BoardEx Execucomp Summary

January 2022

Types of Long-Term Incentive Plans (LTIP)

- We focused on options.
  - Options – Buy stock at a strike price sometime in the future. Usage has fallen since 2008.
  - LTIP Options – Awarded based if performance criteria satisfied. Preferred nowadays. Essentially a step added prior to giving an option.
- Other types of plans we did not look at:
  - Equity Matching Scheme
    - Employer matches whatever stock you already own in company
  - Equity Issued
    - Typically no vesting period
  - Cash Plan
    - Not sure yet what this is exactly
- Important to note that the data we have is about exercising a stock option. No idea how long an executive holds onto a stock.
  - Holding for awhile vs. selling immediately both are common strategies.

Options Timeline Example

Options Plan Issued

Executive awarded plan.

Until the vesting period begins the option is **un-exercisable.**

Vesting Period Begins

From this date the options can be exercised.

Executive may now buy stock at strike price if they want to.

If executive leaves prior to expiration their options are valid typically 3-6 months after departure.

Option Plan Expires

Any options that were never exercised disappear.

Options and Taxes

- The granting of an option is not subject to tax. Neither is holding an option.
- Exercising option and sell stock **within same year**
  - You pay ordinary income tax on the gain from the strike price, ie the difference between the strike price and value of the stock when option is exercised.
  - You pay capital gains on the difference between the price you sell the stock and the value of the stock when option was exercised.
- Exercising and holding stock **beyond a year and option is ISO**
  - You pay capital gains, rather than ordinary income, on the difference between grant price and the sale price.
  - If option is NSO then can’t escape ordinary income tax. Taxed as if exercised and sold within same year.

Example of exercising option and selling in same year

- Number of options: 100
- Strike price: $10
- Fair market value when exercised: $50
- Fair market value when sold: $70

- When stock price is $50, you exercise all the options. Your stock options cost $1,000 (100 share options x $10 grant price).
- Next month you sell the all the stock for $70.
- Pay ordinary income tax on the difference between the grant price ($10) and the full market value at the time of exercise ($50). In this example, $40 a share, or $4,000.
- Pay capital gains tax on the difference between the full market value at the time of exercise ($50) and the sale price ($70). In this example, $20 a share, or $2,000.

Options plans are very heterogeneous

- Several different plans typically awarded in same year.
- Plans differ in size, when vesting period starts and length, strike price, expiry date.
- Most option plans are NOT exercisable when issued -- executive must wait.
- But sometimes there are plans that are exercisable immediately.
- Very common to have strike price LOWER than stock price when issued.

All I was looking at was *quantities* of options per exec

- **OPT_EXER_NUM**: Number of options exercised by the executive during the year.
- **OPT_UNEX_EXER_NUM:** The aggregate number of unexercised options held by the executive at fiscal year end that were vested.
- **OPT_UNEX_UNEXER_NUM:** The aggregate number of unexercised options held by the executive at fiscal year end that were not yet vested.

Looked at exercised options out of total options held:

Ratio = OPT_EXER_NUM / (Total of all 3)

And

Ratio = OPT_EXER_NUM / (OPT_EXER_NUM + OPT_UNEX_EXER_NUM)

Problems we ran into

- Execucomp prevents us from seeing the heterogeneity in plans issued.
- We don’t know the strike price of these options. Can not be backed out.
- Do not know the expiration date nor the vesting period length.
- Essentially all we can see is the aggregate **number** options for each individual.

We turned to BoardEx…

- Pros
  - Shows options awarded by plan.
  - Public and private companies. Executive and non-executives.
  - Detailed plan info: We have vesting period start date (when option becomes exercisable), expiration date, strike price, stock price
  - We have base salary, annual bonuses, etc.
- Cons
  - Do NOT know when the option is exercised. Only know the period when it could be exercised.

BoardEx Analysis – Results were not very informative.

- Like with Execucomp we look at the ratio
  - Options Exercised / (Options Exercised + Unexercised Exercisable Options + Unexercised exercisable options)
  - And
  - Options Exercised / (Options Exercised + Unexercised Exercisable Options)
- **I constructed**: Options Exercised (all assumptions listed in next slide), Unexercised Exercisable Options, and Unexercised unexercisable options.
- I needed to make an assumption about when options were exercised.
- I only looked at numbers of options exercised/number unexercised. Not able to determine the value.

Assumptions of when options were exercised.

1. Median Vesting Year
    a. Assume that executive exercises option package at the median vesting period in the dataset (around 7-8)
2. Spread Out Package over Vesting Period
    a. If an executive has 1 over and a vesting period of 5 years then they exercise 0.2 of that option in each vesting year.
3. Executive exercises option package when stock value is highest during vesting period.
    a. Would be an upper bound case.
    b. Never programmed this. It is is harder than it sounds.

Problems with BoardEx

- Not knowing when options were exercised really limited analysis.

- We discovered that after 2009 BoardEx surveyed fewer executives. Hard to distinguish whether options exercised were growing over time or sample getting smaller.

- **Not really a problem but good to know**: Also discovered that options are not longer popular. LTIP options are preferred now. LTIP option information is available in BoardEx.