



# Report

For members of the Conference for Advanced Life Underwriting

## IPPs versus RRSPs: The AIW Index Argument

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One of the highest-rated workshops at the CALU 2005 Annual Meeting, *IPPs Revisited*, challenged members to review the subject of Individual Pension Plans (IPPs) in the context of retirement planning. In doing so, it advanced the argument that:

- a) the future indexing of the maximum pension limits are linked to the increases in the Average Industrial Wage (AIW) Index;
- b) the AIW Index is likely to be less than 5.5% in future years; then,
- c) the contribution advantage of IPPs over Registered Retirement Savings Plans (RRSPs) is decreased or eliminated when the AIW index is 2.5% or less per year.

This article rejoins the exchange of views as to the appropriate application of IPPs and argues for a more

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favourable consideration of their place vis-à-vis RRSPs.

### Background Information

To understand this argument requires a basic understanding of RRSPs and IPPs.

Money purchase (MP) pension plans are defined under the Income Tax Act<sup>1</sup> and the Income Tax Regulations. An MP plan defines the contribution to be made by the employer (and perhaps, the member) via a formula. In MP plans, the known factor is the amount of contribution, and the unknown factor is the amount of pension at retirement age that those contributions and their accrued investment earnings will generate.

RRSPs are a type of MP plan. The maximum contribution to an RRSP is 18% of the member's previous year's earned income up to a specific dollar limit. Note that the RRSP dollar limit for the current year equals the previous year's MP dollar limit.

The MP dollar limit is defined in 147.1(1) of the Act.

Defined benefit (DB) pension plans are also defined under the Act and the Regulations. A DB plan defines the

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pension a member is to receive upon retirement via a formula. An actuary is required to calculate and certify the contributions needed to properly fund this pension promise. Therefore, in DB plans, the known factor is the amount of pension at retirement, and the unknown factor is the amount of funding required. The actuary is required to update his or her calculations at least every three years. Note that for any particular calendar year, the maximum pension dollar limit per year of credited service is defined as exactly 1/9 of the MP dollar limit for that year (see Regulation 8500(1)). Also, note that for private-employed Canadian citizens, the maximum accrual per year of credited service in a DB plan is 2.0%.

IPPs are a type of defined benefit plan. IPPs are designed to provide maximum pension at retirement and thus maximum contributions. Most IPPs are designed for owner-employees and highly paid executives of Canadian corporations.

### **The Magic Factor of 9**

The relationship cited above between the MP dollar limit and the DB dollar limit has been termed "the magic factor of 9." This relationship equates a \$9.00 contribution in an MP plan to \$1.00 of annual pension at age 65 in a DB plan, regardless of the member's current age.

Obviously, this equation is a generalization. Assume that at age 65, the lump sum needed to provide an annual pension of \$1.00 per year (non-indexed<sup>2</sup>) is \$13.93<sup>3</sup> using an interest rate of 5% per year.

Now, consider the power of compound interest. A member age 25 would need only \$1.97 today in order to amass \$13.93 over the next 40 years at 5.0% per year. Whereas a member age 60 would need \$10.91 today to amass \$13.93 over the next five years.

The age 25 member would not give up \$9.00 of contribution to obtain a pension which today has a value of only \$1.97. Similarly, the age 60 member would gladly give up the opportunity to contribute \$9.00 in order to receive a pension that has a value today of \$10.91.

With this equality built into the Canadian tax system, the reasonable conclusion is that RRSPs are appropriate for younger members while IPPs are appropriate only for older members. We believe that IPPs are appropriate, in the right circumstances,<sup>4</sup> for members who are at least age 40.

### **Actuarial Assumptions**

Regulation 8515(7) describes the assumptions and methods to be used by the actuary to determine maximum funding contributions under IPPs as follows:

- a) projected accrued benefit method used to determine actuarial liabilities and current service costs;
- b) a valuation interest rate of 7.5% per year;
- c) a salary increase rate of 5.5% per year;
- d) a rate of increase in the Consumer Price Index of 4.0% per year;
- e) retirement at age 65;
- f) assumed continuous employment until retirement;
- g) at retirement, member is assumed to be married to a person who is the same age;
- h) no pre-retirement mortality;
- i) post-retirement mortality is based upon the 1983 Group Annuity Mortality Table using 80% of the average of male and female rates; and
- j) plan assets are valued at their fair market value.

