

Chapters 1 and 2: The Really Big Picture

Problem: A company values its inventory using LIFO and reports a LIFO inventory reserve of \$50,000,000. This firm faces a marginal tax rate of 35% and has an after-tax cost of capital of 15%. What's a ballpark estimate of the annual savings from using LIFO for this firm?

$$\$50,000,000 * .35 * .15 = \$2.625$$

Problem: Assume that you (acting and being taxed as an individual) can choose between a municipal security that pays 5% per annum and a corporate bond of equal risk and duration. Your personal tax rate is .396 (This is the top tax rate on individuals in 2000).

1. At what rate of interest would you be indifferent between holding the municipal security and the corporate bond?

$$X(1-.396) = .05$$

$$X = 8.28\%$$

2. What is the tax payment on the corporate bond?

$$3.28\%$$

Who pays it?

The investor

Who gets it?

the government

3. What is the corporation's after-tax cost of borrowing (assume the corporation pays taxes at a 35% rate)?

$$8.28\%(1-.35)=5.382\%$$

4. What is the tax payment on the municipal security?

$$\text{Implicit tax} = 3.82\%$$

Who pays this tax?

The investor by accepting a lower pretax rate of return

Who gets it?

The municipal government, in the form of a lower pretax rate

5. What is the municipality's after-tax cost of borrowing?

$$5\%$$

Problem: Assume that a corporation must raise \$1,000,000 to fund investment opportunities. The current shareholders are not interested in diluting their ownership interest and thus are considering only two forms of financing: debt and preferred stock. Assume the debt and preferred stock will have the same risk profile and duration. Pre-tax interest rates on comparably risky corporate debt are 10%. Assume that the marginal investor is a corporation with a marginal tax rate of 35%.

1. At what dividend rate on the preferred stock is the corporate investor indifferent to holding the debt or preferred stock?

$$X(1-(.35*.3))=.1*.35$$
$$X=7.26\%$$

2. What marginal tax rate would make a corporation prefer financing using preferred stock versus debt?

$$.1-.0726=27.4\% \text{ if higher prefer debt, if lower prefer preferred stock}$$

3. Why might a firm issue both debt and preferred stock?

Times, circumstances, and marginal tax rates change. It is typically not costless to undo financing arrangements.

Consider this: Say you've got two brothers operating two businesses. One brother supplies the other with inventory that is sold in the second brother's business. Across the street you've got the same two types of businesses with the same relationship, but no brothers involved. In each of the two cases, the supplier businesses have higher tax rates than the acquiring businesses.

1. What are the brothers more likely to do than the unrelated parties in structuring transactions? Who loses? Who wins? How much is won?

The brothers might try to shift income from the high tax brother to the low tax brother. Unrelated parties will have difficulty doing this because they have to build up the necessary trust to pull it off (they can't write a contract that rigs prices solely to avoid taxes and expect to have it upheld in court—in fact, it would be evidence against them in a tax fraud case).

Chapter 3: Alternative Savings Vehicles

Problem: An individual invests \$1,000 in a partnership. All partnership income is taxable to partners annually (partnerships are referred to as pass-through or conduit entities because of this feature). Assume the partnership generates a pretax return of 10% for 10 years. Also assume that the individual faces a 39.6% tax rate. All of the returns to the partnership are reinvested. What will the partnership stake be worth in 10 years? What is the annualized rate of return? Use a calculator.

$$\$1,000 * (1 + .1(1 - .396))^{10} = 1797.62$$

Present value = \$1,000

Future value = \$1797.62

Periods = 10

Solve for interest = 6.04 = .1(1 - .396)

Problem: An individual invests \$1,000 in a non-deductible IRA. All returns are exempt from taxation until withdrawn. The IRA invests in fully taxable corporate bonds that yield 10% for 10 years. Assume that the individual withdraws all of the IRA's assets at the end of 10 years and, at that point, pays tax on the returns at a 39.6% tax rate. How much would the individual have at that point? What is the annualized rate of return?

$$\$1,000 * (1 + .1)^{10} - [\$1,000 * (1 + .1)^{10}] * .396 + \$1,000 * .396 = 1962.62$$

Present value = \$1,000

Future value = \$1962.62

Periods = 10

Solve for interest = 6.98

Problem: Say you have \$100,000 of taxable income all of which is subject to a tax rate of 40%. You can borrow money at a pretax rate of 10% and deduct interest expense from taxable income. You can purchase tax exempt municipal securities that yield 7%. How much money do you want to borrow? What will you do with the money you borrow? How much better off will you be?

You want to eliminate all taxable income, so you want to generate interest expense equal to \$100,000. This you can do by borrowing \$1,000,000 ($\$100,000/.1$). With the million in borrowed cash you can go out and purchase \$1,000,000 municipal securities that yield 7% pretax and after-tax, i.e., \$70,000. By doing so you've reduced your total implicit plus explicit tax rate from 40% to 30% and your better off by \$100,000 ($.4-.3$) or \$10,000.

Chapter 4: Optimal Organizational Form

Problem: Assume you can invest \$1 today and earn a pretax return of 20% on the initial investment and the reinvestment of returns. Tax rates are as noted above. If the investment horizon is 5 years is it preferable to operate within a partnership structure or a corporate structure? What if the investment horizon is 30 years?

Return to partnership	5-year horizon	12.08%
	30 year horizon	12.08%
Return to corporation	5-year horizon	10.80%
	30 year horizon	12.28%

Problem: If the personal tax rate is 39.6% and the corporate rate is 35%, and the effective annualized shareholder tax rate is 10% by how much do pretax returns on corporate projects have to exceed those to partnerships?

3.2%

What happens if the personal tax rate drops to 33% and the effective annualized shareholder tax rate drops to 8%?

Corporate returns have to exceed those earned in the partnership form by 12.0%

What might be the consequences from such a change on the choice of organizational form?

Partnerships would become relatively more efficient from a tax standpoint. You would expect to see more firms organizing as partnerships rather than as corporations

Chapter 5: Implicit Taxes

Problem: The Economic Recovery Tax Act of 1981 introduced the accelerated cost recovery system (ACRS) which accelerated depreciation deductions on productive assets (e.g., buildings, machinery and equipment).

What was the likely effect of this change in tax policy on required rates of return on affected assets?

Accelerating depreciation deductions likely increases their present value. Investors would have competed for these “increased in value” depreciation deductions, thereby reducing required pretax returns to affected assets. Note this effect is analogous to investors driving down required pretax returns on tax-favored assets such as municipal bonds.

On the supply of affected assets?

The increased governmental subsidy of capital assets should have increased their supply—assuming that such supply could, in fact, be increased (i.e., the factors of production could be increased).

Problem: An individual can invest \$1,000 in an asset. The investment is immediately deductible for tax purposes. The investment gives rise to an annual pretax rate of return of 10% for 10 years. The return is taxable at the end of 10 years. In case 1, the investor's tax rate in the year of investment is 40% and is expected to be 40% in ten years. In case 2, the investor's tax rate in the year of investment is 40% and is expected to be 30% in ten years.

1. What is the average annual rate of return on the investment in cases 1 and 2?

$$\text{Case 1: } \frac{\$1000(1+.1)^{10} (1-.4)}{\$1000(1-.4)} = 10\%$$

$$\text{Case 2: } \frac{\$1000(1+.1)^{10} (1-.3)}{\$1000(1-.4)} = 11.71$$

2. What factors will affect the price of a depreciable asset if future tax rates are expected to increase? decrease?

Holding current rates constant, if future tax rates are expected to increase and anticipated returns taxed at a higher amount investors will be willing to pay less for these assets.

Holding current rates constant, if future tax rates are expected to decrease and anticipated returns taxed at a lower amount investors will be willing to pay more for these assets.

Problem: An individual can invest \$1,000 in an asset that has a 10-year life and generates a return that is taxable at the conclusion of those 10 years. The investment is immediately deductible for tax purposes. The return is taxable at the end of 10 years. The investor's tax rate in the year of investment is 40% and is expected to be 30% in ten years. The pre-tax rate of return that can be earned on fully taxable bonds of equal risk is 10%.

What pretax rate of return on the investment will make the investor indifferent between investing in the \$1,000 asset or a \$1,000 fully taxable bond?

8.3%

Problem: Assume the risk-adjusted rate of return on a fully taxable bond is 10% and the risk-adjusted rate of return on depreciable equipment is 9% and the risk adjusted rate of return on a tax exempt bond is 7%.

1. What is the explicit tax rate on the returns to the fully taxable bond? The implicit tax rate?

Explicit=30%, implicit=0%

2. What is the explicit tax rate on the returns to the depreciable asset? The implicit tax rate?

Explicit=20%, implicit=10%

3. What is the explicit tax rate on the returns to the tax-exempt bond? The implicit tax rate?

Explicit=0%, implicit=30%

Problem: Calculate the implicit and explicit tax rates for the following three assets using the required pretax returns including and excluding risk premiums.

Asset 1: fully taxable, pretax rate of return 15%, risk premium 3%

Asset 2: partially taxable, pretax rate of return 20%, risk premium 9%

Asset 3: tax exempt, pretax rate of return 10%, risk premium 0%

	No risk Adjustment	Risk Adjustment
Asset 1		
Explicit	33%	16.7%
Implicit	0%	0%
Asset 2		
Explicit	66%	8.3%
Implicit	-.33%	8.3%
Asset 3		
Explicit	0%	0%
Implicit	33%	16.7%

$$R(1-tg) = r$$

$$20\% - 9\%(1 - .167g) = .10$$

$g = .5$ (in words, returns to the partially taxed asset are taxed at half the explicit rate)

Do the results suggest differences regarding the relative tax-favored / tax-disfavored status of the partially taxable asset that would affect its attractiveness to a taxpayer facing a relatively low tax rate? A relatively high tax rate?

On a risk-adjusted basis, the best investment for a low tax rate taxpayer (e.g., pension fund, educational institution) would be Asset 1. On a before risk adjustment basis Asset 2 looks best.

The high tax rate taxpayer prefers Asset 3 in both situations since it bears the greatest implicit tax.

Chapter 7: Marginal Tax Rates

For our purposes, we're going to define marginal tax rates as the present value of the tax due on the next dollar of income earned.

If you're unmarried and not the head of a household the 2000 tax rate schedule looks like this:

For unmarried individuals other than heads of households and surviving spouses, the tax is 15 percent of the taxable income between \$0 and \$26,250; \$3,937.50 plus 28 percent of the taxable income over \$26,250 but not over \$63,550; \$14,381.50 plus 31 percent of the taxable income over \$63,550 but not over \$132,600; \$35,787 plus 36 percent of the taxable income over \$132,600 but not over \$288,350; or \$91,857 plus 39.6 percent of the taxable income over \$288,350.

1. What's the marginal tax rate of an individual with taxable income of \$39,000? What is the effective tax rate of the same individual (i.e., total tax payable/taxable income)?

Marginal rate = .28

Effective tax rate = 19.25% =

$$[3937.5 + .28 (39000-26250)] / 39000$$

2. What's the marginal tax rate of an individual with taxable income of \$139,000? What is the effective tax rate of the same individual?

Marginal tax rate = .36

Effective Tax rate = 27.4% =

$$[35787 + .36 (139000-132600)] / 139000$$

If you're a corporation the 2000 tax rate schedule looks like this:

11(b) AMOUNT OF TAX.--

11(b)(1) IN GENERAL.--The amount of the tax imposed by subsection (a) shall be the sum of--

11(b)(1)(A) 15 percent of so much of the taxable income as does not exceed \$50,000,

11(b)(1)(B) 25 percent of so much of the taxable income as exceeds \$50,000 but does not exceed \$75,000,

11(b)(1)(C) 34 percent of so much of the taxable income as exceeds \$75,000 but does not exceed \$10,000,000, and

11(b)(1)(D) 35 percent of so much of the taxable income as exceeds \$10,000,000.

In the case of a corporation which has taxable income in excess of \$100,000 for any taxable year, the amount of tax determined under the preceding sentence for such taxable year shall be increased by the lesser of (i) 5 percent of such excess, or (ii) \$11,750. In the case of a corporation which has taxable income in excess of \$15,000,000, the amount of the tax determined under the foregoing provisions of this

paragraph shall be increased by an additional amount equal to the lesser of (i) 3 percent of such excess, or (ii) \$100,000.

1. What's the marginal tax rate of a corporation with taxable income of \$100,000,000? What is the effective tax rate of the same corporation?

Marginal tax rate = .35
Effective Tax rate = .35

It is important to note that effective tax rates that enter into the discussion of corporate tax burdens in tax policy deliberations are usually calculated as current taxes payable divided by pretax income for financial reporting purposes. Conspicuously absent from this calculation are implicit taxes that are incurred by firms that enter into tax advantaged transactions (i.e., transactions that are responsive to incentives that are specifically created as an outcome of tax policy deliberations). Also absent from this calculation are deferred taxes that will become payable in the future.

Problem: Say the federal tax rate is 35%, the state tax rate is 5% and the local tax rate is 3%. Recognizing that state and local taxes are deductible for federal purposes, what is the firm's marginal tax rate?

\$1 less the after tax return or \$1 less $\$1(1-.08)(1-.35)$ or 40.2%

Problem: Grace has a consulting business. In 2002 she generates taxable revenues of \$500,000 and incurs tax-deductible expenses of \$800,000. In 2000 she had taxable income of \$35,000. In 2001 she had taxable income of \$140,000. She anticipates generating income of \$500,000 in 2003. Assume Grace's after tax cost of capital is 10% and that she paid and expects to pay taxes as an unmarried individual based on the tax rate table on the preceding page. What is the present value of the after-tax benefit

from the net operating losses incurred in 2002 assuming:
 1) Grace carries back losses to generate a refund of taxes paid in 2000 and 2001 and carries forward the remaining losses to offset projected income in 2003; and 2) Grace does not carry back losses to generate a refund of taxes paid in 2000 and 2001, but rather carries forward the entire 2002 loss to offset projected income in 2003

$$1. [3937.5 + .28(35000 - 26250)] + [35787 + .36(140000 - 132600)] + [.396(125000)] / 1.1$$

(Grace will be able to reduce taxable income in 2003 from \$500,000 to \$375,000, using the \$125,000 of NOL she did not carryback, thereby saving tax on the last \$125k of income that she would have otherwise recognized for tax purposes in 2003.

$$2. \text{ Grace will be able to reduce taxable income in 2003 from } \$500,000 \text{ to } \$200,000. \text{ The tax savings is equal to } [.36(288350 - 200000) + .396(500000 - 288350)] / 1.1$$

Problem: Assume a company has \$100,000,000 in NOLs, and expects to generate \$25,000,000 per year in taxable income (without regard to the NOL). The firm faces a marginal statutory tax rate on every dollar of income of 35%. The firm's after-tax cost of capital is 10%. What is the firm's marginal tax rate?

Number of years until the firm will pay taxes equals $\$100/\25 or 4.

The present value of taxes paid 4 years hence equals $.35/1.1^4$ or 23.9%

Problem: What kinds of investments and financing are you going to prefer if you're a corporation with a low tax rate?

Tax disfavored investments like corporate bonds and dividend paying stock.

Tax disfavored financing instruments like convertible debt, convertible preferred stock, preferred stock and common stock. A great security would be debt that links the payment of interest to the generation of taxable income.

What happens if your tax rate changes?

You want to undo your positions—convert equity to debt, dump the corporate bonds, buy munis, etc. When you're doing your tax planning you've got to have an eye on the horizon and not be myopically focused on your current status—tax status is often dynamic—and made so by your own actions.

Chapters 8 and 9: Compensation Planning

True or False: If corporate rates are constant over time, employers can offer their after tax rate of return on deferred compensation to employees?

Sure. The firm forgoes the current deduction, invests the money it would have otherwise paid employees (net of tax), generates its after-tax return and, in the future, pays this after tax return to employees. No problem—completely indifferent.

True or False: All else equal, if future corporate tax rates are likely to be higher than current tax rates deferred compensation preferred. Why?

Deferred compensation dominates current compensation because the government offers the employer a greater subsidy to paying its employees as future corporate tax rates increase.

Problem: Who prefers pension compensation? Why? Who prefers to be paid currently in cash? Why?

Preference for pension compensation:

1. Investments returns are tax deferred
2. Have plenty of cash already
3. Can borrow on the cheap
4. Have high current tax rates

Preference for cash compensation:

1. Significant demand for current compensation
2. Can't borrow cheaply
3. Have low current tax rates

True or False: The preference for deferred compensation (relative to pension compensation) increases with the corporation's after-tax rate of return. Why?

This is true because the greater the corporation's expected future after-tax rate of return, the larger the "return" it afford to promise on deferred compensation (e.g., it's my understanding that GE was promising Jack Welch an annual return of 14% on deferred compensation).

True or False: The higher the current corporate tax rate the lower the preference for pension compensation relative to deferred compensation)? Why?

Recall that, all else equal, deferred compensation will be preferred when future tax rates are higher than current tax rates. It follows that the preference for deferred compensation will decline relative to pension contribution when current tax rates are high.

True or False: Pension compensation is less risky to the employee than deferred compensation? Why?

Pension plans are guaranteed by the Pension Benefit Guarantee Corporation (see mission statement below). With deferred compensation, the employee is an unsecured creditor of the corporation.

The Pension Benefit Guaranty Corporation (PBGC) protects the retirement incomes of about 43 million American workers -- one of every three working persons -- in nearly 40,000 defined benefit pension plans. A defined benefit plan provides a specified monthly benefit at retirement, often based on a combination of salary and years of service.

PBGC was created by the Employee Retirement Income Security Act of 1974 to encourage the continuation and maintenance of defined benefit pension plans, provide timely and uninterrupted payment of pension benefits, and keep pension insurance premiums at a minimum. Defined benefit pension plans promise to pay a specified monthly benefit at retirement, commonly based on salary and years on the job. PBGC is not funded by general tax revenues. PBGC collects insurance [premiums](#) from employers that sponsor insured pension plans, earns money from investments and receives funds from pension plans it takes over.

PBGC pays monthly retirement benefits, up to a guaranteed maximum, to nearly 215,000 retirees in 2,785 pension plans that ended. Another 317,000 people will be paid when they reach retirement age.

The maximum pension benefit guaranteed by PBGC is set by law and adjusted yearly. For plans ended in 2001, workers who retire at age 65 or older can receive up to \$3,392.05 a month (\$40,704.60 a year). The guarantee is lower for those who retire early or when there is a benefit for a survivor.

Question: Assuming that a firm wants to compensate its employees in part by promising to cover its employees post retirement medical coverage how should the firm accomplish this objective?

Funding through the pension plan is tax favored since a deduction is allowed up front for contributions and returns compound tax-free. Alternatively, contributions to plans set up to service post retirement obligations often do not generate current tax deductions and returns do not compound tax-free.

As an aside, it is my understanding that the Big 5 accounting firms (and perhaps others) created vehicles to get current tax deductions for prefunding other post employment benefits. These vehicles were recently disallowed by the IRS.

Chapters 10 and 11: Multinational Tax Planning:

Problem: A U.S. based multinational company operates two foreign subsidiaries. Relevant information follows:

	After-tax Earnings and Profits	Dividend Paid	Withhold. Tax	Foreign Income Tax Rate
Sub 1	\$100	\$20	\$2	20%
Sub 2	\$200	\$40	\$6	30%

U.S. income tax rate equals 35%

1. Assume the company only operates Sub 1. How much tax will be due upon repatriation?
 1. Gross up the dividend: $\$20 / (1 - .2)(1 - .0909) = \27.50 —this is the foreign source income that gave rise to the dividend—i.e., $\$27.50(1 - .2)(1 - .0909)$. My apologies on the withholding tax rate—I got sloppy in putting it in as a dollar amount. You calculate the withholding rate in this problem as equal the dollar amount of withholding tax (\$2) divided by X, the pre-withholding after foreign tax income (i.e., $X - \text{withholding tax} = \20). Solving for X, you then calculate the withholding rate as $\$2 / 22$, or 9.09%.
 2. Calculate FTC limit—in this case you can safely assume that the company will be allowed a credit for foreign taxes paid no greater than what the U.S. tax on a similar amount of income would have been (i.e., $\$27.50 * .35 = \9.63)
 3. The U.S. tax on foreign source income (i.e., $\$27.50 * .35 = \9.63) is greater than the foreign tax paid (i.e., $\$27.50(.2) + [\$27.50 - \$27.50 * .2](.0909)$ or \$7.50) therefore a U.S. tax of 2.13 is due on repatriation ($\$9.63 - \7.50). The firm is in an excess limit position (i.e., $\text{limit} > \text{FTC credit}$).

2. Assume the company only operates Sub 2. How much tax will be due upon repatriation?

1. Gross up the dividend: $\$40/(1-.3)(1-.13)=\65.68 —this is the foreign source income that gave rise to the dividend—i.e., $\$65.68(1-.3)(1-.13)$. My apologies on the withholding tax rate—I got sloppy in putting it in as a dollar amount. You calculate the withholding rate in this problem as equal the dollar amount of withholding tax (\$6) divided by X, the pre-withholding after foreign tax income (i.e., $X-\text{withholding tax}=\40). Solving for X, you then calculate the withholding rate as $\$6/46$, or 13%.
2. Calculate FTC limit—in this case you can safely assume that the company will be allowed a credit for foreign taxes paid no greater than what the U.S. tax on a similar amount of income would have been (i.e., $\$65.68*.35=22.99$)
3. The U.S. tax on foreign source income (i.e., $\$65.68*.35=\22.99) is less than the foreign tax paid (i.e., $\$65.68(.3)+ [\$65.68-\$65.68*.3](.13)$ or \$25.68) therefore no U.S. tax is due on repatriation. The firm is in an excess credit position (i.e., $\text{FTC credit} > \text{limit}$)

3. Assume the company operates both Sub 1 and Sub 2. How much tax will be due upon repatriation?

Total foreign source income = $\$65.68+\$27.50=\$93.18$
Total foreign taxes paid (FTC) = $\$25.68+7.50= 33.18$
Total U.S. tax on foreign source income $\$93.18*.35=32.61$
FTC > US tax, ergo no tax due.

4. Assume the company operates both Sub 1 and Sub 2. What is this company's foreign tax credit position—specifically does the firm have excess foreign tax credits or will it have to pay U.S. taxes upon repatriation (assume that all foreign source income and taxes can be pooled in generating the FTC)?

The company has an excess FTC of \$.57 (\$33.18-\$32.61). It can repatriate low tax foreign income that would otherwise trigger a tax of \$.57 without triggering a U.S. based tax.

5. Does this company have an incentive to generate additional income in a high or low tax rate country (relative to the U.S.)? How might that income be generated?

This company can generate returns in low tax countries and not be “penalized” by a U.S. tax on repatriation—basically it is on the same footing as a corporation based in a territorial tax country.

Take a step back and consider the case of a firm that does business in a low tax foreign jurisdiction and has to pay tax upon repatriation of profits to its home country. This firm may actually have an incentive to generate income in a high tax foreign jurisdiction. Specifically, while this firm is at a competitive disadvantage relative to a firm based in a territorial tax country when operating in a low tax country it is on an equal footing when operating in a high tax country. Moreover, excess foreign tax credits generated in the high tax country can be used to offset home country taxes that would otherwise be due upon repatriation of income from low tax countries. Specifically, they mitigate the competitive disadvantage relative to a firm based in a territorial tax country.

When should a company repatriate earnings?

At first blush it may appear that, since repatriation can trigger an additional tax (say for U.S. firms operating in countries that have lower than 35%), postponing repatriation for as long as possible makes sense.

But, it doesn't, necessarily.

Consider the following:

A U.S. based multinational company operates one foreign subsidiary. The subsidiary has accumulated after-tax earnings and profits of \$100. The subsidiary faces a tax rate of 20% on all income earned. By treaty, there are no withholding taxes on dividends to the U.S. parent. The parent can earn 15.0% pretax in the U.S. and 11.25% pretax in the foreign country. Assume the U.S. tax rate is 40%

1. Is the parent better off by postponing repatriation of accumulated earnings and profits for 1 year?

NO better or worse off

Repatriate:

Pretax foreign source income = $X/(1-.2)=100$

$X=\$125$

Additional U.S. tax due on repatriation $\$125(.35-.2)=\18.75

After-tax repatriation = $\$100-\$18.75 = \$81.25$

Invest for a year $\$81.25(1+.15(1-.4)) = \mathbf{\$88.56}$

Don't repatriate:

Invest for a year $\$100 (1+.1125(1-.2))=\109

Pretax foreign source income = $X/(1-.2)=109$

$X=\$136.25$

Additional U.S. tax due on repatriation $\$136.25(.35-.2)=\20.44

After-tax repatriation = $\$109-\$20.44 = \mathbf{\$88.56}$

2. Would the parent be better off postponing repatriation of accumulated earnings and profits for 1 year if the foreign pretax rate were greater than 11.25%? YES

less than 11.25%? NO

3. Assume that the parent could invest the foreign subsidiary's accumulated earnings and profits in investments that generate Subpart F income (e.g., stocks and bonds) and that these investments return 15% per year, exactly what the firm would earn on similar investments in the U.S.. Should the firm make these investments overseas or at home? For the sake of concreteness, calculate the difference between repatriating immediately and investing at home to earn 15% pretax each year for 5 years and investing abroad, generating Subpart F income and repatriating at the end of 5 years.

Note: we are assuming that the Subpart F income is not being generated in a controlled foreign corporation (CFC) and is therefore not taxable each year in the U.S.

Repatriate:

Pretax foreign source income = $X/(1-.2)=100$

$X=\$125$

Additional U.S. tax due on repatriation $\$125(.35-.2)=\18.75

After-tax repatriation = $\$100-\$18.75 = \$81.25$

Invest for five years $\$81.25(1+.15(1-.4))^5 = \mathbf{\$125.01}$

Don't repatriate:

$\$100 (1+.15(1-.2))^5 = \176.23

Pretax foreign source income = $X/(1-.2)=176.23$

$X=\$220.29$

Additional U.S. tax due on repatriation $\$220.29(.35-.2)=\33.04

After-tax repatriation = $\$176.23-\$33.04 = \mathbf{\$143.18}$