Taxes and Business Strategy

1. Chapter 1 -- Introduction to Tax Strategy: This course is not a substitute for any of the other tax classes. The basic class on Taxation examines a variety of provisions in the Internal Revenue Code including the basic rules, exceptions to the basic rules, exceptions to the exceptions, etc. Significant time is devoted to considering whether the particular provision can be justified on the basis of equity, efficiency or simplicity. Alternatives are examined. The same basic technique is pursued in the advanced courses on Corporate Tax, Partnership Tax, and International Taxation. Those courses are not primarily planning courses. This course is complementary to those other courses: we use a much-simplified version of the tax rules and then we consider varies strategies that maximize after-tax returns. An especially important part of this course is that we consider the tax positions of all parties to the transaction.

    1.1 Themes of the Book

        1.1.1 Overview

            1.1.1.1 Why is it important to consider the tax consequences to <u>all</u> parties to a transaction? Consensual transactions are all about deciding how to divide a pie: taxes paid by any party are unavailable to be split. Thus, in a perfect world the parties would maximize the size of the pie and then agree on how to split it. However, if side payments are costly to make, minimizing the joint tax liability might actually worsen some of the parties.

            1.1.1.2 We usually use the term “explicit taxes” to refer to actual tax payments to a governmental authority and “implicit taxes” to refer to the difference between a fully-taxable return and the lower pre-tax return generated by a tax-preferred activity. For example, if the interest received from fully taxable bonds pays 10% while the interest received on bonds issued by state and local governments which is exempt from tax pays 8%, there is a 20% implicit tax on the exempt interest (because (10% minus 8%) divided by 10% equals 20%).

            1.1.1.3 Note that effective tax planning is not the same as minimizing explicit taxes or even minimizing both explicit and implicit taxes of one party or even of all the parties. Effective tax planning requires all costs to be considered including explicit taxes, implicit taxes, and all other costs that vary across different business opportunities. The ideal goal is to maximize the joint after-tax return to all parties taking into account all costs.

        1.1.2 Taxing Authority as Investment Partner: One can think of the taxing authority as a nonvoting equity investor. This is a fair description, however, only if losses are allowable without limitation: if gains are taxable but losses are not deductible, the taxing authority has what amounts to a profits interest in the venture. Assuming losses are allowable without limitation and that extraordinary returns

to capital average zero, then the effective rate on extraordinary returns is zero regardless of the nominal tax rate. Why?

1.1.2.1 To the extent that tax rules are designed to encourage or discourage certain behaviors, then the tax rules are substitutes for other incentive structures. For example, in lieu of exempting interest on state and local bonds from the federal income tax, Congress could provide a direct subsidy of state and local borrowing costs. What are the pros and cons of replacing the current exemption with a direct subsidy? Note that the ACA (i.e., ObamaCare) as originally enacted imposed a tax on employers who do not provide health care benefits and on individuals who do not buy health care. Could such a system be replaced with some alternate mechanism?

1.1.2.2 To the extent that taxpayers incur costs to benefit from tax expenditures, society incurs a deadweight loss: that is, funds are spent without any pre-tax productivity. Consider an employer who can purchase a health insurance policy for a healthy employee. The policy costs the employer $100 per month, is worth $80 per month to the employee, and cash compensation is taxable to the employee at 28% while employer-provided health benefits are excludible from the employee's income. Assuming the employer can deduct the cost of fringe benefits as well as cash compensation, what actions will be taken? What is the amount of the deadweight loss? ($20)

1.1.3 The Importance of a Contractual Perspective

1.1.3.1 Negotiating strategy starts with identifying those things most important to your client yet likely unimportant to the counterparty as well as things important to the counterparty yet unimportant to your client. Why?

1.1.3.2 Can this be extended to a negotiation involving one element? Company is negotiating a new contract with labor. Company says that if labor costs are not reduced, bankruptcy will result; labor says that Company will make a healthy profit and some of that anticipated profit should be captured by labor. How should this negotiation end, assuming all other costs are fixed?

1.1.3.3 Should a low bracket taxpayer purchase state or local bonds? If a low-bracket taxpayer inherits state or local bonds, what should the taxpayer do?

1.1.3.4 Assume the cost of business equipment and machinery can be deducted more quickly than the assets actually depreciate; that is, assume that such assets are tax-preferred in that net income from productive use of such assets can be deferred. What should a company do if it needs to employ such assets but anticipates incurring tax losses in the next few years? In other words, how can the depreciation deductions be sold?

1.1.4 An Introduction to the Coase Theorem (not in the text):

1.1.4.1 The Coase Theorem shows that property rules have no allocative consequences if bargaining is costless and information is perfect. Of course, bargaining never is costless and information never is perfect, so property rules in fact have allocative effects. But what the Coase Theorem reminds us (and as Professor Coase explicitly recognized, see Ronald Coase, *The Problem of Social Cost*, 3 J. Law & Econ. 1 (1960)) is that minimizing bargaining costs likely will improve allocative outcomes. Further, to the extent bargaining will be expensive, property rules likely will determine which activities are conducted.

1.1.4.2 Consider a railroad which runs adjacent to a farm. The farmer would like to grow wheat and the railroad would like to run a train. However, the train emits sparks that will cause the wheat to burn. Thus, either the farmer will grow wheat or the train will run, but not both. There are two possible property rules: (1) the farmer has the right to exclude the train, or (2) the train has the right to run without regard to the farmer's desires.

1.1.4.2.1 Suppose the train can install a spark arrestor at a cost of $100, and suppose further that the farmer can make a net profit of $125 from the wheat. If the farmer can exclude the train, he will do so and the wheat will grow. The railroad will be forced to purchase the spark arrestor, so it will make $100 less from running the train than it otherwise would make. If the farmer cannot exclude the train, he will agree to purchase a spark arrestor for the train, and again the wheat will grow. Note, though, that the farmer's net profit has decreased from $125 to $25 because of the need to pay for the spark arrestor, though the train's profit increases by the same amount. Note also that regardless of the property rule, the wheat is grown and the train uses a spark arrestor.

1.1.4.2.2 Suppose now that the farmer will only make a net profit of $80 from the wheat. If the farmer has the right to exclude the train, presumably the railroad will pay the farmer some amount between $80 and $100 for the right to run the train while emitting sparks. Thus, the train will run without a spark arrestor, no wheat will grow, and the farmer will be richer by something between $80 and $100. If the farmer cannot exclude the train, it will run without a spark arrestor, no wheat will grow, and the farmer will have no money. Again, the property rule does not affect the substantive outcome (i.e., whether wheat will grow; whether a spark arrestor will be used), but it does affect the relative wealth

of the railroad and of the farmer. We say that the property rule in this case has no allocative effect (because it does not affect how society allocates its resources) but has a distributional effect (because it effects how society's wealth is distributed).

1.1.4.3 When bargaining is expensive, property rules can have allocative consequences. For example, reconsider the train/wheat examples above, but assume that the parties cannot contract without paying a contract tax of $35. Now, if the train can run without a spark arrestor it will do so (and there will be no wheat), even if the gains from growing wheat will more than cover the cost of a spark arrestor.

1.1.4.4 The example above of the farmer and the railroad assumes that if (1) the farmer has the right to exclude the train, and (2) the crop is worth only $80 while the spark arrestor costs $100, the farmer will sell his right to exclude the train for no less than $80 and no more than $100. Unfortunately, there is no way to guarantee this result. In particular, the parties may misrepresent their true preferences in a strategic attempt to obtain a larger share of the $20 surplus. And even if they do not misrepresent their preferences, they may be unable to reach an agreement because each side holds out for more than the other is willing to offer. This is called the “bi-lateral monopoly” problem.

1.2 Why Do Tax Rules Influence Before-Tax Rates of Return and Investment Decisions? It is clear the tax rules affect after-tax investment returns, but it is less obvious why tax rules affect before-tax investment returns. *The answer is that in a competitive market all investments should yield the same after-tax return (after allowing for risk).* Why? Because any investment that yields a higher return will see its price bid-up as investors chase that above-market return, this will eventually result in a market return once the market-clearing price is reached. Similarly, an investment paying a below-market after-tax return will see its price decline until it reaches a market-clearing price yielding a market return.

1.2.1 Implicit Taxes and Tax Clienteles: We have already seen that pre-tax preferences and pre-tax disabilities should yield implicit taxes and implicit subsidies. Taxpayers whose individual circumstances make specific investment more desirable to them than to others are referred to as tax clienteles of the tax item.

1.2.2 Tax Planning as a Tax-Favored Activity: A taxpayer has $10,000 to invest. Investment #1 will increase by 50%, fully taxable at 40%, while investment #2 will allow the taxpayer to amend her tax return for the prior year and get a refund of $10,000. Which is the better investment? Assume the appropriate discount rate is 10% per year.

1.2.2.1 Investment #1: The taxpayer will invest $10,000 to get $15,000 after one year. The taxpayer will pay $2,000 in taxes on the gain of $5,000, leaving the taxpayer with an after-tax return of $13,000. That is an

annual after-tax return of 30%, and represents an immediate, discounted return of $11,818 ($13,000 discounted for one year at 10%).

1.2.2.2 Investment #2: The taxpayer will invest $10,000 on tax advice, and tax advice is deductible. Accordingly, after one year the taxpayer will have the refund of $10,000 (federal tax refunds are not subject to tax) as well as a deduction of $10,000 worth $4,000 after-taxes. Thus, the discounted value of the advice is $14,000 discounted by 10% for one year, or $12,727.

1.2.2.3 Why does investment #2 have a zero pre-tax return but a 40% after-tax (undiscounted) return? Note: While tax advice nominally remains deductible (section 212(3) of the I.R.C.), for individuals who receive advice about investment activity rather than about the operation of a business, that deduction is now disallowed in full (section 67(g) of the I.R.C.). And while neither the statute not the courts have clearly defined the difference between business activity and mere investment activity, the Supreme Court has ruled that buying and selling stocks for one's own account always is investment activity regardless of how often shares are bought and sold.

1.3 Intended Audience for this Book:

1.3.1 Tax Rates: Note the table 1.1 at page 1-9. Treating tax planning as a deadweight loss, what can Congress do to reduce this loss? Reduce rates and broaden the base.

1.3.2 In many circumstances, tax benefits cannot formally be sold. For example, a state or local government cannot simply sell its ability to issue tax-exempt securities. How might such a synthetic sale be structured? Find a company that needs to borrow money, then agree to become the lender to such company at the tax-exempt rate in exchange for some form of consideration such as the construction of roads or schools or the promise of local employment.

1.4 Discussion Questions (p. 11)

1.4.1 Question 1: Tax minimization focuses on only one cost: taxes. But implementing a tax minimizing strategy may require payments to lawyers and financial advisors, payments that might dominate the tax savings. In addition, adopting a tax minimizing strategy might be inconsistent with business goals because it might require changing vendors, disappointing employees, or losing valuable business reputation. Finally, because explicit taxes affect pre-tax rates of return, minimizing explicit taxes alone might also reduce investment returns.

1.4.2 Question 2: If the activity is socially desirable and the cost of providing a direct subsidy is expensive, using the tax rules to encourage the productive activity might be the cheapest way for the government to produce the desirable activity. In addition, if the proper level of the activity is dependent on the preferences of taxpayers, subsidizing the activity through tax rules may permit taxpayers to demonstrate their preferences to enjoy the subsidy. Consider the

deduction given to charitable contributions. It could be replaced by direct government subsidies, but which charities should enjoy a subsidy and how much such be given to each charitable organization? By giving the subsidy to taxpayers, the taxpayers in effect direct government expenditures by giving to their preferred charitable organizations.

1.4.3 Question 3: (1) State and local bonds, (2) depreciable equipment and machinery, (3) business research and development, (4) low-income housing, and (5) educational institutions.

1.4.3.1 Part (a): (1) yes; (2) unclear; (3) unclear; (4) yes; and (5) probably not.

1.4.3.2 Part (b): (1) high-bracket investors; (2) businesses with needs for durable equipment; (3) high-tech businesses; (4) taxable real estate investors; and (5) students who are admitted to underpriced educational institutions.

1.4.3.3 Part (c): (1) the bond issuers; (2) the equipment manufacturers; (3) scientists and other highly-educated employees; (4) low-income residents; and (5) students.

1.4.3.4 Additional Thoughts:

1.4.3.4.1 Suppose investments in unimproved real estate (that is, dirt) are preferentially taxed. What will happen to the price of dirt? It will rise, giving the holders of the dirt a windfall gain. Assuming the tax preference remains unchanged, no subsequent holder of dirt will enjoy any windfall: the tax preference will be fully captured in the purchase price paid by the investor.

1.4.3.4.2 Does the same analysis apply to depreciable property and equipment, assuming such tangible personal property is subject to preferential taxation in the form of accelerated depreciation? Presumably the tax benefit will be priced into the property, but what about property manufactured after the tax preference is enacted? We would expect that the holders of raw materials would see an increase in value when accelerated depreciation is enacted.

1.4.3.4.3 What should the effect be on raw land if accelerated depreciation, applicable only to equipment and machinery, is enacted? A reduction in the tax imposed on anything should have an upward after-tax return on everything. What does this tell us about the incidence of the corporate tax?

1.4.4 Question 4:

1.4.4.1 Part (a): This statement is correct since municipal bonds are tax-favored.

1.4.4.2 Part (b): This statement is not correct. For example, suppose your tax rate is 30% and you can invest in (1) municipal bonds that yield 10% or

(2) equally risky taxable bonds that yield 16%. You should invest in the taxables and pay explicit taxes of 4.8% to earn an after-tax return of 11.2% (which exceeds the 10% after-tax return on the exempt bonds).

1.4.4.3 Part (c): This statement is correct when the business assets are eligible for favorable tax treatment to owners. This is the case in most countries. When owning is tax-favored, it gives rise to high implicit taxes. Low-tax-rate investors do not value the tax benefits as much as high-tax-rate investors do. The low-tax-rate investors can effectively sell the tax benefits to ownership by renting at reduced rental rates.

1.4.4.4 Part (d): This statement is not necessarily correct. Suppose that employers' tax rates are going to fall more than employee tax rates. In this case, the tax benefit of deferral to employees may be swamped by the cost of deferral to the employer. By adjusting the level of current compensation, employees can be made to prefer current payment. Nontax considerations may also be important. To the extent employees have a strong preference for current consumption and they cannot borrow funds at favorable interest rates, current compensation may be preferred even when taxes can be saved by deferring compensation. We will analyze this problem more formally in chapter Eight.

1.5 Exercises:

1.5.1 Exercise 10: The taxable bonds pay $12,500 per year in interest. Of that amount, $3,500 is remitted to the government in taxes, leaving $9,000 for the bondholder. An annual after-tax return of $9,000 on an investment of $100,000 is an annual return of 9%, the same return as the tax-exempt bond. The $3,500 annual revenue lost by the federal government from the tax-exempt bonds is enjoyed not by the holder of the bonds but rather by the issuer of the bonds in the form of a reduced interest cost. In effect, then, the holder of the exempt bonds continues to pay the same tax but now the recipient of the taxes has shifted from the federal government to the issuer of the bonds (that is, to the municipality). Put another way, the explicit taxes imposed on the taxable bonds equals the implicit taxes the market imposes on the tax-exempt bonds. The implicit tax rate equals ($12,500 - $9,000)/$12,500, or 28%.

1.5.2 Exercise 12: **This problem should come much later in the book!**

1.5.2.1 The maximum price a taxpayer should be willing to pay for an income stream is the present discounted value of that income stream. For the five-year taxable bond, the present discounted value of the income stream equals $r/(1+d) + r/(1+d)^2 + \ldots r/(1+d)^5 + fv/(1+d)^5$, where r is the annual after-tax interest payment (i.e., the annual return), fv is the face value of the bond (i.e., what the holder will receive at maturity), and d is the appropriate annual discount rate (i.e, the after-tax return the taxpayer is able to achieve). On our facts, r = $60x(1 – 0.31) = $41.40; fv = $1,000 (because return of capital is not taxed), and d = 4.14% (the

taxpayer's after-tax rate of return for a fully-taxed investment). Accordingly, the bond is worth $41.4/(1.0414) + $41.4/$(1.0414)^2$ + . . . $41.4/$(1.0414)^5$ + $1,000/$(1.0414)^5$, or $1,000.

1.5.2.2 The analysis is trickier for the tax-free bond because there will be a loss recognized at redemption when the taxpayer receives the face value of the bond, having paid more than face value to acquire the bond (while we call the bond a "tax-free" bond, only the interest is free of tax. Gain or loss at disposition is taxable. The loss will be a capital loss, but I will use the same 31% rate as the income is taxed). Accordingly, if P is paid for the bond, then we have P = $60/(1.0414) + $60/$(1.0414)^2$ + . . . + $60/$(1.0414)^5$ + $1,000/$(1.0414)^5$ + (P - $1000)x0.31/$(1.0414)^5$, where the final term accounts for the loss recognized at redemption. Noting that $0.31/(1.0414)^5 = 0.253$, we combine P's, to get 0.747P = $60/(1.0414) + $60/$(1.0414)^2$ + . . . + $60/$(1.0414)^5$ - $253. Accordingly, 0.747P = $1,082.44 - $253, or P = $829.44/0.747 = $1,110.36.

1.5.2.3 Based on the computation above, we know that the purchase of the exempt bond for $1,110.36 gives the taxpayer a return of 4.0414% per year, the implicit tax equals (0.06 – 0.04014)/0.06, or 31%. That is, the implicit tax on the exempt bond is the same as the explicit tax on the taxable bond when the purchase price for the exempt bond is $1,110.36.

1.5.3 Exercise 14:

1.5.3.1 If the employee accepts the bonus in the current year, she will have $30,000 (1 – 0.37), or $18,900. At a 5% after-tax rate of return, that will grow by $945. Thus, she will have an after-tax return after one year of $18,900 + $945, for a total of $19,845.

1.5.3.2 If the employee prefers to defer the bonus for one year, she will have an after-tax return of $30,000(1 – 0.24), or $22,800. Thus, deferring the bonus for one year is better.

1.5.3.3 If we assume that the employee receives the bonus in the first year and generates a post-tax return of 25% on her investment of $18,900, then she will generate an after-tax return of $5,725. As a result, her total return is $18,900 + $4,725, or $23,625. Now the immediate bonus is better for her.