

Today's Objectives

- To discuss the Canada Pension Plan (CPP), in particular:
 - Calculation of contributions
 - Eligibility for benefits
 - Determination of benefit amounts

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Recall that:

- CPP Benefits include:
 - Retirement Benefits
 - Disability Benefits
 - Survivors Benefits-dependent pension, Death Benefit
- CPP Contributions are paid on earnings between the:
 - YBE – Year's Basic Exemption and
 - YMPE – Year's Maximum Pensionable Earnings
- 2020 employee and employer contributions are:

$$Total = \frac{10.5\%}{2} \times \min[(YMPE - YBE), (actual\ income - YBE)]$$

- If self-employed, contributions are at full 10.5%

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example – CPP contribution calculation

- Given that the 2020 YMPE is 58,700 and the 2020 YBE is \$3,500, what is the total amount contributed to the CPP in 2020 if:
 - a) Your income for 2020 is \$55,000. $55,000 - 3,500$
 - b) Your income for 2020 is \$64,700. $58,700 - 3,500$
 - c) How would your answer change for (a) and (b) if you are self-employed?

$\times 2$

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example – CPP contribution calculation

a) 2020 income is \$55,000

$$\begin{aligned} Total &= \frac{10.5\%}{2} \times \min[(58,700 - 3,500), (55,000 - 3,500)] \\ &= \frac{10.5\%}{2} \times \min[55,200, 51,500] = \frac{10.5\%}{2} \times 51,500 \\ &= 2,703.75 \end{aligned}$$

b) 2020 income is \$64,700

$$\begin{aligned} Total &= \frac{10.5\%}{2} \times \min[(58,700 - 3,500), (64,700 - 3,500)] \\ &= \frac{10.5\%}{2} \times \min[55,200, 61,200] = \frac{10.5\%}{2} \times 55,200 = 2,898 \end{aligned}$$

c) Contributions would be twice as much if self-employed

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Contributions

Year	Year's Maximum Pensionable Earnings (YMPE)	Year's Basic Exemption amount (YBE)	Maximum contributory earnings	Employee and employer contribution rate (%)	Maximum annual employee and employer contribution	Maximum annual self- employed contribution
2020	\$58,700	\$3,500	\$55,200	5.25	\$2,898.00	\$5,796.00
2019	\$57,400	\$3,500	\$53,900	5.1	\$2,748.90	\$5,497.80
2018	\$55,900	\$3,500	\$52,400	4.95	\$2,593.80	\$5,187.60
2017	\$55,300	\$3,500	\$51,800	4.95	\$2,564.10	\$5,128.20
2016	\$54,900	\$3,500	\$51,400	4.95	\$2,544.30	\$5,088.60
2015	\$53,600	\$3,500	\$50,100	4.95	\$2,479.95	\$4,959.90
2014	\$52,500	\$3,500	\$49,000	4.95	\$2,425.50	\$4,851.00

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Eligibility (Qualification) Criteria (by benefit)

CPP Retirement Pension Benefit (RPB)

- One must apply to receive the CPP RPB
- The ‘normal’ retirement age is 65 but can start receiving CPP RPB pension anywhere from age 60-70
 - There is no longer any requirement to retire to get the CPP and no longer limits on what you are earning if receiving CPP (prior to 2012 there was)

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Eligibility (Qualification) Criteria (by benefit)

CPP Retirement Pension Benefit (RPB)

- CPP RPB are adjusted upwards/downward if you retire after age 65/before age 65 (adjustment changes recently phased in)
 - If start to receive **payments after age 65** (postponed retirement, PR)
 - benefit is now **increased by 0.70% per month** older than age 65
 - If start to receive **payments prior to age 65** (early retirement, ER)
 - benefit is now **reduced by 0.60% per month** younger than age 65
 - QPP differs a bit (ER factors for those with less than max benefit)

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Eligibility (Qualification) Criteria (by benefit)

CPP Retirement Pension Benefit (RPB)

- A **post retirement CPP benefit (CPP PRB) adjustment** was recently introduced
 - Can earn a PRB for each year CPP contributions made (while being paid CPP pension), same age adjustments as above
 - The post retirement benefit is **2.5% (or 1/40) of max CPP payable, adjusted for a person's age and actual earnings**

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example – CPP benefit calculation

- Given that the 2020 CPP maximum monthly benefit = \$1,175.83
 - a) If someone starts receiving CPP benefits in 2020 at age 67 years, 7 months old, what is the maximum monthly CPP benefit that they would be entitled to?
 - b) If someone starts receiving CPP benefits in 2020 at age 61 years, 4 months old, what is the maximum monthly CPP benefit that they would be entitled to?
 - c) Suppose someone was age 65 on Jan 1, 2019 and started drawing the CPP in 2019 but was still working. What is the maximum CPP Post Retirement monthly benefit he/she would be paid in 2020?

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example – CPP benefit calculation

a) Starts CPP in 2020 at age 67 years, 7 months old

Starts CPP 2 years, 7 months (31 months) after age 65

$$\text{Increase} = 0.7\% \times 31 = 21.7\%$$

$$\text{Benefit} = 1,175.83 \times 1.217 = \$1,430.99$$

b) Starts CPP in 2020 at age 61 years, 4 months old

Starts CPP 3 years, 8 months (44 months) before age 65

$$\text{Decrease} = 0.6\% \times 44 = 26.4\%$$

$$\text{Benefit} = 1,175.83 \times 0.736 = \$865.41$$

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example – CPP benefit calculation

- c) Starts CPP in 2019 at age 65 years, but works another year
Receives regular CPP benefit in 2020 plus post-retirement benefit

$$\text{Increase} = 0.7\% \times 12 = 8.4\%$$

$$\text{PRB} = 1,175.83 \times 1.084 \times 2.5\% = \$31.86$$

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Eligibility (Qualification) Criteria (by benefit)

Disability Benefit

- Under CPP **disability is defined to be “unable to engage in any substantial gainful employment”**
- CPP rules were tightened up considerably in 1998
 - Effective in 1998, to be eligible you **must have made CPP contributions in 4 of the last 6 years** to receive any sort of disability benefit
 - This was **changed to 3 of the last 6 years** in 2007
- Disability payments begin in the 4th month following month of disability and are payable as long as the individual is disabled OR until age 65 (individual would then start getting CPP RPB)
- There are some differences with QPP eligibility (e.g. QPP disability definition less strict (more generous) if age 60-64)

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Eligibility (Qualification) Criteria (by benefit)

Survivor Benefit

- Survivor Benefits include pension(s) payable to an eligible spouse and to dependent children and a small Lump Sum Death Benefit (\$2,500 maximum)
- Eligibility criteria:
 - If contributions were made to CPP for not less than 1/3rd of the total number of calendar years within the contributory period (but not less than 3 years) OR for at least 10 years

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Benefits

Year	Maximum Monthly Retirement Benefit	Maximum Monthly Post-Ret Benefit	Maximum Monthly Disability Benefit	Maximum Monthly Survivor Benefit (Spouse)	Maximum Monthly Survivor Benefit (Children)	Maximum Lump Sum Death Benefit
2020	\$1,175.83	\$29.40	\$1,387.66	\$638.28	\$255.03	\$2,500
2019	\$1,154.58	\$28.86	\$1,362.30	\$626.63	\$250.27	\$2,500
2018	\$1,134.17	\$28.35	\$1,335.83	\$614.62	\$244.64	\$2,500
2017	\$1,114.17	\$27.85	\$1,313.66	\$604.32	\$241.02	\$2,500
2016	\$1,092.50	\$27.31	\$1,290.81	\$593.62	\$237.69	\$2,500
2015	\$1,065.00	\$26.63	\$1,264.59	\$581.13	\$234.87	\$2,500
2014	\$1,038.33	\$25.96	\$1,236.35	\$567.91	\$230.72	\$2,500

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Retirement Pension Benefit (RPB) Payments

Annual RPB = $0.25 \times \text{"average adjusted pensionable earnings"}$ OR

Annual RPB = $0.25 \times \text{Avg 5 year YMPE}_{\text{when applying}} \times \text{AER}$ and $\text{AER} \leq 1$

- The RPB benefit paid is **based on contributor's earnings history (up to YMPE)** from age 18 to when they apply
- To compensate for periods of unemployment, low earnings, and sickness/disability, **certain periods of a person's working lifetime can be "dropped" or "ignored"** in computing average earnings

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Retirement Pension Benefit (RPB) Payments

- The 'dropout provisions' include:
 - Any month where you were eligible for a CPP disability pension
 - Periods when you stopped working to look after kids < 7 yrs old
 - Up to 17% of lowest earning years (used to be 15%), provided there's at least 120 months left (between age 18 and retirement)
 - Periods after age 65 while contributing to CPP
 - However, a contributor may substitute a month of earnings after age 65 to maximize earnings

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Retirement Pension Benefit (RPB) Payments

1. Every year of your earnings from age 18 to the date of claim are considered
 - The allowable “drop out” earning years are removed
2. Calculate **YMPE 5 year Average** (current yr + previous 4 years)
3. Calculate the **adjusted pensionable earnings (APE)** for each year (or month) using

$$APE = \left(\frac{\min(Earnings_{given\ yr}, YMPE_{given\ yr})}{YMPE_{given\ yr}} \right) \times YMPE_{5\ yr\ avg}$$
$$= ER_{given\ yr} \times YMPE_{5\ yr\ avg}$$

Note: $APE = YMPE_{5\ yr\ avg}$ if $Earnings_{given\ yr} \geq YMPE_{given\ yr}$

Benefit : pensionable earnings.
↕
earnings.

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Retirement Pension Benefit (RPB) Payments

4. Total the yearly adjusted pensionable earnings (excludes drop out years) and divide this by the number of years in the non-drop out period
 - This gives you the average adjusted pensionable earnings
 5. Annual RPB equals 25% of your average adjusted pensionable earnings
 - Divide this by 12 to get monthly CPP RPB payment
- Note: If you earn more than the YMPE in every year you worked and you worked every year in the “non-drop out period” then you are eligible for maximum monthly RPB

Today's Objectives

- To discuss the Canada Pension Plan (CPP), in particular:
 - Determination of benefit amounts
 - General provisions

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Recall that:

- CPP Benefits include:
 - Retirement Benefits
 - Disability Benefits
 - Survivors Benefits-dependent pension, Death Benefit

- CPP Contributions are paid on earnings between the:

- YBE – Year's Basic Exemption and

- YMPE – Year's Maximum Pensionable Earnings

- 2020 employee and employer contributions are:

$$Total = \frac{10.5\%}{2} \times \min[(YMPE - YBE), (actual\ income - YBE)]$$

- If self-employed, contributions are at full 10.5%

employer + employee = 10.5%
 $\frac{1}{2}$ $\frac{1}{2}$

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Contributions

Year	Year's Maximum Pensionable Earnings (YMPE)	Year's Basic Exemption amount (YBE)	Maximum contributory earnings	Employee and employer contribution rate (%)	Maximum annual employee and employer contribution	Maximum annual self- employed contribution
2020	\$58,700	\$3,500	\$55,200	5.25	\$2,898.00	\$5,796.00
2019	\$57,400	\$3,500	\$53,900	5.1	\$2,748.90	\$5,497.80
2018	\$55,900	\$3,500	\$52,400	4.95	\$2,593.80	\$5,187.60
2017	\$55,300	\$3,500	\$51,800	4.95	\$2,564.10	\$5,128.20
2016	\$54,900	\$3,500	\$51,400	4.95	\$2,544.30	\$5,088.60
2015	\$53,600	\$3,500	\$50,100	4.95	\$2,479.95	\$4,959.90
2014	\$52,500	\$3,500	\$49,000	4.95	\$2,425.50	\$4,851.00

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Benefits

Year	Maximum Monthly Retirement Benefit	Maximum Monthly Post-Ret Benefit	Maximum Monthly Disability Benefit	Maximum Monthly Survivor Benefit (Spouse)	Maximum Monthly Survivor Benefit (Children)	Maximum Lump Sum Death Benefit
2020	\$1,175.83	\$29.40	\$1,387.66	\$638.28	\$255.03	\$2,500
2019	\$1,154.58	\$28.86	\$1,362.30	\$626.63	\$250.27	\$2,500
2018	\$1,134.17	\$28.35	\$1,335.83	\$614.62	\$244.64	\$2,500
2017	\$1,114.17	\$27.85	\$1,313.66	\$604.32	\$241.02	\$2,500
2016	\$1,092.50	\$27.31	\$1,290.81	\$593.62	\$237.69	\$2,500
2015	\$1,065.00	\$26.63	\$1,264.59	\$581.13	\$234.87	\$2,500
2014	\$1,038.33	\$25.96	\$1,236.35	\$567.91	\$230.72	\$2,500

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Also recall that:

Determination of CPP Payments

CPP Retirement Pension Benefit (RPB) Payments

APE

Annual RPB = $0.25 \times$ "average adjusted pensionable earnings" OR

Annual RPB = $0.25 \times \text{Avg 5 year YMPE}_{\text{when applying}} \times \text{AER}$ and $\text{AER} \leq 1$

- The RPB benefit paid is **based on contributor's earnings history (up to YMPE)** from age 18 to when they apply
- To compensate for periods of unemployment, low earnings, and sickness/disability, **certain periods of a person's working lifetime can be "dropped" or "ignored"** in computing average earnings

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example 1 – CPP RPB calculation

- Calculate the monthly CPP Retirement Pension benefit for someone age 65 who applied for the CPP this month (January 2020) that earned in excess of the YMPE every year for 40 years.
- You are given that the 2020 YMPE is \$58,700. Other values needed are provided below.

Year	Year's Maximum Pensionable Earnings (YMPE)
2020	\$58,700
2019	\$57,400
2018	\$55,900
2017	\$55,300
2016	\$54,900

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example 1 – CPP RPB calculation

- 5 year average ^{less maximum Pensionable Earnings.} YMPE (at retirement) is:

$$\frac{58,700 + 57,400 + 55,900 + 55,300 + 54,900}{5} = \$56,440$$

- ‘Drop out provision’ considerations for this person:
 - He can drop $0.17 \times (65-18) = 7.99$ or ≈ 8 years (yrs)
 - Out of total 47 potential yrs of work (65-18), has to include 47-8=39 yrs (worked 40)

Average ER.

- “AER”=1 → he gets maximum benefit of \$1,175.83
 - Each year (and for 40 years) he made > YMPE so his AER=1

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example 2 – CPP RPB calculation

- Sam started working in Canada in 2000. He retired at age 65 in Dec. 2019. Calculate his monthly CPP Retirement Pension Benefit given:

Year	Actual Salary	YMPE	Minimum (YMPE, Salary)	Adjusted Pensionable Earnings (APE) ($ER_{yr t} * YMPE_{5 yr avg}$)	$ER_{yr t}$
2000	\$25,500	\$37,600	\$25,500	$(\$25,500/\$37,600)*\$55,420 = \$37,585.37$	0.6782
2001	\$28,500	\$38,300	\$28,500	$(\$28,500/\$38,300)*\$55,420 = \$41,239.43$	0.7441
2002	\$31,500	\$39,100	\$31,500	$(\$31,500/\$39,100)*\$55,420 = \$44,647.83$	0.8056
2003	\$34,500	\$39,900	\$34,500	$(\$34,500/\$39,900)*\$55,420 = \$47,919.55$	0.8647
2004	\$36,500	\$40,500	\$36,500	$(\$36,500/\$40,500)*\$55,420 = \$49,946.42$	0.9012
2005	\$38,000	\$41,100	\$38,000	$(\$38,000/\$41,100)*\$55,420 = \$51,239.90$	0.9246
2006	\$39,500	\$42,100	\$39,500	$(\$39,500/\$42,100)*\$55,420 = \$51,997.39$	0.9382
2007	\$43,500	\$43,700	\$43,500	$(\$43,500/\$43,700)*\$55,420 = \$55,166.36$	0.9954
2008	\$44,500	\$44,900	\$44,500	$(\$44,500/\$44,900)*\$55,420 = \$54,926.28$	0.9911
2009	\$45,500	\$46,300	\$45,500	$(\$45,500/\$46,300)*\$55,420 = \$54,462.42$	0.9827
2010	\$47,500	\$47,200	\$47,200	$(\$47,200/\$47,200)*\$55,420 = \$55,420.00$	1.0000
2011	\$50,500	\$48,300	\$48,300	$(\$48,300/\$48,300)*\$55,420 = \$55,420.00$	1.0000
2012	\$51,500	\$50,100	\$50,100	$(\$50,100/\$50,100)*\$55,420 = \$55,420.00$	1.0000
2013	\$54,000	\$51,100	\$51,100	$= \$55,420.00$	1.0000
2014	\$55,500	\$52,500	\$52,500	$= \$55,420.00$	1.0000
2015	\$57,500	\$53,600	\$53,600	$= \$55,420.00$	1.0000
2016	\$60,000	\$54,900	\$54,900	$= \$55,420.00$	1.0000
2017	\$63,000	\$55,300	\$55,300	$= \$55,420.00$	1.0000
2018	\$63,700	\$55,900	\$55,900	$= \$55,420.00$	1.0000
2019	\$64,200	\$57,400	\$57,400	$= \$55,420.00$	1.0000
YMPE _{5 Yr Avg} = \$55,420				Total = \$1,043,330.94	18.8259

min (earnings, YMPE)
earnings < YMPE
earnings > YMPE

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example 2 – CPP RPB calculation

- 5 year average YMPE (at retirement) is:

$$\frac{58,700 + 57,400 + 55,900 + 55,300 + 54,900}{5} = 56,440$$

- As in the previous example, the # of years in 'non-drop out' period is 39, but in this case none of the 20 working years can be dropped
- Average adjusted pensionable earnings (APE) is:
$$\text{Avg APE} = 1,043,330.94 / 39 = \$26,752.08$$

total earning / work years
- Monthly retirement pension benefit (RPB) is:
$$\text{Monthly RPB} = 0.25 \times 26,752.08 / 12 = \$557.33$$

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example 2 – CPP RPB calculation

Alternative Approach:

- Maximum monthly retirement pension benefit (Max RPB) is:

$$\text{Max Monthly RPB} = 0.25 \times 55,420 / 12 = \$1,154.58$$

- Average Earnings Ratio (AER), is average of annual Earnings Ratios (ER's) over 'non-drop out period'

$$\text{AER} = 18.8259 / 39 = 0.482715$$

- Monthly retirement pension benefit (RPB) is:

$$\text{Monthly RPB} = 0.482715 \times \$1,154.58 = \$557.33$$

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Disability Benefit Payments

- Disability benefits are paid out to (a) disabled contributor and (b) eligible dependent children
 - a) Disabled contributor receives a flat rate pension PLUS an earnings related component
 - **Earnings related component equals 75% of disabled pension**
 - This is calculated as if person retired (reached age 65) as of date of disability
 - 2020 earnings related max = \$881.87 = $0.75 \times \text{RPB max } \$1,175.83$
 - Flat rate pension amount is currently \$505.79
 - **Maximum benefit = flat rate amount + .75* CPP RPB max**
 - Then 2020 maximum benefit = $505.79 + 881.87 = \$1,387.66$

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Disability Benefit Payments

- b) Dependent children of a disabled contributor receive monthly payments (while dependent is less than 18 or between 18-25 and in school)
 - **Monthly payment amount is same as what is paid to dependent children of a deceased contributor** (survivor benefit)
 - 2020 amount is \$255.03

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Survivor Benefit Payments

- There is a (a) Lump Sum Death Benefit (b) Dependents Survivor Pension and (c) Spousal/Common Law Survivor Pension
 - a) Lump Sum Death Benefit (LSDB)
 - Payable to spouse or estate (or to person who paid funeral expenses)
 - Effective this year the LSDB is now \$2,500 for all cases (simplified)
 - **Benefit maximum has been capped at \$2,500 since 1998**

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Survivor Benefit Payments

b) Dependent Pension Benefits

- CPP monthly flat rate amount is paid (**2020 amount is \$255.03**) while dependent is less than 18 or between 18-25 and in school
 - QPP dependent pension benefit amount is now the same as CPP (recently changed to make this the case)
- If dependent is an orphan they will get double benefits if both parents contributed to the CPP

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Survivor Benefit Payments

c) Pension to Eligible Spouse/Common Law Partner

- There is a flat rate plus an earnings related component
- Until now, this was most complicated benefit to explain, but some simplification and now simplification (part simplified shaded in blue below and these changes are fully in effect in 2019)
- There are differences between CPP and QPP survivor benefits

CPP Survivor Benefits

<i>Partners (survivor) age</i>	Survivor Pension	2020 Maximum
	60% of deceased's calculated	
65 or more	CPP Retirement Pension	\$705.50 = $0.6 * (1,175.83)$
	Flat rate PLUS	\$197.34 PLUS
Less than 65	0.375*contributors 'CPP RPB'	$0.375 * (1,175.83) = \$638.28$

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Survivor Benefit Payments

c) Pension to Eligible Spouse/Common Law Partner

Combined Benefit Maximums:

- maximum CPP Survivor/Retirement Combined benefit equals maximum CPP Retirement benefit (\$1,175.83 in 2020)
- maximum CPP Survivor/Disability Combined benefit equals maximum CPP Disability Benefit (\$1,387.66 in 2020)

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Determination of CPP Payments

CPP Survivor Benefit Payments

- Additional comments:
 - Benefits must be applied for
 - Can only get a maximum of 12 months of missed benefits
 - Benefit is indexed annually
 - Spousal/partner survivor benefit does not cease on remarriage
 - Benefits stop upon death of survivor

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example – Survivor Benefit

- Jim retired January 1, 2020 at age 61.
 - a) What is his CPP Retirement Pension monthly payment?
Assume he is entitled to the maximum benefit (that applies to him)?
 - b) Now suppose one month later Jim unexpectedly passes away. He has a wife who is 44 years old. Calculate her survivor benefit.

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

Example – Survivor Benefit

a) Starts CPP in 2020 at age 61 years old

Starts CPP 4 years (48 months) before age 65

$$\text{Decrease} = 0.6\% \times 48 = 28.8\%$$

$$\text{Benefit} = 1,175.83 \times 0.712 = \$837.19$$

b) Survivor benefit to spouse age 44 years old

$$\text{Benefit} = 197.34 + 0.375 \times 837.19 = \$511.29$$

3/8 Benefit

Today's Objectives

- To discuss the Canada Pension Plan (CPP), in particular:
 - General provisions
 - Changes/enhancements to program

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

General CPP Provisions

Benefit Indexing

- Before retirement, indexing is based on average wages (YMPE values)
- After retirement indexing is based on CPI
- Benefits are adjusted annually

Income Tax

- CPP benefits are taxable income
- Employer (E'er) contributions are fully tax deductible
- Employees (E'ees) receive a tax credit = E'ee contribution x 15%

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

General CPP Provisions

Credit Splitting and Payment Assignment

- On separation/divorce CPP credits can be split (even if only one partner made contribution)
- Retirement pension payments can be divided between 2 spouses

Reciprocal Agreements

- Set up to help people qualify for benefits in either country
- CPP (federal) has 57 agreements, QPP has 33

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

General CPP Provisions

C/QPP Integration

- OAS GIS example (i.e., reduce GIS payment \$1 for every \$2 of CPP payments)
- Another example is that some Worker's Compensation (WC) programs take C/QPP disability pension into account when determining WC benefit
- Pension Plan Integrations: Defined Benefit (DB) pension plan benefits and contributions to the plan may be integrated either directly or indirectly with C/QPP (will discuss more when we discuss employer pension plans)

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

General CPP Provisions

Funding and Future Contributions

- CPP originally set up to be funded on a “pay-as-you-go” basis
- Reserve funds were set up that equal to 2 to 3 years of benefits
- Funds in excess of what is needed for 3 months worth of benefits were loaned to the provinces (at below market interest rates)
- Over time changes have been made

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

General CPP Provisions

Funding and Future Contributions

- 1998 was a major year of changes for the C/QPP and reasons for this included:
 - Full retirement benefits were available since 1977 (even though CPP only started in January 1965)
 - Aging population due to baby boomers – more retirees, but fewer workers to support them
 - Slower than expected economic growth (mid 80's, early 90's)
 - Higher disability payouts than expected

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Major changes made in 1998 to C/QPP

1. Contribution rate rose sharply to 9.9% by 2003 and were to remain at this “steady state” level (see 2016 Expansion Announcements)
 - Increased reserve fund to amount to provide for 5 yrs of benefits
 - The 9.9% rate ensures that current workers contribute a fairer share towards their pension (lessens burden on next generation of workers)
2. YBE was frozen at \$3500 (resulting in higher contribution base)
3. Reserve fund is invested prudently in a diversified portfolio of securities for higher returns
 - Fund started being managed by new CPP Investment Board (CPPIB)
4. Changes to how retirement benefits are calculated
 - Moved to 5 year YMPE average from a 3 year average
5. Changes to disability benefits eligibility and tighter administration

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

Major changes made in 1998 to C/QPP

- Actuarial valuation and report done every 3 years for each of CPP and QPP
- This includes assessment of contribution rates
 - QPP rates are different and increased starting in 2012
 - CPP rate 9.9% to end of 2018 (Note: changes in 2019 due to 2016 Expansion Announcements)
- For more details on changes, refer to article from In-Class Assignment #1 -The truth about whether CPP will be there for you in retirement

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

June 2016 CPP Expansion Announcements

- This expansion was to some extent triggered by the now defunct Ontario Registered Pension Plan ORPP)
- Expansion of the CPP deemed essential given the shrinking % of the work force covered by corporate pensions (especially Defined Benefit Pension Plans)
- Changes will be phased in, and these changes include:
 - Increase CPP RPB to 33% of average work earnings received after 2019 (versus its current 25% of average work earnings up to YMPE)
 - Substantial increase in maximum earnings to be covered (move from YMPE of 54,900 in 2016 to projected upper limit of \$82,700 by 2025)
 - Increase contribution rates (9.9% to 11.9%) of earnings below YMPE over 5 years (2019 to 2023 to help support expansion, followed by 2 year phase in (2024 to 2025) of benefits based on new upper limit

Module 2 – Old Age

→ Government Pension Programs (Ch 2 of *Morneau Shepell Handbook*)

3) Canada/Quebec Pension Plan (C/QPP)

June 2016 CPP Expansion Announcements

Year	Projected YMPE	Projected earnings limit	Upper earnings limit as share of YMPE	Below YMPE Contrib Rate	Above YMPE Contrib Rate
2018	\$58,000	\$58,000	100%	9.9%	0%
2019	\$59,700	\$59,700	100%	10.2%	0%
2020	\$61,500	\$61,500	100%	10.5%	0%
2021	\$63,500	\$63,500	100%	10.9%	0%
2022	\$65,600	\$65,600	100%	11.4%	0%
2023	\$67,800	\$67,800	100%	11.9%	0%
2024	\$70,100	\$74,900	107%	11.9%	8.00%
2025	\$72,500	\$82,700	114%	11.9%	8.00%

- Note that projected YMPE in table differs from actual YMPE for 2018 to 2020 (as a result projections for 2025 have changed)