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Quantifying the Tax Advantage of Deferred Compensation

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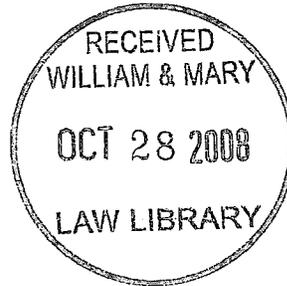
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CHAPTER 8

Quantifying the Tax Advantage of Deferred Compensation

ERIC D. CHASON

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Synopsis

§ 8.01   INTRODUCTION

Deferred compensation allows employer and employee to defer the tax consequences of compensation that is currently earned. Such deferral appears quite beneficial to the employee, so long as tax rates do not rise before the time of final payout. From the perspective of the employee, then, deferred compensation is just as good as the deferral from an IRA or 401(k) plan. The employer, though, faces a tax disadvantage from deferred compensation. Current compensation is currently deductible. Deferred compensation is not, even if the employer is otherwise on the accrual

8-1

method of accounting.[1]

Prior authors (including me) have written about whether the taxation of deferred compensation is tax advantaged, and have generally answered in the affirmative.[2] The ultimate question will always be whether the employer and employee can achieve joint tax savings by entering into a deferred compensation arrangement. In other words, do the benefits to the employee (deferral of income) outweigh the burdens to the employee (deferral of deduction).

The joint-tax perspective is extremely useful to frame the question, but it does not give us an ultimate answer. Whether deferred compensation (or any other transaction) is tax advantaged is always a relative question—advantaged compared to what? The prior literature has tended to use as a baseline third-party investments.[3] For example, suppose that an employee wants to buy a fully taxable bond and hold it for 10 years. The employee might simply take her compensation, pay her taxes, and buy the bond. Or, the employee might ask her employer to defer her compensation for ten years. The employer would then buy the bond with the compensation savings, holding it for the employee until the time of payout.

This approach does have weaknesses. The employee has different economic and legal rights from holding the taxable bond than entering into deferred compensation. Under deferred compensation, the employee faces the risk that the employer will become insolvent or go bankrupt before final payout occurs. The employee faces no such risk by buying the bond outright. Moreover, many (probably most) deferred compensation arrangements are not funded. The employer might agree to replicate the return on the taxable bond but may not actually set aside funds to buy the bond. To fully implement the joint-tax perspective, we would also need to consider the tax attributes of the issuer of the taxable bond.

We can avoid these difficulties by examining the tax consequences to the two parties (employer and employee) of the two-party transaction that employer and employee actually enter in to. Deferred compensation is a contract between employer and employee with two components: a compensatory element and an investment element. We will see below that the rules for deferred compensation typically preserve the IRS's ability to tax the compensatory element but negate its ability to tax the investment element.

§ 8.02 MARGINAL TAX RATES AND OTHER NOMENCLATURE

The tax efficiency of deferred compensation depends upon the marginal tax rates of

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[1] IRC § 404(a)(5).

[2] See, e.g., Scholes et al., Taxes and Business Strategy 212-16 (3d ed. 2004).

[3] See, e.g., Yale & Polsky, Reforming the Taxation of Deferred Compensation, 85 N.C. L. Rev. 571, 576-577 (2007).

the employer and employee. As used in this Article, the marginal tax rate is an economic, not legal, concept, defined as the "present value of . . . taxes . . . to be paid per dollar of additional (or marginal) taxable income."[4] The marginal tax rate is not an average rate or effective rate, which is irrelevant to the tax advantage of a transaction.

For employees, I will assume that the marginal tax rate is the highest federal rate of 35% for all periods involved. Most recipients are highly paid, and employers face significant, perhaps insurmountable, difficulties in bestowing deferred compensation on rank-and-file employees.[5] The long-term capital gains and dividend income of employees will be taxed at long-term capital gains rate, currently 15%.

This Article will assume that employers are taxable as C corporations. Nevertheless, the marginal tax rates of employers is more difficult to generalize. Employers often have (or expect to incur) net operating losses (NOL). An employer incurring a current NOL does not have a 0% marginal tax rate because the NOL can be carried back to the prior two or forward to the subsequent 20 taxable years.[6] An extra dollar of taxable income does not increase current taxes paid but does reduce the current NOL, a valuable asset. As will be seen below, deferred compensation is tax advantaged when the employer's marginal tax rate is lower than the employee's. A useful assumption will then be that the employer's marginal tax rate is 20%.

When numbers are not used, the following symbols will represent the various marginal tax rates:

t_i the marginal tax rate for individuals (other than long-term capital gains)

t_{cg} the marginal long-term capital gains rates for individuals

t_c the marginal tax rate for corporate employers

To simplify the analysis, I am focusing only on federal income taxes. I do not consider

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[4] Scholes et al., supra note 2, at 186.

[5] Tax Management Portfolio 385-4th: Deferred Compensation Arrangements Section IX. A. Excess benefit plans under ERISA § 3(36) avoid these restrictions but are uncommon. They are in fact tied to limits under the Code under IRC § 415, but those limits are so high that they are practically meaningless for rank and file employees. A qualified plan must provide an $185,000 a year pension, or contribute $46,000 a year to an employee's account, before IRC § 415 actually applies. See IRS Announces Pension Plan Limitations for 2008, IR-2007-171, Oct. 18, 2007 (listing the section 415 limits for 2008). Cf. Tax Management Portfolio 385-4th: Deferred Compensation Arrangements Section IX.A (noting that excess benefit plans are not a common refuge from the requirements of ERISA); id Section II.G ("An excess benefit plan must be maintained 'solely' for the purpose of providing benefits in excess of the § 415 limits and the limitation will, in all likelihood, be construed narrowly.").

[6] IRC § 172(b).

state, local, foreign, employment, or implicit taxes. Obviously, the analysis could be expanded to accommodate these additional taxes.

§ 8.03   IRS SHARE OF CURRENT COMPENSATION

When an employer pays current (cash) compensation, the employee is taxed, but the employer receives a deduction. If the pre-tax compensation is C, then the employee pays tax of Ct_i, and the employer gets a deduction of Ct_c. The IRS's net share is $C(t_i - t_c)$. Note that the IRS receives nothing on balance from current compensation if the employer and employee have the same tax rate. The IRS's share depends upon the spread in tax rates between employer and employee. For example, suppose that MC Corp. pays an executive (Ellie) $1,000,000 of current compensation. MC Corp. has a marginal tax rate of 20%, and Ellie a rate of 35%. The net share of the IRS will be $150,000.

§ 8.04   IRS SHARE OF DEBT TRANSACTIONS

When an individual loans money to a corporation, the individual will pay tax on the interest, and the corporation will receive a deduction. If the pre-tax interest rate is R and the amount loaned is P, the individual pays tax of PRt_i, and the employer gets a deduction worth PRt_c. The IRS's net share will be $PR(t_i - t_c)$. As with current compensation, the IRS's share of the debt transaction depends on the spread in tax rates between the parties. For example, if Ellie loans $1,000,000 to MC Corp. at 10% interest, the IRS's net claim will be $15,000. Note that the IRS's net claim is periodic, arising every year that the debt transaction remains open.

Later, we will see that the tax advantage of debt-based deferred compensation is that it deprives the IRS of its claim to any share to the investment component of the transaction. In effect, the interest inherent in deferred compensation is neither taxable nor deductible. After that point is developed, it will be useful to translate the IRS periodic claim to the debt transaction into a single-lump sum amount determined upon the close of the debt transaction. Let us return to the example of Ellie and MC Corp. to develop this point before expressing it algebraically.

Assume again that Ellie loans $1,000,000 to MC Corp. at 10% interest, but now assume that the maturity of the debt is 10 years. The interest is taxable to Ellie and deductible to Ellie whether or not cash interest payments are made.[7] Let us assume that MC Corp. pays actual cash interest to Ellie in an amount to allow Ellie to pay her taxes every year. That would be 3.5%. The rest (6.5%) will be capitalized into the loan. So, Ellie does not have to make any out-of-pocket payments for the duration of the loan, and will enjoy a 6.5% after-tax rate of return.

The tax consequences of this arrangement are described in the following chart.

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[7] IRC §§ 1271-1275.

Year	Loan Balance	Annual Interest	Tax on Ellie	Deduction for MC Corp.	IRS Net Share
0	$ 1,000,000	$ 100,000	$ 35,000	$ 20,000	$ 15,000
1	$ 1,065,000	$ 106,500	$ 37,275	$ 21,300	$ 15,975
2	$ 1,134,225	$ 113,423	$ 39,698	$ 22,685	$ 17,013
3	$ 1,207,950	$ 120,795	$ 42,278	$ 24,159	$ 18,119
4	$ 1,286,466	$ 128,647	$ 45,026	$ 25,729	$ 19,297
5	$ 1,370,087	$ 137,009	$ 47,953	$ 27,402	$ 20,551
6	$ 1,459,142	$ 145,914	$ 51,070	$ 29,183	$ 21,887
7	$ 1,553,987	$ 155,399	$ 54,390	$ 31,080	$ 23,310
8	$ 1,654,996	$ 165,500	$ 57,925	$ 33,100	$ 24,825
9	$ 1,762,570	$ 176,257	$ 61,690	$ 35,251	$ 26,439
10	$ 1,877,137				

We have thus determined the future value of Ellie's repayment to be $1,877,137. The IRS receives periodic payments, but the goal is to translate those into a final payment in year 10. Note that the IRS's net share starts at $15,000 and increases by 6.5% each year. If the IRS would be willing to accept the same after-tax return as Ellie (6.5%), the future value of the IRS's stream of payments equals $15,000*10*(1.065)^9 = $264,386. In more general terms, the future value of the IRS's net share is:

$$PR(t_i - t_c)N(1 + R(1 - t_i))^{(N - 1)},[8] \text{ where}$$

P is the initial principal

R is the pre-tax interest rate and

N is the number of years that the loan is outstanding.

§ 8.05   IRS SHARE OF EQUITY TRANSACTIONS

Rather than loaning money to a corporation, the individual may wish to purchase corporate stock or other equity. The IRS's share of equity transactions depends on many different factors, and to simplify our analysis, I will make the following assumptions:

- The equity does not yield any dividends.

- All gains are subject to the long-term capital gains rate.

- All losses are fully and currently usable to offset long-term capita gains from other assets.

One simplifying fact is that the issuing corporation has no tax consequences from the

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[8] See http://en.wikipedia.org/wiki/Time_value_of_money#Future_value_of_a_growing_annuity>.

equity transaction.[9] Thus, our joint-tax perspective is limited to the individual.

If the equity has gained in value from the time purchased to the time sold, the IRS will receive 15% of the increase. If the equity has declined in value, the IRS will lose 15% of the decline (by way of revenue foregone from other sources). Another way of thinking about this is that the IRS will receive 15% of the value of the equity at the time it is sold, minus 15% of the price paid (adjusted basis). If S0 is the initial price and SN is the price at sale, then the IRS's claim will be—

$$t_{cg}(S_N - S_0).$$

Whether the IRS's claim will turn out to be valuable depends upon the performance of the stock. But, the same could be said if the IRS (or the federal government) went out on the market to buy stock directly. What makes the IRS's claim to capital transactions inherently valuable is that it can, in effect, buy stock on favored terms. If the government wanted to buy shares of stock without putting up any funds out of pocket, the government would have to borrow money to do so. If the interest rate were r and if the government repaid the loan upon sale of the stock, the government would have a net position of

$$S_N - S_0(1+r)^N.$$

But, when the government invests indirectly by way of capital-transaction taxation, it has a net position of

$$S_N - S_0,$$

scaled up or down to reflect the capital gains rate of tcg. The advantage, then, is that the government can effectively borrow the initial S0 required to buy the stock without having to pay any interest.[10]

§ 8.06 THE COMPENSATORY ELEMENT OF DEFERRED COMPENSATION

When an employer promises to pay deferred compensation to an employee, two things occur. The employer makes the initial promise to the employee as compensation for services rendered. Valuing this initial promise might be difficult (or impossible), but we can be sure that the promise has some value. Because ultimate payout is deferred, the employee must receive some compensation to reflect the time value of money.

Let us suppose that the initial promise to pay deferred compensation is worth C, as expressed in pre-tax dollars. (It is unimportant that we might face practical

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[9] IRC § 1032(a).

[10] This point is a corollary to the Domar-Musgrave theorem. See Charlene D. Luke, Taxing Risk: An Approach To Variable Insurance Reform, 55 Buff. L. Rev. 251, 253 (2007).

difficulties in determining just what $\$C$, as will be shown shortly.) Let us also suppose that the employer will credit the employee with interest at rate of r every year. After N years, the employee will receive the full value of the deferred compensation. The pre-tax payment will be $\$C(1+r)^N$. After paying taxes, the employee will be able to keep

$$\$C\ (1 - t_i)(1 + r)^N.$$

Now, if the employer had actually paid $\$C$ in current cash to the employee, the employee would have to pay tax and would get to keep.

$$\$C(1\text{-}ti).$$

We can see that r is the employee's *after-tax* rate of return under the contract, and we can use this same after-tax rate of return when valuing the IRS's claims.

If the employer had paid current compensation to the employee, the IRS's net share would be $\$C(ti - tc)$, payable immediately. If the employer paid deferred compensation, the IRS's net share would be $\$C(1 + r)^N(ti - tc)$, payable after N years. The interesting result here is that the IRS is kept whole as to it claim to the compensatory element of deferred compensation.

This result can be generalized to situations where deferred compensation is based on equity or on the returns to third-party investments. The IRS is always kept whole as to its claim to the compensatory element because it receives the same after-tax rate of return (r) that the employee receives. So far, then, deferred compensation appears to be tax neutral. However, as will be shown next, the taxation of deferred compensation negates the IRS's claim to the investment component of such arrangements.

§ 8.07 IRS's CLAIM TO THE INVESTMENT ELEMENT OF DEBT-BASED DEFERRED COMPENSATION

Assume now that the employer actually pays $\$C$ to the employee in current cash compensation. After paying taxes, the employee loans what is left—$\$C(1 - ti)$—to the employer. The employer agrees to pay the employee enough interest to give the employee an after-tax rate of return equal to r. Because the employee pays tax at the *ti* rate, the employer must pay pre-tax interest of $r/(1-ti)$. As before, we will assume that the employer pays cash interest sufficient to allow the employee to pay her tax bill on the interest. The remaining interest will be capitalized.

Under this arrangement (current compensation plus debt), the employee is in exactly the same economic situation as under deferred compensation. The legal rights of the employee under this structure can be tailored to be identical to those under deferred compensation. For example, current compensation plus debt is consistent with the insolvency risk that employees must face under deferred compensation. As for the economic rights, regardless of the structure, the employee has no positive or negative cash flows until after N years, at which time the employee will have cash of $\$C(1 -$

ti)(1 + r)^N, the same as under deferred compensation Also, we know from before that the IRS's claim to the compensatory element of deferred compensation is kept intact. So, we can focus exclusively on the IRS's claim to the investment element of deferred compensation.

Because of its economic equivalence to deferred compensation, current compensation plus debt tells us what the IRS *should* be receiving as its claim to the investment element of deferred compensation. We saw above[11] that the future value of the IRS's share of a debt transaction is equal to $PR(t_i - t_c)N(1 + R(1-t_i))^{(N-1)}$, where

P is the initial principal

R is the pre-tax interest rate (remember that r is the after-tax rate) and

N is the number of years that the loan is outstanding.

In our current compensation plus debt model,

P = $C(1 - t_i)$

R = $r/(1 - t_i)$

Thus, future value of the IRS's debt-based claim is equal to

$Cr(t_i - t_c)N(1 + r)^{(N-1)}$.

To recap, this amount describes what the IRS would receive if deferred compensation were structured as current compensation plus debt. This amount describes the tax advantage to debt-based deferred compensation. Note that no advantage exists when the employer and employee are in the same tax bracket.

§ 8.08 GENERALIZING THE IRS's CLAIM TO THE INVESTMENT ELEMENT OF DEFERRED COMPENSATION

This result can be generalized to most (perhaps all) types of deferred compensation. The most convenient part of this generalization is that we do not even need to know what C (the initial value of the compensation). Let us define D to equal the amount that the employee receives upon ultimate payout of deferred compensation. Using debt-based deferred compensation, D will equal $C(1 + r)^N$. We can substitute that into the final result from the prior section to see that the IRS's claim to the investment element of deferred compensation equals—

$D(t_i - t_c)Nr/(1 + r)$

Below, I will refer to this expression as the "investment formula."

The convenience of investment formula has significant policy consequences. Other scholars have argued that the Internal Revenue Code should be amended to apply a

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[11] See supra note 8 and accompanying text.

"special tax" on employers who offer nonqualified deferred compensation.[12] The practical difficulty of these approaches is that they require annual valuation of the deferred compensation contract, which might prove burdensome or inaccurate. Under the investment formula, however, we do not need to value the deferred compensation contract annually. The final payout (D) is already determined under current law. The after-tax interest rate (r) could be determined by a statutory system. Perhaps the most difficult part would be determining the duration (N) of a deferred compensation contract, given that employees often receive accruals under the same contract over multiple years. Yet, reasonable conventions for determining the duration of the contract should be attainable.

A special tax might work as follows. Suppose that in 2019, MC Corp. pays Ellie deferred compensation of $2 million under a contract that was agreed to in 2009. Thus, D is $2 million, and N is 10 years. We do not have direct evidence of the after-tax rate of return (r) used by the parties, but developing a statutory rate should be achievable. Let us assume that the rate is 5%. The tax base for the special tax would be $DNr/(1 + r)$ = $2 million * 10 * 0.05/1.05 = $952,381. This is the present value, determine in 2019, of the interest that passed between the parties under the contract. Next, MC Corp. pays a special tax equal to ti (the highest rate for individuals) times the tax base. In our example, MC Corp. pays a special tax equal to $333,333. MC Corp. would also get to deduct the tax base. As MC Corp. is in the 20% rate, the deduction is worth $190,476. On balance, the IRS would get $142,857 in 2019.

Mechanically, the investment formula can just as easily be applied to equity-based deferred compensation. The real question is whether it is appropriate to do so, and we will examine phantom stock plans to determine the appropriateness. Under a phantom stock plan, the employer promises to pay the employee a future amount equal to the value of the employer's stock in the future. So, employer stock might be worth $C today, but might be worth $E in the future. If we view phantom stock as being most analogous to grants of real stock, applying the debt-based model appears arbitrary. After all, the point of the debt-based special tax is to replicate the tax treatment of debt, and stock is most certainly not debt.

But, there is another way to view phantom stock that does have a debt component. Rather than viewing phantom stock as analogous to stock ownership, we can view it as a combination of straight debt and a forward contract on the stock itself.[13] Using this interpretation, we could break down equity-based deferred compensation into the following components:

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[12] See Polsky & Yale, supra note 3, passim; Halperin, Interest in Disguise: Taxing the Time Value of Money, 95 Yale L.J. 506 (1986).

[13] See Polsky & Yale, supra note 3, at 615.

Compensation Component: Employer pays employee current compensation of C, where C is the current (not future) value of the shares covered by the phantom stock plan. After the employee pays her taxes, she is left with $C(1 - t_i)$.

Debt Component: This is essentially the same as the current-compensation plus debt model. The employee immediately loans her after-tax proceeds ($C(1 - t_i)$) to the employer. The employer promises to pay the employee pre-tax interest of $r/(1 - t_i)$ for N years. As under our current-compensation-plus-debt model, the employer makes actual interest payments sufficient to allow the employee to pay her annual taxes on the interest. Thus, the employee will have $C(1 - t_i)(1 + r)^N$ after N years.

Forward Component: Immediately after the current compensation is paid, the employee and employer enter into a forward contract with respect to the employer's stock. The employee agrees to buy a fixed number of shares of stock for $C(1 - t_i)(1 + r)^N$ after N years. Standard financial theory holds that this is a "fair" price for the forward contract, not requiring a payment from either party to the other.[14] Because the contract is fair, the employee has no basis in it.

Arguably, this analogy is a more accurate one that outright stock ownership. Under equity-based deferred compensation, the employee does not enjoy the dividend and control rights that accompany outright ownership of stock. Instead, hers is an economic right to the future value of the stock after N years, which is replicated by the forward contract.

The compensation component of the contract is adequately taxed under current law for reasons discussed above. As for the forward component, a reasonable case can be made that the IRS loses nothing if it is unable to tax the forward component of the contract. The employer should have no tax consequences from the forward component because it is dealing in its own stock.[15] The employee potentially has gain or loss on the forward contract depending upon the ultimate performance of the employer stock. As discussed above, however, the IRS's share of capital transactions is economically equivalent to a tax-free loan from the taxpayer to the IRS of a portion of the taxpayer's adjusted basis in the contract. Because the contract is fairly priced, the employee has no adjusted basis in the forward-contract component, making the IRS's claim inherently neutral (rather than valuable). Thus, the IRS suffers no prejudice if we do not try to replicate the tax consequences of the forward-contract component. Another way of putting it is that the IRS could theoretically obtain a fairly priced forward contract on the market without any outlaw of funds.

This leaves the debt component. Yet, we have already developed a method for taxing

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[14] See Hull, Options, Futures, and Other Derivatives, 44-47 (5th ed. 2003).

[15] IRC § 1032(a).

nonqualified deferred compensation structured as debt. Under this model, the value of the IRS's claim to the debt transaction is $D(t_i - t_c)Nr/(1 + r)$, where D is the pre-tax amount paid under debt-based deferred compensation. In our example, $D = \$C (1 + r)^N$, which is really just the future value, after N years, of $\$C$. Another way of expressing this same concept is to increase the initial amount $\$C$ by another time-value-of-money transaction, namely the stock of the employer. So, if stock currently worth $\$C$ grows (or declines) to $\$E$, we can substitute $\$E$ for $\$D$ rewrite the value of the IRS's claim to equity-based deferred compensation as follows:

$$E(t_i - t_c)Nr/(1 + r)$$

Again, we have a convenient result. $\$E$ is the actual pre-tax payout that the employee receives under the phantom stock plan. Thus, we can value the IRS's claim to the investment component of equity-based deferred compensation without resorting to any annual valuations. Indeed, the only valuation that must be performed is the final one, which the parties must perform to complete the phantom stock plan anyway.

§ 8.09   CONCLUSION

Deferred compensation contains two components—compensatory and investment. The tax rules for deferred compensation adequately preserve the IRS's share of the compensatory element but not the investment element. If the employer is in a lower tax bracket than the employee, deferred compensation arrangements will receive a tax advantage.

The amount of the advantage can be specified algebraically, based upon the pretax value of the final payout under the plan, the number of years that the plan was open, and the appropriate after-tax interest rate. In the text I made the case that the algebraic expression could be applied not only to debt-based deferred compensation but also equity based (like phantom stock). More work should be done, but the result could conceivably be applied to any system of deferred compensation and even nonqualified stock options.

One use of the algebraic expression of tax savings is for tax planners, who can estimate the dollar amount of tax savings from deferred compensation. My primary goal, however, is to use the algebraic expression as a policy tool, allowing Congress to impose an administrable and properly calibrated special tax on deferred compensation that renders it tax neutral.