per FTE	$396	$6,894	$10,687	$5,738	$7,193	$3,486

Note: DB = Defined benefit plan; DC = defined contribution plan; FTE = full-time-equivalent
1. Pension plan deficits presented are before unamortized gains/loses; as of F2011, except for UQAM for which figure is as of May 2010.
2. Discount rates are presented for the same periods as pension plan deficits.
3. YMPE = Yearly Maximum Pensionable Earnings, set annually by Canada Revenue Agency (CRA) and represents maximum amount of salary from which Canada Pension Plan is deducted.
*DBRS estimate; ** UQAM participates in the DB plan of the Université du Québec network. At April 30, 2011, it accounted for 3,077 of the 8,444 plan members (36.4%). This figure represents UQAM's pro-rata share of the network's pension deficit which is incorporated into DBRS's analysis of the university.

APPENDIX

DBRS Ratings	Queen's	Simon Fraser	Toronto	UOIT	UQAM	Windsor	York
Long-term debt	AA	AA (low)	AA	BBB (high)	A (low)	A (high)	AA (low)
Trend	Stable	Stable	Stable	Stable	Stable	Stable	Stable
Last update	Oct. 13, 2011	Jan. 30, 2012	Nov. 3, 2011	Apr. 1, 2011	Aug. 17, 2011	May 16, 2011	Sep. 28, 2011
Type of pension plan (DB, DC or hybrid)	Hybrid (DC, with DB component that provides minimum level of pension benefits)	DB	DB	DC	DB**	**Employee plan (EP)** - DB; **Faculty plan (FP)** - Hybrid (DC, with DB component that provides minimum level of pension benefits)	Hybrid (DC, with DB component that provides minimum level of pension benefits)
Number of plan members (active/ retired/ deferred)	3,611/1,867/1,545	1,590/283	8,682/4,824/2,805	-	3,077 (total)	**EP** - 796/344/56 **FP** - 684/367/169	4,420/1,805/1,360
Unfunded pension liability ($millions)[1]	(325.0)	(64.0)	(1392.6)	-	(185.5)**	(76.7)	(272.5)
Basis (accounting, solvency)	Solvency	Solvency	Accounting	N/A	Accounting	Accounting	Accounting
Discount rate[2]	5.8%	3.3% for 10 yrs, 5% thereafter	5.6%		5.5%	6.0%	5.75%
Contribution rates[3]:							
University	6.0% up to YMPE, plus 7.0% thereafter	Employer makes all contributions - 15.3% of total payroll	10.98% of payroll	6% of YMPE, plus supplemental contribution of 2% of YMPE	9.05%	**EP** - Match employee contribution (50% cost sharing) **FP** - 6% of normal salary for DC portion, plus 4.96% to fund DB portion	Match employee contributions dollar for dollar, plus additional 3%
Employee	4.5% up to YMPE plus 6.0% thereafter	Voluntary	5.25% of payroll	3% of YMPE; with optional contributions increase to of 6% of YMPE	9.05%	**EP** - 9.2% of normal salary up to year's basic exemption (YBE) (CRA determined), plus 6.4% above YBE up to YMPE, and 9.2% thereafter **FP** - DC portion, 8% of normal salary	4.5% up to YMPE, plus 6.0% thereafter
Measures taken to address shortfall	• Increased employee contributions • Increased pensionable contributions from all departments • Several additional plan changes expected to make the plan more sustainable	• Applying to the provincial government for solvency exemption • Negotiations with employee groups for plan changes • Letters of credit to fund current solvency deficiency	• Two lump sum payments totaling $300M • Increased employee contributions for two large employee groups • Increased annual pension special payments substantially	N/A	• Partial indexation for benefits related to service rendered after 2004.	**EP** - Increased member contributions with employer match **FP** - DC contribution formula increasing from 6% to 8%, no associated employer match	• Engaged actuarial advisor to explore options to make plan more sustainable • Built additional pension contributions of $28M Base contributions into the budget plan • Discussions with an all employee groups on plan redesign
Enrolment (FTEs) (F2011)	19,865	25,492	66,611	6,615*	29,482	14,029	47,894
Unfunded pension liability per FTE	$16,360	$2,510	$20,906	N/A	$6,291	$5,470	$5,689

Note: DB = Defined benefit plan; DC = defined contribution plan; FTE = full-time-equivalent
1. Pension plan deficits presented are before unamortized gains/loses; as of F2011, except for UQAM for which figure is as of May 2010.
2. Discount rates are presented for the same periods as pension plan deficits.
3. YMPE = Yearly Maximum Pensionable Earnings, set annually by Canada Revenue Agency (CRA) and represents maximum amount of salary from which Canada Pension Plan is deducted.
*DBRS estimate; ** UQAM participates in the DB plan of the Université du Québec network. At April 30, 2011, it accounted for 3,077 of the 8,444 plan members (36.4%). This figure represents UQAM's pro-rata share of the network's pension deficit which is incorporated into DBRS's analysis of the university.

Note: All figures are in Canadian dollars unless otherwise noted.

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