SSCG
Actuarial Solutions & Software Innovations

3158 Des Plaines Avenue, Suite 209
Des Plaines, IL 60018-4222

Doris J. Bloom, FLMI
Howard W. Heidorn, Jr., ASA, MAAA, FCA
Richard C. Heidorn, FLMI
Larry M. Li

Voice: (847) 296-8890
Fax: (847) 296-8871
Toll Free: (888) 658-SSCG
web site: www.sscgonline.com
e-mail: info@sscgonline.com

Immediate Annuities – A Primer

The Need

Baby Boomers are getting older and older as the years go by. Within the next 10 years the earliest cohorts will be attaining age 65, and many of them will be looking for ways to guarantee that they won't out-live their assets. Insurance companies and fraternal benefit societies offer products that can provide such guarantees, but such guarantees are not without their costs. Perhaps the most common instrument for providing these guarantees is the immediate annuity. Such annuity can be purchased directly from an issuer, or it can be obtained as part or all of a death benefit settlement option. How immediate annuities work, the kinds that are available, and how they might be used are topics not well understood by the general population. This primer is intended to provide some background information for those who may be contemplating the purchase of such products.

What is an Immediate Annuity?

An immediate annuity is a contract offered by an insurer (or possibly some other entity) that provides an income stream in installments to a designated person. The purchaser need not be a real person (that is, it could be a corporation). The purchaser is normally called the "owner." The entity receiving the income stream, if a real person, is called an "annuitant." This income stream is generally, although it does not have to be, a level dollar amount, and it is also generally paid by the insurer to the annuitant on a monthly basis. However, it can also be paid on any other basis that is mutually agreed upon, such as quarterly, semi-annually, annually, monthly, say, for 10 consecutive months, skip 2 months, and repeat this cycle, and so on.

As an example of an immediate annuity, suppose a 65 year old male wanted to be guaranteed an income of $3,000 per month for 5 years for sure, and then as long thereafter as he lives. Such an income stream would consist of at least 60 monthly payments to the annuitant (or to a named beneficiary in the event that the annuitant would die within this 60-month period), but the number of monthly payments that would be made after these initial 60 payments cannot be exactly determined. It is well within the abilities of an insurance company or a fraternal benefit society to estimate how many of these remaining monthly payments will be made, and then to charge an appropriate price (determined in a manner to hedge its estimate) for such benefits. In order to provide the above income stream, an insurer might charge $427,350, for example. (Note that a different insurer might charge a different amount, and that the amount the insurer charges is based on such parameters as the investment earnings of the insurer, its mortality experience on similar kinds of contracts, its expenses, and similar such items.)

Although it costs almost a half million dollars for such an arrangement, which is certainly a lot of money, let's consider some of the arithmetic in more detail. If the above gentleman dies within the first 60 months, his beneficiary will receive at least the remaining $3,000 monthly payments. That is, at least 60 times $3,000, or $180,000, is guaranteed to be returned. Secondly, assuming our gentleman lives to age 77, he would have received 144 monthly payments of $3,000 (144 = 12 years times 12 months per year), or $432,000. That is, he at least recouped his initial investment. If he lives to age 85, he gets 240 monthly payments of $3,000 (20 years times 12 months per year), or $720,000, and he more than recoups his initial investment. As a matter of fact, the longer he lives, the more he will get in total, but his initial investment never changes from the above $427,350.

The immediate annuity is purchased via a lump sum deposit paid by the purchaser to the insurer. For the directly purchased immediate annuity, this lump sum deposit consists of money that the insurer does not already have in its possession. For example, the purchaser may have a bank CD that matured, and the proceeds from this CD are paid to an insurer to purchase the immediate annuity.

In other cases the immediate annuity is "purchased" with part or all of the proceeds that would otherwise be paid to the beneficiary in the event of an insured's death. When an insured person dies, the insurance proceeds are paid, generally in a lump sum, to a person called the beneficiary. However, the beneficiary may select an alternative means of receiving the death benefit proceeds. If one of these alternative means is to receive payments in installments, then we call the resulting immediate annuity a settlement option. Thus, if the immediate annuity is the result of a settlement option, the insurer in effect is not receiving any outside moneys—it is merely paying in installments the amount of the proceeds that otherwise would have been paid in a lump sum to the beneficiary.

A similar situation occurs when a person purchases an accumulation annuity from an insurer. In this case, the person pays money to the insurer either in a lump sum or in installments. The insurer receives such moneys and, in effect, invests them for the purchaser. The insurer may or may not guarantee an interest rate that will be credited to the resulting funds. After several years the person may want to convert the accumulated annuity fund into an immediate annuity. In this situation also the insurer, at the time of this conversion to the immediate annuity, is not receiving outside moneys. However, it had received these moneys over prior periods.

The example above referred to a monthly payment of $3,000 to an annuitant for 60 months for sure, and then for the rest of the annuitant's life thereafter. Such a product is called a 5-year certain and life annuity. If the life of the annuitant is considered in the determination of how many payments will eventually be made, then that annuity is said to be based on life contingencies. However, immediate annuities, either purchased directly or obtained as part or all of a death benefit or accumulation annuity settlement, do not have to contain life contingencies. Thus, it is possible to construct an immediate annuity that will pay the annuitant a quarterly income for 10 years, for example. The annuity payments would stop after the 40th payment was made. Payments would be made whether the annuitant lived or died. However, if he or she died within the 10-year period, then either the balance of the 40 payments is paid to the beneficiary as these payments become due, or it may be paid in a lump sum, calculated to be equal to the present value of the remaining payments, and it would be paid to the beneficiary in a single check.

What kinds of immediate annuities are available?

As shown above, immediate annuities may or may not be based on payments covering a certain number of years or months (we used 5 years in one example, 10 years in another). They may also be based on the contingency that the annuitant to whom payments are being made is then living. In addition, they may be based on contingencies that more than one annuitant is living at the time a payment is to be made. Thus, for example, it is possible to design an immediate annuity that is payable for 10 years certain, and then as long thereafter as at least one of a husband and wife are living. As a matter of fact, an annuity based only on life contingencies, payable at 100% while both spouses are living or if the non-working spouse dies, but payable at only 50% if the non-working spouse is the survivor, is the "default" immediate annuity represented in most pension plans as a result of the enactment of the Employee Retirement Income Security Act (ERISA) if 1974.

The following summary lists some general categories of immediate annuities and gives some examples:

Period Certain Annuities

These immediate annuities could be issued by a bank, savings and loan, insurer, or any other entity, as long as it is able to make the payments. Payments are made for a fixed number of months or years, and generally the annuity payments are of a fixed dollar amount, although at times the last payment may be smaller than the earlier ones. Since these kinds of annuities are not based on life contingencies, the calculation of how much a person will receive is based only on an assumed rate of interest. The higher the assumed interest rate, the larger will be the annuity payments for a given lump sum deposit. Also, for a given interest rate, the longer the guaranteed payment period (like 10 years versus 5 years, for example), the lesser the dollar amount of each annuity payment.

Interest Only Annuities

These immediate annuities are also issued by the above kinds of organizations. However, these annuities do not promise a fixed dollar amount nor a fixed number of payments. Instead, given that a fund exists, the insurer or other payer merely pays, generally via monthly checks, any interest that was earned on that fund during the month. The interest rate that the funds would earn is determined by the organization paying the annuity checks, perhaps subject to some minimum. This interest rate could be redetermined as often as the organization wishes, but it usually remains constant for at least three months. In addition, daily or monthly compounding could be used in determining the amount of the monthly checks. If daily interest is used in the calculations, the check a person receives for March, say, would be larger than the one (s)he receives for April, since March has one more day than April. The fund balance itself is generally payable on demand by the annuitant.

Single Life Annuities

As the title indicates, these kinds of annuities are based on whether or not a given person continues to survive. Because of this "life contingent" nature, these annuities are only issued by insurance organizations. The calculation of the amount of income a person will receive is based both on a mortality table and on an assumed rate of interest. The mortality table considers the gender of the annuitant. Since females generally live longer than males, the dollar amount of a single life annuity paid to a female would be smaller than that for a male of the same age at annuitization and for the same purchase amount.

Single life annuities may also be combined with period certain annuities, producing such common forms of immediate annuities as 5 years certain and life annuities, 10 years certain and life, 15 years certain and life, and 20 years certain and life. For each of these kinds of annuities, if the annuitant should die before the end of the certain period, then the beneficiary would receive either the remaining payments at the times they are due, or a lump sum payment calculated as the present value of the remaining payments. If the annuitant survives the certain period, then (s)he continues receiving annuity payments until death.

Another kind of certain period guarantee that is still based on life contingencies is called a refund annuity. This annuity guarantees the return of the lump sum payment made to purchase it, and if the annuitant is still living after the lump sum has been returned, the annuitant continues to receive the annuity payments until death. For example, if a lump sum payment of $200,000 produced a refund annuity of $2,000 per month, then in effect this annuity is a 100 month certain and life annuity (100 months times $2,000 per month is $200,000).

The above guarantees (for the period certain or for the refund feature) have a cost associated with them. Thus, for a given gender, a life only annuity will produce the greatest monthly income for a given lump sum deposit. The 5 year certain and life would produce a smaller amount of monthly income than the life only annuity, but larger (generally) than that produced by a 10 year certain and life annuity. In general, the longer the certain period associated with a life annuity, the smaller the monthly income.

Joint Life Annuities

As the name implies, joint life annuities are based on the probabilities that two (or perhaps more) lives survive to collect the annuity income (as well as on an interest rate and, perhaps, expense loading). These annuities may be based on lives of the same gender or of different genders. Generally, for different genders, these kinds of annuities are primarily used in the pension marketplace, where the pension must provide an income for both the primary worker and the spouse.

Consider, for example, an annuity that pays a monthly income of $2,500 to a husband and wife as long as either remains living. Such an annuity is called a joint and last survivor annuity. If both are living, the monthly annuity amount is $2,500. If the husband dies, the wife is entitled to the same $2,500 per month until she dies.

The monthly income after the first death does not have to be the same as when both annuitants are alive. For example, since it may be less expensive for a single person to live than for two people (food for one person, only one car, etc.), the annuity may specify that as long as both annuitants are alive, the payment will be $2,500, but after the first death, the payment reduces to $1,250. Because $1,250 is 50% of $2,500, such annuity is called a joint and 50% survivor (or joint and one-half) annuity. Besides the joint and 100% survivor annuity mentioned in the prior paragraph, another common form is a joint and two-thirds (66.67%) survivor. In the past these kinds of joint annuities were relatively common in the pension market. In comparison to a joint and 100% survivor, the joint and 50% survivor annuity would provide a larger monthly income for a given lump sum deposit because it would not pay out as much after the first death.

Another common joint annuity in the pension marketplace is called the joint and contingent survivor annuity. For these annuities, if the primary wage-earner was the survivor, then 100% of the monthly income would continue to be paid. However, if the primary wage-earner was the first to die and the spouse survived, then only a fraction (50% or 66.67%, generally) of the monthly benefit was paid. The rationale here was that if the primary wage earner survived, then (s)he deserved the full monthly amount, perhaps because of his or her contributions to the pension plan. Because of the probability of paying a larger amount under the joint and contingent survivor annuity than with the joint and last survivor, the joint and contingent annuity would provide a somewhat smaller monthly benefit for a given purchase amount.

<u>Variable Immediate Annuities</u>

The word "variable" is generally used in insurance circles to reflect the fact that the insured (or annuitant) is absorbing some or all of the interest rate risk. In addition, many times the funds supporting the product are invested in common stocks, which historically have returned larger rates than other investment instruments—at least over the long term.

The variable immediate annuity may be a period certain annuity, an interest only annuity, or a single or a joint life annuity. Again, the primary difference is the lack of an interest rate guarantee.

The insurer, however, does use an "expected" interest rate in the calculation of the targeted monthly benefit that will be paid. If the actual investment earnings on the fund are less than the "expected" interest rate, subsequent monthly payments may be reduced. If the actual investment earnings on the fund are more, then subsequent payments may be larger than the "target." How much less or greater than "target" is generally up to the insurer, and the insurer may also guarantee certain minimums or maximums. However, with any guarantees, again, there would be an associated cost in the form of a smaller "targeted" monthly payment.

Conclusion

Immediate annuities can offer a person a rock-solid guarantee that she or he will not outlive their assets, regardless of the manner in which these assets were accumulated. However, this guarantee is not without its costs—both to the person who accumulated such assets and, perhaps, to the beneficiaries.

In addition, we live in a litigious society. Many times people can be sued if the insurance products sold are not "suitable" to the needs of the purchaser.

Because of these facts, it is prudent to obtain more than cursory knowledge of how these kinds of insurance products work. It is hoped that this primer has been an effective instrument in this regard.