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# Immediate Annuities: Current Issues and Trends

by Elliott L. Shifman

**D**emographic trends in both Canada and the United States are clear. People are living longer and retirees are becoming a larger percentage of the total population. Both of these trends have been evident for many years and provide the insurance industry with a significant opportunity. After all, providing life-contingent income is a niche that no other segment of the financial services industry can fulfill. Economists refer to this as a barrier to entry. In order to make the most of our opportunity, we will have to formulate answers to some pretty tough questions. Specifically, insurers will have to design products that match customers real needs and meet reasonable profitability targets. With the obvious stated, let's look at the issues.

- What has been the market penetration for immediate annuities to date?
- What future opportunities exist for insurers on the payout side?
- How can insurers design products that meet customers' needs?

## Market overview

### Market penetration

The insurance industry as a whole has had little success converting accumulation dollars into payout streams. Limited industry data makes it tough to draw meaningful conclusions; even so, a few statistics are worth mentioning. From 1992-1994, the annualized percentage of SPDA and FPDA contracts annuitized was a mere 0.3%. In dollar terms, this amounted to \$2.6 billion in 1994.

(LOMA) Considering the scant percentage of deferred annuities annuitized, not to mention untapped 401(k) accumulations, clearly, huge potential exists.

### Existing payout products

Payout annuities have two basic designs, either a *Fixed Interest Rate Immediate Annuity* or a *Variable Immediate Annuity*.

We are all familiar with the *Fixed*

*Interest Rate Immediate Annuity*. It is usually offered as a settlement option in deferred annuities. Typical forms include life only, life with a guarantee period and joint and survivor annuities. Payments are usually quoted based on a single interest rate, regardless of policy size. Some carriers offer higher interest rates (banded) for larger amounts annuitized.

*The Variable Immediate Annuity* provides an initial payment based on an Assumed Interest Rate (AIR). Unlike the *Fixed Interest Rate Immediate Annuity*, subsequent payments rise or fall depending on the relationship between fund performance and the AIR. Selection of a lower AIR, results in a lower initial payment than a payment based on a higher AIR. All things being equal, the initial payment based on the lower AIR will grow at a faster rate than the payout calculated at the higher AIR. AIRs are usually in the 3-5% range.

## Future opportunities for insurers

Demand for payout products in the United States will be driven primarily by the demographic changes over the next 35 years. There are two relevant effects:

- 1) A greater portion of the U.S. population will survive to advanced ages.

- 2) Those who survive can expect to live for longer periods of time.

These two ideas sound the same, though they occur for very different reasons.

A good way to visualize the changing demographics of the US population is with a few statistics. Let's track two age bands, those age 65 and those age 85.

### Population pyramid

Over the next 35 years, as Baby Boomers retire, the overall structure of the population, also referred to as the population pyramid, will be more heavily weighted toward the retiree population. Just how significant are the effects on both the absolute number of retirees and the percentage of retirees in the older age bands? Consider the following two charts. In absolute terms, the population of those age 65 and over is expected to more than double between 1995 and 2035, from 34.2 million to 72.0 million. Similarly, the population over age 85 is expected to increase from 3.89 million to 9.52 million over the same period.

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## Demographic Profile of Age 65 Population

(in millions)

Year	Total Population	Over-Age-65 Population	% of Total Over Age 65
1975	225	23.3	10.4%
1995	273	34.2	12.5%
2015	318	45.7	14.4%
2035	350	72.0	20.6%

Source: Social Security Administration

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**Demographic Profile of Age 85 Population**

(in millions)

Year	Over-Age-65 Population	Over-Age-85 Population	% of Retirees Over Age 85
1975	23.3	1.88	8.1%
1995	34.2	3.89	11.4%
2015	45.7	5.89	12.9%
2035	72.0	9.52	13.2%

Source: Social Security Administration

**Consider tail-end probabilities**

Increased life expectancies should influence the way payout annuities are viewed. Financial planners project their

clients' needs assuming a fixed ending age, commonly age 85. The problem with using age 85 is that you may live past 85. How significant are tail-end probabili-

ties? Consider the following chart of 65-year-olds: 41% of males and 58% of females would outlive their means if their financial plan ended at age 85.

**Tail-End Probabilities (65-Year-Old)**

Age X	Probability of a male living past Age X	Probability of a female living past Age X
85	41%	58%
90	22%	36%
95	8%	16%

**Life expectancies are increasing**

As indicated below, population data tells us that survival rates to advanced ages

will increase over the next 50 years. Survival rates are projected to be slightly better when one considers the insured

population, as represented by the Annuity 2000 Table.

**More People Survive to Older Ages**

Probability of Living from Age 65 to Age 85  
U.S. Population Data

	<u>Male</u>	<u>Female</u>
<b>1930</b>	<b>15%</b>	<b>19%</b>
<b>1960</b>	<b>20%</b>	<b>32%</b>
<b>1990</b>	<b>28%</b>	<b>47%</b>
<b>2020</b>	<b>34%</b>	<b>54%</b>
<b>2050</b>	<b>40%</b>	<b>59%</b>

**Individual Annuity Data**

<b>Annuity 2000 Table</b>	<b>49%</b>	<b>62%</b>
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Sources for population data: Bureau of the Census  
Social Security Administration

**Customer needs**

A recent customer survey revealed that customers had four major concerns at retirement:

- Outliving their assets  
With life expectancies increasing, have individuals saved enough?
- Inflation  
Today inflation, as measured by the Consumer Price Index, is under 2%. How quickly we forget that in 1980 the Consumer Price Index was 14%.
- Safety of principal.
- Liquidity

A recent customer survey revealed that customers would not annuitize because of:

- A loss of control.
- A potentially low locked-in interest rate.

- Underestimating their longevity risk.
- Inflation risk (decreasing value of payments).
- Confusion about the product (agent is not compensated to “sell”).

Ways to respond to the concerns voiced by policyholders:

- Repackage existing products.
- Enhance existing products.
- Educate policyholders.

**Repackaging existing products**

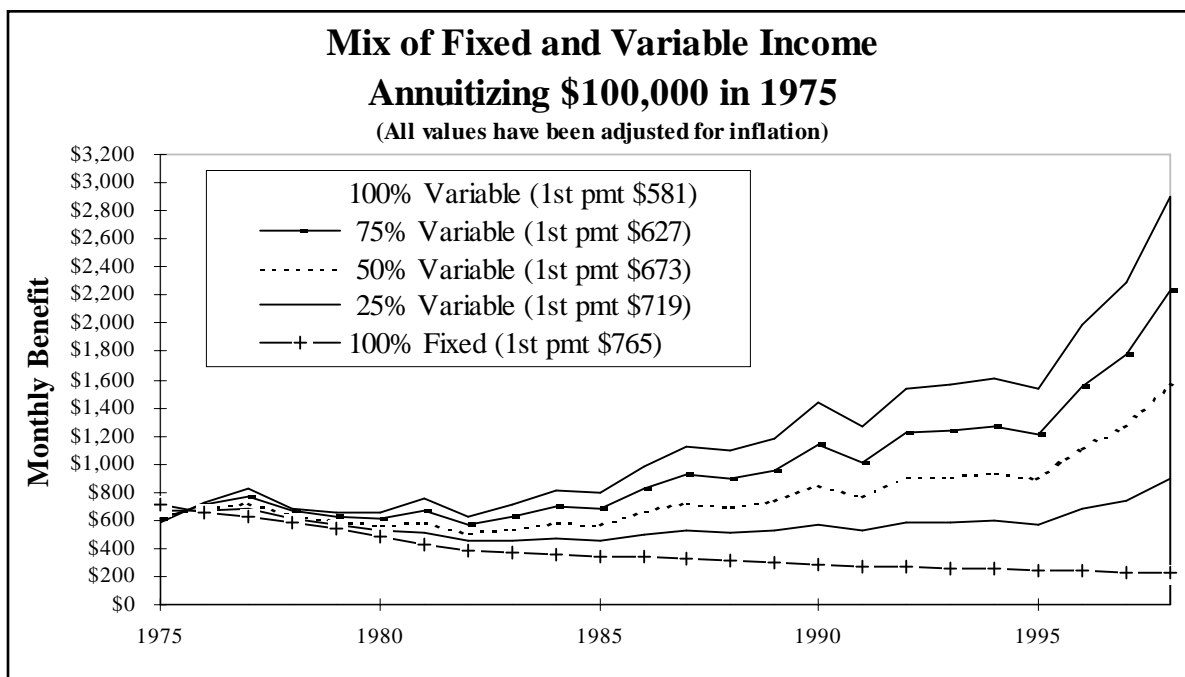
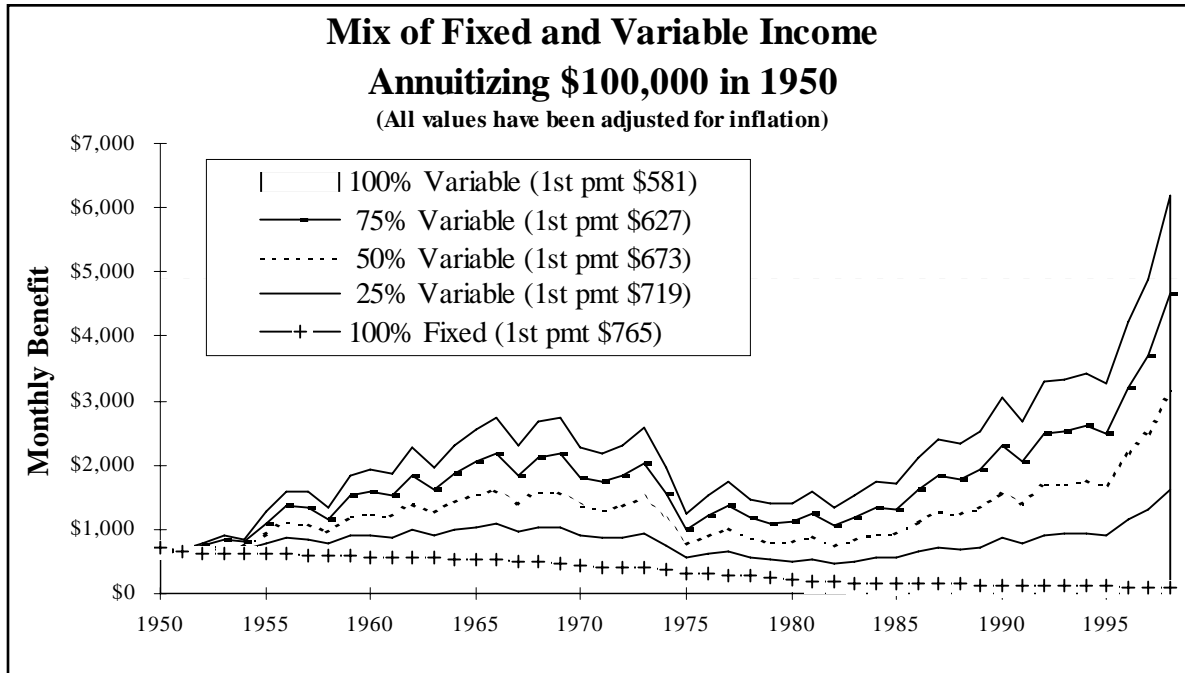
Many insurers have already developed both a fixed interest rate immediate annuity and a variable immediate annuity. Instead of offering a policyholder an all-or-nothing choice between selecting either a fixed or variable product, why not offer both? One advantage of combining a fixed payout with a variable

payout is that the equity characteristics of a variable annuity have historically counteracted the erosion effects of inflation on the fixed annuity. Historically, what portion of your payout must be a variable immediate annuity to counteract the erosion effects of inflation? The charts on page 10 illustrate the effects of combining different percentages of fixed and variable payouts over two different time periods. In both examples, the policyholder annuitizes a total of \$100,000 assuming varying percentages of fixed and variable payouts. Percentages, once selected, are assumed constant during the projection period.

What percentage of variable payout when combined with a fixed payout is needed to mitigate the effects of inflation? The result is interesting. In both of the illustrated time periods, annuitizing just 25-30% of the fund within a variable immediate annuity has the effect of counteracting the erosion effects on the fixed payout. Notice in the graphs on page 10, by annuitizing 100% of funds

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in a traditional fixed payout annuity, inflation has the effect of reducing the real value of the initial payout. Inflation has the effect of causing a downward sloping line on the 100% fixed payment scenario.

The objective of this exercise is to illustrate that by adding a small portion of variable payout, the downward sloping line can be turned into a horizontal line. A visual indication that the real value of the annuity payout remains constant.

#### **Enhancing existing products**

Some of the concerns voiced by policyholders can be eliminated by enhancing existing products. For instance, by indexing annuity payments to inflation, the

- Inflationary times are memories of the past. May be a tough sell.

*Increased liquidity* is another enhancement often coveted by policyholders. Allowing policyholders to commute their benefits can be an expensive product enhancement, and that the policyholder may not want to pay for. One way to keep the cost down is by making the liquidity feature non-elective. In other words, have the liquidity feature triggered by some catastrophic event when the funds are really needed. One such trigger could be entering a nursing home.

A fairly recent innovation is the *Guaranteed Minimum Income Benefit*

for at least 10 years and that the policyholder select a life-contingent annuity.

Product development hurdles on GMIBs include unknown rates of annuitization, complicated stochastic pricing models, and unclear capital and reserving requirements. While the product development hurdles are formidable, the appeal to the policyholder is obvious: upside potential with downside protection if the annuitization option is chosen.

#### **Educating policyholders**

How can we educate policyholders about annuitization? To start with, encourage your agents through win-win compensation structures. Agents have been known to refer to annuitization as the "last churn," or the last time to make money off of their client. Payout annuity compensation today is usually paid at issue as a percentage of single premium. This format gives little incentive for the agent to sell or service payout annuities.

One obvious solution, convert up-front commissions to asset-based trail commissions. Easier said than done. The actuarial equivalent trail commission differs by the settlement option selected, and in the case of life-contingent payouts, depends on the age of the annuitant. For example, the equivalent trail on a life annuity issued to a 35-year-old must be lower than a trail on a 65-year-old. One way to solve the trail calculation problem is to band trails by "like" payout periods. A 65-year-old life annuity may turn out to be equivalent to a 10-year certain trail option.

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real value of the annuity payment remains constant. As usual, there are no free lunches. The pros and cons of indexing annuity payments to inflation are as follows:

- **Pros**
  - Real value of payment remains constant
  - Adds to policyholder's portfolio of indexed benefits (e.g. Social Security Supplement)
- **Cons**
  - Indexing feature results in a lower initial payment

(GMIB) available on a variable deferred annuity. Usually sold as a cost rider, the GMIB allows the policyholder to use the greater of a defined floor (usually premium accumulated with interest) and the actual fund value, as a base from which to annuitize. The GMIB concept; is analogous to the *Guaranteed Minimum Death Benefit* (GMDB) concept, the difference being, the policyholder controls if and when a GMIB is triggered. As mentioned earlier, elective benefits are tough to price. Pricing considerations usually force companies to impose additional constraints such as mandating that policies must be in-force

### **Editorial Correction**

The article "Automated Underwriting and Distribution of Life Insurers" in the March 1999 *Product Development News* newsletter was attributed to Jim Maher of St. Paul Reinsurance Company Ltd. The author was actually Jim Maher, CEO of FMS in Ireland. We apologize to both of these individuals for this mistake.