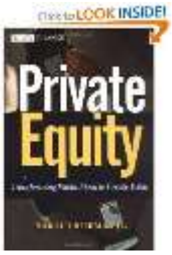

Book Summary: Private Equity: Transforming Public Stock Into Private Equity to Create Value (Wiley) by Harold Bierman Jr.

Number of Pages: 256 pages

ISBN-13: 978-0471392927

Book Finished: 2 Jan 2014

Note: This is a very concise paraphrased summary. Please support the author and buy the book.

- The public corporations have many different types of investors, each type having a different financial objective. The primary objective of **private equity** is that the **stockholders are likely to have similar financial objectives** and it is much easier for the corporation's financial strategies to be consistent with these objectives.
- **Private Equity Definition:**
  - Common stock of a corporation where that common stock is held by a relatively few investors, and
  - Is not traded on any of the conventional stock markets.
- **The Advantages of Private Equity**
  - **The financial reporting requirements to all the governmental entities are reduced.**
    - This simplifies management's responsibilities and results in transaction cost savings for the firm.
    - Decisions are not affected by short term earnings and the anticipated stock market's reactions to the earnings; thus the firm's decision making may be improved.
  - **Alignment of Management and Ownership**
    - With the average publicly held firm the interests of management and the firm's ownership are not always perfectly aligned.
  - **Tax advantages of Private Equity**
    - Tax deferral
    - Lower capital gains tax rate compared to the tax rate on ordinary income.
      - If the owners are also employees of the firm, the incomes earned from services will be taxed at ordinary income tax rates.
    - The private equity firm **has little or no incentive to pay cash dividends** on the common stock.
      - The investors would rather be paid as employees or have the equity investment paid be converted into capital gains and have these gains taxed at the lower capital gains rate in the future.
  - **Capital Structure**
    - **The use of debt becomes a much more important tool for adding value with a private equity firm than with a public firm.**
    - The senior managers of public corporations have a significant incentive to act in such a way as to not jeopardize the stream of salaries that will be earned if the managers are not dislodged from their jobs.
- **Factors that determine whether to effect a management buyout**

1. Potential improvement in managerial incentives
2. Save costs of disseminating information to stockholders
3. Company secrets are better protected
4. Tax savings of interest tax shields and other tax savings
5. Avoidance of hostile takeovers
6. Difficulty to raise capital
7. Illiquid stock (leading to greater difficulty attracting managers)
8. Disagreements among stockholders (because of illiquid investments)

- **Step 1: Valuing the target firm**
  - **In some situations the only completely objective value measure is the market capitalization.**
    - This is equal to the number of outstanding shares of common stock times the market price per share, assuming the market price is observable and there are no complexities in computing the number of outstanding shares.
    - **Any acquirer would have to expect to pay a premium to the current market capitalization.**
    - The market value of the common stock sets a floor for an offering price by a buyer. Rarely would a buyer consider submitting a bid less than current market price and expect to acquire a majority of the outstanding shares.

- **Thus the market price of the common stock is an important measure of value since it sets a minimum-offering price.**
- It can be argued that, with a closely held corporation, if the stockholders desire to unload their stock, they may not be able to, because the market is too thin. In such a situation the seller might accept the market price or even marginally less than the market price, since the market price does not fairly represent the firm's value.
- **Premiums paid by acquirers in most deals are less than 30%.**

- **Multipliers**
  - The use of multipliers for valuation is common practice. The multiplier is obtained from observing comparable firms.
  - The following multiples are used:
    - **Price-earnings multiplier**
      - Cannot be used if:
        - The firm has a loss or very small income compared to assets.
        - The firm has a large amount of noncash utilizing expenses (goodwill and depreciation expense) compared to income.
        - The accounting income measure is not reliable.
        - There are extra assets recorded or not recorded.
        - There are unrecorded or recorded excess liabilities.

Now let us consider the average *P/E* of 8 for 10 comparable firms. Assume that 9 firms have a *P/E* of 5 and one firm has a *P/E* of 35.

The conventional average

$$\text{Ave } P/E = \frac{9(5)+1(35)}{10} = \frac{80}{10} = 8$$

The harmonic average takes an average of the reciprocals and then takes the reciprocal of the average.

$$\text{Ave of reciprocals} = \frac{1}{10}\left[\left(\frac{1}{5}\right)9 + \left(\frac{1}{35}\right)1\right]$$

$$= \frac{1}{10}\left(\frac{9}{5} + \frac{1}{35}\right) = \frac{1}{10}\left(\frac{64}{35}\right) = \frac{6.4}{35}$$

$$\text{Reciprocal} = \frac{35}{6.4} = 5.47$$

    - **Cash flow multiplier** (EBITDA and free cash flow multipliers).
      - *EBITDA* is earnings before interest, taxes, depreciation, and amortization.
      - *Free cash flow* is cash flow from operations after maintenance capital expenditures. Sometimes free cash flow is computed after all investment outlays.
        - Instead of using an earnings multiplier **many merchant bankers prefer to use a cash flow (or EBITDA or free cash flow) multiplier.**
        - **The value normally obtained using EBITDA is the firm's value** (debt plus equity) rather than the stockholders' value.
        - The prime advantage to be gained by using cash flow versus conventional income is that it is theoretically correct and it **does not tie us to the results of accounting procedures that are not designed for this specific type of decision.**
    - **Cash flow multipliers** applied to the next period's flows (e.g., NEBITDA).

- Valuation is very much an art.
  - This is particularly true when the firm does not have a long history of earnings and cash flows.

- Do the calculations, but fully describe the assumptions, the basis of the assumptions, and also estimate the value of the firm if these assumptions are not valid.

- **Step 2: Structuring and Selling The Deal**
  - **Sources of Capital:**
    - Debt: equity capital firms, banks, pension funds, seller of firm
    - Debt with equity kicker: same as above and add insurance companies and rich people
    - Preferred stock: insurance companies
    - Convertible preferred stock: insurance companies or other corporations
    - Common stock: LBO or private equity firms, LBO funds, and rich people
  - **Bid For Acquisition:**
    - The maximum amount of debt that can be issued:

$$V_L = \frac{S}{1-t} = \frac{260{,}000}{.65} = \$400{,}000$$

assuming S = value of equity before refinancing, tax rate = 35%

  - **Structuring a Deal:**
    - There are two primary issues to be resolved:
      - The split between debt and equity
      - The percentage of equity to be kept by the deal's promoter and the percentage to be given to the other equity contributors.

An Example

Assume that a firm can be acquired for $78,000,000 and the expected cash-out date is three years. The firm's value at that time (the sale price) is estimated to be $162,400,000. The underlying internal rate of return (IRR) of the firm is

$$78(1 + \text{IRR})^3 = 162.4$$
$$\text{IRR} = .2769$$

The firm's underlying IRR of .2769 is reasonably impressive. But assume $60,000,000 of debt costs .18 and that the payment of the debt at time 3 would be $98,600,000.

$$60{,}000{,}000(1.18)^3 = \$98{,}600{,}000$$

Since the proceeds at time 3 from the sale of the firm are expected to be $162,400,000 the return to the equity contributors is $63,800,000.

$$162{,}400{,}000 - 98{,}600{,}000 = \$63{,}800{,}000$$

The equity contributors of $18,000,000 earn

$$18(1 + \text{IRR})^3 = 63.8 \text{ IRR}$$
$$= .525$$

Assume the equity contributors of $17,000,000 want a return of .35 (the promoters contribute $1,000,000).

The $17,000,000 requires proceeds of $41,800,000 at time 3.

$$17(1.35)^3 = \$41.8 \text{ million}$$

This leaves $22,000,000 for the promoters.

$$63{,}800{,}000 - 41{,}800{,}000 = \$22{,}000{,}000$$

The promoters expect to earn an IRR of 1.8 or 180 percent on their $1,000,000 investment.

$$1(1 + \text{IRR})^3 = 22$$
$$\text{IRR} = 1.80 \text{ or } 180\% \text{ per year}$$

With the given assumptions, the equity contributors of $17,000,000 to earn their .35 per year have to be awarded .655 of the equity.

$$\frac{41.8}{63.8} = .655$$

        - Some equity analysts predict the equity value at the end of the planning horizon independent of the capital structure. This is faulty since the **equity value is affected by the capital structure.**
    - **Selling the Deal**
        - **A <u>Conventional LBO</u> buys 100 percent of the common stock.**
            - <u>The main problems</u> **are raising the private equity** and **accomplishing the LBO without attracting competition.**
        - **<u>A Partial LBO</u>**
            - The corporation will repurchase its own shares.
            - The stockholders who want cash receive it by selling some of their stock and having the gain on the stock sale taxed at a capital gains rate.
            - Assume that management currently owns or has rights (options) to 20 percent of the firm's 1,000,000 outstanding shares. The firm repurchases 30 percent of the 1,000,000 outstanding shares. There are 700,000 shares outstanding after the share repurchase. If management does not sell any of their shares, they will now own 28.57 percent of the shares (before the buyback they owned 20 percent).
            - In a few years management will have the same percentage of ownership that it would have obtained with an immediate LBO.
            - An important advantage of the partial LBO strategy is that management's investment is highly liquid compared to an investment in a LBO.

- **<u>Dividend Policy</u>**
    - The primary reasons for paying dividends are:
        - Zero tax investors (or low tax)
        - Have done it in the past
        - Trust legal list
        - Few good investments (too much cash)
        - Raiders
        - Do right by investors (investors need cash for consumption)
    - **Also dividends are thought to have an informational content**; that is, an increase in dividends means that the board of directors expects the firm to do well in the future.
    - Reasons for Not Paying Dividends:
        - There are better forms of distribution than cash dividends, given tax considerations.
        - There are transaction costs with an investor receiving cash and then having to reinvest.
        - The firm has transaction costs if it needs to raise an equivalent amount of cash to substitute for the dividend.
        - Retention may be better than a dividend when the firm has good investments and the tax law favors retention compared to cash dividends.
    - When paying dividends or retaining cash is irrelevant:

Assume a firm pays a \$1 dividend and the investor nets after tax $(1 - t_p)$ and invests to earn an after tax return of r_p so that after one year the investor has:

$$(1 - t_p)(1 + r_p)$$

With retention by the corporation of the \$ 1 where the corporation earns r and then pays a dividend the investor has:

$$(1 + r)(1 - t_p)$$

There is indifference for dividends and retention if $r = r_p$. If r is larger than r_p, then retention is better than an immediate dividend.

If $r_p = r$ there is indifference for dividends and retention.

- **<u>Changed capital structure</u>**
    - Motivations for using debt:
        - The nominal cost of debt is less than the current cost of equity.
        - Debt facilitates the acquisition of the firm. It helps get the deal done.

TABLE 5.1 Investment Has a Higher Return than Debt Cost

	0	1	Return and Costs
Investment	−1,000	+1,100	.10
Debt	+500	−530	.06
Common stock	+500	−570	.14

- Conventional valuation model:

$$V_L = V_u + tB \qquad (5.1)$$

where V_L = the value of the leveraged firm
V_u = the value of the firm before debt is substituted for equity
t = the corporate tax rate B = the amount of debt that is added

- Costs of financial distress:
  - With more debt the tax savings increase but so do the costs of financial distress.
- Reasons for using debt:
  - Tax deductibility of interest (debt is cheaper than equity; thus debt increases the firm's value and reduces its cost of capital).
  - Raise capital from banks quickly.
  - Raising equity capital signals overvaluation so the firm issues debt, which signals optimism.
  - Easier to increase ROE (if investment earns more than the cost of debt). Also may have a desirable effect on EPS.
  - No dilution of voting control.
  - Incentive to management and a constraint of management.
  - Timing (common stock is depressed and capital is needed).
  - Reduces the need for equity capital (using other people's money).
  - A large amount of debt tends to discourage raiders.
  - Debt has lower issue costs than new equity.

- **Merchant Banking**
  - **Old Definition:** The very old art of a banking firm's collecting funds from investors to invest in enterprises.
  - **New Definition:** In recent years the term has been applied to firms that engage in private equity types of activity.
- **Operations: the Other Factor**
  - **Roll-ups**
    - **Organize a corporation which then acquires a series of small retail operations.**
  - **Consolidations**
    - With a consolidation the private equity lead **manager convinces five to ten owner-managers that they would benefit from being part of a much larger corporation. The firms being consolidated are in different aspects of the same industry**.
    - The consolidation offers the prospect of marketing and production efficiencies as well as better planned research and development.
    - Frequently the small corporations are lacking in one or another type of managerial skill.
    - A by-product effect is that the larger corporation tends to attract a larger P/E in the stock market.
- **The Virtues of Going Public**
  - **Liquidity**
    - **Probably the number one reason** for preferring an investment in publicly held firms compared to private equity firms is the liquidity of the equity investment.
  - **Family Complexities**
    - Public traded firms are great vehicles for insuring a peaceful transfer of power and wealth between generations.
  - **Diversification**
    - One of the primary reasons for families to sell their controlling interest in a family business is to achieve an adequate amount of investment diversification.
    - Having all of one's eggs in a single basket is normally not a desirable investment strategy. In a dynamic competitive economy it is desirable for investors to be diversified.
  - **Capital Raising**
    - The most obvious advantage is the ability to issue common stock shares in the market.
    - But even the issuance of debt is facilitated by the firm that has a market capitalization for its common stock.
    - A firm with publicly traded stock is required to file audited financial statements. These statements give potential lenders more confidence as to the reality of the financial information.
  - **Management and Options**
    - A publicly traded company has an advantage when trying to hire top management since it can offer stock options or the equivalent for a stock that has a readily determined market price.

- The private equity firm can contract with prospective managers, but the process is made more complex by the absence of a market price for the firm's stock.

- <u>**Partial LBO**</u>
  - MBO = LBO led by management

TABLE 9.1 Management's Ownership Progression

Year	Shares Outstanding	Price per Share	Shares Purchased with $80,000,000	New Number of Shares
1	10,000,000	$ 50.00	1,600,000	8,400,000
2	8,400,000	$ 59.52	1,344,000	7,056,000
3	7,056,000	$ 70.86	1,129,000	5,927,000
4	5,927,000	$ 84.36	948,000	4,979,000
5	4,979,000	$110.42	797,000	4,182,000
6	4,182,000	$119.56	669,000	3,513,000

- **Rollover stockholders:** Management, directors and their affiliates.
- **Phillips Petroleum, Mesa and Icahn (1984-1985)**. Icahn suggested the following to unlock value:
  - **More preferred stock**
  - **Large common stock dividend**
  - **A 3-for-1 stock split**
- **A higher interest rate reduces the debt capacity.**
- Maximum debt capacity:

2. EBITDA = 1,840 + 682 = 2,522 million

where $682 = the tax paid

$$\text{Debt} = \frac{2{,}522}{.12} = \$21.017 \text{ billion}$$

- Maximum Value PE firm should bid assuming the $50 stock price accurately reflects the firm's value before the LBO Competition starts:

1. $V_L = V_U + tV_L$

$$V_L = \frac{V_U}{1-t}$$

With $V_U = \$50(233 \text{ million shares}) = \$11.65 \text{ billion}$

$$V_L = \frac{11.65}{1 \;\; -.34} = \$17.65 \text{ billion}$$