

LOOKING AHEAD



The 2008 Deal



October 2009



Background

To understand the 2008 filing, we have to look at the State of the Union after the 2005 filing was made in June 2006.



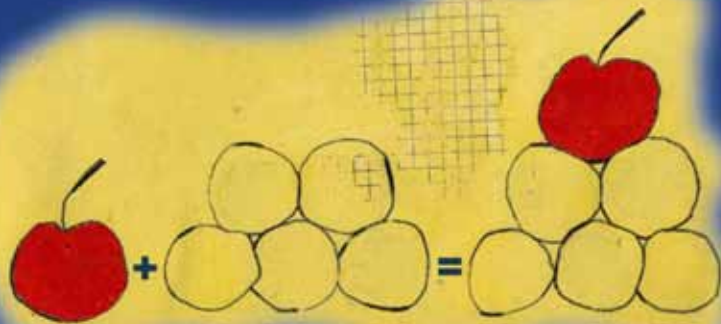
The 2005 Deal in Summary



- Shortfall addressed
- Assumptions adjusted
- Benefits protected
- Contribution increases phased-in
- Survey
- Study of assumptions
- 15% contribution cap



Valuation on January 1, 2008



- We said:
 - Mandatory filing
 - Changes possible



The State of the Union - 2008

- Preliminary Funding Valuation for Jan. 1, 2008 as reported to OTPP AGM

- ▲ Assets \$104.9 billion
- ▲ Future contributions \$30.0 billion
- ▲ Total assets \$134.9 billion
- ▲ Future benefits (\$147.6 billion)
- ▲ Preliminary shortfall (\$12.7 billion)





A Reminder - 2005 v. 2008

	2005 (\$ in billions)	2008 (\$ in billions)
Assets	\$82.8	\$104.9
Future Contributions	\$17.0	\$21.8
Special Contributions Current Members		\$6.1
Future Members		\$2.1
Actuarial Assets	\$99.8	\$134.9
Future Benefits	(\$119.2)	(\$147.6)
Surplus/(Deficiency)	(\$19.4)	(\$12.7)



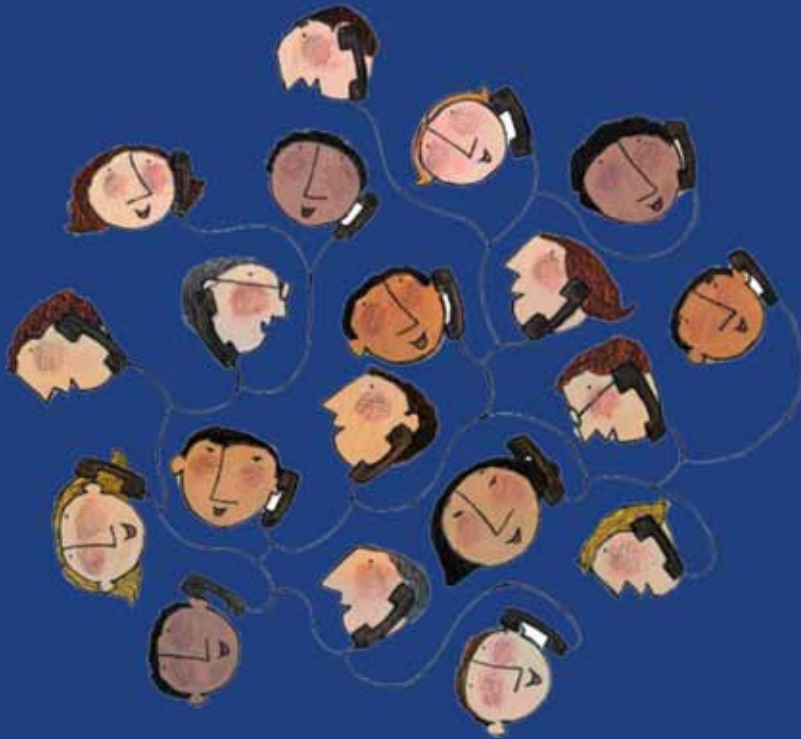
What's Changed Since 2005?



- Mortality
- RRB rate
- Interest rates



Mortality



- They say that...
- Contrary to the myth
- Averages
 - ▲ Work 26 years
 - ▲ Males 30 years
 - ▲ Females 33 years
- Oldest survivors



Accounting for Longevity



- Members living longer than expected
- Good news – *but*
- Added \$5.5 billion to liabilities



Remainder of Shortfall

- Balance of deficit due to discount rate
- The lower the rate:
- The greater the liabilities





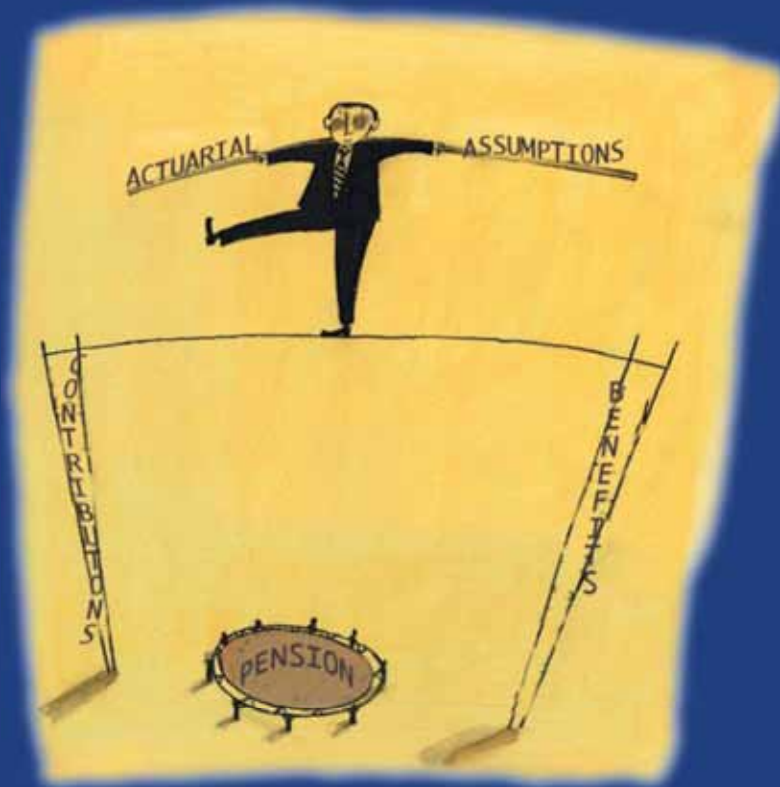
The 2008 Deal

- No new contribution rate increases
- No changes until January 1, 2010
- Cap of 15%
- Partial conditional indexing *IF* rates pushed near cap





Partial Conditional Indexing



- No effect on accrual rate!
- No immediate cost
- Only when needed and
- Only as much as needed

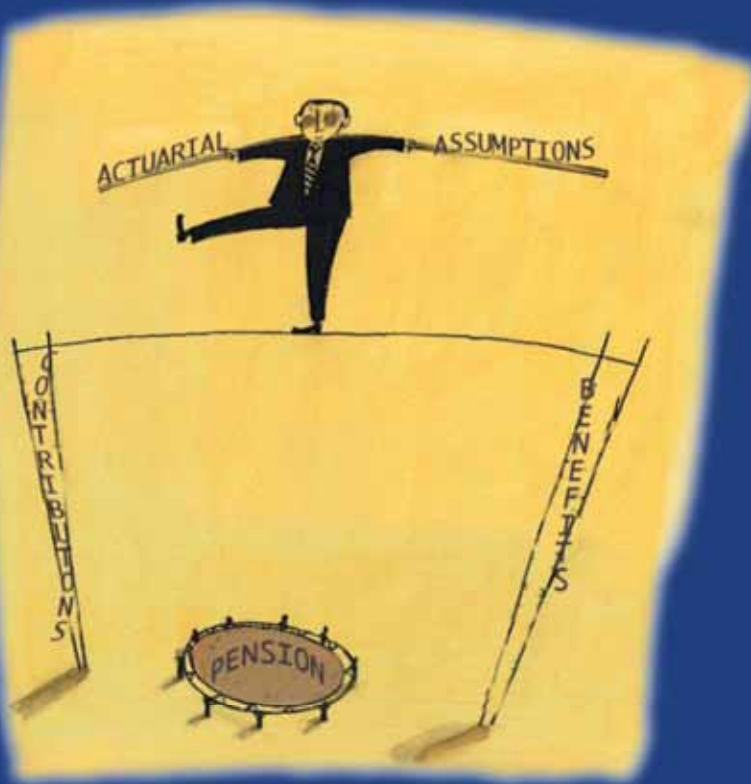


How it works

- Only on accrual *after* Jan. 1, 2010
 - 50% remains guaranteed
 - 50% becomes discretionary



It Doesn't Sound Good to Me!



- 100% until 2010 *plus*
- At least 50% after *plus*
- As much of the remaining 50% as possible



100% Target



- Partners will fund Plan to provide 100%
 - ▲ Partial conditional indexing *IF* rates pushed near cap
 - ▲ Return to 100% indexation ASAP
 - ▲ If sufficient surplus, return to “run rate”
 - As if full COLA never interrupted



Some Practical Examples

Assume
inflation
running
at 2%

**Guaranteed
before
portion
(100%)**

**Guaranteed
after
Portion
(50%)**

**Conditional
after
portion
(50%)**



Our “Close to Retirement” Teacher

- Fred with:
 - ▲ 28 yrs before January 1, 2010
 - ▲ 2 yrs after
 - ▲ \$80 000 x 2% x 30 years credit, so
 - ▲ \$48 000 base pension



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension	
Guaranteed before portion		
Guaranteed after portion		
Conditional after portion		



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension	
Guaranteed before portion	\$44 800 x 2%	\$896
Guaranteed after portion		
Conditional after portion		



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension	
Guaranteed before portion	$\$44\,800 \times 2\%$	\$896
Guaranteed after portion	$\frac{\$3200 \times 2\%}{2}$	\$32
Conditional after portion		



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension	
Guaranteed before portion	$\$44\,800 \times 2\%$	\$896
Guaranteed after portion	$\frac{\$3200 \times 2\%}{2}$	\$32
Conditional after portion	$\frac{\$3200 \times 2\%}{2}$	\$32



Our “Mid-Career” Teacher

- Tracy with:
 - ▲ 15 yrs before January 1, 2010
 - ▲ 15 yrs after
 - ▲ \$48 000 base pension



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension	Tracy with: 15 yrs before 15 yrs after \$48 000 base pension		
Guaranteed before portion	$\$44\,800 \times 2\%$	\$896		
Guaranteed after portion	$\frac{\$3200 \times 2\%}{2}$	\$32		
Conditional after portion	$\frac{\$3200 \times 2\%}{2}$	\$32		



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension		Tracy with: 15 yrs before 15 yrs after \$48 000 base pension	
Guaranteed before portion	$\$44\,800 \times 2\%$	\$896	$\$24\,000 \times 2\%$	\$480
Guaranteed after portion	$\frac{\$3200 \times 2\%}{2}$	\$32		
Conditional after portion	$\frac{\$3200 \times 2\%}{2}$	\$32		



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension		Tracy with: 15 yrs before 15 yrs after \$48 000 base pension	
Guaranteed before portion	$\$44\,800 \times 2\%$	\$896	$\$24\,000 \times 2\%$	\$480
Guaranteed after portion	$\frac{\$3200 \times 2\%}{2}$	\$32	$\frac{\$24\,000 \times 2\%}{2}$	\$240
Conditional after portion	$\frac{\$3200 \times 2\%}{2}$	\$32		



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension		Tracy with: 15 yrs before 15 yrs after \$48 000 base pension	
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Conditional after portion	$\frac{\$3200 \times 2\%}{2}$	\$32	$\frac{\$24\,000 \times 2\%}{2}$	\$240



Our “Early-Career” Teacher

- Manel with:
 - ▲ 0 yrs before January 1, 2010
 - ▲ 30 yrs after
 - ▲ \$48 000 base pension



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension		Tracy with: 15 yrs before 15 yrs after \$48 000 base pension		Manel with: 0 yrs before 30 yrs after \$48 000 base pension	
Guaranteed before portion	$\$44\,800 \times 2\%$	\$896	$\$24\,000 \times 2\%$	\$480		
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Guaranteed before portion	$\$44\,800 \times 2\%$	\$896	$\$24\,000 \times 2\%$	\$480	\$0	\$0
Guaranteed after portion	$\frac{\$3200 \times 2\%}{2}$	\$32	$\frac{\$24\,000 \times 2\%}{2}$	\$240		
Conditional after portion	$\frac{\$3200 \times 2\%}{2}$	\$32	$\frac{\$24\,000 \times 2\%}{2}$	\$240		



Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension		Tracy with: 15 yrs before 15 yrs after \$48 000 base pension		Manel with: 0 yrs before 30 yrs after \$48 000 base pension	
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Guaranteed after portion	$\frac{\$3200 \times 2\%}{2}$	\$32	$\frac{\$24\,000 \times 2\%}{2}$	\$240	$\frac{\$48\,000 \times 2\%}{2}$	\$480
Conditional after portion	$\frac{\$3200 \times 2\%}{2}$	\$32	$\frac{\$24\,000 \times 2\%}{2}$	\$240		

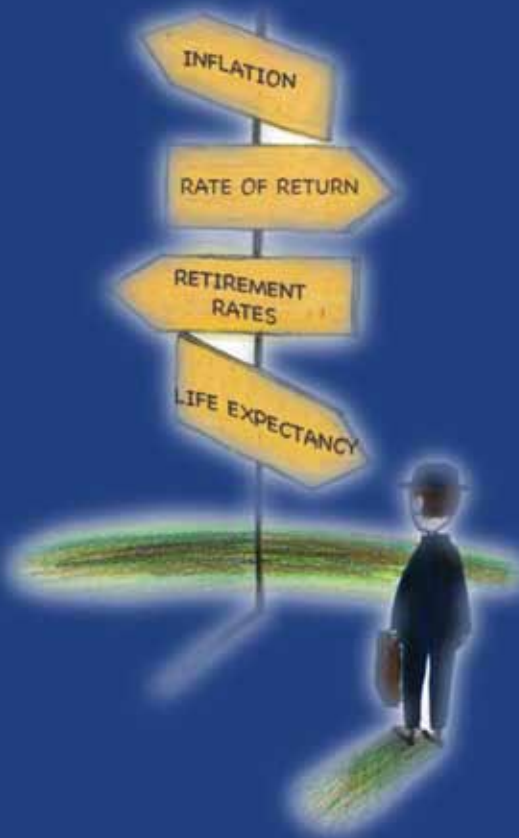


Some Practical Examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension		Tracy with: 15 yrs before 15 yrs after \$48 000 base pension		Manel with: 0 yrs before 30 yrs after \$48 000 base pension	
Guaranteed before portion	$\$44\,800 \times 2\%$	\$896	$\$24\,000 \times 2\%$	\$480	\$0	\$0
Guaranteed after portion	$\frac{\$3200 \times 2\%}{2}$	\$32	$\frac{\$24\,000 \times 2\%}{2}$	\$240	$\frac{\$48\,000 \times 2\%}{2}$	\$480
Conditional after portion	$\frac{\$3200 \times 2\%}{2}$	\$32	$\frac{\$24\,000 \times 2\%}{2}$	\$240	$\frac{\$48\,000 \times 2\%}{2}$	\$480



Over 30 Years of Pension...



- Suppose annual inflation of 2%
 - ▲ How much would each be guaranteed?
 - ▲ How much would each have “at risk”?
 - With no return to “run rate”
 - Returned to “run rate”
- Assume three years with:
 - ▲ No payment of conditional portion
 - ▲ Return to fully funded year after



Some practical examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension
Unconditional	\$1 947 267.80
No return to "run rate"	\$1 943 642.72 (\$3 625.09)
Return to "run rate"	\$1 947 070.73 (\$197.07)
%age loss without/with return	0.19%/0.01%



Some practical examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension	Tracy with: 15 yrs before 15 yrs after \$48 000 base pension
Unconditional	\$1 947 267.80	\$1 947 267.80
No return to "run rate"	\$1 943 642.72 (\$3 625.09)	\$1 920 192.97 (\$27 074.84)
Return to "run rate"	\$1 947 070.73 (\$197.07)	\$1 945 793.98 (\$1 473.82)
%age loss without/with return	0.19%/0.01%	1.39%/0.08%



Some practical examples

Assume inflation running at 2%	Fred with: •28 yrs before •2 yrs after \$48 000 base pension	Tracy with: 15 yrs before 15 yrs after \$48 000 base pension	Manel with: 0 yrs before 30 yrs after \$48 000 base pension
Unconditional	\$1 947 267.80	\$1 947 267.80	\$1 947 267.80
No return to "run rate"	\$1 943 642.72 (\$3 625.09)	\$1 920 192.97 (\$27 074.84)	\$1 893 378.73 (\$53 888.98)
Return to "run rate"	\$1 947 070.73 (\$197.07)	\$1 945 793.98 (\$1 473.82)	\$1 944 329.87 (\$2 937.94)
%age loss without/with return	0.19%/0.01%	1.39%/0.08%	2.77%/0.15%



Partners Share Risk



- *IF* conditional indexing applied
- Government will pay share
- Equal to “loss” by retirees



Acknowledge Risk

- Partners understand the risk, but
- There's risk now
- All borne by active members

- Post 2010
- Gradual sharing until
- 30 years hence all will share equally