

Revalorization or Continued Participation? A Comparison

Note:

*This is for illustrative purposes only; some numbers
are rough estimates*

Retirement after Normal Retirement Date (NRD): Member receives the greater of

Retirement after Normal Retirement Date (NRD): Member receives the greater of

- (1) Pension calculated in the usual way, as before the NRD
- (2) Revalorized pension

Example 1.

Gender	Male
NRD	1 June, 2015
Credited Service	30 years
FAE	\$105,000
Pension at NRD	\$ 55,696
Postponed to:	1 June, 2021
Credited Service	36 years
FAE	\$122,000
Pension at PRD*	\$78,000
Post-65 Contrib. (without interest)	\$33,000

* This assumes the (average) YMPE = \$55,000.

The revalorized pension is calculated like this:

Actuarial value of pension

Actuarial value of

must equal

benefits payable at NRD

deferred benefits

Annual Pension
at NRD

Probability of death
× Death benefit

×

+

Lifetime factor
*(based on mortality
and interest)*

must equal

Prob. of surviving ×
Reval. Pension R ×
Def. pension factor

$$\$55,696 \times 12.6$$

=

$$(.1) \times \$590,000 +$$

$$(.9) \times R \times 8.9$$

now solve for R

$$R = \frac{700,000 - 59,000}{7.92}$$

=

$$\$80,300$$

Note that this is higher than the pension at NRD (\$ 78,000).
However, there is more:

Note that this is higher than the pension at NRD (\$ 78,000).

However, there is more:

- ▶ In this example, since the revalorized pension is greater than the regular pension, the \$ 33,000 in additional contributions is invested separately.

Note that this is higher than the pension at NRD (\$ 78,000).

However, there is more:

- ▶ In this example, since the revalorized pension is greater than the regular pension, the \$ 33,000 in additional contributions is invested separately.
- ▶ Over the six year this money will accumulate to, say, \$ 37,000. This will give a life annuity of about \$ 2,700. So the total pension at age 71 with revalorization would be \$ 83,000 instead of \$ 78,000.

Note that this is higher than the pension at NRD (\$ 78,000).

However, there is more:

- ▶ In this example, since the revalorized pension is greater than the regular pension, the \$ 33,000 in additional contributions is invested separately.
- ▶ Over the six year this money will accumulate to, say, \$ 37,000. This will give a life annuity of about \$ 2,700. So the total pension at age 71 with revalorization would be \$ 83,000 instead of \$ 78,000.
- ▶ So in this example the difference between the pension calculated for each year of service to age 71 and the revalorized pension is about \$ 5,000 or 6.4 %.

Another alternative is to become a NON-PARTICIPANT in the
Plan at age 65

Another alternative is to become a NON-PARTICIPANT in the Plan at age 65

- ▶ Non-participants have **maximum RRSP room** for 5 years.

Another alternative is to become a NON-PARTICIPANT in the Plan at age 65

- ▶ Non-participants have **maximum RRSP room** for 5 years.
- ▶ The maximum for 2013 is close to \$ 24,000.

Another alternative is to become a NON-PARTICIPANT in the Plan at age 65

- ▶ Non-participants have **maximum RRSP room** for 5 years.
- ▶ The maximum for 2013 is close to \$ 24,000.
- ▶ Had the \$ 33,000 been invested in an RRSP **you** control it, and it might have grown faster than in the Plan.

Another alternative is to become a NON-PARTICIPANT in the Plan at age 65

- ▶ Non-participants have **maximum RRSP room** for 5 years.
- ▶ The maximum for 2013 is close to \$ 24,000.
- ▶ Had the \$ 33,000 been invested in an RRSP **you** control it, and it might have grown faster than in the Plan.
- ▶ You would have been able to contribute much more each year. If you are a Member of the Pension Plan your contributions are severely limited.

Another alternative is to become a NON-PARTICIPANT in the Plan at age 65

- ▶ Non-participants have **maximum RRSP room** for 5 years.
- ▶ The maximum for 2013 is close to \$ 24,000.
- ▶ Had the \$ 33,000 been invested in an RRSP **you** control it, and it might have grown faster than in the Plan.
- ▶ You would have been able to contribute much more each year. If you are a Member of the Pension Plan your contributions are severely limited.

Example 2.

Gender	Female
NRD	1 June, 2015
Credited Service	10 years
FAE	\$100,000
Pension at NRD	\$ 17,400
Postponed to:	1 June, 2021
Credited Service	16 years
FAE	\$116,000
Pension at PRD*	\$33,000
Post-65 Contrib. (without interest)	\$32,000

* This assumes the (average) YMPE = \$55,000.

Now the revalorized pension is calculated like this:

Actuarial value of pension

Actuarial value of

must equal

benefits payable at NRD

deferred benefits

Annual Pension
at NRD

Probability of death
× Death benefit

×

+

Lifetime factor
*(based on mortality
and interest)*

must equal

Prob. of surviving ×
Reval. Pension R ×
Def. pension factor

$$\$17,400 \times 12.6$$

=

$$(.08) \times \$184,000 +$$

$$(.92) \times R \times 11$$

now solve for R

$$R = \frac{219,000 - 14,000}{10.1}$$

=

$$\$20,300$$

(This slide was added later)

NOTE: A non-participant in the Plan is not the same as a non-contributory Member.

(This slide was added later)

NOTE: A non-participant in the Plan is not the same as a non-contributory Member.

- ▶ Non-participants stop their membership in the plan altogether (this can only be done at or after age 65).

(This slide was added later)

NOTE: A non-participant in the Plan is not the same as a non-contributory Member.

- ▶ Non-participants stop their membership in the plan altogether (this can only be done at or after age 65).
- ▶ Non-contributory Members still belong to the plan and accrue additional pension benefits, BUT

(This slide was added later)

NOTE: A non-participant in the Plan is not the same as a non-contributory Member.

- ▶ Non-participants stop their membership in the plan altogether (this can only be done at or after age 65).
- ▶ Non-contributory Members still belong to the plan and accrue additional pension benefits, BUT
 - ▶ These increased pensions generally (although not always) are less than revalorized ones (of course they are less than for a contributory Member past age 65).

(This slide was added later)

NOTE: A non-participant in the Plan is not the same as a non-contributory Member.

- ▶ Non-participants stop their membership in the plan altogether (this can only be done at or after age 65).
- ▶ Non-contributory Members still belong to the plan and accrue additional pension benefits, BUT
 - ▶ These increased pensions generally (although not always) are less than revalorized ones (of course they are less than for a contributory Member past age 65).
 - ▶ As a continuing Member of the pension plan the RRSP room is significantly reduced.

(This slide was added later)

NOTE: A non-participant in the Plan is not the same as a non-contributory Member.

- ▶ Non-participants stop their membership in the plan altogether (this can only be done at or after age 65).
- ▶ Non-contributory Members still belong to the plan and accrue additional pension benefits, BUT
 - ▶ These increased pensions generally (although not always) are less than revalorized ones (of course they are less than for a contributory Member past age 65).
 - ▶ As a continuing Member of the pension plan the RRSP room is significantly reduced.
 - ▶ Consequently for most individuals there (usually) is no advantage to being a non-contributory Member after age 65.

SUMMARY:

SUMMARY:

- ▶ In general Members with many years of service are better off becoming non-participatory at age 65

SUMMARY:

- ▶ In general Members with many years of service are better off becoming non-participatory at age 65
- ▶ Members with fewer years of service are better off remaining in the Plan as contributory Members

SUMMARY:

- ▶ In general Members with many years of service are better off becoming non-participatory at age 65
- ▶ Members with fewer years of service are better off remaining in the Plan as contributory Members
- ▶ The comparison depends strongly on the interest rate being used and the expected salary increases over the next 6 years.

SUMMARY:

- ▶ In general Members with many years of service are better off becoming non-participatory at age 65
- ▶ Members with fewer years of service are better off remaining in the Plan as contributory Members
- ▶ The comparison depends strongly on the interest rate being used and the expected salary increases over the next 6 years.
- ▶ HR provides information on **exactly** what you will get under the revalorization option. You will have to estimate what you will get if you remain in the Plan based on your highest salary averaged over 36 consecutive months.

EARLY RETIREMENT

EARLY RETIREMENT

- ▶ Pensions for Members who retire between ages 55 and NRD are calculated using the same formula as for those who retire at age 65, based on years of service, with no reduction.

EARLY RETIREMENT

- ▶ Pensions for Members who retire between ages 55 and NRD are calculated using the same formula as for those who retire at age 65, based on years of service, with no reduction.
- ▶ There is a caveat: for members who satisfy NONE of the following conditions there is a reduction of 3% per year:
 - ▶ Age is at least 60
 - ▶ Credited (pensionable) service is at least 30 years
 - ▶ Age plus credited service is at least 80

EARLY RETIREMENT

- ▶ Pensions for Members who retire between ages 55 and NRD are calculated using the same formula as for those who retire at age 65, based on years of service, with no reduction.
- ▶ There is a caveat: for members who satisfy NONE of the following conditions there is a reduction of 3% per year:
 - ▶ Age is at least 60
 - ▶ Credited (pensionable) service is at least 30 years
 - ▶ Age plus credited service is at least 80
- ▶ **Example** Someone who retires at age exactly 55 with exactly 20 years of service is in this category; he or she would have a reduction of 3% per year for 2.5 years, i.e. 7.5%. That is because in 30 months this persons age + service = 80, so one of the conditions would be satisfied. The calculation is based on months.

EARLY RETIREMENT (continued)

EARLY RETIREMENT (continued)

- ▶ In addition to the permanent pension there is a “bridge” pension paid until age 65.

EARLY RETIREMENT (continued)

- ▶ In addition to the permanent pension there is a “bridge” pension paid until age 65.
- ▶ The bridge is intended to replace the QPP which normally begins at age 65.

EARLY RETIREMENT (continued)

- ▶ In addition to the permanent pension there is a “bridge” pension paid until age 65.
- ▶ The bridge is intended to replace the QPP which normally begins at age 65.
- ▶ The bridge amount is obtained by **not** subtracting the 0.5% (up to the AYMPE max.) from the 2% in the formula - i.e.

$$C36 \times \text{Years} \times (0.02)$$

instead of

$$C36 \times \text{Years} \times (0.02) - \text{AYMPE} \times \text{Years} \times (0.005)$$

with a similar adjustment for non-contrib. years.

INDEXATION:

The terms of the Pension Plan provide for two kinds of indexation of pensions:

INDEXATION:

The terms of the Pension Plan provide for two kinds of indexation of pensions:

- ▶ Pensions are indexed each year by the Consumer Price Index (CPI) -2% .
 - ▶ maximum indexation = (5 - year average rate of return of pension fund) -5%

INDEXATION:

The terms of the Pension Plan provide for two kinds of indexation of pensions:

- ▶ Pensions are indexed each year by the Consumer Price Index (CPI) -2% .
 - ▶ maximum indexation = (5 - year average rate of return of pension fund) -5%
 - ▶ if this number is less than $\text{CPI} - 2\%$ (or negative) the shortfall is tracked and topped up in later years if and when the fund has a higher (5-year average) rate of return.

INDEXATION:

The terms of the Pension Plan provide for two kinds of indexation of pensions:

- ▶ Pensions are indexed each year by the Consumer Price Index (CPI) -2% .
 - ▶ maximum indexation = (5 - year average rate of return of pension fund) -5%
 - ▶ if this number is less than $\text{CPI} - 2\%$ (or negative) the shortfall is tracked and topped up in later years if and when the fund has a higher (5-year average) rate of return.
- ▶ In addition to the above there is “excess interest indexation” based on the 2 - year average rate of return of pension fund $-5\% - \text{CPI}$, up to a maximum of 2% .

INDEXATION:

The terms of the Pension Plan provide for two kinds of indexation of pensions:

- ▶ Pensions are indexed each year by the Consumer Price Index (CPI) -2% .
 - ▶ maximum indexation = (5 - year average rate of return of pension fund) -5%
 - ▶ if this number is less than $\text{CPI} - 2\%$ (or negative) the shortfall is tracked and topped up in later years if and when the fund has a higher (5-year average) rate of return.
- ▶ In addition to the above there is “excess interest indexation” based on the 2 - year average rate of return of pension fund $-5\% - \text{CPI}$, up to a maximum of 2% .
 - ▶ The excess or negative for the year are adjusted for cumulative unused credits and negatives from prior years.

APPROXIMATE JOINT/LAST SURVIVOR REDUCTIONS

Conversion of a lifetime pension with a 10-year guarantee to a 60% Joint & Survivor pension

	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69
50	91%	90%	89%	88%	88%	87%	86%	85%	85%	84%	83%	82%	81%	80%	80%
51	91%	90%	90%	89%	88%	87%	87%	86%	85%	84%	83%	83%	82%	81%	80%
52	91%	90%	90%	89%	89%	88%	88%	87%	86%	85%	84%	83%	82%	81%	81%
53	92%	91%	91%	90%	89%	88%	88%	87%	86%	85%	84%	83%	83%	82%	81%
54	92%	91%	91%	90%	90%	89%	88%	87%	86%	86%	85%	84%	83%	83%	82%
55	92%	92%	91%	91%	90%	89%	89%	88%	87%	86%	85%	84%	84%	83%	82%
56	93%	92%	92%	91%	91%	90%	89%	88%	87%	87%	86%	85%	84%	84%	83%
57	93%	92%	92%	91%	91%	90%	90%	89%	88%	88%	87%	86%	85%	84%	84%
58	94%	93%	93%	92%	92%	91%	90%	89%	88%	88%	87%	86%	86%	85%	84%
59	94%	93%	93%	92%	92%	91%	91%	90%	89%	89%	88%	87%	86%	86%	85%
60	94%	94%	93%	93%	93%	92%	91%	90%	89%	89%	88%	87%	87%	86%	86%
61	95%	94%	94%	93%	93%	92%	92%	91%	90%	90%	89%	88%	88%	87%	86%
62	95%	95%	94%	94%	94%	93%	92%	91%	91%	90%	90%	89%	88%	88%	87%
63	95%	95%	94%	94%	94%	93%	93%	92%	91%	91%	90%	90%	89%	89%	88%
64	96%	96%	95%	95%	95%	94%	94%	93%	92%	92%	91%	90%	90%	89%	89%
65	96%	96%	95%	95%	95%	94%	94%	93%	93%	92%	92%	91%	91%	90%	90%
66	97%	97%	96%	96%	96%	95%	95%	94%	93%	93%	92%	92%	91%	91%	91%
67	97%	97%	96%	96%	96%	95%	95%	94%	94%	93%	93%	93%	93%	92%	91%
68	97%	97%	96%	96%	96%	96%	96%	95%	95%	94%	94%	93%	93%	93%	92%
69	98%	98%	97%	97%	97%	96%	96%	96%	96%	95%	95%	94%	94%	94%	93%
70	98%	98%	97%	97%	97%	97%	97%	96%	96%	95%	95%	95%	95%	94%	94%