

Objectives – Sessions 9 and 10

- ▶ Tax Planning & Executive Compensation
- ▶ Taxation of various forms of compensation
- ▶ Multilateral planning perspective (both employee and employer costs are important)
- ▶ Incentive stock options (ISOs)
- ▶ Non-qualified stock options (NQSOs)
- ▶ Other issues



What is an employee?

- ▶ Classification of a worker as an *employee*:
 - Employer subject to payroll taxes (i.e., Social Security, Unemployment)
 - Employee subject to regular Social Security tax rather than higher self employment tax
 - Employee unreimbursed business expenses are deductible only as itemized deductions and subject to a limitation
- ▶ Classification of a worker as an *independent contractor*:
 - Employer pays no payroll taxes
 - Worker subject to self employment tax
 - Worker's business expenses are always deductible
- ▶ IRS does not allow taxpayers to choose whether they are employees, classification is based on strict rules about the relationship between the employer and the employee (e.g., can the employer tell the employee how to do his or her job?)



Taxation of Various Forms of Compensation

- ▶ Current Salary
 - Employee - taxable as currently paid
 - Employer - deductions as currently paid
- ▶ Qualified deferred compensation (e.g., pensions)
 - Employee - taxable when received in the future
 - Employer - deductions received now



Taxation of Various Forms of Compensation

- ▶ Nonqualified deferred compensation
 - Employee - taxable when received in the future
 - Employer - deductions received in the future
- ▶ Fringe benefits
 - Employee - never taxable
 - Employer - deductions received now
- ▶ Stock options (discussed later)



Which Form of Compensation is Optimal?

- ▶ The optimal form of compensation can't be determined without knowing the following:
 - The current and expected future marginal tax rates of the employee
 - The current and expected future marginal tax rates of the employer
 - The after tax rates of return available to the employer and employee
 - The time horizon
 - Nontax considerations



Salary vs. Deferred Comp - Multilateral Perspective

| Tax rates: | Year 1 | Year 2 |
|------------|--------|--------|
| Employer | 40% | 60% |
| Employee | 20% | 50% |

- ▶ Both employer & employee can earn a 5% after tax return on investments
- ▶ Current plans are to pay the employee \$2,000 of deferred compensation in year 2.



What would each party prefer under a unilateral perspective?

- ▶ The employee prefers current salary:
 - current salary yields $\$2,000 (1-.2) = \$1,600$
 - deferred comp. yields $\$2,000 (1-.5)/1.05 = \952

- ▶ The employer prefers deferred compensation:
 - current salary costs $\$2,000 (1-.4) = \$1,200$
 - deferred comp. costs $\$2,000 (1-.6)/1.05 = \762



Can employer be made better off while holding the employee indifferent?

To hold the employee indifferent, she must receive the equivalent of \$952 after tax in present value:

| Salary | Deferred Comp. |
|-------------------|------------------------------|
| $S(1-.2) = \$952$ | $\$2,000(1-.5)/1.05 = \952 |
| $S = \$1,190$ | |

Now evaluate whether the employer still prefers \$2,000 of deferred compensation:

| Salary | Deferred Comp. |
|------------------|-------------------------------------|
| $\$1,190 (1-.4)$ | versus $\$2,000(1-.6)/1.05 = \762 |
| $= \$714$ | |



Can employee be made better off while holding the employer indifferent?

To hold the employer indifferent, she must face a compensation cost equivalent to \$762 after tax in present value:

| Salary | Deferred Comp. |
|-------------------|------------------------------|
| $S(1-.4) = \$762$ | $\$2,000(1-.6)/1.05 = \762 |
| $S = \$1,270$ | |

Now evaluate what the employee prefers:

| Salary | | Deferred Comp. |
|------------------|--------|------------------------------|
| $\$1,270 (1-.2)$ | versus | $\$2,000(1-.5)/1.05 = \952 |
| $= \$1,016$ | | |



Can both be made better off?

YES --any current salary between \$1,190 and \$1,270 will make both parties better off. (See below for \$1,225)

Employer is better off because PV after tax cost of \$1,225 salary is less than the PV after tax cost of \$2,000 of deferred compensation:

$$\begin{aligned} & \$1,225(1-.4) - [\$2,000(1-.6)/1.05] = \\ & \$735 - \$762 = -\$27 \end{aligned}$$

Employee is better off because PV after tax benefit of \$1,225 salary is more than the PV after tax benefit of \$2,000 of deferred compensation:

$$\begin{aligned} & \$1,225 (1-.2) - \$2,000(1-.5)/1.05= \\ & \$980 - \$952 = \$28 \end{aligned}$$



Nontax Costs of Salary & Deferred Compensation

- ▶ Moral Hazard -- If we pay an employee a fixed salary with no “deferred component,” the employee has no incentive to work
- ▶ Risk of Employer Insolvency -- In accepting a “future” component in their compensation, employees are accepting the risk that the employer will go bankrupt



Salary vs. Fringe Benefits

- ▶ What are the benefits of a fringe benefit such as employer-supplied life and health insurance?
 - Fringe benefits are deductible by the employer and tax exempt to the employee
 - From a strictly tax perspective, this is the “best” way to be compensated
- ▶ Would any employees prefer salary over the tax exempt benefits?



Qualified Plans (“Pensions”)

- ▶ **Defined Contribution** - the employer makes a contribution into an account that will accumulate pension benefits on behalf of the employee --contributions are fixed while outcomes depend on returns earned
- ▶ **Defined Benefit** - the employer promises the employee a fixed benefit at retirement, based on salary and/ or years of service, usually in the form of an annuity



Salary vs. Pension

- ▶ Employer doesn't care -- gets deduction either way
- ▶ Employee investment grows to:

$$\text{Pension: } P = (1 + R_{cn})^n (1 - t_{pn})$$

$$\text{Salary: } S = (1 - t_{po})(1 + r_{pn})^n$$

where: R_{cn} = before-tax return on pension

r_{pn} = after-tax return on employee's investments

t_{po} (t_{pn}) = employee's tax return today (in period n)

When $P > S$ prefer pensions



Deferred Compensation vs. Pension

- ▶ Employer is indifferent between dollar of current salary and deferred compensation of \$D when:

$$D(1-t_{cn}) / (1+r_{cn})^n = \$1(1-t_{co})$$

$$D = [(1-t_{co}) (1+r_{cn})^n] / (1-t_{cn})$$

- ▶ Employee's after tax deferred compensation $d = D(1-t_{pn})$



Deferred Compensation vs. Pension

- ▶ A dollar contributed to a pension plan would yield the following at year n:

$$p = (1 + R_{cn})^n (1 - t_{pn})$$

- ▶ When $p > d$ then employee prefers pension to deferred compensation
- ▶ Note:
 - Employee tax rates are irrelevant because under both cases, employees pay tax in year n
 - Employer tax rates matter because with a pension, the deduction is immediate



Why use “Stock Compensation” Plans in Rewarding Executives?

- ▶ Stock compensation plans provide rewards based on an increase in the value of a company’s equity
- ▶ Plans provide for a direct link between executive compensation and shareholder returns --if executive performance improves the value of the company, both gain



% of Firms with Long-term Plans

| | Financials | Industrials | Utilities | Services | Private |
|-------------------|------------|-------------|-----------|----------|---------|
| Any Plan | 83% | 91% | 54% | 88% | 33% |
| Options | 75% | 85% | 39% | 83% | NA |
| Stock App. Rights | 45% | 36% | 34% | 25% | NA |
| Restricted Stock | 33% | 32% | 15% | 42% | NA |
| Performance Plans | 42% | 40% | 4% | 33% | NA |



“Stock Compensation” Plans

- ▶ Incentive stock options:
 - A right granted by an employer *to an employee* to purchase stock at a particular price during a specific period of time
- ▶ Non-qualified stock options:
 - A right granted by an employer to purchase stock at a particular price during a specific period of time
- ▶ Stock appreciation rights:
 - Employee receives the appreciation in value of a specified # of shares
- ▶ Many others



Options

- ▶ Stock options are the most commonly used form of equity based compensation (employed by over 80% of companies)
- ▶ Tax and financial reporting consequences can occur at 3 different points in time:
 - Grant date
 - Exercise date
 - Final sale date



Incentive Stock Options (ISOs)

- ▶ ISO grant can only be made to an employee
- ▶ Option exercise price must be 100% or more of FMV at date of grant (110% if employee is 10% shareholder of the company)
- ▶ The life of the option cannot exceed 10 years
- ▶ Value of options exercised in any one year is limited to \$100,000 (options exercised in excess of \$100,000 become NQSOs)
- ▶ Option must be held 2yr (1yr) from grant (exercise) date



Incentive Stock Options (ISOs)

▶ Federal Taxes -- Employee

- Employee does not recognize income upon grant or exercise of an ISO
- Appreciation in value from the grant date to the final sale date is long-term capital gain

▶ Federal Taxes -- Employer

- No deduction for compensation expense is allowed



Incentive Stock Options (ISOs)

► Financial Reporting Considerations

- No accounting expense under current FASB rules
- May decrease EPS due to the dilution effect as the number of outstanding shares increases



Example of ISO Taxation

P_g, P_e, P_s = price of stock at various dates (grant, exercise, sale, respectively)

X = exercise price of options

t_c = corporate tax rate

t_p = personal tax rate

t_g = long term capital gains rate for individuals



Example of ISO Taxation

Tax Liabilities (Cash Flow Effects)

| | Grant | Exercise | Final Sale |
|-------------|-------|----------|----------------------|
| Stock Price | P_g | P_e | P_s |
| Firm | NA | NA | NA |
| Employee | NA | NA | $-(P_s - P_g) * t_g$ |

Where $P_g = X$ (grant = exercise)



Example of ISO Taxation

- ▶ In 1992, you receive an ISO to acquire 1,000 shares of your employer's stock at an exercise price of \$30 per share. On that date, the stock traded at \$30 per share. In 1993, you exercised the option when the price was \$42 per share. In 1995, you sold the stock for \$60 per share.
- What is the amount and character of income to you in 1992, 1993, and 1995?
- How much is the employer's tax deduction, and when is it deductible?
- How much is the employer's financial accounting expense and when is it expensed?



Example of ISO Taxation

- ▶ What is the amount and character of income to you in 1992, 1993, and 1995?
 - 1992: Grant date -- No income recognized
 - 1993: Exercise date -- No income recognized
 - 1995: Final sale date -- $(\$60 - \$30) * (1,000) = \$30,000$ of long-term capital gain
- ▶ How much is the employer's tax deduction, and when is it deductible?
 - Employer gets no tax deduction
- ▶ How much is the employer's financial accounting expense and when is it expensed?
 - Employer reports no financial accounting expenses



Non-qualified Stock Options (NQSOs)

- ▶ NQSO grant usually made to an employee (not a requirement)
- ▶ Option exercise price may be at a price below FMV at date of grant
- ▶ The life of the option is usually 10 years
- ▶ Vesting restrictions may exist
- ▶ Very flexible
- ▶ If an option does not qualify as an ISO then it's a NQSO



Non-qualified Stock Options (NQSOs)

▶ Federal Taxes -- Employee

- Employee does not (generally) recognize income upon grant of a NQSO
- Employee recognizes income upon exercise of a NQSO (excess of stock price at exercise over option price)
- Appreciation in value from the exercise date to the final sale date is long-term capital gain

▶ Federal Taxes -- Employer

- A deduction for compensation expense equal to the amount included in employee's income at exercise



Non-qualified Stock Options (NQSOs)

- ▶ Financial Reporting Considerations
 - No accounting expense required under current FASB rules
 - May decrease EPS due to the dilution effect as the number of outstanding shares increases
- ▶ Rules are in flux!
 - A number of firms have announced they will expense options.



Example of NQSO Taxation

P_g, P_e, P_s = price of stock at various dates (grant, exercise, sale, respectively)

X = exercise price of options

t_c = corporate tax rate

t_p = personal tax rate

t_g = long term capital gains rate for individuals



Example of NQSO Taxation

Tax Liabilities (Cash Flow Effects)

| | Grant | Exercise | Final Sale |
|-------------|-------|--------------------|----------------------|
| Stock Price | P_g | P_e | P_s |
| Firm | NA | $(P_e - X) * t_c$ | NA |
| Employee | NA | $-(P_e - X) * t_p$ | $-(P_s - P_e) * t_g$ |



Example of NQSO Taxation

- ▶ In 1992, you receive a NQSO to acquire 1,000 shares of your employer's stock at an exercise price of \$30 per share. On that date, the stock traded at \$30 per share. In 1993, you exercised the option when the price was \$42 per share. In 1995, you sold the stock for \$60 per share.
 - What is the amount and character of income to you in 1992, 1993, and 1995?
 - How much is the employer's tax deduction, and when is it deductible?
 - How much is the employer's financial accounting expense and when is it expensed?



Example of NQSO Taxation

- ▶ What is the amount and character of income to you in 1992, 1993, and 1995?
 - 1992: Grant date -- No income recognized
 - 1993: Exercise date -- $(\$42 - \$30) * (1,000) = \$12,000$ of ordinary income
 - 1995: Final sale date -- $(\$60 - \$42) * (1,000) = \$18,000$ of long-term capital gain
- ▶ How much is the employer's tax deduction, and when is it deductible?
 - Employer gets a \$12,000 tax deduction in 1993
- ▶ How much is the employer's financial accounting expense and when is it expensed?
 - Employer reports no financial accounting expenses



ISOs versus NQSOs

- ▶ Unilateral planning perspective
 - Employee will prefer ISOs since they provide for more favorable timing (at final sale) and character (long-term capital) of gains
 - Employer will prefer NQSOs since the firm receives a deduction when the employee recognizes ordinary income on the exercise date
- ▶ Multilateral planning takes into account both parties to the transaction



ISOs versus NQSOs

Employee prefers ISOs (minimizes tax cost):

PV(NQSO tax) - PV(ISO tax)

$$= [(P_e - X)t_p + (P_s - P_e)t_g / (1 + r_p)^n] - [(P_s - P_e)t_g / (1 + r_p)^n]$$

$$= (P_e - X)t_p + (P_e - P_g)t_g / (1 + r_p)^n$$

Employer prefers NQSOs (maximize tax benefit):

$$= (P_e - X)t_c$$



ISOs versus NQSOs

ISOs will be favored when employee preferences $>$ employer preferences:

$$= [(P_e - X)t_p - (P_e - P_g)t_g / (1 + r_p)^n - (P_e - X)t_c$$

$$= (P_e - X)(t_p - t_c) - [(P_e - P_g)t_g / (1 + r_p)^n] > 0$$

How does this expression change with:

Increase in $(t_p - t_c)$? (only preferred when $t_p > t_c$)

Increase in t_g ?

Increase in r_p ?



Historical Analysis of ISOs versus NQSOs

Before TRA86

$$(P_e - X)(.50 - .46) - [(P_e - P_g)(.20)/(1 + r_p)^n] > 0$$

After TRA86

$$(P_e - X)(.28 - .34) - [(P_e - P_g)(.28)/(1 + r_p)^n] < 0$$

After RRA93

$$(P_e - X)(.396 - .35) - [(P_e - P_g)(.28)/(1 + r_p)^n] > 0$$

Now

$$(P_e - X)(.396 - .35) - [(P_e - P_g)(.20)/(1 + r_p)^n] > 0$$



Disqualifying ISOs (Microsoft)

| Year | ISO Tax Benefit | Current Federal Taxes Payable | Pretax Income Effect | After-tax Income Effect | Reported Net Income |
|-------|-----------------|-------------------------------|----------------------|-------------------------|---------------------|
| 1987 | \$24,348 | \$39,788 | \$14,187 | \$6,187 | \$71,878 |
| 1988 | 11,554 | 45,034 | 14,459 | 8,850 | 123,908 |
| 1989 | 14,098 | 34,659 | 8,000 | 4,730 | 170,538 |
| 1990 | 19,965 | 84,036 | 6,000 | 3,960 | 279,186 |
| Total | \$69,995 | \$203,517 | \$42,646 | \$23,721 | \$645,510 |

^aDisclosed by Microsoft as capital contributions

^bCurrent federal taxes payable after reduction by disqualification tax benefit

^cBook income effects of the payment to employees to disqualify ISO or convert ISO to NQSO.



Stock Appreciation Rights (SARs)

► Characteristics

- No employee investment is required
- A maximum value may be placed on the amount of appreciation that may be received
- Distributions may be made in cash or stock or both
- Very flexible



Stock Appreciation Rights (SARs)

▶ Federal Taxes -- Employee

- Employee does not recognize income upon grant of an SAR
- Employee recognizes ordinary income upon exercise
- If an SAR has a stated maximum appreciation, taxable income occurs when specified maximum is reached

▶ Federal Taxes -- Employer

- A deduction for compensation expense equal to the amount included in employee's income at exercise



Stock Appreciation Rights (SARs)

► Financial Reporting Considerations

- Estimated expense is accrued from date of grant to date of exercise. Expense is generally equal to the amount of appreciation each year.



\$1 Million Limit on Deductible Compensation

- ▶ Political response to unpopular executive compensation (applies to amounts paid in 1994 and after)
- ▶ Section 162(m) limits employer's tax deduction to first \$1 million of compensation paid to certain employees
 - CEO and four other most highly paid officers
 - applies only to compensation paid by publicly held corporations



\$1 Million Limit on Deductible Compensation

- ▶ \$1 million dollar limit does NOT apply to:
 - compensation payable on commission basis
 - certain performance based compensation plans
 - payments to qualified retirement plans
 - compensation paid under written binding contracts in effect on 2/17/93



Golden Parachutes

- ▶ Payment to top executive that is contingent upon the loss of his position due to change of control of the company
- ▶ Corporation cannot deduct “excessive payments” and executives pay a 20% excise tax on this excess.
- ▶ “Excessive payments” are those that are more than 3 times the total annual compensation of the employee



Types of Retirement Plans

- ▶ Defined benefit
 - Promised future retirement payment amount with current contribution actuarially determined
- ▶ Defined contribution
 - promised current contribution amount to plan but uncertain future benefit
- ▶ Keogh plans for self employed persons
- ▶ SEP - simplified plan for self-employed
- ▶ Individual Retirement Accounts (IRA)

