

Employee Stock Options

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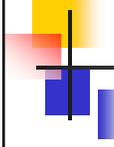
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Who am I?

- Software developer, development manager, consultant
- Long time USENIX Tutorial instructor
- Interest in financial planning
- Expecting Diploma in Financial Planning from Boston University by year end
- May do Financial Planning professionally

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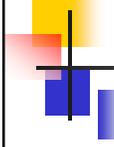


What Is This Talk About?

- Many companies are including equity as part of a compensation package
 - What does that mean?
 - What are the tax rules?
 - How do you know if your offer is any good?
 - When should you exercise your options?
 - How do you decide to sell/hold your stock?

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What Is This Talk About?

- Knowing the landscape is critical – you **can** understand it if you want to
 - Being able to evaluate a potential advisor's knowledge
 - Planning early is critical. There are numerous decisions where time makes a big difference
 - Basic math skills are very useful – risk, time value of money, diversification, marginal tax brackets
 - **BEWARE – THERE ARE FEW EASY ANSWERS!**

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Outline

- Types of stock
 - Stock options (qualified and non-qualified)
 - Stock purchase plans
 - The IPO process
 - Taxation
 - Risks
 - Strategies
 - Valuation
 - Advanced tax planning

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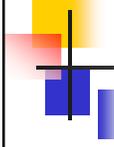


Securities – Debt

- Obligation to pay
 - Bonds, notes, bills
 - Interest or dividend income
 - Capital gains possible based on credit worthiness and interest rate changes
 - No ownership transfer, but perhaps collateral
 - Bankruptcy: paid first

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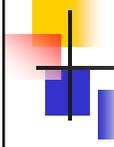


Securities – Equity/stock

- Represents a fractional ownership interest in a company
- Shareholders vote on:
 - Board of directors
 - Fundamental changes (mergers, issuance of new shares)
- Profits sometimes paid to the shareholders as dividends
 - Less popular these days since dividends are taxed more than stock sales
- Capital Gain/Appreciation is the risk reward

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All Stock Is Not the Same

- Different classes, different voting rights, different rights to dividends
 - Preferred – maybe fixed cumulative right to dividends, behind debt holders at bankruptcy
 - Common – last in line at bankruptcy
- Articles of incorporation specify
 - Classes of stock
 - Max number that can be issued (authorized)

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Employee Stock Options

- Goals
 - Incentive for key employees – performance, retention
 - Low cost to company – administrative, dilution, no discrimination tests
- The right (but not obligation) to purchase shares
 - Specified price (“strike” or “exercise”)
 - Time limit (often 10 years)

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Restrictions

- Vesting
 - Restrictions on transfer of stock acquired (via options or otherwise)
 - Often 4 or 5 year, annual cliff, or 1st year cliff, monthly thereafter

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Taxation (Simple Version)

- Ordinary income (wages, interest, rents, etc.)
 - Marginal tax brackets (15%, 28%, 31%, 36%, 39.6%)
- Capital assets (e.g. stock)
 - Basis = cost paid
 - Gain = sales price - basis
 - Only the gain is taxed

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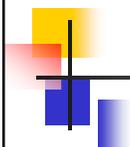


Taxation (Capital Gains)

- | | |
|--|--|
| <ul style="list-style-type: none">■ Short term<ul style="list-style-type: none">■ Holding period < 12 months■ Taxed at ordinary income rates<ul style="list-style-type: none">■ 15%, 28%, 31%, 36%, 39.6% depending on other income & deductions | <ul style="list-style-type: none">■ Long term<ul style="list-style-type: none">■ Holding period > 12 months■ Taxed at<ul style="list-style-type: none">■ 10% (if normally in 15% ordinary income bracket)■ 20% (if in other brackets) |
|--|--|

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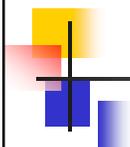


Taxation (Capital Gains)

- Super long term, starting in 2001
 - Holding period \geq 5 years
 - Purchase date after 12/31/00
 - In 2001, you can elect to pay taxes now on current gain to get lower rate for the future gains?!?
 - 8% (if normally in 15% ordinary income bracket)
 - 18% (if in other brackets)

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Taxation (Another Odd Quirk)

- Small business stock
 - Holding period \geq 5 years
 - C corp, with gross assets $<$ \$50M at time of issue
 - Stock must be acquired from the company for \$ or services
 - Business: not professional services, etc.
 - Can exclude 50% of gain
 - Not more than \$10M or 10 times basis
 - Rest taxed at 28% (effective rate 14%)
 - Can rollover tax deferred into a another small business within 60 days

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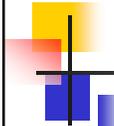


Alternative Minimum Tax (AMT)

- Get ready for Alice in Wonderland
- Compute your tax the normal way
- Re-compute your tax with rules to prevent “bad” deductions, tax-free income
 - Remove deductions for state tax, 2nd mortgage interest, etc.
 - Add tax free income, **phantom income (ISO FMV - EP, when exercised)**
 - After subtracting special AMT exemption, 26% and 28% AMT brackets
- If AMT > Reg tax, pay AMT instead
- If flipped in future years, credit **may** be available

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Terms

- EP = exercise price
- SP = sales price
- FMV = fair market value
- Bargain element = FMV – EP
- LTCG/STCG – long/short term capital gain
- AMT – alternative minimum tax
- FICA – old term for social security and medicare payroll tax (7.65% x 2)
- IRR – internal rate of return: **interest rate received for an investment consisting of payments (negative values) and income (positive values) when Net Present Value = 0**

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Stock Options (Non-statutory)

- Right to purchase as specified price (need not be FMV!)
- Usually subject to expiration time and vesting

Taxes	Grant	Exercise	Sale
Employee	none	Ordinary income = FMV – EP (Basis = FMV)	Short or Long Cap Gain = SP – Basis
Company	none	Deduction = FMV – EP	none

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Incentive Stock Options (ISO)

- No taxation upon exercise
 - Alternative minimum tax (AMT) possible
- Entire gain can be capital gain not ordinary income. Sale must be
 - 2 years after grant,
 - 1 year after exercise,
 - Otherwise “disqualifying disposition” and all gain ordinary income (W-2 but no FICA)
- Disqualifying disposition includes gifts and many transfers (not pledges)

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Incentive Stock Options (ISO)

- Restrictions by 26 USC 422(b) (tax code)
 - Written plan
 - Exercise price must = FMV (110% of FMV for 10% owners), common discounted vs. preferred
 - Only \$100,000 of option grants per year per employee (rest automatically non-statutory)
 - Must be employee (not contractor/director)
 - Cannot transfer stock except to spouse or via death
 - Would be disqualifying disposition
 - Must exercise within 10 years of grant and 90 days of leaving company

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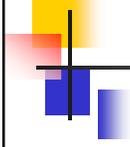
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ISO Taxation

Taxes	Grant	Exercise	Sale after 2 yrs of grant & 1 yr after exercise	Disqualifying Disposition
Employee Regular	none	none Basis = EP	Cap Gain = SP - Basis	Ordinary income = SP - Basis
Employee AMT	none	AMT preference item = FMV - EP AMT Basis = FMV	AMT Cap Gain = SP - AMT Basis	AMT Short term gain = SP - AMT Basis
Company	none	none	none	Deduction = FMV _{exercise} - EP

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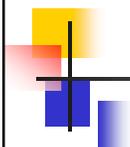


Employee Stock Purchase Plan

- Must be employee during holding period, < 5% owner
- LTGC if held for 2 yrs from grant, 1 yr from exercise
- All full-time employees must be included except
 - < 2 yrs employment, highly compensated, seasonal
 - Can limit amount purchased, usually 10-15% of salary
- Not more than \$25,000 per year per employee
- Option price
 - \geq 85% of FMV at grant date **or** exercise
 - Max 27 months
 - Bargain element taxed as ordinary income
- Free money if the stock goes up. (e.g. Lock in 85% of IPO price for over 2 years!). Maybe breakeven if stock goes down (how fast can you sell?)
- Diversification issues if you hold

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The IPO Process

- Companies raise money
 - Founders, angels, venture capitalists, corporate investors
 - Rounds of financing
 - Seed, mezzanine, public offering
 - Each round issues new shares dilutes previous holder's % of company
 - Value of shares (hopefully) increases
 - Series A, B, C, etc. Preferred stock
 - Forward or reverse splits change # of shares but don't effect overall value
 - Most likely to happen before IPO to make IPO share value \$10
 - Be careful, your 1000 shares can easily turn into 500

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The IPO Process

- Employee option plans
 - ISO/non-qualified – common stock
- Stock must be “registered” with SEC before public sale
 - S-1 for company stock
 - S-8 for employee options
 - Preferred stock converts to common (each series may have a different conversion ratio)
- Lockup period
 - Restricted stock legend
 - Cannot sell your stock
 - Usually 180 days

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The IPO Process

- Rule 144
 - If you're not covered by S1 or S8 (e.g. Founder or angle stock w/o registration rights)
 - SEC exception to registration requirement
 - Requires 90 days availability of public info
 - Limits on # shares (based on volume)
 - Easy to do these days, brokers even file forms
- Other insider restrictions may apply

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Valuation

- What's an option worth?
 - Options:
 - Time value: based on expiration date
 - Complex
 - Intrinsic value: $FMV - strike$

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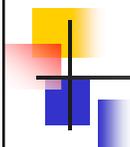


Valuation

- Shares
 - Fraction of the value of the company
 - Hard to ascertain for private companies
 - Based on
 - Shares issued (not authorized)
 - Options issued (but not all may vest)
 - Beware that new shares may eventually be issued (to investors, employees via options, or for acquisitions)

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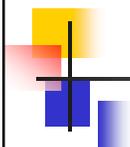


How to Evaluate Your Package

- Number of shares doesn't matter
- % Of company matters
 - Dilution will happen
- Estimate (guess) at potential market capitalization
 - Similar companies (product/services, revenues, profits(?), margins, prospects)
- Your share value = % x market capitalization

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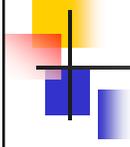


Strategies

- Exercise as late as possible
 - Pro: if company loses, you don't
 - Con: LTCG clock starts late or is lost
- Exercise early
 - Pro: start the LTCG clock
 - Cons: exercise cost, investment risk, current tax liability for non-qual options (without cash flow), AMT liability for ISO's
 - If not vested: 83b election critical, 30 days

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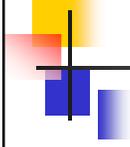


83b Election

- What?
 - Ordinary income if price paid < FMV
 - Think of stock for services (price paid = 0)
- When?
 - At purchase date or when not subject to “substantial risk of forfeiture” *and* “transferable”. Typically this is vesting. Need to include in each year’s tax return. More and more tax due if value increases even if not sold or salable
 - **Therefore FMV recomputed at each vesting point**
 - 83b election taxes all right away, but typically little or no tax due (low FMV or FMV= price paid)
- Company gets deduction when employee pays tax
- Catch: if stock is eventually forfeited, loss is not deductible!

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Math

- Estimate **after tax** cash flows
 - Variables: tax bracket and unrelated tax issues
 - Future selling prices
 - Reinvestment rate
- Use the difference to compute IRR
- Is it worth the investment risk for lower taxes?
 - Very very important to consider
- In general buy & hold makes more sense
 - The higher your marginal tax bracket
 - EP is low compared to FMV
 - More gain
 - You think stock price will increase

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Early Exercise Math ISO (Rough)

Date	Buy&Hold	Buy&Sell	Difference
DD/YY	- EP	+ (SP ₀ - EP)	- SP
4/15/(YY+1)	- AMT if any	- (SP - EP) * tax bracket	- AMT + reg tax
(DD+1)/(YY+1)	+ SP	+ reinvestment interest	+ SP ₁ - interest
4/15/(YY+2)	- (SP - EP)*20%	+ reinvestment interest	- LT Cap Gains Tax - interest
4/15/(YY+3)	+ reinvestment interest + AMT credit (maybe)	+ reinvestment interest	+AMT (maybe)

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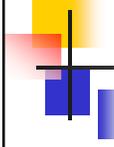
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Risks

- Be prepared to decide to exercise or walk away within 90 days after you leave a company
- Do not lose your “drop dead money” because you can’t bring yourself to sell
 - Diversification is important
 - Let 10% of your net worth ride
 - Don’t let 90% of your net worth ride on one company without hedging
- Lockups are very painful

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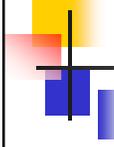


Hedging Strategies – Easy

- Regular sales no matter the price
 - Reverse of dollar-cost-averaging (vary # shares, sell same \$ amount)
 - Discipline to avoid being greedy

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Hedging Strategies – Advanced

- Be careful, easy to get wrong, consult experts
- Put and call options
 - Expensive (based on volatility)
 - Thinly traded on small stocks (high spreads)
 - Not available usually for 6 months, sometimes never
- Margin loans
 - Max 50% of value, risk of margin calls if stock tanks, exactly wrong time to sell

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Hedging Strategies – Private

- Complex
- Large amounts (\$100k to millions required)
- Non-recourse loans
 - If structured correctly not a sale
 - Stock as collateral
 - Money up front, interest due at end of loan period
 - At end, pay back loan, get stock or
 - Walk away, pay capital gains (?) on loan amount + interest not paid back (forgiveness of debt)
 - May not be able to buy other equities
 - If used for investment, interest may be deductible

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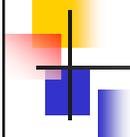


Hedging Strategies – Private

- Forward sales
 - Contract to sell in the future
 - # of shares determined based on future price
 - You retain upside
 - Can buy equities
 - Current taxation
- Swap funds
 - People contribute highly appreciated securities
 - In exchange you get shares in the fund and some diversification
 - Illiquid, 7 year time frame
 - Deferred taxation

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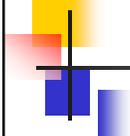


Estate Planning (Oversimplification)

- \$675,000 estate or lifetime gifts tax free
- \$10,000 a year per person gift tax free
- Beyond this, taxed up to 55%
- Strategies
 - Give it away (at a discounted if possible)
 - Especially if "it" will appreciate (e.g. Pre-IPO stock)
 - Retain some control via irrevocable trusts
- Very complex

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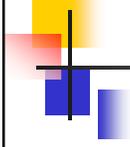


Conclusions

- Non-statutory Options
 - Best for large companies:
 - Deduction may be large
 - Option value is significant to employee because exercise price is typically FMV and large (public, large cap company)
 - Employees not likely to buy and hold
 - Upside without cash outlay

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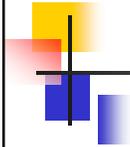
Conclusions

■ ISO

- No deduction for company
- Significant restrictions
 - Transfers
 - Exercise within 90 days of termination even if public market
- Great for employee if EP is low
- Frequently used in startups
- Upside without cash outlay and chance to buy & hold with minimal tax implications

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Conclusions

- Value options as % of company future market cap, not number of shares
- Start before stock is worth anything
 - But then risk is large, no easy answers
 - Plan gifts while FMV is low (pre-IPO for sure)
- For startups if total exercise price is small:
 - Try hard to get 83b restricted stock instead and don't forget to file 83b election in time. No tax due since FMV = EP
 - Or exercise as soon as vested (before?) to minimize AMT and maximize holding period (aiming for 2 yrs from grant, 1 yr from purchase)

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Conclusions

- Risk and diversification

- Most folks are emotionally attached to the options and don't want to sell
- If options represent small fraction of net worth let them ride
- If options represent "drop-dead money" how can you leave it alone? How many Internet companies are down 90% YTD?

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Conclusions

- Buy & hold may not be best. Really need to do an IRR/time value of money cash flow analysis comparing sell now and buy & hold including:
 - Exercise price
 - AMT due
 - Sales price (?) -- subjective
 - Taxes due
 - Reinvestment rate

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Conclusions

- Various private banking hedging options if stock > \$100,000; public options not available for IPO companies for at least 6 months and then very expensive (high volatility)
- It's not real until it vests and you sell or hedge

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References

- www.rochlis.com/options
- Pointers to several books and websites

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