

Annuities

by

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Tax-deferred variable annuities (hereafter “annuities”) are contracts with insurance companies through which the public can invest in portfolios of stocks and bonds similar to mutual funds.² Annuities are costly, complex investments sold based on typically insignificant tax or insurance benefits by financial advisors with strong financial incentives adverse to those of their customers. These financial advisors receive generous commissions for selling annuities to investors who would be far better served by investments in individual stocks and bonds or mutual funds.

Regulatory scrutiny of variable annuity sales practices and private litigation have focused on the investment risk of subaccounts, on annuity “switching” and on the purchase of annuities within IRAs. In this paper, we demonstrate that in most situations, investors being sold annuities will pay more taxes and have less wealth in retirement as a result of the tax treatment of investments within tax-deferred annuities. We also report the results of scientific literature which demonstrates that the death benefit feature is worth a tiny fraction of what insurance companies charge investors for this feature.

SECTION I: INTRODUCTION

Variable annuities are investment contracts sold by insurance companies through brokers. The amount paid for an annuity is allocated across managed pools of securities called subaccounts. Annuity purchasers typically have many subaccounts available to choose from within an annuity. Subaccounts are similar to stand-alone mutual funds offered by mutual fund companies. In fact, mutual fund companies may offer stand-alone mutual funds with the same names and essentially identical portfolios as the subaccounts offered within annuities. The value of an annuity fluctuates as a result of changes in the net asset values of the subaccounts and because of fees assessed by the insurance company.

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² We focus in this paper on annuities whose market value can rise and fall and the returns to which are not taxed immediately. Fixed annuities offer fixed returns and fixed payouts during retirement. Much of our discussion applies with slight modification to fixed annuities.

The returns to an annuity are not taxed prior to the start of scheduled withdrawals. When the withdrawals begin, the returns accumulated within the annuity are taxed as current income rather than at the lower capital gains tax rate, even if the returns are entirely capital gains. It is possible - even likely - that investors buying annuities will actually end up paying more in taxes and having less after-tax wealth at retirement, because of the harm caused by the tax benefit claimed for tax-deferred annuities.

Annuities contain an insurance-like feature commonly referred to as a Guaranteed Minimum Death Benefit (“death benefit”). If the purchaser of an annuity dies before the investment is redeemed or payments upon retirement start, a designated beneficiary is guaranteed to receive at least the amount invested less any withdrawals. This feature pays off if the aggregate value of the investments in the subaccounts has declined net of withdrawals since the initial investment.

Variable annuities are typically more expensive than analogous mutual funds and their expenses are not easily understood. Management fees are assessed against the subaccounts much like mutual fund expense ratios. In addition, the insurance company assesses a fee referred to as the Mortality and Expense risk charge. This expense is substantial and is inaptly named since, contrary to the implication of its name, only a miniscule portion of it goes to funding the death benefit. The Mortality and Expense risk charge is economically equivalent to the 12b-1 fees assessed by load mutual fund companies to fund substantial upfront commissions paid to brokers who sell the investments. In addition to these ongoing expenses, variable annuities have high surrender charges for many years and any withdrawals prior to age 59½ will be subject to IRS early withdrawal penalties.

The market for annuities has grown dramatically. The National Association for Variable Annuities estimates that the net assets in variable annuities as of December 31, 2004 was over \$1.1 trillion, an increase of 40% since the end of 2002.³ Given their tax disadvantages, illiquidity and trivial insurance benefits, the phenomenal growth in the

³ See <http://www.navanet.org/press/Q4%202004%20%20Industry%20StatsFINAL.htm> and <http://www.navanet.org/press/03-04-03.htm>.

sales of annuities can only be attributed to the powerful incentives offered to salesmen and the industry's obfuscation of the true costs and benefits of annuities.

SECTION II: ANNUITY HALL OF SHAME

With apologies to Winston Churchill, we can say this about tax-deferred variable annuities: never in the field of financial products has so much been sold to so many when suitable for so few.⁴ This is not to say that the product is never suitable. Yet annuities are so lucrative for those in the business of selling them that they have become subject to an array of abuses. Here is a sampling of some of the chief issues.

Purchases in Qualified Accounts.

The tax deferral feature of annuities is much oversold, as we explain in detail later. In limited circumstances this feature can be the saving grace of an otherwise undesirable choice of investment vehicle. However, an annuity may be suitable for the portion of a portfolio that is invested to generate current income—bonds, or possibly REITs—if the income will be deferred over a long enough period.

Within an IRA or other qualified account, the advantage of an annuity in producing tax deferral disappears. Income in such an account is already deferred, so this potential “benefit” is wasted. Deferred variable annuities are inappropriate for such accounts for the same reason tax-exempt bonds are inappropriate: the investor incurs the added expense associated with a product that is intended to produce a tax advantage, without securing the benefit of that tax advantage.

Sales to Retirees.

An immediate annuity may be a reasonable choice for a retiree who is concerned about outliving his or her savings. The added expense associated with the variable annuities that are the subject of this article cannot be justified unless the annuity is held for an extended period of time—perhaps for decades, as our analysis will show. It follows that variable annuities should not be sold to individuals who are retired or close to

⁴ See Jane Bryant Quinn, “One Faulty Investment” *Newsweek*, August 30, 2004 at <http://www.msnbc.msn.com/id/5782782/site/newsweek/print/1/display>, and “What’s Wrong With Variable Annuities?” *SmartMoney.com* (2004) at <http://www.smartmoney.com/retirement/investing/index.cfm?story=wrongannuities>.

retirement. Yet a great many variable annuities are sold to these individuals. Given the limited period of deferral, there is no reasonable prospect for the tax deferral benefit to outweigh the costs.

Unsuitably Risky Subaccounts.

Variable annuities offer the opportunity to choose among subaccounts that resemble mutual funds. Like mutual funds, some of these underlying investments are likely to be unsuitable, especially if they expose the investor to an inappropriately high level of risk. Some investors have suffered grievous losses when they failed to understand the risk to which they were exposed in these subaccounts.

Annuity Switching.

Approximately 70% of annuity purchases are the reinvestment of the proceeds from the sale of existing annuities. Annuity switching is analogous to mutual fund flipping and are highly suspect. Most switches pay the broker significant commissions and involve the reestablishment of maximum surrender charges, while providing the investor with little benefit over their existing annuity.⁵

The SEC found that a supervisor failed to supervise a registered representative who violated Rule 10b-5 by switching annuities and by failing to inform his customers that the switches did not provide his customers with any benefits, but paid him substantial commissions.⁶ Waddell & Reed recently settled with the NASD and some state regulators over rampant annuity switching abuses⁷

⁵ Under certain circumstances, annuity switches might benefit investors, especially if the value of the subaccounts has risen dramatically since the contract was first entered into. In this case, switching would allow the investor to ratchet up the floor on the investment value set pursuant to the guaranteed minimum death benefit. Milevsky, Moshe Arye and Kamphol Panyagometh, "Exchanging Variable Annuities: An Optional test for Suitability", *working paper*, December 19, 2003 at http://www.ifid.ca/pdf_workingpapers/WP2003DEC19.pdf.

⁶ *In the Matter of Donna N. Morehead*, Securities Exchange Act of 1934 Release No. 46121, June 26, 2002.

⁷ See "Waddell & Reed, Inc. Agrees to Pay \$5 Million Fine, up to \$11 Million in Restitution to Settle NASD Charges Relating to Variable Annuity Switching", NASD News Release at http://www.nasd.com/web/idcplg?IdcService=SS_GET_PAGE&ssDocName=NASDW_013886&ssSourceNodeId=551.

Material Omissions and Misrepresentations About Costs and Benefits

Annuities are sold as tax advantaged products. Whether the sales force describes annuities as tax advantaged or tax deferred, the sales pitch is materially false for the vast majority of annuity purchasers. Potential investors should be truthfully informed of the likely tax impact of any annuity purchase. This disclosure need not be burdensome or complicated. The likely tax impact is a function of the investor's age, time to retirement, current and future marginal tax rates and the proposed asset allocation within the subaccounts.

Annuities are sold as insurance products. The insurance benefit is a complex, but substantively trivial benefit. Nonetheless, the power of its false appeal is evidenced by the enormous success the industry has at selling annuities to older, more conservative investors.

In the next two sections we explain how marketing materials currently used by insurance companies to sell annuities materially misrepresent their benefits and omit material information about their costs.⁸

SECTION III: TAX DEFERRAL

Investment earnings that accumulate in an annuity are not taxed until withdrawn. Tax deferral can be a powerful tool in building wealth. Unfortunately, the benefit of tax deferral in an annuity is more than offset by other factors. Promotional materials for annuities demonstrate the power of tax deferral while obscuring the other factors that eliminate the benefit. The obvious purpose is to create the misleading impression that the annuity provides the investor with a way to build significantly greater after tax wealth.

Material currently appearing on the web site of a prominent insurance company provides a good example. In a guide to variable annuities for "informed investors," the company offers an illustration of "just how effective tax deferral can be." The illustration assumes an investment of \$100,000 that earns a steady annual return of 8% over a period of 30 years. A tax rate of 33% prevails throughout this period. If the earnings are subject to tax at this rate on an annual basis, earnings will compound at the rate of 5.36% (67%

⁸ A truthful disclosure would tell potential investors exactly what compensation the salesman and his employer would receive if the investor purchased the annuity. Such disclosure would cripple sales efforts.

of 8%), and the investor ends up with \$478,931. If instead the investor can defer the income tax, earnings will compound at 8%, growing to \$1,006,266. After paying the 33% tax, the investor is left with \$707,198.

The example is accompanied by a lengthy disclaimer, but the company clearly intends to create the impression that the tax deferral feature of an annuity will make a huge difference (a staggering 48% in its example) in the investor's after tax wealth at retirement. The "informed investor" is led to believe it would be foolish to invest in a way that will leave him or her with less than \$500,000 when there is an alternative that will turn the same investment into more than \$700,000 through the magic of tax deferral.

The example is technically correct, of course. The results given in its illustration of tax deferral do indeed follow from the assumptions. The problem is that the assumptions are wholly counter-factual. When we make realistic assumptions about the tax consequences of investing, we find that the annuity may provide little or no net benefit. Even when there is a net benefit, it is likely to be overwhelmed by the costs described in Section V.

Period of Deferral

The example uses a 30-year period of deferral. This is important because differences in investment results that stem from tax deferral are not proportionate to the period of deferral. Instead, these differences grow slowly at first and then, if the deferral period is long enough, they grow much more dramatically. Someone who does not know this might guess that a ten-year deferral period would produce roughly one-third the benefit of a thirty-year deferral period. The reality is quite different. Using the assumptions in the insurance company's example, a thirty-year deferral produces a benefit of \$228,267. Using the same assumptions, a ten-year deferral produces a benefit of just \$9,087.

Annuities are rarely sold to investors who are thirty years away from retirement. Most are sold to investors who are much closer to retirement, or even already retired. The companies selling these annuities are well aware of this fact, yet they use a 30-year period to illustrate the tax benefit of deferral. The reason is obvious: a difference of \$228,267 in retirement wealth is dramatic enough to overcome objections to undesirable

aspects of variable annuities, such as hefty surrender fees. A difference of \$9,087 would be unlikely to generate the same level of purchasing desire.

The insurance company's illustration does not mention, even in the lengthy disclaimer, that the typical period of deferral is much shorter, and the potential benefit of deferral is dramatically smaller in a shorter period. The evident purpose of choosing a 30-year period for the illustration is to mislead potential purchasers into believing that the annuity is likely to produce a far greater tax deferral benefit than can reasonably be expected.

Tax Rates

Earnings produced by taxable accounts are not all taxable at the rates that apply to ordinary income. For many years we have had favorable rates for long-term capital gain, and more recently the same favorable rates apply to qualified dividend income.⁹ Annuities do not preserve the benefit of these lower rates. On the contrary, they convert capital gain and qualified dividend income into ordinary income that is taxed at higher rates. The disclaimer in the sales material mentions the possibility that lower rates may apply to investment income, but does not explain the significance of this fact.

This omission is particularly egregious in light of the 8% growth rate used in the example. A portfolio composed entirely of taxable bonds could be expected to produce nearly all its earnings in the form of interest income, which is taxed at rates comparable to the rate used in the illustration. Yet, bond investments cannot reasonably be expected to produce earnings at 8% over an extended period of time. To achieve that result, it would be necessary to allocate a substantial percentage of the portfolio to stocks. In a taxable account, stocks can produce long-term capital gain and qualified dividend income taxable at 15%, yet the example in the sales material assumes that all income in the taxable account will be taxed at the same 33% rate that applies to annuity income.

To show the significance of this factor, we calculated the results of the insurance company's example with the following change in assumptions. We assume that half the taxable account would be allocated to bonds earning 6% (taxed as ordinary income at

⁹ Application of these rates to qualified dividend income is set to expire after 2008 but efforts are under way to make these rates permanent.

33%) and the other half would be allocated to stocks earning 10% (taxed as long-term capital gain and qualified dividend income at 15%).¹⁰ The annuity is also divided equally between stocks and bonds, and we assumed no rebalancing. The results, after 30 years, still give an advantage to the annuity, but the advantage is much smaller than the insurance company's published example suggests, because now we are accounting for one of the major drawbacks of annuity investing: converting long-term capital gain and qualified dividend income into income taxed at the higher rates applicable to ordinary income. According to their example, the investor's wealth increases by \$228,267 after holding the annuity 30 years, but when we account for the lower tax rates that are available for capital gain and qualified dividend income in a taxable account, the 30-year benefit is only \$68,941.

What if the investor holds the annuity for a shorter time period? After 10 years, under these assumptions, the annuity produces \$7,320 *less* wealth than the taxable account. In this shorter time frame, the disadvantage of converting capital gain into ordinary income is greater than the benefit of deferral. The investor has to hold the annuity 20 years just to break even. Using these assumptions, an annuity will produce an overall tax benefit only if the deferral period is quite long indeed, and even then the benefit will be much smaller than the promotional material suggests.

The asset allocation for many annuities is greater than 50% to stocks, so that even more than 20 years will be needed to reach the break-even point when the benefit of deferral catches up with the detriment of converting capital gain to ordinary income. As noted earlier, most annuities are sold to individuals who are fewer than 30 years away from retirement, and many are sold to people who are already retired. A majority of the purchasers will see a net tax *detriment*, not a benefit, from investing through annuities rather than taxable accounts. Even in the fine print of the disclaimers, there is nothing in the sales materials of insurance companies that would suggest this is true.

¹⁰ Stocks sometimes produce income that is taxed at higher rates (short-term capital gains or nonqualified dividend income), but this is not an important factor in the analysis, partly because investors have it within their power to largely avoid these forms of income, and partly because many annuities have greater than 50% of their assets allocated to stocks.

Capital Gain Realizations

It gets worse. In our discussion so far we have assumed that all the earnings in a taxable account are currently taxable. Yet a significant portion of those earnings come in the form of capital gains that can be deferred indefinitely. Investors who choose index funds or tax-managed funds for their stock investments may see their wealth grow substantially from appreciation in their stock holdings, while reporting little or no capital gain. Even in a stock mutual fund that is not geared toward tax efficiency, realizations can be expected to represent a fraction of the overall growth in value. This means that a substantial amount of tax deferral is possible even in a taxable account. It is misleading to compare the deferral benefit of an annuity with the results that would occur in an investment account that produces no deferral, because the bulk of the earnings from stocks come in the form of capital gain that can be deferred. As noted earlier, the insurance company's example of the benefit of tax deferral uses an earnings rate that would be unreasonably high if the portfolio did not include a substantial allocation to stocks.

To see how a more realistic taxable account would compare with an annuity, we developed our model to account for the deferral of capital gains. Once again we are dividing the account equally between bonds earning 6% and stocks earning 10%. The difference is that we are now assuming half of the income produced by the stock portion of the account represents unrealized capital gains. In this scenario the taxable account gains the benefit of deferring part of its income so it performs better than in the previous scenario where we assumed all the earnings in the taxable account were fully taxable. We find that under these assumptions the taxable account outperforms the annuity even after 30 years. The break-even point, when full deferral under the annuity catches up with partial deferral for capital gains (combined with lower tax rates for capital gains) occurs in year 33.

Many investors are able to defer far more than half of their stock income. If we reduce the realization rate for capital gains to levels easily accomplished through the use of index funds or tax-managed funds, the results produced by the taxable account will almost always outstrip the results produced by the annuity. In addition, we have assumed

the taxable stock account is cashed in at the end, with tax being paid on all previously unrealized capital gains. In reality, many taxpayers avoid capital gains realization permanently by holding appreciated stocks until death. In short, we are being generous in suggesting that the annuity may be able to catch up with the taxable account by year 33.

Conclusion on Tax Benefits

Investors who are drawn into annuity investments by the promise of tax benefits are victims of misrepresentation. In any case where a substantial portion of the annuity is invested in stocks, the investor can expect to end up with less wealth, not more, than if the investments were retained in a taxable account. This is true even before taking into account the Mortality and Expense risk charge, which is another significant drag on earnings. As discussed next, investors who believe the bulk of this charge pays for insurance benefits are sadly mistaken.¹¹

SECTION IV: GUARANTEED MINIMUM DEATH BENEFIT

The Benefit

Annuities offer an insurance like feature allowing it to be sold by insurance companies as an insurance product. This Guaranteed Minimum Death Benefit (“GMDB”) feature guarantees that the designated beneficiary will receive at least the amount of the net investment in the contract if the investor dies before beginning scheduled withdrawals. Thus, if the investor dies at time when the aggregate value of the subaccounts is less than net investment in the contract, the insurance company pays out the value of the subaccounts plus the amount of any shortfall.

The GMDB is an amalgam of two options, a traditional life insurance policy wherein the death benefit is a put option on the aggregate value of the subaccounts. In the simplest case, the GMDB delivers an immediately expiring put option with a strike price equal to the net investment in the account to the beneficiary. If the owner dies, the

¹¹ Reichenstein, William, “An Analysis of Non-qualified Tax-Deferred Annuities”, *Journal of Investing*, Summer 2000, 1-12. and Reichenstein, William, “Who Should Buy a Non-qualified Tax-Deferred Annuity”, *Financial Services Review*, 11 (2002) 11-31. At death, the heirs do not receive a stepped up basis for the value of the subaccounts in an annuity like they do with mutual funds making the tax-deferred annuity doubly tax-disadvantaged relative to mutual funds.

beneficiary accepts the value of the contract or - if the contract is worth less than the net investment - a return of the net investment.¹²

Although the mathematics becomes hairy, valuing this benefit is not that difficult conceptually. The GMDB can be thought of as a series of put options on the value of the subaccounts expiring each month into the distant future with the strike price of all the options equal to the net investment in the contract. These options are relatively easy to value. Roughly speaking, by multiplying these put option values by the probability that the investor will die each month into the future and summing up the products we can determine the maximum value of the GMDB.

The GMDB will be worth more 1) the more risky the assets held in the subaccounts, 2) the older and the poorer the health of the investor, and 3) the lower the current value of the subaccounts relative to the net investment in the contract. If the subaccounts hold only money market funds, the GMDB will be literally worth nothing. If the subaccounts hold only bonds, the GMDB will be worth almost literally nothing. The value of the GMDB will be greatest if the subaccounts hold mostly stocks. But even there, the GMDB will only be worth between 2 and 3.5 basis points per year to a 50-year old annuity purchaser. Even if the annuity is going to be held for 30 years, the present value of the GMDB less than 1% of the contract value on day 1.

The Cost

Investors are charged both management fees within the subaccounts and an annual Mortality and Expense risk fee based on the overall value of the subaccounts. This additional fee is substantial, typically around 1.25% per year, and is virtually 100% used to fund commissions paid to brokers and to provide profit to the insurance company. While the insurance industry has improved its fine print disclosures in recent years, it

¹² Some annuities have more complicated GMDBs. For example, instead of guaranteeing to pay out the net investment if the investor dies, the contract might guarantee to pay the highest contract value on specified dates during the life of the contract, typically the anniversaries of the contract date. In other cases, the GMDB guarantees to pay the net investment increased by a fixed percent per year with the guarantee typically capped at twice the value of the net investment. GMDBs with guarantees that ratchet up on anniversary dates or that increase at a fixed percent per year can also be thought of as traditional insurance contracts that deliver immediately expiring put options with strike prices that are contingent on interim aggregate subaccount values or on the length of time between the contract purchase and the investor's death.

continues to obfuscate the true economics of annuities and mislead investors. The Mortality and Expense risk charge has nothing to do with mortality risk since it is largely invariant to mortality risk factors and to the volatility of the underlying assets. Moreover, as a fixed percentage, the charge increases with the value of the subaccounts even though the already miniscule value of the guarantee declines as the subaccounts increase in value.

Given the high initial surrender charge and ongoing Mortality and Expense risk charge it is clear that the insurance industry is at no risk from selling this defective product to unsuspecting investors.¹³

SECTION V: CONCLUSION

Annuities stand out as the investment most likely to be unsuitable since in virtually every instance, the investor would have been better served by mutual fund or a portfolio of individual stocks. That variable annuities hold more than \$1 trillion in assets is a testament to the powerful incentives created by the insurance industry with generous commissions and the massive fraud they engender.

Brokers should explain to prospective purchasers in clear, frank terms annuities' terrible tax disadvantages. Brokers selling annuities should also explain to clients that the guaranteed minimum death benefit is in fact worth less than 1/20 of 1% per year and the 1.25% annual Mortality and Expense risk charge is really assessed to pay his commission for selling the product.

¹³ See Milevsky, Moshe Arye and Steven E. Posner, "The Titanic Option: Valuation of the Guaranteed Minimum Death Benefit in Variable Annuities and Mutual Funds", *The Journal of Risk and Insurance*, 2001, Vol. 68, No. 1, 93-128.