

# **Financial Executives International**

## **Gauging the Path of Private Canadian Pensions**

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**June 11, 2010**



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ACCOUNTANTS**

# Summary of Main Assumptions



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Table 1 (Risk Free Basis)

	December 31, 2004	December 31, 2008
<b>Interest Rate</b> Determined from yield on long-term Government of Canada bonds	5.00%	3.50%
<b>Without indexation of benefits</b>	0.00%	0.00%
<b>With indexation of benefits</b> Represents blended rate of pre-retirement indexation (based on wage increases) and post-retirement indexation (based on CPI increases)	3.25%	2.00%
<b>Mortality Table</b>	UP94G Uninsured Pensioner Mortality Table 1994 Generational	UP94G Uninsured Pensioner Mortality Table 1994 Generational
<b>Retirement Age</b>	Plan's own assumption	Plan's own assumption

# Overall Funding Position of Canadian DB Plans



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Table 2 - Results without Indexation of benefits

Status	Number of Plans		Plan assets market value (\$Bn)		Plan liabilities (\$Bn)		Surplus/ (Deficit) (\$Bn)		Funding Ratio	
	2004	2008	2004	2008	2004	2008	2004	2008	2004	2008
Plans with deficit	460	696	45.5	239.3	54.1	315.4	-8.6	-76.1	84%	76%
Plans with surplus	324	65	177.8	10.1	145.6	8.7	32.2	1.4	122%	116%
<b>Total</b>	<b>784</b>	<b>761</b>	<b>223.3</b>	<b>249.4</b>	<b>199.7</b>	<b>324.1</b>	<b>23.6</b>	<b>-74.7</b>	<b>112%</b>	<b>77%</b>

# Overall Funding Position of Canadian DB Plans



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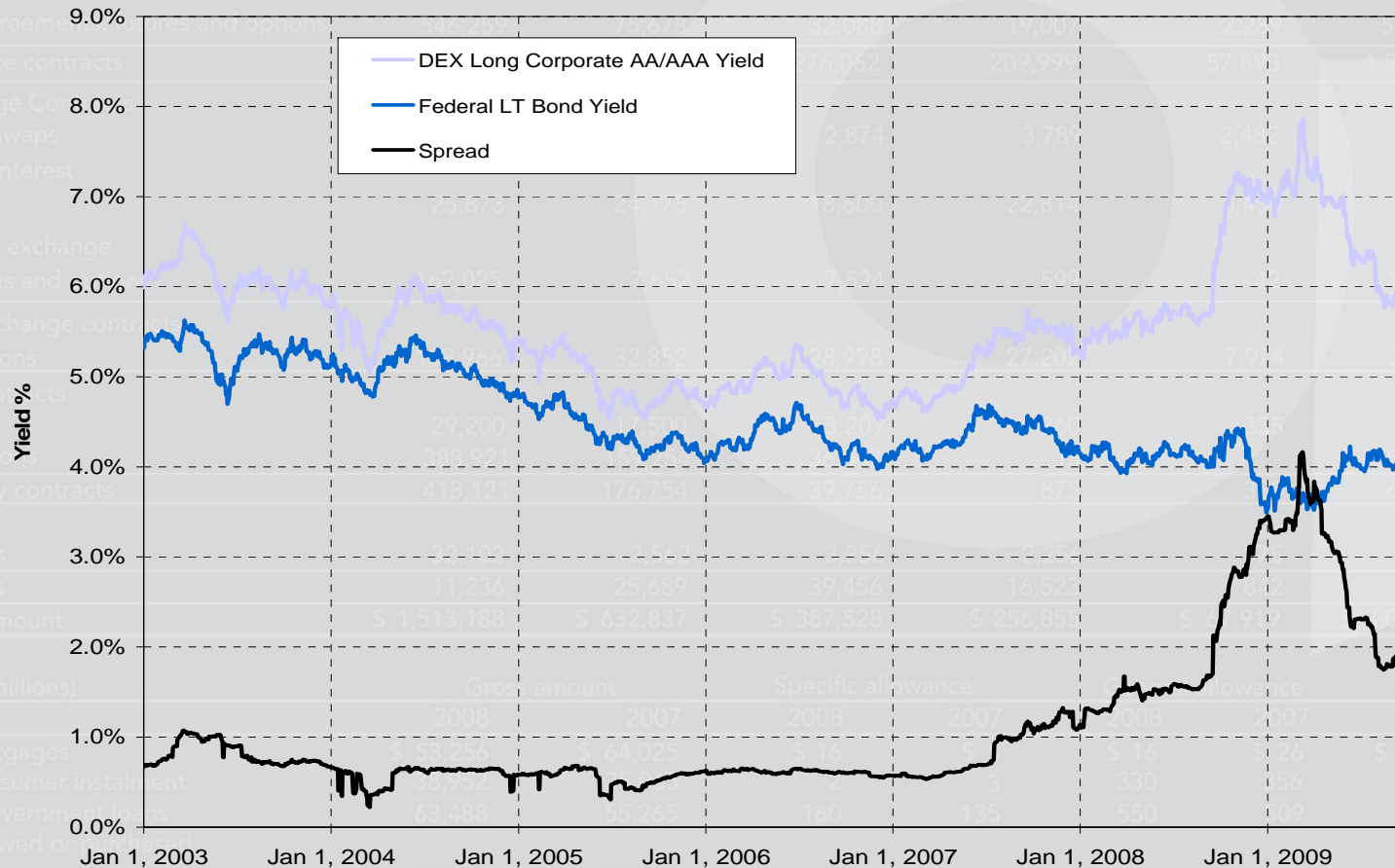
Table 3 - Results with Indexation of benefits

Status	Number of Plans		Plan assets market value (\$Bn)		Plan liabilities (\$Bn)		Surplus/ (Deficit) (\$Bn)		Funding Ratio	
	2004	2008	2004	2008	2004	2008	2004	2008	2004	2008
Plans with deficit	751	735	220.6	247.8	310.5	436.7	-89.9	-188.9	71%	57%
Plans with surplus	33	26	2.7	1.6	2.2	1.4	0.5	0.2	123%	118%
<b>Total</b>	<b>784</b>	<b>761</b>	<b>223.3</b>	<b>249.4</b>	<b>312.7</b>	<b>438.1</b>	<b>-89.4</b>	<b>-188.7</b>	<b>71%</b>	<b>57%</b>

# Canadian Bond Yields



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# Solvency Ratios



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Table 4 – Solvency Deficit

	2006	2007	2008
Proportion of Plans in Solvency Deficit	66%	71%	92%
Total Assets/Total Liabilities (All Plans)	103%	104%	82%
Total Assets/Total Liabilities (Plans in Deficit)	89%	92%	81%

Natural resources	7	19	172	52	1,348	4,471	-	-	-	-
Government	360	560	3,456	1,974	56	18	-	-	-	-
Other	616	689	3,450	1,338	1,246	193	349	220	109	4
Total	8,406	8,830	14,498	5,567	5,545	9,747	1,351	370	759	191

(Canadian \$ in millions)



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## Effect of Crisis on Canadian DB Pension Plans

- Direct Cost Reduction
- Liability – Driven Investing
- Increased Focus on Governance
- Adverse Financial Effects on Employees

Interest Rate Contracts	Within 1 year	1 to 3 years	3 to 5 years	5 to 10 years	Over 10 years	Total	an
Swaps	\$ 316,504	\$ 319,302	\$ 243,934	\$ 181,336	\$ 55,604	\$ 1,400,565	\$ 750,652
Forward foreign exchange contracts, futures and options	198,965	28,859	16,805	27,202	7,974	589,562	1,094,877
Total interest rate contracts	862,763	394,980	276,062	209,999	57,893	1,990,127	2,045,529
Foreign Exchange Contracts							
Cross-currency swaps	1,068	1,025	2,874	3,789	2,482	10,850	10,689
Cross-currency interest rate swaps	25,873	24,175	18,600	22,814	5,450	92,851	72,416
Forward foreign exchange contracts, futures and options	198,965	28,859	16,805	27,202	7,974	173,189	132,564
Total foreign exchange contracts, futures and options	198,965	28,859	16,805	27,202	7,974	276,890	215,669
Commodity Contracts							
Swaps	29,200	17,500	3,209	860	335	52,368	66,852
futures and options	17,500	17,500	17,500	17,500	17,500	581,564	575,421
Total commodity contracts	17,500	17,500	17,500	17,500	17,500	633,932	642,273
Equity Contracts						42,500	33,054
Credit Contracts						92,165	54,265
Total notional amount	\$ 1,513,188	\$ 632,837	\$ 387,528	\$ 256,855	\$ 67,919	\$ 3,035,614	\$ 2,990,790

(Canadian \$ in millions)	Gross amount		Specific allowance		General allowance		Net amount	
	2008	2007	2008	2007	2008	2007	2008	2007
Residential mortgages	\$ 53,256	\$ 64,025	\$ 16	\$ 3	\$ 16	\$ 26	\$ 535,005	\$ 64,589
Credit card, consumer instalment	38,952	35,065	2	3	330	356	38,652	34,709
Business and government loans	63,488	55,265	160	135	550	509	61,885	56,325
Securities borrowed or purchased under resale agreements	37,098	31,562	-	-	-	-	38,956	32,562
Subtotal	192,794	185,917	178	141	896	891	674,498	188,185
Customers' liability under acceptances	12,532	7,336	-	-	56	42	12,564	7,289
Total	\$ 205,326	\$ 193,253	\$ 157	\$ 153	\$ 952	\$ 933	\$ 687,062	\$ 195,474

	Change from 2007					Change from 2007					Change from 2007				
	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$	%	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$	%	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$	%
Net Interest income (feb)	3,598	3,691	3,546	(93)	-3%	3,125	3,259	2,785	(134)	-4%	750	730	723	20	3%

Natural resources	7	19	172	52	1,348	4,471	-	-	-	-
Government	360	560	3,456	1,974	56	18	-	-	-	-
Other	616	689	3,450	1,338	1,246	193	349	220	109	4
Total	8,406	8,830	14,498	5,567	5,545	9,747	1,351	370	759	191

(Canadian \$ in millions)

Interest Rate Contracts	Within 1 year	1 to 3 years	3 to 5 years	5 to 10 years	Over 10 years	Total	an
Swaps	\$ 504	\$ 19,302	\$ 274	\$ 181,333	\$ 55,604	\$ 1,400,565	\$ 750,652
Forward						589,562	1,094,877
Total interest rate contracts	862,763	394,980	276,062	209,999	57,893	1,990,127	2,045,529
Foreign Exchange Contracts							
Cross-currency swaps	1,068	1,025	2,874	3,789	2,482	10,850	10,689
Cross-currency interest rate swaps	25,873	24,175	18,600	22,814	5,450	92,851	72,416
Forward foreign exchange contracts, futures and options						173,189	132,564
Total foreign exchange contracts, futures and options					7,974	276,890	215,669
Commodity Contracts							
Swaps						52,368	66,852
futures and options						581,564	575,421
Total commodity contracts	418,121	176,754	39,756	875	335	633,932	642,273
Equity Contracts						42,500	33,054
Credit Contracts	11,236	25,689	39,462	16,523	842	92,165	54,265
Total notional amount	\$ 513,119	\$ 597,427	\$ 387,528	\$ 256,855	\$ 67,919	\$ 3,035,614	\$ 2,990,790



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## Current State of Canadian DC Pension Plans

- Private Sector DC Plan Membership has doubled between 1991 and 2006
- No significant change in Public Sector
- DC Plan Growth mainly from Active Plan Membership

(Canadian \$ in millions)	Gross amount		Specific allowance		General allowance		Net amount	
	2008	2007	2008	2007	2008	2007	2008	2007
Residential mortgages	\$ 53,256	\$ 64,025	\$ 16	\$ 3	\$ 16	\$ 26	\$ 535,005	\$ 64,589
Credit card, consumer instalment	38,952	35,065	2	3	330	356	38,652	34,709
Business and government loans	63,488	55,265	160	135	550	509	61,885	56,325
Securities borrowed or purchased under resale agreements	37,098	31,562	-	-	-	-	38,956	32,562
Subtotal	192,794	185,917	178	141	896	891	674,498	188,185
Customers' liability under acceptances	12,532	7,336	-	-	56	42	12,564	7,289
Total	\$ 205,326	\$ 193,253	\$ 157	\$ 153	\$ 952	\$ 933	\$ 687,062	\$ 195,474

	Change from 2007					Change from 2007					Change from 2007				
	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$	%	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$	%	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$	%
Net Interest income (teb)	3,598	3,691	3,546	(93)	-3%	3,125	3,259	2,785	(134)	-4%	750	730	723	20	3%



Natural resources	7	19	172	52	1,348	4,471	-	-	-	-
Government	360	560	3,456	1,974	56	18	-	-	-	-
Other	616	689	3,450	1,338	1,246	193	349	220	109	4
Total	8,406	8,830	14,498	5,567	5,545	9,747	1,351	370	759	191

(Canadian \$ in millions)



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## Current State of Canadian DC Pension Plans

	Within 1 year	1 to 3 years	3 to 5 years	5 to 10 years	Over 10 years	Total	
Interest Rate Contracts							
Swaps	\$ 1,400,565	\$ 750,652					
Forward rate agreements, futures and options	546,259	75,678	32,088	19,007	2,289	589,562	1,094,877
Total interest rate contracts	862,763	394,980	276,062	209,999	57,893	1,990,127	2,045,529
Foreign Exchange Contracts							
Cross-currency swaps	1,068	1,025	2,874	3,789	2,482	10,850	10,689
Cross-currency interest rate swaps	25,873	24,175	18,600	22,814	5,450	92,851	72,416
Forward foreign exchange contracts, futures and options			7,524	599	42	173,189	132,564
Total foreign exchange contracts, futures and options	188,966	32,852	28,998	27,202	7,974	276,890	215,669
Commodity Contracts							
Swaps	29,200	17,500	3,209	860	335	52,368	66,852
futures and options	581,564	159,254	36,547	15	-	581,564	575,421
Total commodity contracts	610,764	176,754	39,756	875	335	633,932	642,273
Equity Contracts				2,256	875	42,500	33,054
Credit Contracts				16,523	842	92,165	54,265
Total notional amount	\$ 1,513,188	\$ 632,837	\$ 387,528	\$ 256,855	\$ 67,919	\$ 3,035,614	\$ 2,990,790

- Risk Management
- Control
- Flexibility
- Employee Empowerment
- Employee Incentives

	Specific allowance		General allowance		Net amount	
	2008	2007	2008	2007	2008	2007
Residential mortgages	\$ 53,256	\$ 64,025	\$ 16	\$ 3	\$ 535,005	\$ 64,589
Credit card, consumer instalment	38,952	35,065	2	3	38,652	34,709
Business and government loans	63,488	55,265	160	135	61,885	56,325
Securities borrowed or purchased under resale agreements	37,098	31,562	-	-	38,956	32,562
Subtotal	192,794	185,917	178	141	674,498	188,185
Customers' liability under acceptances	12,532	7,336	-	-	12,564	7,289
Total	\$ 205,326	\$ 193,253	\$ 157	\$ 153	\$ 687,062	\$ 195,474

	Fiscal 2008	Fiscal 2007	Fiscal 2006	Change from 2007		Fiscal 2008	Fiscal 2007	Fiscal 2006	Change from 2007		Fiscal 2008	Fiscal 2007	Fiscal 2006	Change from 2007	
				\$	%				\$	%				\$	%
Net Interest income (feb)	3,598	3,691	3,546	(93)	-3%	3,125	3,259	2,785	(134)	-4%	750	730	723	20	3%



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## Action Plan

- Design of Fair, Sustainable, Simple & Efficient Pension System
- Pension Benefits = Deferred Compensation
- Adoption of Hybrid Models
- Principle of “One Law, One Regulator”
- Universal & Compulsory Coverage
- Consolidation of Private Sector RPP Functions
- Harmonization of Tax Treatments

Natural resources	7	19	172	52	1,348	4,471	-	-	-	-
Government	360	560	3,456	1,974	56	18	-	-	-	-
Other	616	689	3,450	1,338	1,246	193	349	220	109	4
Total	8,406	8,830	14,498	5,567	5,545	9,747	1,351	370	759	191

(Canadian \$ in millions)



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## Guiding Principles

- No Player Too Big to Fail
- Nationalize
- Avoid Failed Theories
- Confront Asymmetrical Pay Structures
- Self-Sufficient & Sustainable Pension Plans

	Within 1 year	1 to 3 years	3 to 5 years	5 to 10 years	Over 10 years	Total	
Interest Rate Contracts							
Swaps	\$ 504	\$ 319,302	\$ 243,974	\$ 181,336	\$ 55,604	\$ 1,400,565	\$ 750,652
Forward rate agreements, futures and options	546,259	75,678	32,088	19,007	2,289	589,562	1,094,877
Total interest rate contracts	862,763	394,980	276,062	209,999	57,893	1,990,127	2,045,529
Foreign Exchange Contracts							
Cross-currency swaps	1,068	1,025	2,874	3,789	2,482	10,850	10,689
Cross-currency interest rate swaps				22,814	5,450	92,851	72,416
Forward foreign exchange contracts, futures and options	112,025	7,652	7,524	599	42	173,189	132,564
Total foreign exchange contracts	188,966	32,852	28,998	27,202	7,974	276,890	215,669
Commodity Contracts							
Swaps				860	335	52,368	66,852
futures and options	388,921	159,254	36,547	15	-	581,564	575,421
Total commodity contracts	388,921	159,254	36,547	875	335	633,932	642,273
Equity Contracts	32,102	2,562	3,256	2,256	875	42,500	33,054
Credit Contracts	12,233	1,889	19,564	16	842	92,165	54,265
Total notional amount	\$ 1,476,782	\$ 598,527	\$ 344,177	\$ 239,166	\$ 16,101	\$ 3,035,614	\$ 2,990,790

	Gross amount		Specific allowance		General allowance		Net amount	
	2008	2007	2008	2007	2008	2007	2008	2007
Residential mortgages	\$ 53,256	\$ 64,025	\$ 16	\$ 3	\$ 16	\$ 26	\$ 535,005	\$ 64,589
Credit card, consumer instalment	38,952	35,065	2	3	330	356	38,652	34,709
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	Change from 2007				Change from 2007				Change from 2007			
	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$ %	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$ %	Fiscal 2008	Fiscal 2007	Fiscal 2006	\$ %
Net Interest income (feb)	3,598	3,691	3,546	(93) -3%	3,125	3,259	2,785	(134) -4%	750	730	723	20 3%



A grayscale background image of an office environment. In the foreground, a man in a suit is seated, looking down at a device in his hands. Behind him, a woman in a business suit is walking and talking on a mobile phone. Further back, another man is visible, also in business attire. The office has bookshelves and various office equipment.

**Thank you!**



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