

When Pensions Make Sense

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Summary. Traditional and Roth-type pensions share the common characteristic that the after-tax return approximates the portfolio return, meaning that there is the potential to increase wealth over what can be achieved in taxable environments. These pensions also provide increased wealth transfer opportunities for those in comfortable circumstances with younger heirs.

Notwithstanding these advantages, other investments may be better choices when costs are high or opportunities are limited in the pension environment. Pensions are generally not attractive for the small business owner unless he is self-employed and some insurance-based pensions pose unacceptable income tax risks.

Large pensions present estate planning challenges and are vulnerable to changes in future income tax treatment.

Introduction. As financial planners, we have all shared the story of Early Bird, who contributes to her pension for ten years, and of Late Starter, who begins saving at age thirty and continues for the rest of his working career. Early Bird ends up with more wealth at retirement.

The message we convey by stories like this is that everyone should stuff as much as they can, as soon as they can, into tax-advantaged savings vehicles. Such vehicles have tremendous potential to increase wealth but we should be more forthright about the downsides. “As much as you can, as soon as you can” is simplistic. Our message should be more nuanced.

There are a variety of tax-advantaged savings vehicles. Each has its own set of rules and planners risk unpleasant conversations with their insurance carriers unless they know the differences¹. That said, defined benefit and defined contribution plans, 401(k) and profit sharing plans, tax sheltered annuities, SIMPLE and SEP plans, traditional and Roth IRAs, 457 and other deferred compensation plans, Keogh plans, educational IRAs and 529 college savings plans are indistinguishable from an investment perspective.

For the purposes of the present discussion, contributions to “traditional-type pensions” are pre-tax and distributions are taxed as ordinary income. Contributions to “Roth-type pensions,” education IRAs and 529 college savings plans are after-tax and distributions are tax-free. “Pension” includes all of the retirement savings vehicles listed in the preceding paragraph.

Contributions to commercial annuities are made with after-tax dollars. Distributions are taxable to the extent that the distribution reflects earnings and not taxable to the extent that the distribution reflects tax-paid

contributions. Nondeductible contributions to a traditional IRA and after-tax contributions to an employer's retirement plan are treated similarly.

Annuity treatment is inferior to the tax treatment afforded pensions, education IRAs and 529 college savings plans.

Economic vs. Nominal Valuations. The economic value of any investment is the value if the investment were distributed. The economic value is less than the nominal value to the extent that there is an unpaid income tax liability.

The economic value of a million dollar Roth IRA is a million dollars. The economic value of a million dollar traditional IRA is perhaps \$670,000. The economic value of a long term taxable investment could be as low as \$780,000. Yet in each of these situations, brokerage statements value these investments as a million dollars.

The marginal rate on ordinary income is 33% and the marginal rate on long term capital gains is 22%. These are the about the marginal rates for a California resident with one to two hundred thousand dollars in taxable income.

All distributions are held for sufficient periods and to a sufficient age and are used for qualified purposes. That is, we are neglecting penalties.

The quantitative results herein would be different for different marginal rates but the qualitative conclusions would not.

It is necessary to distinguish economic from nominal valuations when allocating assets in a mixed portfolio containing both pension and taxable investments.

Example. *Your customer has a million dollar Roth IRA and a million dollar taxable portfolio. Their goal is equal allocation to income and growth assets. For tax efficiency, they want to own the income assets in the pension environment to the extent possible. The nominal and economic values are similar because there is little or no unrealized appreciation within the taxable account.*

Your customer should allocate a million dollars to income assets within the Roth IRA and a million dollars to growth assets within the taxable account.

Example. *Your customer has a million dollar traditional IRA and a million dollar taxable portfolio, seeks equal allocation to income and growth assets and wants to own the income assets in the pension environment to the extent possible.*

The economic value of the traditional IRA is \$670,000. The economic value of the combined portfolio is \$1,670,000. Your customer should own half of the combined economic value as growth assets and half as income assets. The allocation of income and growth assets between the taxable and pension environments should be, in nominal terms,

	<u>Growth Assets</u>	<u>Income Assets</u>
<i>Taxable environment</i>	<i>\$825,000</i>	<i>\$175,000</i>

<i>Pension environment</i>		\$1,000,000
<i>Economic Value</i>	\$825,000	\$825,000

Your initial reaction might have been to allocate a million dollars of income assets to the traditional IRA and a million dollars of growth assets to the taxable account. An allocation based on nominal values would produce a more aggressive portfolio, meaning that after-tax values would grow somewhat faster and exhibit somewhat more volatility than an allocation based on economic values.

The estate tax liability is assessed on nominal values, unfortunately. This means that there may be more estate tax traditional-type pension than on a Roth-type pension with the same economic value.

Example. Two single sisters die during 2004 when the exemption from federal estate tax is \$1.5 million. Each owns a pension with an economic value of a million dollars and little else. The sister who owns the million dollar (minimal) Roth IRA need not file a federal estate tax return and owes no tax. The sister who owns the million and a half (nominal) dollar traditional IRA must file a federal estate tax return and may owe a small amount of tax. The difference between nominal and economic values is of minor consequence.

Assume there are a million and a half dollars in other assets. Both sisters must file estate tax returns and the sister owning a Roth IRA owes perhaps \$400,000 in federal estate tax. The sister owning a traditional IRA whose nominal value exceeds the economic value owes perhaps \$600,000 in federal estate tax¹

Distributions from traditional pensions are taxed as ordinary income while distributions from Roth-type pensions, education IRAs and 529 college savings plans are tax-free. Notwithstanding these distinctions, there is no substantive difference in after-tax investment return. All pensions and education savings vehicles provide an after-tax investment return which approximates the portfolio return.

The truth and limitation of this theorem will be illustrated by comparing the investment returns of traditional and Roth IRAs. But before doing so, let me remind you that the basic meaning of “customer” is someone who buys something of value while the basic meaning of “client” is someone who is dependent upon another. As suggested by Ron Baker, the Value Pricing advocate, those who pay us for financial advice are our customers.

¹ The true impact is less than the difference in estate tax because the incremental estate tax is potentially recoverable as an income tax deduction under §671(c). Even if all of the incremental estate tax were eventually recovered, which is unlikely, the net present value of the estate tax liability increases when nominal values exceed the economic values.

Example. Your customer invests \$2,000 in a Roth IRA. If the portfolio return is 10% annually, the account grows to \$4,000 in a bit over seven years and your customer nets \$4,000 after-tax. The after-tax return as measured from the economic value of the original investment is 10% and equal to the portfolio return.

The analysis and result are the same if your customer invests in a 529 plan.

If your customer invests the same economic value in a traditional IRA, the nominal value of their account will be \$3,000 initially. That is, the economic value of a \$3,000 pre-tax contribution is \$2,000. The nominal value grows to \$6,000 in a bit over seven years. If the marginal tax rate is unchanged at the time of distribution, your customer nets \$4,000 after-tax and the after-tax return as measured from the economic value of the original investment again equals the portfolio return.

It is widely believed that tax rates will be lower in retirement. If marginal rates were lower when a traditional pension is distributed, the after-tax return of a traditional pension would modestly exceed the portfolio return.

Predicting marginal tax rates is even harder than predicting portfolio returns. That said, imagine that your customer retires at age 65 with a \$1.5 million (nominal) traditional IRA. This is not an unusually large pension for someone who has been saving for a lifetime.

The adjacent chart displays the required minimum distributions assuming a 10% portfolio return. These distributions add hundreds of thousands of dollars of ordinary income to the tax return.

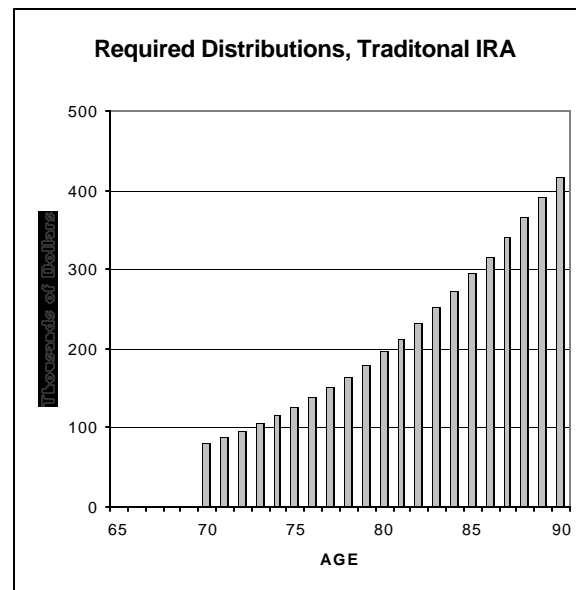
To infer marginal rates, we would need to consider other income, deductions, filing status and how future tax rates are affected by inflation and politics. Not

withstanding that the analysis is not complete, this illustration does not support the notion that successful savers will pay tax at low rates when their pensions are distributed.

I conclude that the after-tax returns of both Roth and traditional-type pensions will equal the portfolio return to a pretty good approximation.

The distinction between economic and nominal values is also important when the contribution limit is expressed in nominal terms. Roth-type pensions are superior to traditional-type pensions if your customer can afford to contribute the maximum amount.

Example. 401(k) and 403(b) plans are permitted to accept elective deferrals on an after-tax basis beginning in 2006. The tax treatment is similar to that of a Roth IRA.



In 2006, employees will be able to contribute \$15,000 before-tax or \$15,000 after-tax. If the portfolio return is 10%, the after-tax value of the Roth-type contribution will be \$30,000 in a bit over seven years while the after-tax value of the traditional-type contribution will be much less, on the order of \$20,000.

Converting to a Roth IRA is generally attractive precisely because conversion increases the economic value of the pension to its nominal value.

It is also useful to distinguish between nominal and economic valuations when allocating assets between pension and taxable portfolios.

Example. Your customer has a million dollar traditional IRA and a million dollar taxable portfolio. Their goal is equal amounts of income and growth assets and, for tax efficiency, they want to own the income assets in the pension environment to the extent possible.

The economic value of the traditional IRA is \$670,000 and the economic value of the combined portfolio is \$1,670,000. Your customer should own half of the combined economic value as growth assets and half as income assets. The allocation of these assets between the taxable and pension environments should be, in nominal terms,

	<u>Growth Assets</u>	<u>Income Assets</u>
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<i>Economic Value</i>	<i>\$825,000</i>	<i>\$825,000</i>

Your initial reaction might have been to allocate a million dollars of income assets to the traditional IRA and a million dollars of growth assets to the taxable account. The truth is that an equal allocation based on nominal values would be a more aggressive portfolio, meaning that after-tax values are likely to grow somewhat faster and exhibit somewhat more volatility than an equal allocation based on economic values.

The estate tax liability is assessed on nominal values, unfortunately. This means that there is more estate tax on a million and a half dollar traditional-type pension than on a million dollar Roth-type pension even though the economic values are the same.

We will return to estate tax impacts later in this article.

Comparative Investment Returns. The following examples are intended to illustrate the general magnitude of the increased after-tax returns which are possible in pension environments. Other assumptions, especially comparisons over shorter or longer time intervals, would have produced different numerical results. Recall that after-tax returns in pension environments approximate the nominal return.

- The active trader who is lucky enough to earn a 15% nominal return might have a 500 bp after-tax advantage if he trades in the pension environment.

- An infrequent trader whose portfolio gains 10% annually might have a 200 bp advantage² in the pension environment.
- The 6% bond holder might have a 200 bp advantage.
- A buy-and-hold investor whose portfolio gains 10% might have a hundred bp advantage³ in the pension environment.

These illustrations assume that investment opportunities, costs and estate taxes are the same in the pension and taxable environments. In the words of George Gerswin, "It ain't necessarily so."

- Leverage increases returns and risk. Leverage cannot be used directly in the pension environment. That's why you can't open a margin account for your customer's IRA. If your customer's goal is maximum return, they might do better with leveraged taxable investments than with unleveraged pension investments.
- As a practical matter, it is difficult to invest in individual parcels of real estate in a pension environment. There is also little financial incentive because owning real estate in a taxable environment is almost a tax-free investment: taxable income is low due to depreciation, tax-free exchanges defer gains indefinitely and cumulative unrealized gains are forgiven at death. If your customer has their heart set on a real estate empire, they should probably make these investments in a taxable environment.
- Owning stock and stock options in small businesses can produce spectacular returns and the gains may be entitled to especially favorable tax treatment. Such investments may be impractical or impossible in the pension environment.
- The values of closely-held businesses and limited partnerships can be heavily discounted for estate tax purposes but both are uncommon in the pension environment.

What To Do When An Employer Plan Has High Costs? Some 529 college savings plans are cost competitive with taxable mutual funds while others have extra expenses in excess of 200 bp. Any cost differential reduces the benefit of investing in these plans. Large cost differentials sharply reduce and might even eliminate the financial incentive to invest in these plans.

If your customer finds themselves in a costly 529 college savings plan, or in a plan with unappetizing investment choices, they can switch to a more attractive 529 plan. Ditto for someone who finds themselves in a costly IRA.

However, employees seldom have the flexibility to switch their employer's pension plan to another provider.

When faced with high costs or unattractive investment alternatives, employees should generally contribute only enough to capture the employer

match. They should use the rest of their “pension” contribution for purposes like

- Converting traditional IRA assets to a Roth IRA. Paying the tax liability is properly thought of as an extra pension contribution.
- Contributing to a low cost 529 college savings plan or IRA.
- Increasing their spouse’s contributions to a low cost employer plan.
- Building equity in their home and thereby avoiding the cost of mortgage insurance.
- Paying down consumer debt. Not paying 6% interest is equivalent to earning a 6% after-tax investment return.

It can make sense to contribute to a costly employer pension if you anticipate moving the money to a low cost pension when you change employers. A contribute and move strategy always produces less than a low cost employer plan but it does produce more, over long periods, than investing buy-and-hold in a taxable environment.

After-tax Value, 10% nominal return

	<u>Buy-and Hold, Taxable</u>	<u>Move to a Low Cost Plan at 10 years</u>	<u>Low Cost Plan</u>
Ten years	$0.78*(1.1^{10}-1)+1 = 2.24$	$1.08^{10} = 2.16$	$1.1^{10} = 2.59$
Twenty years	$0.78*(1.1^{20}-1)+1 = 5.5$	$2.16*(1.1^{10}) = 5.6$	$1.1^{20} = 6.7$
Thirty years	$0.78*(1.1^{30}-1)+1 = 13.8$	$2.16*(1.1^{20}) = 14.5$	$1.1^{30} = 17.5$

Business Owners. I have been arguing that an investment which provides a current income tax deduction is not necessarily better than an investment with no current tax deduction. Unfortunately, many of our customers are convinced that the bigger the tax deduction, the better the investment.

For truly large income tax deductions, think defined benefit plans. If a small business owner is in his mid-fifties and institutes a pension plan which entitles him to \$165,000 a year from age 62, the plan has to accumulate several million dollars over seven years. The required annual contributions will make a significant dent in the business owner’s tax liability.

The downside of a pension plan in the small business environment is that the owner must contribute to the pensions of his or her employees. If the pension plan was established for competitive reasons or out of altruism or as an asset protection strategy⁴, these costs may be acceptable. However, in purely financial terms, the business owner with employees might be better off forgoing the income tax deduction and investing in a taxable environment.

Example. A business establishes a pension plan on behalf of himself and his employees. Through careful design, fully 70% of the company’s pension costs accrue

for the owner's benefit. If the nominal return is 10% in the pension environment, the owner would have to achieve only 8% after-tax to match the performance of the pension over a 20-year investment horizon.

§412(i) plans are defined benefit plans which are entirely funded with life insurance. The good news is that the income tax deduction tends to be larger than the deduction allowed other defined benefit plans and, because the insurance company guarantees performance, the compliance burden is eased.

However, it is unlikely the investment return will exceed the guaranteed rate, meaning that 412(i) plans tend to skew overall portfolio allocations in the conservative direction.

Some 412(i) plans promise spectacular results by using springing cash surrender values⁵. The IRS took steps in February⁶ to shut down such plans.

Intergenerational Wealth Transfer. Other things being equal, pensions have the potential to transfer more wealth to younger heirs than do taxable investments, educational IRAs and 529 college saving plans.

Taxable and pension portfolio are equally valuable to those heirs who have immediate need for the money. However, the net present economic value of a pension as of the date of death could be double the economic value of a taxable portfolio if the heirs were to spend their inheritance gradually over their lifetimes⁷.

There is therefore value to an investment strategy which increases pensions late in life, as a proportion of the total portfolio, if your customer's objective is to enrich younger heirs⁸.

The wealth transfer potential can be spectacular if coupled with the conversions to Roth IRAs because the distributions required of traditional-type pensions make it mathematically impossible to live a long time and to still leave most of your wealth in the form of pension assets.

Example. Assume a million dollars at age 65. This might be a million dollar taxable portfolio, a traditional IRA with a million dollar economic value or a million dollar Roth IRA. Each of these portfolios has a \$7 million economic value twenty years later⁹.

A \$7 million bequest of taxable assets is worth \$7 million to the heirs.

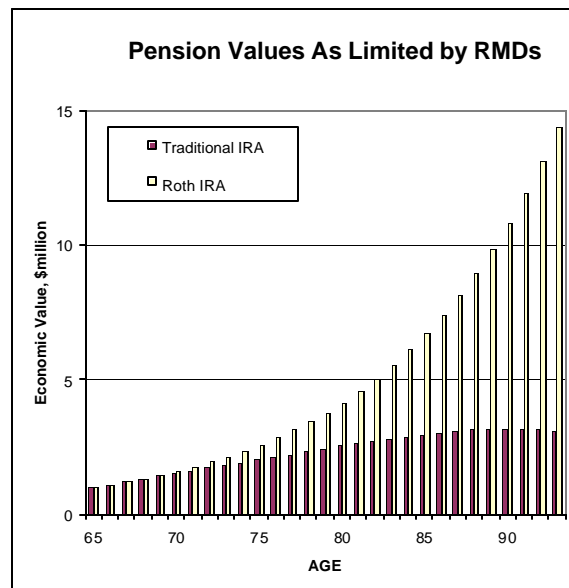
A bequest of a \$7 million Roth IRA is worth potentially twice as much if the heirs are younger and willing to take distributions over their lifetimes.

The third bequest is composed of a traditional IRA with a \$3 million economic value and \$4 million in taxable assets. This bequest is a mixture of pension and taxable assets because required minimum distributions (RMD) limit the growth of traditional pensions (see chart). This bequest might be worth \$10 million after considering intergenerational wealth transfer benefits (twice the economic value of the pension plus the taxable portfolio).

The Roth IRA in this illustration has the potential to provide an extra \$7 million as compared to a taxable portfolio with the same economic value. The traditional IRA has the potential to provide an extra \$3 million.

Had this illustration incorporated estate tax, the actual ages of the heirs and a 671(c) deduction forecast using on the heirs' actual marginal rates, the intergenerational wealth transfer benefits would be numerically different. But they would be very large.

Intergenerational wealth transfer is often the deciding factor for affluent individuals with relatively young heirs who are considering a Roth conversion.



Large Pensions Complicate Estate Planning. Let's examine the estate plan associated with each of the preceding vignettes assuming a married couple where one spouse owns all of the pension assets.

The estate plan would likely call for funding a by-pass trust at the first death with the maximum amount that can be shielded from federal estate tax. There would be no estate tax at the first death, assuming the surviving spouse is a U.S. citizen, because of the unlimited marital deduction.

The estate tax is scheduled to be repealed in 2010 and to be reinstated a year later. My crystal ball is just as cloudy as everyone else's but I don't think repeal is realistic. For present purposes, let's assume a 45% estate tax on amounts over \$3.5 million. This is current law in 2009.

Taxable Assets Only. If the couple jointly own \$7 million in taxable assets, the decedent's half passes to the by-pass trust. The estate of the surviving spouse is \$3.5 million (assuming no change in valuations) and there is no estate tax at the first or second death.

Taxable and Pension Assets. If the couple jointly own \$4 million in taxable assets and the decedent owns a \$3 million pension with the surviving spouse is beneficiary, the by-pass trust would be funded to only \$2 million. Assuming no change in valuations, there is estate tax at the second death.

It is possible to reduce the estate tax at the second death by routing some of the pension assets to the by-pass trust. This is not ideal. There are procedural hurdles that have to be navigated and the by-pass trust will be underfunded if the nominal value of the pension at the first death exceeds the economic value¹⁰. Routing pension assets to the by-pass trust also reduces

the opportunity for intergenerational wealth transfer at the second death and is completely without effect if the nonparticipant spouse dies first.

A better solution, in California, is an Aggregate Agreement¹¹. A couple may agree that the surviving spouse has a disproportionate community interest in the pension assets and that the deceased spouse has a disproportionate community interest in the taxable assets such that, in aggregate, the community shares are of equal value.

For example, the couple could agree that the decedent's share of the community property is \$3.5 million of taxable assets and that the survivor's share is the \$3 million pension plus \$0.5 million of taxable assets. Such an agreement allows funding of the by-pass trust without using pension assets and without concern for which spouse dies first.

If the pension is Roth-type, an agreement would eliminate estate tax at the second death. If the pension is a traditional pension, an agreement would reduce but probably not eliminate estate tax at the second death.

Another approach would be to distribute some of the pension before the first death. This can be especially attractive with traditional pensions. Purchasing life insurance is another possibility. Whether any of this makes sense depends on the anticipated tax liabilities, the value assigned to intergenerational wealth transfer and the cost of the insurance.

Pension Assets Only. If the decedent owns a \$7 million pension with the surviving spouse as beneficiary, there is no money to fund the by-pass trust and the estate of the second-to-die is valued at \$7 million.

This result could be improved if the participant spouse were to promise to die first because, in this event, some of the pension assets could be routed to the by-pass trust. However, there is nothing that can be done to avoid estate tax at the second death, short of distributing the pension before death or buying life insurance to pay the tax, if the nonparticipant spouse dies first.

Estate tax can reduce or eliminate the wealth benefits of pension investing.

Example. A million dollar Roth IRA grows to \$7 million net of income tax in a bit over twenty years at 10%. Assume there is no cost-effective way with pension assets to plan around the estate tax liability. The effective value of the Roth IRA is \$5.4 million net of income and estate taxes plus any intergenerational wealth transfer benefits.

A million dollars in a taxable environment grows to a bit more than \$5.4 million net of income tax in a bit over twenty years in a 10% environment with infrequent trading and a stepped-up basis at death. If there is a low cost way to plan around the estate tax liability using taxable assets and if intergenerational wealth transfer is valueless, taxable investing produces the better result.

The pensions in these vignettes have become so large that there is the need for skillful planning if we are to preserve value for our customers. My bottom line is that we need to be alert to the estate tax implications of large pensions.

Vulnerability to Future Tax Changes. I suspect that any assaults on the tax benefits afforded by large pensions will be covert. The appreciation within a Roth account, for instance, might be made subject to the alternate minimum tax or it might be considered when determining the taxability of Social Security benefits. The tax on “excess accumulation” within a traditional pension account might be reinstated. Pensions might become distributable at death. Just as we recommend that our clients allocate their portfolios among asset classes to reduce financial risk, it is wise to allocate portfolios among taxable and pension environments to reduce political risk.

4280 words

¹ For the rules affecting retirement saving vehicles, see “Pensions, State Taxes and the 2001 Tax Relief Act,” Peter James Lingane, *Journal of Financial Planning*, January 2002.

² The annualized after-tax return is nearly 8% assuming no dividends, a two-year holding period and a 22% marginal tax rate at the time of distribution.

³ The annualized after-tax return is 8.9% assuming no dividends, a twenty-year holding period and a 22% marginal tax rate. The annualized after-tax return is 9.2% in a jurisdiction with no state tax.

⁴ There are reports that increasing number of physicians in Florida and other jurisdictions are forgoing malpractice insurance. An ERISA pension provides bankruptcy protection and the value of this asset protection may outweigh the cost of employee pensions for the uninsured business owner.

⁵ Peter Katt, “Tax-Avoidance Life Insurance Schemes Redux,” *Journal of Financial Planning*, March 2004.

⁶ Revenue Rulings 2004-20 and 2004-2, Revenue Procedure 2004-16 and proposed changes to various regulations. See also www.irs.gov/newsroom/article/0,,id=120409,00.html.

⁷ For example, Steve Trytten, “Estate Planning for Qualified Retirement Plans and IRAs” *Retirement Planning Conference: What the CPA Needs to Know*, California CPA Education Foundation, 2003.

Traditional and Roth-type pensions with the same economic value on the date of death have different net present values because the §671(c) recovery of the extra estate tax paid on traditional pensions is inexact. These differences are not consequential to the present argument.

⁸ This is not necessarily the best objective argues John Scroggin in “Influencing the Behavior of Heirs,” *Journal of Financial Planning*, November 2003.

⁹ 10.2% annualized return, after-tax. The assumption that of identical returns somewhat overstates the rate of growth of the taxable and traditional IRA portfolios and somewhat understates the wealth transfer benefits of the traditional IRA and the wealth transfer benefit from converting to a Roth IRA.

¹⁰ “Should Planners Recommend Trusts as IRA Beneficiaries?” Cal Brown and Thomas Campbell, *Journal of Financial Planning*, October 2003.

¹¹ I am distinguishing between legal title and community property ownership. The participant spouse holds legal title to the pension but each spouse has a one half community property interest in the pension for estate and gift tax purposes, including the funding of a by-pass trust.

“Aggregate Theory Agreements: Don’t Get “Bogg’ed” Down,” Steven E. Trytten, *California Trusts and Estates Quarterly*, 5(3), Fall 1999.

“Practicalities of Port-Mortem Distribution Planning for Community Property Retirement Benefits and IRAs – Trusts as Beneficiaries, Separate Shares and Aggregate Theory Agreements,” Edward V. Brennan, *California Trusts and Estates Quarterly*, 5(4), Winter 1999.