Today's Objectives

- To discuss pension plans and group RRSPs
- To discuss advantages and disadvantages of registered pension plans
- To discuss types of registered pension plans

Recall:

- The (*traditional*) **Three Pillars of Old Age Financial Security** (aka the three-legged stool)

Pillar I – Government Plans

Pillar II – Group or Employer (E'er) Plans

Pillar III – Individual Savings Plans

Group or Employer Plans

- The two types of employer plans we will look at are:
  1. **Pension Plans (PPs)**
     - Pension plans are an employer benefit designed to help employees financially prepare for retirement
     - There are different types of PPs
     - Most PPs are **Registered Pension Plans (RPPs)** and that **will be our focus** (DB, DC, hybrids)
     - There are however non-registered plans and supplementary arrangements e.g. Supplemental Employer Retirement Plan (SERP)
  2. **Group Registered Retirement Savings Plans (RRSP's)**
     - These are also intended to help employees financially prepare for retirement and have increased in popularity

1. <u>Registered Pension Plans (RPPs)</u>

Overview

- **RPPs are formally structured regulated plans**
  - Have to apply to Canada Revenue Agency (CRA) to register plan, under the ITA as well as provincial pension standards legislation
    - Income Tax Act (ITA): deductibility of contributions, tax sheltering
    - Respective provincial standards legislation (protects plan members)
  - There are funding requirements (i.e., not pay-as-you-go)

- Employers (E'ers) are not required to offer RPPs for their employees (E'ees) and many do not

Module 2 – Old Age
→ Group or Employer Plans (Ch 1, 3, 9 and 14 of *Morneau Shepell Handbook*)

1. <u>Registered Pension Plans (RPPs)</u>

Overview

- Stats Canada numbers from 2014 show that
  - There are a total of 17,757 employer sponsored RPPs in Canada that cover 6.2 million employees (3.2 million public sector, 3.0 million private), and these plans have $1.6 trillion in assets
  - But **just under 40% of those working in Canada are members of an RPP**

- There is quite a difference between public and private sector both in terms of % of employees that are part of a RPP and also in RPP type

1. <u>Registered Pension Plans (RPPs)</u>

Overview

	Pension Coverage as % of # of e'ees	**Total MV Assets ($ trillions)**	**Annual Contributions ($ billions)**	**Annual Benefits ($ billions)**
Public Sector	86%	$1.1	$37.5	$36.5
Private Sector	24%	$0.5	$18.5	$24.6
Total	**38%**	**$1.6**	**$55.0**	**$61.1**
Public Sector Share	n/a	70%	68%	60%

Module 2 – Old Age
→ Group or Employer Plans (Ch 1, 3, 9 and 14 of *Morneau Shepell Handbook*)

1. Registered Pension Plans (RPPs)

Overview

- **Most (95%+) public sector employees with RPPs are members of Defined Benefit (DB) plans** that provide inflation (CPI) protection + other rich benefits, and tend to be contributory plans
- **Less than 50% of private sector employees with RPPs are members of Defined Benefit (DB) plans**
- Virtually no new Defined Benefit plans have been introduced in more than 10 years and several existing DB plans have been transitioned and/or replaced with another plan (or benefit, e.g. group RRSP)

1. Registered Pension Plans (RPPs)

Pension Plan Arguments

i. Government

Arguments for

- social utility
- reduce government pressure to increase income security benefits
- cash invested in the economy

Not strongly argued against, but

- tax relief granted does lead to loss of government tax revenue (timing issue only – pension payments when received are fully taxed)

1. <u>Registered Pension Plans (RPPs)</u>

Pension Plan Arguments

ii. Employers

Arguments for

- expensing of pension costs ('cost and order')
- contributions are a tax deductible expense
- help attract (recruit) and retain employees
- contributory plans (reduce employer costs)
- retiring employees - ongoing and/or restructuring
- incentive (e.g. contribution tied to company's profits)

1. Registered Pension Plans (RPPs)

Pension Plan Arguments

ii. Employers

Arguments against

- could reinvest in own business ("higher return")
- admin. costs & complexities
- view of employer subsidizing government
- employee should assume responsibility for retirement - e.g. can provide higher salaries without the RPP (compensate more and offload risk to employees)
- other alternatives can be offered by employer (group RRSPs being one example)

1. Registered Pension Plans (RPPs)

Pension Plan Arguments

iii. Employees

Arguments for

- e’ees view RPP as essential leg of the 3-legged stool (or pillar)
- pension (Retirement Income) security
- tax sheltered savings
- convenience, discipline

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

- There are 3 types:
  - A. Defined Contribution (DC) Plans
  - B. Defined Benefit (DB) Plans
  - C. Combination of DB and DC Plans

A. Defined Contribution (DC) Plans
   - **37% of RPPs, 17% or RPP plan members are in DC plans**
   - The plan can be considered 'contributory' or 'noncontributory' (same thinking applies to DB plans) - if it is only the employer that is making the contributions, it is a noncontributory plan, otherwise it is a contributory plan

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

A. Defined Contribution (DC) Plans
   - The amount of contributions to be made by the employer (e'er) is clearly defined and if it is a contributory plan, the employee (e'ee) contributions are also clearly defined
   - The contributions are invested and there typically are several investment options to choose from (employee chooses)
   - The contributions accumulate and the pension amount (or retirement income) is what accumulated contributions will buy
   - The pension income is therefore not known and not guaranteed – it will depend on investment returns, how many years of contributions are made, and when you retire

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

A. Defined Contribution (DC) Plans
   - **With DC plans, it is the employee who assumes 100% of the investment risk**

   - There are two types of DC plans:
     i. **Money Purchase** – employer and employee contributions are a fixed % of earnings or a fixed amount
     ii. **Profit Sharing** - employer contributions linked to company profits subject to a minimum 1% of earnings

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans
   - Plan member (employee or e'ee) is promised a "defined" amount of annual pension (retirement income payment)
   - RPP defines the formula for determining the pension amount
   - **With DB plans, employer bears 100% of the investment risk**
   - Plans can be contributory or non-contributory, but if it is a contributory plan, employee contributions are clearly defined
   - The cost of the plan to the employer is the total amount of money required to provide the given level of benefits for all plan members
     - If plan is contributory, employee contributions can be offset against the costs

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

- Plan costs are reviewed annually
  - Costs are determined using a given funding method (Actuary required to do this valuation)

- Types of DB plans:
  i. Flat Benefit
  ii. Career Average Earnings
  iii. Final Average Earnings
  iv. Flexible plans

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

   i. Flat Benefit - represent about 15% of all DB plans
      - These plans are popular with unions
      - **The retirement pension for this type of plan is a specified number of dollars for each year (or month) of service**
         – There is no earnings recognition in benefit calculation
      - Benefits often "integrated" with CPP/QPP by providing bridge benefits from retirement to age 65
         – Bridge benefits provide an approximately level retirement income to the individual without a sudden increase when government pensions commence

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

   i. Flat Benefit

      - <u>Advantage</u> historically with this plan type was that it was simple to administer, easy for employees to understand
      - <u>Disadvantage</u>: flat amount per year of service based on wage levels at time level is established, but pension will be paid in future when wages/prices have ↑ (lack of inflation protection)
      - Most flat benefit plans now subject to periodic upgrades to reflect inflation and have become more complex to administer

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

   ii. Career Average Earnings Plans - about 35% of all DB plans

   - **Annual pension benefit is calculated as a certain percentage of earnings in each year of plan membership (equal weight is given to each year's earnings (years of service is considered)**
   - Benefits usually "integrated" with CPP/QPP (and contributions if contributory plan)
     - Lower benefit and contribution rates on earnings up to CPP earnings ceiling and higher rates above ceiling

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

ii. Career Average Earnings Plans

- Advantages:
  - Easy to administer and understand
  - More manageable employer costs
- Disadvantages:
  - Gives equal weight to employment earnings in each year of an e'ee's working lifetime, which is not good for e'ees that have made significant advancements over their career (lower pension relative to income at retirement in these cases)
  - Equal weight to each year's salary an issue if inflation is high
  - Above concerns sometimes addressed by updating the "plans earning base", which will be illustrated in Example 1b)

Today's Objectives

- To discuss types of defined benefit pension plans

- To discuss types of combination pension plans

Recall that:

- There are 3 types of registered pension plans (RPPs):
  A. Defined Contribution (DC) Plans
  B. Defined Benefit (DB) Plans
  C. Combination of DB and DC Plans

B. Defined Benefit (DB) Plans

- There are 4 types of DB plans:
  i. Flat Benefit
  ii. Career Average Earnings
  iii. Final Average Earnings
  iv. Flexible plans

Also recall that:

B. Defined Benefit (DB) Plans

i. Flat Benefit - represent about 15% of all DB plans

- **The retirement pension for this type of plan is a specified number of dollars for each year (or month) of service**

ii. Career Average Earnings Plans - about 35% of all DB plans

- **Annual pension benefit is calculated as a certain percentage of earnings in each year of plan membership (equal weight is given to each year's earnings (years of service is considered)**
- Updating the "plan's earning base" addresses inflation and lower earnings years

Example 1 – Career Average Earnings Plan

- An employee is looking to retire in two months (March 2020) when he turns aged 65. He has been a member of the company's defined benefit plan since he was age 30. The DB plan is a "1.5% career average" plan. You are given the employee's salary history:

Age	# Years	Salary
30 to 39	10	\$40,000
40 to 49	10	\$65,000
50 to 54	5	\$95,000
55 to 64	10	\$100,000

a) Calculate the annual pension that this individual will receive.

b) Now, suppose all earnings prior to 2020 are deemed to be equivalent to earnings in 2019 for benefit purposes. What then would be the annual pension that this individual would receive? (This would be an example of a "plan earnings base" update.)

Example 1 – Career Average Earnings Plan

a) Annual pension received by employee

Age	# Years	Salary	Benefit
30 to 39	10	\$40,000	$1.5\% \times 10 \times 40{,}000 = 6{,}000$
40 to 49	10	\$65,000	$1.5\% \times 10 \times 65{,}000 = 9{,}750$
50 to 54	5	\$95,000	$1.5\% \times 5 \times 95{,}000 = 7{,}125$
55 to 64	10	\$100,000	$1.5\% \times 10 \times 100{,}000 = 15{,}000$
			$Total\ Annual\ Benefit = 37{,}875$

b) Annual pension if earnings adjusted to 2019 level

$$Annual\ Benefit = 1.5\% \times 35 \times 100{,}000 = \$52{,}500$$

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

iii. Final Average Earnings Plans - about 49% of all DB plans

- Most popular salary based DB plan category, especially with public plans
- **Annual pension is based on their average earnings for a stated number of years before retirement AND years of service (YOS)**
- Examples include but are not restricted to:
  - 1.5% of average salary in 3 years prior to retirement × YOS
  - 1.5% of average salary of {best 5 of last 8 years prior to retirement} × YOS
  - A few (public) plans offer x% of {average salary of best 5 years} × YOS

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

iii. Final Average Earnings Plans

- Final average earnings DB plans provide best protection against inflation
  - One exception could be employees whose earnings decline as they approach retirement
- Benefits usually "integrated" with CPP/QPP (and contributions if contributory plan) in same manner as career average plans

Example 2 – Final Average Earnings Plan

- An employee turned 65 on January 1st 2020 and retired on that date. He was a member of a Defined Benefit "2% Final Average Earnings" plan where the final average earnings is based on final 5 years of earnings. He has 30 years of service.
- Calculate the annual pension that is being paid out to this employee, given his/her salary history below.

Year	Salary
2019	$80,000
2018	$79,000
2017	$76,000
2016	$73,000
2015	$70,000

Example 2 – Final Average Earnings Plan

- Total salary received over final 5 year period

Year	Salary
2019	$80,000
2018	$79,000
2017	$76,000
2016	$73,000
2015	$70,000
Total	$378,000

- Annual pension benefit

$$Annual\ Benefit = 2\% \times 30 \times (378{,}000/5) = \$45{,}360$$

Example 3 – Defined Benefit Plans

- An employee just retired at age 62 (on his birthday) and is eligible for pension benefits. Here is their salary info (joined plan at exact age 25):

Age	# Years	Salary
25 to 28	4	$35,000
29 to 34	6	$40,000
35 to 39	5	$47,000
40 to 49	10	$54,000
50 to 51	2	$56,000
52 to 53	2	$57,000
54	1	$58,000
55	1	$59,000
56	1	$61,000
57	1	$63,100
58	1	$65,000
59 to 61	3	$52,000

Example 3 – Defined Benefit Plans

- Calculate his annual pension benefit if the pension benefit is:
  a) A flat benefit of $75 per month for the first 15 years of service and $100 per month thereafter.
  b) A 1.5% final average earnings benefit plan (based on the best 5 of last 10 years of service)
  c) A 1.5% career average earnings benefit plan (answer: 27,646.50)

Example 3 – Defined Benefit Plans

a) Annual pension received under flat benefit plan

$$Annual\ Benefit = (15 \times 12 \times 75) + (22 \times 12 \times 100)$$
$$= 13{,}500 + 26{,}400 = \$39{,}900$$

b) Under final average earnings plan, best 5 years are ages 54 to 58

Age	Salary
54	$58,000
55	$59,000
56	$61,000
57	$63,100
58	$65,000
Total	$306,100

$$Annual\ Benefit = 1.5\% \times 37 \times (306{,}100/5) = \$33{,}977.10$$

Example 3 – Defined Benefit Plans

c) Annual pension received under career average earnings plan

Age	# Years	Salary	Benefit
25 to 28	4	$35,000	$1.5\% \times 4 \times 35{,}000 = 2{,}100$
29 to 34	6	$40,000	$1.5\% \times 6 \times 40{,}000 = 3{,}600$
35 to 39	5	$47,000	$1.5\% \times 5 \times 47{,}000 = 3{,}525$
40 to 49	10	$54,000	$1.5\% \times 10 \times 54{,}000 = 8{,}100$
50 to 51	2	$56,000	$1.5\% \times 2 \times 56{,}000 = 1{,}680$
52 to 53	2	$57,000	$1.5\% \times 2 \times 57{,}000 = 1{,}710$
54	1	$58,000	$1.5\% \times 1 \times 58{,}000 = 870$
55	1	$59,000	$1.5\% \times 1 \times 59{,}000 = 885$
56	1	$61,000	$1.5\% \times 1 \times 61{,}000 = 915$
57	1	$63,100	$1.5\% \times 1 \times 63{,}100 = 946.50$
58	1	$65,000	$1.5\% \times 1 \times 65{,}000 = 975$
59 to 61	3	$52,000	$1.5\% \times 3 \times 52{,}000 = 2{,}340$
	37		$\mathit{Total\ Annual\ Benefit} = 27{,}646.50$

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

iv. Flexible Plans - about 1% of all DB plans

- These plans offer a "tax-effective means" of providing enhanced retirement benefits to employees
- With Flexible Plans:
  - **Employer (E'er) pays for the basic pension benefit**
  - **Employee (E'ee) pays for additional ancillary benefits (E'ee has the option to buy supplemental benefits)**

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

iv. Flexible Plans

- Advantages:
  - Additional ancillary benefits can be purchased without increasing the e'ees Pension adjustment (PA) or reducing their RRSP limit
  - Customization (e'ee can choose ancillary benefits or not)
- Disadvantages:
  - More complex for e'er to administer
  - Members (e'ees) require a high level of understanding of the plan and the ancillary benefits offered

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

B. Defined Benefit (DB) Plans

iv. Flexible Plans

- Ancillary Benefit examples:
  1. Indexing of Pension Benefits
  2. Enhanced final earnings-say from 1.5% to 2%
  3. Enhanced early retirement benefits
  4. Enhanced Post Retirement Spousal Benefit

- Flexible Benefit plans can be 'front end' or 'back end':
  – 'front end': plan member chooses ancillary benefits in advance (in exchange for his contributions)
  – 'back end': e'ee makes contributions and they accumulate and ancillary benefits chosen at termination or retirement

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans
   - These include:
     i. Hybrid Plans
     ii. Combination Plans
     iii. Cash Balance Plans
     iv. Multi-Employer Plans
     v. Target Benefit Plans

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans

   i. Hybrid Plans

      - A Hybrid plan has both DB and DC components
      - **Most common hybrid plan type will provide the greater of {a defined benefit pension, the pension that can be purchased with a members DC account balance}**
      - Hybrid plan operates as DC plan but valued (annual actuarial valuation) like a DB plan to ensure funding adequacy
      - **These tend to be contributory plans**

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans

   i. Hybrid Plans

   Example:

   - DB min benefit = 1.5% earnings per yos
   - Also you know calculated minimum annual pension = $50,000 for a retiring e'ee
   - $Y is the member's DC account balance at retirement
     - If $Y is such that it can purchase $40,000 of annual income, plan member gets $50,000 annual income {greater of…}
     - If Y is such that it can purchase $60,000 of annual income, member will get $60,000 annual income {greater of…}

Today's Objectives

- To discuss types of combination pension plans
- To discuss terms and conditions of pension plans

Recall that:

C. Combination of DB and DC Plans

- Combination plans include:
  i. Hybrid Plans
  ii. Combination Plans
  iii. Cash Balance Plans
  iv. Multi-Employer Plans
  v. Target Benefit Plans

i. Hybrid Plans

- **Most common hybrid plan type will provide the greater of {a defined benefit pension, the pension that can be purchased with a members DC account balance}**

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans

   ii. Combination Plans

   - Pension benefit is the sum of pension provided through the DB component and pension provided through DC component

Example:

- DB: 1% of final average earnings (FAE) (non-contributory plan)
- DC: e'ee contributes 3-5% of salary to a DC plan
- At retirement, e'ee gets annual pension benefit = (.01)(FAE)(yos) PLUS they can use the DC account value to purchase additional annual retirement income

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans

Note:

- Hybrid Plans and Combination plans aggregated account for a very small % of RPPs in Canada (less than 2%)
- Reasons for this are that these plans are very complex to administer and difficult to explain to plan members

- Simpler alternative to previous example: DB (as given) + Group RRSP!

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans

   iii. Cash Balance Plans

- **These plans are more popular in the USA then Canada** (some issues with ITA in Canada)
- Here's how they work:
  - E'ees are assigned annual credits based on earnings during year
  - Credits deposited into a 'hypothetical' account for each e'ee
  - They accumulate with interest until retirement/termination
  - The employer (e'er) makes the investment decision and takes the investment risk and is liable for a minimum guaranteed benefit

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans

    iii. Cash Balance Plans

- Advantage:
  - These plans tend to provide a much higher benefit upon termination (e.g. hypothetical account value vs. a DB commuted value of benefits) than regular DB plans, which appeals to some employees

1. Registered Pension Plans (RPPs)

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans

iv. Multi-Employer Plans (MEP)

- Established by union negotiation with two or more non-affiliated employers (e'ers) in a related industry
- Plans specify both the contribution level & level of benefits
- All employers (that are part of MEP) contribute to the plan
- Benefits typically determined using a flat benefit formula
- **Unlike single employer plans, benefits may be reduced if they cannot be supported by current level of contributions and/or employers are unwilling to increase contributions**

1. <u>Registered Pension Plans (RPPs)</u>

Types of Registered Pension Plans (RPPs)

C. Combination of DB and DC Plans

   v. Target Benefit Plans

   - Similar to design of multi-employer plans, but they are established by a single employer
   - Designed to deliver a targeted benefit but administrators can adjust benefits (reduce if funding issues)
   - Provinces at varying stages with these plans (as of 2016 available in 4 provinces)

1. Registered Pension Plans (RPPs)

Terms and Conditions of Pension Plans

- A pension plan is a legal promise and principal provisions relate to:
  1. Eligibility
  2. Pension formula
  3. Credited or pensionable service
  4. Employee contributions
  5. Retirement Age
  6. "Normal" and Optional Pension Forms
  7. Pre-retirement Death Benefits
  8. Termination Benefits
  9. Disability Benefits
  10. Inflation Protection

Module 2 – Old Age

→ Group or Employer Plans (Ch 1, 3, 9 and 14 of *Morneau Shepell Handbook*)

1. <u>Registered Pension Plans (RPPs)</u>

Terms and Conditions of Pension Plans

1. Eligibility
   - When an employer (e'er) offers an RPP, all employees (e'ees) within a similar class (for whom plan was established) must be eligible to join the plan
   - Most provinces require e'ees be eligible within 2 years of employment (maximum) but many require less time and some companies allow membership on employment start date
   - Part-time** e'ees are eligible for plan membership if in same class as full time e'ees (that are covered by a plan)
   - Larger employers may have more than one plan (e.g. separate one for union, salaried, execs)

** Difference between part-time and contract

1. <u>Registered Pension Plans (RPPs)</u>

Terms and Conditions of Pension Plans

2. Pension Formula
   – Defines how pension benefits are credited/accumulated
   – Formula varies by plan type.
     - DC - contributions amounts, investment options
     - DB - flat benefit, career average, final average etc….
   – Defined Benefit pension formula may be integrated with C/QPP benefits {70% of pre-retirement income (pension + gov't plans) was a popular target for long service employees}

3. Credited or Pensionable Service
   – Defines period of service for which e'ee will earn pension benefits (e.g. maternity leave must be included by law)

1. <u>Registered Pension Plans (RPPs)</u>

Terms and Conditions of Pension Plans

4. Employee Contributions
   - In Canada
     - most union plans are non-contributory
     - about half of private sector plans are contributory
     - all public plans are contributory
   - Contributory plans more common in Canada (tax deductibility) versus the United States
   - E'ee contributions (contributory plans) range from 5-7% in private sector plans and higher 7-9% in public sector plans
   - E'ees can make additional optional contributions - more popular with DC plans

1. Registered Pension Plans (RPPs)

Terms and Conditions of Pension Plans

4. Employee Contributions (continued)
   – 50% rule - this is for contributory DB plans (**e'ers must fund at least 50% of the value of a plan member's benefits**) → if not, excess is returned to ee

5. Retirement Age
   – **Normal Retirement Age (NRA)**
     - NRA is the age specified in the RPP contract at which the e'ee has the right to retire on a full unreduced pension
     - For most plans, the NRA age is 65
     - Employees can, and often do, retire before the NRA – **with or without a pension reduction**

1. Registered Pension Plans (RPPs)

Terms and Conditions of Pension Plans

5. Retirement Age (continued)
   - **Early retirement**
     - Legislation allows an unreduced pension to be paid as early as age 60 or when years of service (YOS) is 30 or when age + YOS = 80
     - Otherwise, person retiring before NRA receives a reduced pension
     - Plans ordinarily allow e'ee to retire anytime within 10 years of NRA but with a reduced pension (unreduced pensions not always offered)
   - Reduced pension on early retirement calculated in one of 2 ways:
     i. An actuarial equivalent reduction
     ii. A reduction that is less than the full actuarial adjustment

Example – Retirement Age

- Suppose that at NRA = 65, an individual's monthly RPP benefit is $4000 (or $48,000 annual pension).
- If the reduction factor is 6% for each year of early retirement, what would your RPP benefit be if you retired at:
  a) Age 63.5 years?
  b) Age 61 years?

Example – Retirement Age

a) Age 63.5 years?

$$Annual\ Benefit = 43{,}680 = 48{,}000 \times (1 - 0.06 \times 1.5)$$

b) Age 61 years?

$$Annual\ Benefit = 36{,}480 = 48{,}000 \times (1 - 0.06 \times 1.5)$$

Note: reduction factors can be stated per month less than NRA (e.g. in this case 0.5% for each month less than 65)

1. Registered Pension Plans (RPPs)

Terms and Conditions of Pension Plans

6. "Normal" and Optional Pension Forms
   - **"Normal" form** of pension is defined in every pension plan and this determines what benefits will be received when employee (plan member) dies after retirement
     - E.g. if 'normal form' is guaranteed pension (annuity) payments for 5 years and plan member dies 2 years after retirement, beneficiary would get 3 years of payments
     - **'Normal' form often different for members who have a spouse** → joint & survivor (J&S) with reduced benefit (to 60%) on members death would be an example of a normal form for those with spouses/partners

1. Registered Pension Plans (RPPs)

Terms and Conditions of Pension Plans

6. "Normal" and Optional Pension Forms (continued)
   - an "**Optional Form**" of pension can be elected before pension payments start and payment amount for the 'optional' form would be determined on an actuarial equivalent basis
     - E.g.: may choose a pension with a longer guarantee period, or a J&S with no reduction (where normal is 60% on death of member)

7. Pre-retirement Death Benefits
   - Legislation now requires these benefits
   - Pre-retirement benefits must be clearly defined in the plan document