EQUITY OWNERSHIP

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EXECUTIVE EQUITY OWNERSHIP

- Equity ownership is intended to mitigate agency problems by aligning the interests of managers and shareholders.
- Executives have greater incentive to build economic value.
- Actions that impair firm value reduce the executive's personal wealth.
- However, equity ownership might also foster undesirable behaviors: "excessive" risk taking, earnings manipulation, insider trading, etc.

What outcomes and behaviors are observed in practice?

EQUITY OWNERSHIP BY THE CEO

- Executives hold considerable personal wealth in the companies they manage.
- Although some executives make direct purchases, most accumulate wealth by retaining compensation-related grants.

CEO EQUITY WEALTH

FIRM SIZE	CEO WEALTH	MARKET CAP ($ THOUSANDS)
TOP 100	$104,912,000	$103,493,000
101 TO 500	$59,922,000	$18,895,000
501 TO 1,000	$34,337,000	$6,383,000
1,001 TO 2,000	$22,300,000	$2,085,000
2,001 TO 3,000	$10,445,000	$642,000
3,001 TO 4,000	$3,470,000	$161,000
1 TO 4,000	$14,946,000	$1,070,000

Median values. Includes stock options, restricted stock, performance plans, and direct stock ownership. Excludes personal wealth outside company stock. Based on Equilar compensation data, fiscal years ending June 2012 to May 2013.

EQUITY OWNERSHIP BY THE CEO

- The incentives provided by equity holdings are at least as important and often dominate the incentives provided by annual compensation.

SENSITIVITY OF CEO EQUITY WEALTH TO CHANGES IN STOCK PRICE

FIRM SIZE	CEO COMPENSATION	CHANGE IN WEALTH (1% STOCK CHANGE)	CHANGE IN WEALTH (50% STOCK CHANGE)	CHANGE IN WEALTH (100% STOCK CHANGE)
TOP 100	$12,335,000	$1,556,000	$85,535,000	$176,985,000
101 TO 500	$6,672,000	$922,000	$47,470,000	$95,549,000
501 TO 1,000	$4,132,000	$486,000	$25,500,000	$52,131,000
1,001 TO 2,000	$2,511,000	$310,000	$16,645,000	$33,390,000
2,001 TO 3,000	$1,542,000	$135,000	$6,923,000	$14,235,000
3,001 TO 4,000	$828,000	$43,000	$2,218,000	$4,534,000
1 TO 4,000	$1,931,000	$193,000	$9,907,000	$20,332,000

Median values. Includes stock options, restricted stock, performance plans, and direct stock ownership. Excludes personal wealth outside company stock. Based on Equilar compensation data, fiscal years ending June 2012 to May 2013.

EQUITY OWNERSHIP AND FIRM PERFORMANCE

- Research generally supports the notion that equity ownership is positively associated with firm performance.
- Firms with high CEO equity ownership have higher market valuations.
- Firms with high CEO equity ownership deliver superior long-term stock market returns.
- Managerial incentives tend to be more closely aligned with the interests of shareholders when executives have "skin in the game."

Morck, Shleifer, and Vishny (1988); McConnell and Servaes (1990); Elsilä, Kallunki, and Nilsson (2013); Lilienfeld-Toal and Ruenzi (2014)

TARGET OWNERSHIP PLANS

- To encourage these effects, a company might adopt a target ownership plan.
- Target ownership plans (or guidelines) require an executive to hold a minimum amount of stock.
- Ownership guidelines can be expressed as:
  - Multiple of annual compensation
  - Fixed number of shares
  - "Retention approach" (executive retains a percentage of vested awards)
- Researchers find positive benefits from the adoption of target ownership plans.

89% of the largest 100 U.S. companies have executive ownership guidelines.

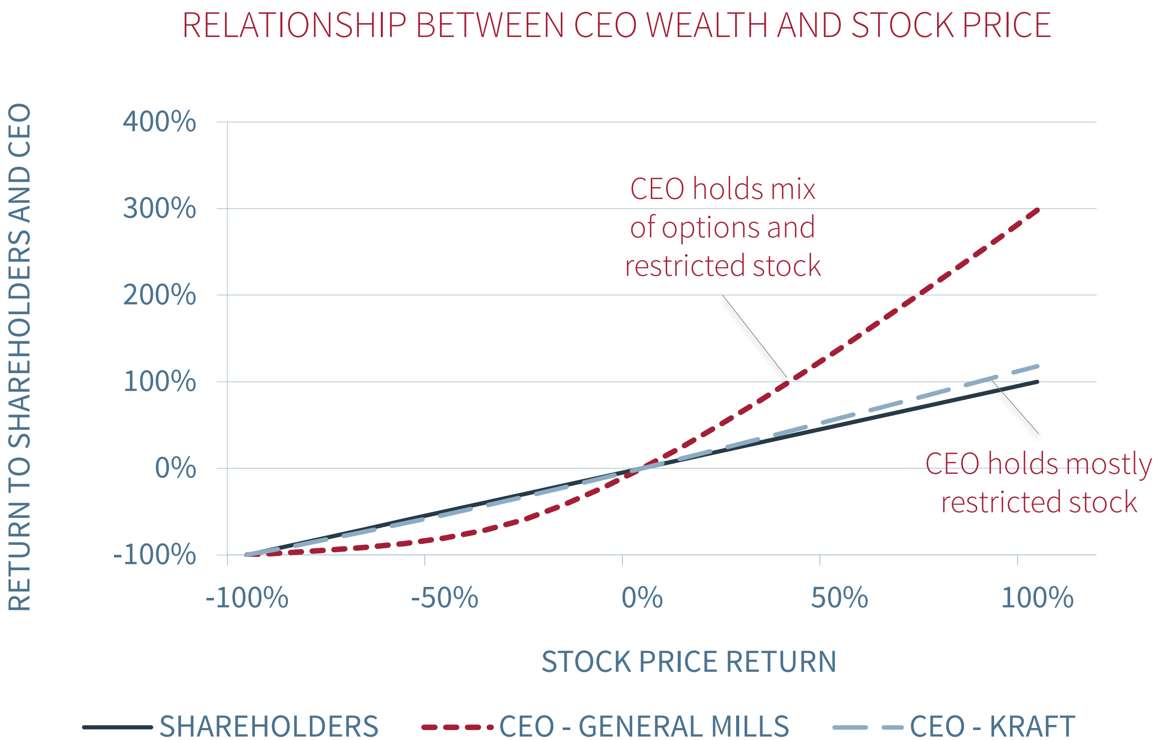
Core and Larcker (2002); Equilar (2013)

EQUITY OWNERSHIP AND RISK

- Equity ownership also influences risk taking.
- An executive's attitude toward risk is shaped by the potential payoff.
- Direct stock holdings:
  - Value moves one-for-one with stock price.
  - Executive is motivated to grow and protect value.
- Stock option grants:
  - Value moves in a non-linear fashion with stock price.
  - Value increases with **volatility**.
  - Executive is motivated to increase firm risk.
- Stock options introduce "convexity" into the potential payoff and encourage risk.

EQUITY OWNERSHIP AND RISK

- Performance and risk taking incentives can be evaluated by mapping the relation between changes in wealth and changes in stock price.



WHAT IS THE UPSIDE?
WHAT IS THE DOWNSIDE?
WHAT REWARD IS PROMISED?
WHAT RISK IS ENCOURAGED?
ARE THESE APPROPRIATE?

EQUITY OWNERSHIP AND RISK

- Research generally shows that executives facing “convex” payoff curves engage in more risk taking.
- Executives that receive options increase the risk profile of the firm:
  - Spend more money on research and development
  - Spend more money on capital expenditures
  - Reduce firm diversification
  - Increase leverage
- Do stock options encourage “excessive” risk taking?
- No standard litmus test exists to distinguish excessive risk from acceptable risk. The board must determine what risk-taking incentives are acceptable, given the risk profile of the firm.

Sanders and Hambrick (2007); Coles, Daniel, and Naveen (2006)

EQUITY OWNERSHIP AND AGENCY COSTS

- Equity ownership is intended to motivate managers to improve performance, but it can also encourage undesirable behaviors.
- Executives might try to increase the value of their equity holdings in ways other than through operating performance:
  - Manipulating accounting results to inflate stock price or achieve bonus targets
  - Manipulating the timing of equity grants to increase their intrinsic value
  - Manipulating the release of information to the public to correspond with more favorable grant dates
  - Using inside information to gain an advantage in selling or otherwise hedging equity holdings

EQUITY OWNERSHIP: ACCOUNTING MANIPULATION

- Is accounting manipulation more or less likely to occur in companies where executives hold large equity positions?
- The research on this topic is very mixed.
  - Some have found higher likelihood of restatement
  - Some have found lower likelihood of restatement
  - Some have found no association
- The board should be aware of the potential for self-gain through accounting manipulation.
- The potential for manipulation might be most pronounced when executives hold a considerable amount of options.

Harris and Bromiley (2007); Baber, Kang, Liang, and Zhu (2013); Armstrong, Larcker, Ormazabal, and Taylor (2013)

MANIPULATION OF EQUITY GRANTS

- Equity ownership might encourage executives to manipulate equity grants to extract incremental value.
- Manipulate the timing of grants.
  - Delay grant date to occur after a stock price decline.
  - Bring grant forward to occur before expected rise.
- Manipulate the timing that information is released.
  - Delay the release of favorable information until after grant date.
  - Bring forward release of unfavorable information to precede grant date.
- In both cases, the executive seeks to maximize value by taking actions not in the interest of shareholders.

MANIPULATION OF EQUITY GRANTS: BACKDATING

- Stock option backdating is the practice where insiders retroactively change the grant date to correspond with a relative low in the company share price.

- Practice was discovered in 2006. More than 120 companies were implicated. Abuses stemmed back to 1981.

- Stock option backdating largely stopped following Sarbanes Oxley, which requires that grants be reported in two days.

- Still, the practice violated GAAP, IRS tax rules, and SEC regulations and indicated a serious lapse in board oversight.

Lie (2005); The Wall Street Journal (2007); Bebchuk, Grinstein, and Peyer (2010)

EQUITY SALES AND HEDGES

- Executives who accumulate a substantial ownership position in company stock might want to limit their exposure.
- The board of directors might allow diversification if it is in the interest of the company (i.e., by reducing risk aversion).
- Executives can achieve diversification by:
  1. Selling shares outright
  2. Hedging a portion through financial instruments
  3. Pledging a portion as collateral for a loan that is used to purchase additional assets

1. TRADING BY INSIDERS

- An insider is an individual—executive, director, employee, or advisor—who has access to material information about the company that has not yet been released to the public.
- Under SEC rules, insiders may only trade when they are not in possession of material nonpublic information.
- Trades on the basis of this information is considered illegal "insider trading".
- Insider trading cases are prosecuted under Rule 10b-5, "Employment of Manipulative and Deceptive Practices."

1. TRADING BY INSIDERS: BLACKOUT WINDOW

- To prevent executives from violating insider trading laws, companies designate a blackout window in which insiders are restricted from making trades.
- Blackout periods occur when material information (earnings, new product, acquisition) is not yet released to the public.
- The median length of a blackout window is 50 calendar days.
- Despite these restrictions, evidence suggests that insiders still have an information advantage in making trades.

- Insider purchases precede periods of market outperformance.
- Insider sales precede periods of market underperformance.
- CEO and chairman have greater trading advantage than other insiders.

Seyhun (1986); Lakonishok and Lee (2001)

1. TRADING BY INSIDERS: 10B5-1 PLANS

- The SEC created Rule 10b5-1 to protect insiders whose positions regularly expose them to inside information.
  - Insider enters contract with a third-party broker.
  - Insider must not know material nonpublic information at the time.
  - Insider specifies program by which trades (purchases or sales) are made.
  - Once in place, insider may not interfere with trades.
  - Broker executes trades, even during blackout window.
  - Insider may amend or terminate at any time.
- Research suggests that 10b5-1 plans are abused.

- Insiders using 10b5-1 plans outperform market by 6% over six months.
- Trades earned under plans are higher than trades made outside plans.
- Sales precede periods of underperformance and purchases precede outperformance.

Jagolinzer (2009)

2. HEDGING

- An executive hedges the value of equity holdings rather than engages in outright sale of shares or options.

  (+) Allows for diversification without an immediate sale

  (+) Might be tax advantageous

  (+) Minimizes public scrutiny that comes with outright sale

  (-) Unwinds equity incentives to perform

  (-) More costly to company than paying equivalent in cash

  (-) Difficult to explain to shareholders why this is allowed

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Hedges tend to follow periods in which the stock price has run up, and precede periods of underperformance.

Jagolinzer, Matsunaga, and Yeung (2007); Bettis, Bizjak, and Kalpathy (2013)

3. PLEDGING

- An executive pledges shares as collateral for a loan, the proceeds of which are used to purchase additional assets.

  (+) Allows for diversification without lessening equity stake

  (+) Might be tax advantageous

  (+) Low interest rate on the loan

  (-) Changes incentive structure imposed on management

- Pledging transactions deserve special consideration by the board.

WHAT IF THE LOAN IS CALLED?
WHAT IF PROCEEDS ARE USED TO LAUNCH NEW BUSINESS?
IS THE BOARD WILLING TO OFFSET LOSSES?

REPRICING AND EXCHANGE OFFERS

- A repricing or exchange offer is a transaction in which employees holding options are allowed to exchange them for new options, restricted stock or (less frequently) cash.

  (+) Generally all employees participate

  (+) Provides new incentives when options are underwater

  (+) Might improve employee retention and reduce turnover

  (-) Might signal a culture of entitlement

  (-) Shareholders wonder why employees benefit while they suffer losses

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- Exchanges generally reduce employee turnover.
- Many firms (40%) that reprice exclude the CEO.
- Repricings are more likely to occur at companies with greater agency problems.

Carter and Lynch (2001); Chidambaram and Prabhala (2003); Change, Kumar, and Todd (2000)

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