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Can Annuities Enhance Retirement Lifestyles?

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OVERVIEW

The past decade has witnessed a tremendous increase in interest in retirement income security fueled by worldwide changes such as the growth in aging populations, tightening government budgets, the continuing shift from defined benefit (DB) to defined contribution (DC) retirement plans, higher worker mobility across borders, and inadequate financial preparation for retirement by many workers. These alarming global trends have triggered a reform movement in public pension systems. A common theme of these reforms is an increased emphasis on individual choice and self-reliance in retirement planning.

Inadequate retirement saving has been a critical issue in the United States for many years. The latest data from the Bureau of Economic Analysis suggest this problem is here to stay. Over the past decade, the U.S. personal saving rate decreased from 4.6 percent in 1995 to 1.8 percent in 2004. In 2005 alone the personal saving rate fell from a negative 0.2 percent in the second quarter to negative 1.5 percent in the third quarter.¹ Two important factors contributing to this trend are the continuing mis-

perception about retirement needs and lack of planning by future retirees. The general rule of thumb among financial planners is that individuals should aim to replace 70 to 80 percent of their pre-retirement income, though some prominent economists such as Professor Olivia Mitchell of the University of Pennsylvania and executive director of the Pension Research Council suggest that a 100 percent replacement rate is more appropriate.² Despite this advice, the *2005 Retirement Confidence Survey* conducted by the Employee Benefit Research Institute (EBRI) and Mathew Greenwald & Associates, Inc. shows how financially unprepared workers are. **Table 1** shows reported total savings and investments by age. Among all workers surveyed, 52 percent reported savings less

Table 1. Reported Total Savings and Investments, By Age*

	All Workers	Ages 25-34	Ages 35-44	Ages 45-54	Ages 55+
Less than \$25,000	52%	70%	50%	41%	39%
\$25,000-\$49,999	13	12	15	14	12
\$50,000-\$99,999	11	9	14	13	7
\$100,000-\$249,999	12	5	10	17	23
\$250,000 or more	11	4	10	16	19

* Not including value of primary residence

Source: Employee Benefit Research Institute and Mathew Greenwald & Associates, Inc., *2005 Retirement Confidence Survey*

*The mission of the American Council for Capital Formation is to promote economic growth through sound tax, trade, regulatory and environmental policies. For further information, contact the ACCF, 1750 K Street, N.W., Suite 400, Washington, D.C. 20006-2302; telephone: 202/293-5811; fax: 202/785-8165; e-mail: info@accf.org; Web site: www.accf.org.

than \$25,000. Even more alarming is the trend among workers age 55 and above. Slightly less than half this group claimed accumulated savings greater than \$50,000.

Until recently much of the attention has been devoted to the accumulation of assets prior to retirement, since the majority of the aging population is still in the workforce. However, with the impending retirement of a large share of the working population in many countries, the focus is beginning to shift to how people will manage their income and spending once they retire. How individuals manage the decumulation of assets will have important implications for the living standards of retirees, as well as for consumption, economic growth and U.S. federal budget outlays. With the shift in emphasis towards self-reliance in retirement planning and saving, there is a greater risk of retirees outliving their assets. In U.S. markets, greater attention is now being directed toward annuities as a way of making sure that retirees do not outlive their saving and maintain an adequate standard of living.

Annuities are financial products specifically designed to guard against longevity risk by exchanging accumulated assets for a lifetime stream of guaranteed income (or a stream of income lasting for an agreed-upon period of time). Even though annuities have been around since Roman times, they have never been a significant part of retirement planning for the vast majority of U.S. workers. Recent developments may lead to a reversal of this trend. Many public policy experts believe that annuities will play a key role in the future of retirement policies, especially in the payout phase. Dr. Estelle James, a consultant to the World Bank, and her co-authors Guillermo Martinez and Augusto Iglesias of PrimAmerica in Chile underscore this crucial role by saying that "...with appropriate incentives, a high proportion of pensioners will purchase annuities that provide longevity insurance and reduce fiscal liabilities."³ This report investigates the current trends in the annuities market and their importance for the aging population.

RISKS ASSOCIATED WITH RETIREMENT

It is well known that a typical retiree will face different types of risk while planning and executing his or her

retirement strategy, especially in the decumulation phase. These risks can be classified in four main groups:

■ **Longevity Risk:** The risk that a retiree will outlive his or her retirement assets due to a longer than expected life span. According to U.S. Department of Health and Human Services' National Center for Health Statistics, a man who retired at age 65 in 2001 could expect to live 16.4 years. For a woman, life expectancy after age 65 is 19.4 years. Coupled with inadequate savings and increasing health care costs, the risk of running out of money during retirement cannot be ignored.

■ **Under-Consumption Risk:** Retirees may try to avoid running out of money by trying to "make do" with their Social Security checks, resulting in significant decreases in their consumption compared to their working years. A 2004 survey of 1,023 near-retirees (aged 55-64) conducted by Prudential Financial shows that 43 percent of retirees plan to hold off tapping their savings until later years because they fear outliving their retirement assets. Another 29 percent of the survey participants plan on using their savings only in emergencies.

■ **Inflation Risk:** The increase in post-retirement life expectancy makes the gradual loss of the purchasing power of financial assets due to inflation an even greater threat, especially if the inflation is unanticipated. For example, a person who retired in 2005 with accumulated assets of \$100,000 would see his or her purchasing power drop by \$18,000 over 10 years if the inflation rate was a constant 2 percent.⁴ Obviously, this calculation ignores any potential return on initial investment. However, it is useful to illustrate the devastating effect of inflation if one ignores it during retirement planning.

■ **Poor Investment Risk:** Any investment strategy that includes the stock market trades off higher risk with the potential for higher returns.

Annuities are specially designed to help retirees during both the investment and payout stages of retirement. Unlike other financial products, annuities have an insurance feature. Specifically, by guaranteeing a stream of income over the life of the contract, annuities can help protect retirees from longevity risk, under-consumption and losses due to market fluctuations. Furthermore, as discussed below, newly designed infla-

tion-indexed annuities can help insure against the loss of purchasing power due to inflation.

WHY INDIVIDUALS ARE NOT ANNUITIZING

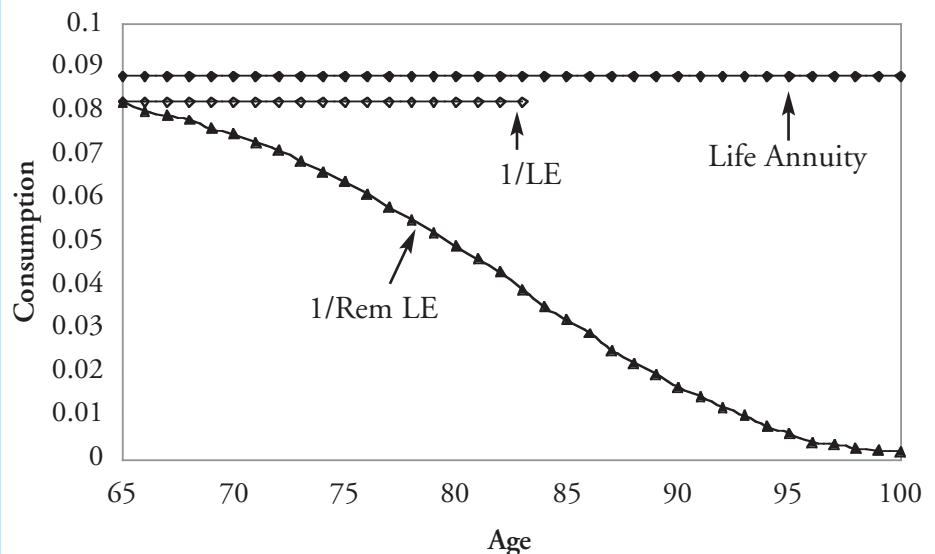
Despite these advantages, most individuals are not currently annuitizing for a variety of reasons. Individuals might want to self-manage the decumulation of their nest eggs rather than annuitizing. There are a number of alternatives to annuitization. David McCarthy of Imperial College, London and Professor Olivia S. Mitchell demonstrated two of these alternatives by comparing the consumption profiles for retirees against an actuarially fair life annuity (annuity products under which expected payouts equal the premiums paid by annuitants) that smoothes consumption from age 65. According to their calculations, with a \$1 “normalized” nest egg, (in other words, per dollar saved retirement assets) an individual could afford to buy a life annuity that provides him or her with a constant stream of income of \$0.09 per dollar per year as shown in Figure 1. Alternatively, the retiree has two options for self-managed retirement. The first is a constant consumption based on his or her life expectancy (equal to $1/(\text{life expectancy (LE)})$) such that the total nest egg would be spent by the time the person reaches the end of his or her life expectancy. Under the second option, the retiree seeks to spend down his or her nest egg over his or her remaining life (equal to $1/(\text{Remaining LE})$). With this option, the retiree updates his or her life expectancy each year, leading to a declining consumption path as shown in Figure 1. The reason for this decline is the argument that says that if a person reaches 70, he or she is more likely to reach 75. As a result, a person who lives to age 70 would be forced to decrease his or her consumption level due to the increased probability of living to 75. As illustrated in Figure 1, both of these self-management options include the potential risks of running out of money or having inadequate funding in the later years of retirement.

Given these risks, many prominent economists have argued in favor of (at least partial) annuitization of retirement assets. In his 1965 work, Menahem E. Yaari showed that some consumers should fully annuitize their savings. Similarly, a 2005 study by Thomas Davidoff of University of California, Berkley, Jeffrey R. Brown of University of Illinois at Urbana-Champaign and Peter Diamond of MIT reached a similar conclusion using more general assumptions.⁵

Another recent study by Olivia S. Mitchell, James M. Poterba of MIT, Mark Warshawsky of U.S. Department of Treasury and Jeffrey R. Brown uses a different approach in order to show the value of annuities for retirees. In particular, they quantify how much of his or her wealth an individual would be willing to give up to gain access to an actuarially fair annuity. Their results suggest retirees would be willing to give up between 30 and 38 percent of their wealth. This is significant in that it quantifies the importance that people attach to insurance against uncertain mortality and longevity risk.

Despite the wide theoretical support for annuities, the empirical evidence shows low annuitization and relatively small annuity markets. There are a number of reasons for retirees’ hesitancy about annuitizing their assets:

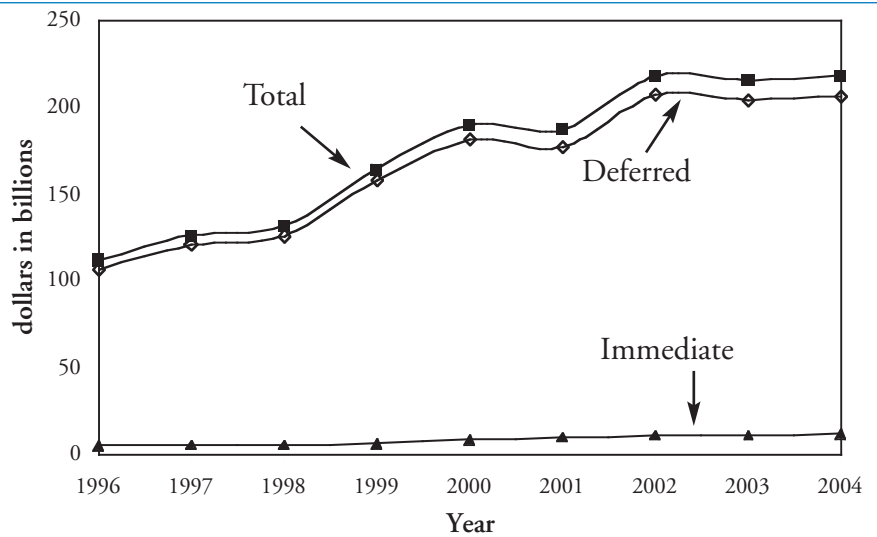
Figure 1. Alternative Consumption Profiles as a Function of Age



Source: David McCarthy and Olivia S. Mitchell, “Annuities for an Ageing World”, in *Developing an Annuity Market in Europe*, pg 16.

- * Fear of losing liquidity and control of retirement assets;
- * Uncertainty about potential future expenditures (in particular, expenditures on medical and long-term care needs);
- * Bequest motives (i.e., the desire to have funds left over to transfer to descendants);
- * The existence of other forms of annuitized income such as Social Security and defined benefit plans;
- * Market imperfections (resulting in higher costs for annuities); and
- * Financial illiteracy and myopia (it may be that people are unaware of the benefits of annuities).

Figure 2. Annuity Industry Total Sales: Deferred vs. Immediate
(dollars in billions)



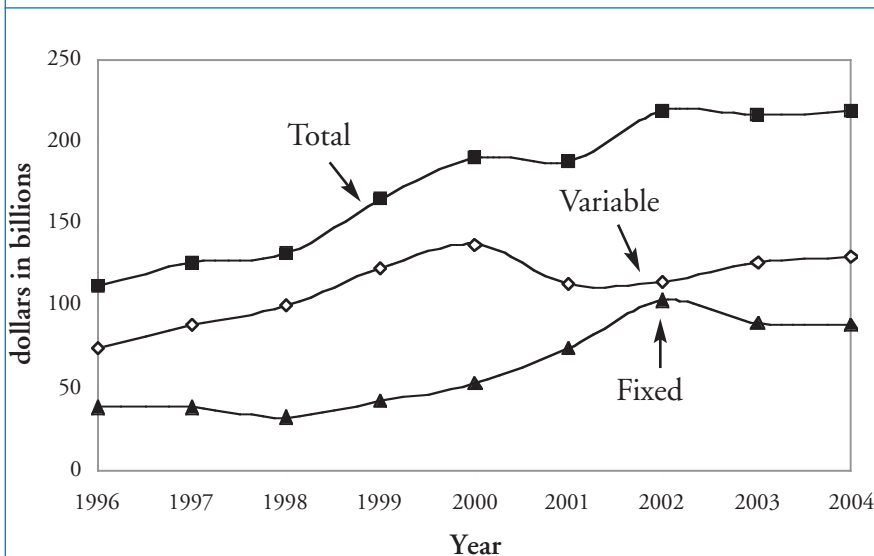
Source: 2005 Annuity Fact Book, NAVA

TYPES OF ANNUITIES AND THEIR SALES IN U.S.

In today's financial market, there are a variety of annuity products that meet the specific needs of individuals in insuring against retirement risks. Many of the newly introduced features of annuity products were designed to address some of the reasons noted above for the hesitancy of investors to annuitize. Annuity products can be classified into two main categories:

■ **Immediate versus Deferred:** While immediate annuities begin paying out immediately after the payment of a single premium, deferred annuities benefit from the tax-deferred accumulation of assets after the payment of a single premium or with periodic payments (multiple premiums) until withdrawals are made at some set date in the future. Figure 2, above, based on the data jointly collected by the National Association for Variable Annuities (NAVA), Morningstar, Inc. and LIMRA International, depicts the sales of deferred and immediate annuities in the U.S. over the last decade. While sales of immediate annuities have been fairly flat since 1996, there has been a strong increase in the sales of deferred annuities.

Figure 3. Annuity Industry Total Sales: Fixed vs. Variable
(dollars in billions)



Source: 2005 Annuity Fact Book, NAVA

■ **Fixed versus Variable:** Returns on fixed annuities are guaranteed and fixed during a specified period of time. In contrast, the stream of income from variable annuities depends on the underlying portfolio chosen by the annuitant, based on his or her risk preference. Figure 3 shows the evolution of total sales for both fixed and variable annuities in the U.S. over the past decade.

In addition to the major types of annuities discussed above, annuity products may differ in several other ways, such as the number of lives covered (for example, an annuity for the life of an individual vs. annuities for the lives of a couple), bequest options (period certain guarantees), and inflation indexing (real annuities). Furthermore, in the U.S. it is possible to purchase annuities with assets from qualified plans that are funded with pre-tax dollars, such as 401(k)s or 403(b)s, as well as non-qualified annuities that are acquired with after-tax dollars. **Figure 4** shows the total sales for qualified versus non-qualified annuities.

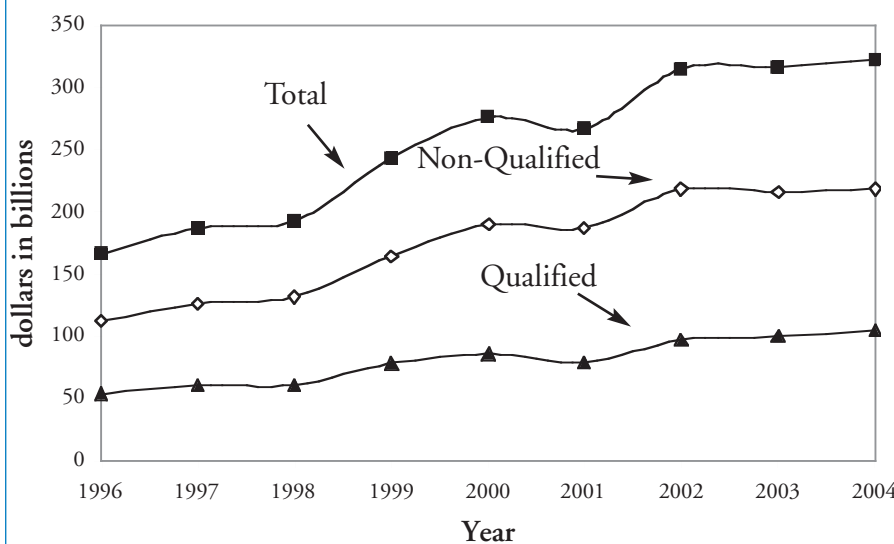
consider that only 20 percent of annuity sales represent the purchase of new retirement assets, this percentage shrinks to 0.4 of total income flow in 401(k) plans.

EMERGING TRENDS IN ANNUITY MARKETS

As mentioned in previous sections, historically low annuitization rates are attributed to a number of factors, including reluctance to turn over control of the underlying asset base and discomfort with the notion that assets “remaining” upon the death of annuitants go to pay others’ annuity benefits, rather than being passed

along to heirs. In response to these concerns as well as to the growing need for individuals to generate their own guaranteed income streams, annuity providers have introduced a new generation of annuity products that offer guaranteed lifetime benefit features. Lifetime benefits guarantee an income for life, even if adverse investment performance depletes the account. Annuity investors who exercise lifetime benefit features still retain some control of the underlying asset base, and may stop taking withdrawals, modify their withdrawal amounts, or surrender the contract in exchange for any remaining account value. In addition, they retain the death benefit provisions of the annuity contract, so even once investors have begun receiving income through a lifetime benefit feature, their beneficiaries would

Figure 4. Annuity Industry Total Sales: Qualified vs. Non-Qualified
(dollars in billions)



Source: 2005 Annuity Fact Book, NAVA

Even though the statistics show a strong upward trend in annuity sales, a good portion of these sales are actually inter- and intra-company exchanges. For example, according to Cerulli Associates, in 2001 less than 20 percent of the total sales of variable annuities were new sales. This implies that the total sales figures described above overstate annuities’ share of retirement assets in the U.S. (which is relatively small to begin with). To put these figures in perspective, according to a recent study by The Vanguard Group, the income flow in 401(k) plans was \$93 billion in 2004. On the other hand, according to a NAVA study, the total amount of annuities sold within 401(k) plans for the same year was \$1.8 billion, just 1.9 percent of the total. When we

be entitled to any remaining account value upon their death.

The most popular lifetime benefit is the Guaranteed Minimum Withdrawal Benefit (GMWB), which guarantees that investors can withdraw a fixed percentage of their account value each year, with percentages generally ranging from 7% for withdrawals over a specified period to 5% for withdrawals over a lifetime. By the third quarter of 2005, GMWB features were available on nearly 80% of variable annuity sales, up from 44.4% in 2003.⁶

ANNUITIES IN THE WORLD MARKET

For many of the same reasons mentioned earlier, annuity markets in most of the world's economies are undeveloped. However, during the recent surge in regulation of retirement income from DC plans, some countries, especially those with rapidly aging populations, have tried to introduce annuitization into their retirement systems either through encouraging voluntary annuitization or by introducing mandatory annuitization. Table 2 reflects the regulations in some of the OECD countries.

The choice between voluntary versus mandatory annuitization is a tough dilemma. Mandatory annuitization takes care of two important problems:

* *High costs of annuities due to adverse selection:* People who expect to live long are more likely to buy annuities, which in turn increases the cost of annuities.

* *Moral hazard problem:* In the absence of a mandate, people might not behave responsibly in the sense that they might choose to spend their savings irresponsibly or not save enough at all in the belief that the government will bail them out.

However, mandatory annuitization could also create unwanted income redistribution between different groups. For example, in the case of using a single mortality table in all annuity calculations, the group with lower expected life spans will be negatively affected (such as the case of men versus women or Caucasians versus African Americans). Mandatory annuitization is also not consistent with the spirit of self-reliance or self-management.

When mandatory annuitization was adopted, previously nonexistent annuity markets turned into rapidly growing industries in many countries. According to data published by Association of British Insurers, sales of pension annuities tripled over the period 1994 and 2003.⁸ In Chile, the previously nonexistent annuity industry grew so much that annuities became the major product in life insurance industry; i.e., two-thirds of life insurance premiums in Chile 2002 were life annuities.⁹

POLICIES TO ENCOURAGE ANNUITIZATION

In the U.S., annuity markets are heavily regulated, especially at the state level. These regulations cover a

Table 2. Regulations of Retirement Income from Defined Contribution Plans in OECD Countries

Country	Occupational Pension Plans	Personal Pension Plans
Canada	No specific regulations - lump sums as well as annuities possible.	Options of programmed withdrawals or annuities.
Finland	Annuities most common - lump sums subject to tax penalties.	Annuities most common - lump sums subject to tax penalties.
Germany	No specific regulations.	"Riester" individual pensions must provide an annuity or capital withdrawals guaranteeing payments also in very old age.
Italy	Annuitization required of at least 50% of the balance at retirement.	Annuitization required of at least 50% of the balance at retirement.
Netherlands	Full annuitization at retirement mandatory.	Full annuitization at retirement mandatory.
Sweden	Full annuitization at retirement mandatory.	Full annuitization at retirement mandatory of new compulsory individual accounts.
UK	Pension fund must be annuitized by age 75, subject to 25% tax-free lump sum, and scheduled withdrawals from retirement till 75. ⁷	Pension fund must be annuitized by age 75, subject to 25% tax-free lump sum, and scheduled withdrawals from retirement till 75.
US	Lump sums as well as annuities possible.	Lump sums as well as annuities possible.

Source: E. Philip Davis, "Issues in the Regulation of Annuities Markets," 2004.

range of issues; from restrictions on the underlying investments to how policies can be explained to potential buyers.¹⁰ The increasing complexity of these regulations coincides with the evolution of some annuities into more complicated products. However, very little has been done to make this important product a natural part of the retirement decision in the U.S. Given the potential benefits of increased reliance on annuities in retirement, policy options to encourage annuitization should be given strong consideration. Increased use of annuities could make this product and its insurance against longevity risk more accessible to people by reducing their transaction costs. Comparing current annuity values with those found in the early 1980s, Professors Mitchell, Poterba, Brown and Dr. Warshawsky showed that there has already been a decrease in the effective transaction costs of participating in the individual annuity markets.¹¹ However, current rates of annuitization are far below desirable levels and more needs to be done. Some possible policy options are as follows.

■ Introduce more options for annuitization within DC plans: As mentioned earlier, there is a trend in the U.S. and around the globe towards switching from DB to DC plans. However, in the U.S. retirement market, few DC plans offer annuitization as a distribution option. According to a 2003 study by Allan P. Blostin, Bureau of Labor Statistics, based on the National Compensation Survey of 2000, among all DC plans only 33 percent offered an annuity option. Given the trend away from DB plans, DC plans could offer future retirees this important option. In addition, DC plans could have annuitization as a default option.

■ Provide better financial education: One of the biggest hurdles in retirement planning for the average retiree is a lack of financial knowledge. That might take the form of miscalculating retirement needs and underlying income requirements or not knowing how to proceed to achieve their targeted level of retirement assets. Currently, workplace financial education is the primary medium for reaching most people. Given that many annuity products are quite complicated, it is important that financial education in the workplace is designed to explain the potential benefits of annuities. Over the years, Congress has passed several measures that would

encourage the participation of employers in their workers' savings decisions. However, more remains to be done in order to incorporate annuities into retirement education in the workplace.

■ Encourage retirees to choose life annuities over lump sum distributions through tax policy: Many prominent mainstream economists have demonstrated the positive effect of tax policy in generating new savings. For example, research conducted by Professors James M. Poterba, David A. Wise and Steven F. Venti support the view that IRAs and 401(k)s have increased household saving.¹² In much the same way, tax policy can be used to encourage an increase in the use of annuities at both the investment and payout stages. While it is true that annuities benefit from the accumulation of tax-deferred assets, there is no tax policy that would favor converting annuity contracts into a lifelong income stream rather than a lump sum payment. At the time of withdrawal, annuity income is taxed at the contract owner's income tax rate. One policy option would be to make some percentage (or a set amount) of annuity payments tax exempt. Another policy option would be to tax the investment return of annuities at the capital gains rate rather than at income tax rates.

CONCLUSIONS

Over the years, economic research has consistently demonstrated the potential importance of annuities for retirees. Despite the existing support for annuities, this important product has not reached an optimal level of usage. However, with baby boomers approaching retirement and with the increased switching from DB to DC plans, more has to be done to insure a responsible management of the payout phase of retirement. One of the best ways to help retirees with this difficult task would be the increased use of annuities, especially immediate annuities, in retirement decisions.

NOTES

1. BEA, November 30, 2005, www.bea.doc.gov.
2. "How Much Money Will You Need for Retirement? More than You Think", Knowledge@Wharton, Fall 2003, pg 32-34.
3. Estelle James, Guillermo Martinez and Augusto Iglesias, "The Payout Stage in Chile: Who Annuityizes and Why?", pg 25. www.estellejames.com/downloads/payout-chile.pdf
4. According to Bureau of Labor Statistics inflation data, the average inflation rate between 1995 and 2005 was 2.6%. For more information, please refer to <ftp://ftp.bls.gov/pub/special.requests/cpi/cpi.txt>
5. The authors show that full annuitization would be optimal if the consumer has no bequest motive and annuities pay a rate of return to surviving investors greater than the return on conventional assets of matching financial risk. If markets are incomplete (such as there is not enough variety of products that match the preference of individual), partial annuitization would still be optimal.
6. Financial Planning.com, "Annuities Special: The Right Rider" February 1, 2006. (<http://www.financial-planning.com/pubs/fp/20060201023.html>).
7. The personal pensions in U.K. divided into two parts: National insurance rebate, which is used to buy a "protected rights pension" equivalent to the state second pension, and the remainder, "personal fund" including employees' and employers' contributions. 25% of the value of the personal fund can be withdrawn in the form of tax-free lump sum.
8. Association of British Insurers, "The Pension Annuity Market: Developing a Middle Market."
9. James et al, "The Payout Stage in Chile: Who Annuityizes and Why?"
10. Please see "2005 Annuity Fact Book", chapter 9.
11. Mitchell, Poterba, Brown and Warshawsky, "New Evidence on the Money's Worth of Individual Annuities."
12. For detailed review, please see Steven C. Wilber, "The Effectiveness of Tax Preferred Savings Vehicles in Promoting Saving and Retirement Security."

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