The Value of a Pension

Different Plans, Different Rules (Don't rely on the Plan Administrator)

Pat Johnston, FSA, FCIA

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Agenda

- Actuaries
  - Where do they fit in?
- Value of a DB pension
  - Many values being determined
- Dividing the Pension
  - Different Plans – Different Rules
  - Different Circumstances – Different Rules

Agenda

- An Unexpected Risk
  - What happens to the Member's pension after division?
- A Few Examples

Introduction – Pension Strategies Inc.

- Actuarial Consulting Firm (403) 851 5196
  - Founded in 2003
  - Performs actuarial valuations of pension entitlements
  - Provides advice (non legal) regarding pension divisions rules
- Pat Johnston, FSA, FCIA
  - Actuary & Principal
  - Over 35 years of experience in the actuarial field
- Rob Easton, BSc.
  - Senior Actuarial Analyst
  - 15 years of experience in pensions and benefits

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Actuaries

- An actuary is a person, who passes as an expert on the basis of a prolific ability to produce an infinite variety of incomprehensive figures calculated with micrometric precision from the vaguest of assumptions based on debatable evidence from inconclusive data derived by persons of questionable reliability for the sole purpose of confusing an already hopelessly befuddled group of persons who never read the statistics anyway!

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Actuaries

- Real definition:

  Actuaries assess the financial implications of future contingent events

- Only a few actuaries provide services for valuing pension entitlements for purposes of division on marriage breakdown
- What these actuaries will do include:
  - Explain rules applicable to the Plan (based on jurisdiction and circumstances)
  - Determine the value of the pension entitlement under a number of different potential future scenarios
  - Determine the value(s) in accordance with Actuarial Standards of Practice.

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DB v. DC

- Generally there are two different plan types
  - Defined Benefit (DB)
  - Defined Contribution (DC)
- The focus of this presentation is on DB
- If term pension or plan is used, it assumes discussion is about DB, unless specifically stated otherwise

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DB v. DC

Defined Contribution (DC)	Defined Benefit (DB)
Contributions to the Plan are defined, not the pension benefit to be provided to the member.	The pension benefit promised to the member is defined, not the contributions.
At retirement, termination of employment or death, the member gets whatever the account balance is, not some promised entitlement of a future lifetime pension.	At retirement, termination of employment or death, the member is entitled to a defined lifetime pension (or the lump sum present value of the defined benefit).
Common types of DC arrangements include: •RRSP (Group or individual) •DPSP •Registered DC Pension Plan •Supplemental retirement plan •TFSA	Common types of DB arrangements include: •Registered DB Pension Plan •Supplemental retirement plan

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Pension Value

- Looks like they are from the same planet
- Seem to speak the same language and terms
- Completely different rules and interpretations, particularly with respect to “value”

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Family Law v. Pension Administration

- There are **two** important questions in pension division
  - **What is the value of the pension asset for purposes of the Matrimonial Property Act?**
    - This is the value that should be shared between the parties
  - **How much of the assets of the Plan can be used in making the above division?**
    - This is what the pension administrator provides.
    - This is generally not the same as the first value.

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Defined Benefit Pension Plans

- The pension is not an account balance
- Pension is generally a monthly amount, payable starting at some future date (or is already in pay) and payable for the lifetime of the member (and contingent survivor pension to the spouse, if pension is in pay)
  - It is important to consider the contingent survivor pension if the pension is already in pay, though rules may be different depending on jurisdiction of the Plan.

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Value of a Pension

- Step 1: Determine the amount of the monthly pension that has accrued.
- Step 2: Determine the conditions for when such monthly pension will be paid.
- Step 3: Assess the probabilities of such pension being paid (e.g., the member being alive to receive the payment) and reflect the time value of money (i.e., discount or interest rate), to determine the present value.

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Step 1 – Amount of Pension Payment

- Pension often expressed as a percentage of highest average earnings at retirement, per year of credited service. For example:
  - $60,000 in average earnings
  - Credited Service of 30 years
  - Pension formula of 2% of average earnings
- Pension = $60,000 x .02 x 30
  = $36,000 per year

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Step 2 – Conditions for Payment

- What are the rules for paying the pension?
- The pension benefit will always be further defined, including conditions such as:
  - Payable for the lifetime of the member
  - Might have a guaranteed number of payments (such as for 5 years)
  - Might have a % continuing to the spouse
  - Might not commence until a specified retirement age and might be able to commence early (with or without a reduction for early commencement)
  - Might be indexed to some percentage increase in the consumer price index (with such cost of living adjustments (COLA) be guaranteed on only provided at discretion of plan sponsor)

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Step 3 – Determine Present Value

- The following is "actuarial stuff" that you don't need to know how to perform
- The pension benefit will always be further defined, including conditions such as:
  - Payable for the lifetime of the member
  - Might have a guaranteed number of payments (such as for 5 years)
  - Might have a % continuing to the spouse
  - Might not commence until a specified retirement age and might be able to commence early (with or without a reduction for early commencement)
  - Might be indexed to some percentage increase in the consumer price index (with such cost of living adjustments (COLA) be guaranteed on only provided at discretion of plan sponsor)

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Present Value Example 1

- Accrued Pension is $3,000/mo
- Male member just under age 55 and plans on retiring at age 55
- Member has sufficient service that pension won't be reduced for early commencement
- Pension is payable for the member's lifetime
- Pension is indexed after commencement at 60% of increases in CPI

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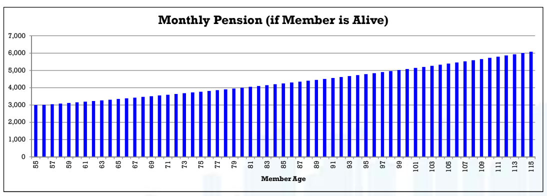
Present Value Example 1

- Project the amount of pension that will be paid at each date in the future if the member is alive at that date



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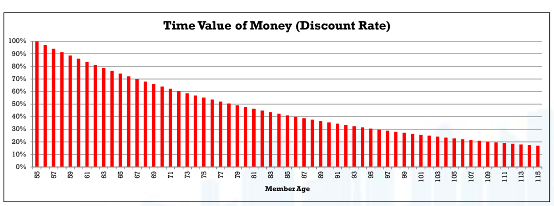
Present Value Example 1

- Reflect the time value of money to each date in the future (e.g. $100 in 2031 is only worth $74.30 in 2016 at 2.00% interest



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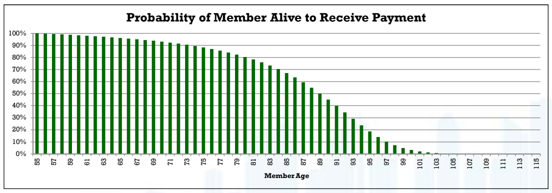
Present Value Example 1

- Determine the probability of the member being alive at each date in the future in order to receive payment



Present Value Example 1

- Put it all together:
  - [Amount of payment if alive at each date in future] x
    [Probability of being alive to receive it] x
    [Discount for time value of money].
- Present value of this example, assuming:
  - interest of 3.00%, COLA of 1.20%
  - Mortality of CPM-B
- Present value of single payment (e.g., say at age 75):
  - $3,770.67 x 88.32% x .5523 = $1,839.34
- Overall Present Value: Add everything up - $858,350

Example 2

- Relevant plan provisions are:
  - Pension is payable for lifetime of the member
  - If member is 55 with 80 points at termination of employment, member can retire without reduction in accrued pension.
  - If member terminates employment prior to age 55, pension is reduced 3% per year below 65.
  - COLA is 60% of increases in CPI. If member terminates prior to age 55, even if member has 80 points, COLA does not start until age 60 (or pension commencement if later).
  - Normal retirement age defined in plan is age 65.

Example 2

- Relevant member details are:
  - Age 54.
  - 30 years of service, so more than 80 points (age + service).
  - Period of joint accrual is 30 years, so entire accrued pension is jointly accrued
  - Current annual earnings: $65,000.
  - Average earnings at current time are $60,000.
  - Accrued pension is $36,000 per annum.

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Actuarial Valuation for Purposes of MPO

- Actuary will determine value of pension as explained earlier, using assumptions in accordance with SOP
  - Mortality rates, inflation, discount rates are all prescribed
  - Will show values for various ages of retirement:
    - result is highly dependent on date member subsequently retires
  - Will show values assuming pensionable earnings are frozen until retirement and assuming that pensionable earnings will continue to increase until retirement
    - Pensionable earnings is a major factor
    - Lots of reasons to include or exclude future salary increases
    - Reflecting future salary is most consistent with McAlister Division

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Actuarial Valuation for Purposes of MPO

- For this example of the 54-year old, we would show the following pre-tax values (based on assumptions applicable for calculations in October 2016):

ACTUARIAL VALUATION RESULTS			
	No Projection of Salary Escalation to Retirement		
Retirement Age:	55	60	65
Pre-Tax Value (joint accrual):	$850,000	$722,000	$548,000
	Projection of Salary Escalation to Retirement		
Retirement Age:	55	60	65
Pre-tax Value (joint accrual):	$850,000	$813,000	$715,000

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Actuarial Valuation for Purposes of MPO

- Not a single number – no knowledge of when the member might ultimately retire.
- The present value of what the member will actually receive for pension related to joint accrual is highly dependent on the date that the member ultimately retires
  - That is why the parties need to agree on (or the court to decide) what is a reasonable retirement date to assume for the member.
- Important: No discussion to this point regarding jurisdiction of the actual pension plan. The value of the pension promise doesn't differ by plan jurisdiction – only by plan provisions.

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Making the Pension Division

- Making the division changes the focus from the Matrimonial Property Act to the relevant Pension Plans Act
  - Now dealing with the rules for the Plan
- Rules are complex, and will depend on:
  - jurisdiction of plan
  - in some cases, age of member
  - type of plan
  - form of intended settlement

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Options for Dividing the Pension:
Using Assets Outside of Plan

- Permitted for any pension jurisdiction
- Leaves pension intact for member
- Spouse receives share of pension value from other assets
- Tax adjustment made if division is made out of already-taxed assets
- Might be only option for some type of plans (such as SERPs, if no separate provision)

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Options for Dividing the Pension:
Using Assets Of the Pension Plan

- Depends on whether it is a provincial plan or federal plan
- Depends on whether it is a public sector plan or private sector plan
- If Alberta plan (private sector or public sector), the options depend on the age of the member (i.e., within 10 years of pensionable age or not)

Division Using Plan Assets:
Alberta Private Sector Pension Plans

- If member more than 10 years away from pensionable age: immediate lump sum division
- If member less than 10 years away from pensionable age: immediate or delayed lump sum division
- No more than ½ of the "total entitlement" attributable to the period of joint accrual can be paid to non-member spouse from plan
- "total entitlement" is commuted value as if member terminated employment at end of joint accrual
- Value of total entitlement is generally determined as at division date.

Division Using Plan Assets:
Alberta Public Sector Pension Plans

- If member more than 10 years away from pensionable age: immediate lump sum division
- If member less than 10 years away from pensionable age: immediate or delayed lump sum division
- No more than ½ of the "total entitlement" attributable to the period of joint accrual can be paid to non-member spouse from plan
- "total entitlement" is value as if member terminated employment at end of joint accrual but didn't start pension until pensionable age
- Value is determined as at division date

Division Using Plan Assets:
Federal Private Sector Pension Plans

- Amount of pension generally determined at end of period of joint accrual
- Commuted value determined as if member terminated employment on division date
- Up to 100% of commuted value related to period of joint accrual can be paid to non-member spouse
- Value is generally determined as at division date

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Division Using Plan Assets:
Federal Public Sector Pension Plans

- Commuted value determined as if member terminated employment on division date
- Commuted value in this case not the same as commuted value as if they terminated employment – it uses some of the funding valuation assumptions such as average retirement age and assumes member is single
- Up to 50% of commuted value can be paid to non-member spouse

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Division Using Plan Assets:
Non Registered Supplemental Pension Plans

- Not subject to pension legislation
- Each plan will have its own rules or administrative practice for how it can be divided.
- Some various options include:
  - Provide ex-spouse with lump sum taxable cash option
  - Only divide pension when it actually commences to be paid, and only then – divide the cheques
  - Not permit any division (rare)

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Options for Dividing Pensions

- Value of pension entitlement is different than assets available from plan to use in division:

	Alberta Private	Alberta Public	Federal Private	Federal Public
Total Value	$614,000	$562,000	$614,000	$612,000
Max Value that can be paid to spouse	$307,000	$281,000	$614,000	$306,000

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Options for Dividing Pensions

- If pension provision was slightly different and it provided 80 point early retirement enhancement to members who terminated prior to age 55:

	Alberta Private	Alberta Public	Federal Private	Federal Public
Total Value	$877,000	$562,000	$877,000	$612,000
Max Value that can be paid to spouse	$438,500	$281,000	$877,000	$306,000

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Options for Dividing Pensions

- Be careful: Don't just divide the value provided by the plan administrator
  - It only indicates the amount of assets that can be made available for settlement; not what the value to be settled is.
  - It can be substantially larger than, or less than, the value the member is expected to receive from the plan.

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Dividing Pensions in Pay
Alberta Private Sector Plans

- Total value of pension entitlement is determined by plan administrator, including any spousal survivor pension.
- "Value" apportioned to spouse is
  50%* x (joint accrual service) / (total service)
  ** or such other percent specified in MPO (not more than 50%)*
- Value for spouse converted back into lifetime pension for spouse, not contingent on member survival
  - No continuing survivor pension to spouse after member dies
- Residual pension for member recalculated – no continuing survivor pension

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Dividing Pensions in Pay
Alberta Public Sector Plans

- Division of the actual monthly pension payments
- Pension paid for same period and amounts as if marriage breakdown had not occurred
- Percentage to be paid to spouse to be specified in MPO:
  - cannot exceed 50% x (joint accrual service)/(total service)
- Percentage can vary between period while both member and spouse alive
  - Permits 100% of pension payment to be paid to either member or spouse after the death of the other – rather than having continuing division with a payment to the estate of the deceased member or spouse.

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Dividing Pensions in Pay
Federal Private Sector Plans

- Pension is divided with pension allocated to spouse payable for spouse's lifetime (not contingent on survival of member)
- Residual lifetime pension determined for member after pension is divided (not contingent on spouse survival)
- Administrators set the rules on how to specify division
  - Rules vary widely by administrator
- Up to 100% of the jointly accrued pension can be divided

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Dividing Pensions in Pay
Federal Public Sector Plans

- Lump sum division to non-member spouse is the only option
  - The lump sum is not the same lump sum as if the member terminated employment (it is less)
- Payment limited to 50% of the portion of the value accrued during the period of marriage

An important, but often ignored, risk

- What happens to the member's pension after the division (particularly for division before retirement)?
  - If you are solely working for the spouse, it generally doesn't matter.
  - If you are working for the member, or have been retained jointly, understanding what happens to the member is crucial!
    - The result of the division could be disastrous for the member.
- In many cases, the plan administrator can't help with the answer because they don't even understand the question!
  - All they will know is that their system, or the actuarial/admin firm they have hired will perform the calculation when the member retires.

Consider Example of 54 year old

- Alberta-registered pension.
- Member had accrued an annual pension at division date of $36,000
- Total entitlement is $877,000.
- Payout to spouse is $438,500 (50%).
- Reasonable to expect (in this example) that since ½ of the value was paid out to spouse that she is deemed to have received ½ of accrued annual pension, and the member's total pension (ignoring the division) would be reduced by $18,000 at retirement.

Alberta Pension Legislation/Regulations

- Does not specify how member's remaining pension is to be determined.
- The Regulation states:
  83(1) Subject to subsection (2), the manner in which the administrator must adjust the member pension partner's share, after the division, for the purposes of section 85 of the Act, is that the adjustment calculation follows generally accepted actuarial principles.
- One major problem with the requirement of the Act:
  - There are no generally accepted actuarial principles!
  - As such it is up to the plan administrator to decide how to do it.

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Common Interpretations

(A) Keep the Plan whole (meaning the Plan is in the identical financial position (no gain or loss) as if the division had not occurred)

(B) Keep the Plan whole based on expected investment returns used in determining the value paid to spouse

(C) Be "fair" to the member (and let the Plan take the loss if being "fair" to the member results in a loss)

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Implications

(A) Keep the Plan whole – Fund rate of return
- Lump sum payment made to spouse is tracked
- Increased over time with fund rate of return
- At member's subsequent retirement, adjustment is made such that pension is reduced by the accumulated value

(B) Keep the Plan whole – expected investment return
- Same as (A) except investment return used in determining lump sum used instead of fund rate of return

(C) Be "fair" to the member
- Value of $18,000 of pension paid to spouse, so member's pension reduced by $18,000

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Implications

- Assume Fund rate of return is 6% per annum
- Discount rate used in determining total entitlement is 3% per annum
- Discount rate used for determining member commuted values at the actual date the member actually retires is 4% per annum

Implications

Subsequent Retirement Age	55	60	65
Jointly Accrued Pension	$36,000	$36,000	$36,000
Adjustment (A)	($20,200)	($28,700)	($43,800)
Remaining Pension (A)	$15,800	$7,300	($7,800)
Adjustment (B)	($19,400)	($22,200)	($27,500)
Remaining Pension (B)	$16,600	$13,800	$8,500
Adjustment (C)	($18,000)	($18,000)	($18,000)
Remaining Pension (C)	$18,000	$18,000	$18,000

Items to watch out for

- Value provided by administrator can be substantially different than an appropriate value
  - In many cases, particularly Alberta private and public plans, value from administrator may materially understate underlying pension value
- Might be financial planning opportunities
  - Some plans provide a "marriage bonus" at retirement that might be worth $100,000+, making it worthwhile to delay division until immediately following retirement

Items to watch out for

- Will be important to understand how administrator will reduce member's pension after a division is paid to the spouse from the plan:
  - There is real potential for the portion of the member's pension related to joint accrual to be reduced by substantially more than 50% after the division.

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Items to watch out for

- Several issues in division of pension in pay
  - Don't forget to value the contingent survivor entitlement payable to the spouse, particularly if value is to be settled outside of plan assets
  - This is particularly important in cases where there was only a short period of joint accrual prior to retirement

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Discuss with Actuary

- Unless you are dealing with a small period of service for a young member, consider speaking with an actuary about the implications:
  - There may be strategies that specifically benefit your client, or even both parties
  - This includes understanding the pension accrual, "bonuses" being provided under the plan if certain milestones are met, etc.

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Discuss with Actuary

- At Pension Strategies Inc – 2016 rates:
  - We will provide a consult for $385
  - If a formal report is prepared, the fee is $775 for a single plan, or $975 for two plans (such as base plan plus supplemental plan)
  - If a consult had been provided, and then a formal report is needed, the consult fee is applied as a credit towards the report
  - If a formal report is prepared – our report is the same whether we are working for the member or spouse (this is part of actuarial standards of practice). As such, we are often engaged jointly by the parties.

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Questions

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