VALUE, PRICE AND INFORMATION:
CLOSING THE DEAL

Value versus Price
Are you valuing or pricing?

**Tools for intrinsic analysis**
- Discounted Cashflow Valuation (DCF)
- Intrinsic multiples
- Book value based approaches
- Excess Return Models

**Tools for "the gap"**
- Behavioral finance
- Price catalysts

**Tools for pricing**
- Multiples and comparables
- Charting and technical indicators
- Pseudo DCF

Drivers of intrinsic value
- Cashflows from existing assets
- Growth in cash flows
- Quality of Growth

Drivers of "the gap"
- Information
- Liquidity
- Corporate governance

Drivers of price
- Market moods & momentum
- Surface stories about fundamentals

Value of cashflows, adjusted for time and risk

INTRINSIC VALUE → Value

THE GAP
Is there one? Will it close?

PRICE

Aswath Damodaran
Test 1: Are you pricing or valuing?
Test 2: Are you pricing or valuing?

Strong sector and stock-picking continue

Impressive performance
Over the past two years, BB Biotech shares have roughly tripled, which could tempt investors to take profits. However, this performance has been well backed by a deserved revival of the biotech industry, encouraging fundamental news, M&A, and increased money flow into health care stocks. In addition, BB returned to index outperformance by modifying its stock-picking approach. Hence, despite excellent performance, the shares still trade at a 23% discount to the net asset value of the portfolio. Hence, the shares are an attractive value vehicle to capture growth opportunities in an attractive sector.

Biotech industry remains attractive
With the re-rating of the pharma sector, investors have also showed increased interest in biotech stocks. Established biotech stocks have delivered encouraging financial results and approvals, while there has also been substantial industry consolidation, which is not surprising in times of “cheap” money and high liquidity. BB Biotech remains an attractive vehicle to capture the future potential of the biotech sector. In addition, investors benefit from a 23% discount to NAV and attractive cash distribution policy of 5% yield p.a. Hence, we reiterate our Buy on BB Biotech shares.

BB Biotech shares remain attractive
In the first 6M of 2013, BB Biotech increased its NAV by 36%, which marks good outperformance against the Nasdaq Biotech Index (NBI)’s 27%. This is a remarkable performance after 2012 when BB’s NAV increase of 45% also...
The drivers of value

What are the cashflows from existing assets?
- Equity: Cashflows after debt payments
- Firm: Cashflows before debt payments

What is the value added by growth assets?
Equity: Growth in equity earnings/cashflows
Firm: Growth in operating earnings/cashflows

How risky are the cash flows from both existing assets and growth assets?
Equity: Risk in equity in the company
Firm: Risk in the firm’s operations

When will the firm become a mature firm, and what are the potential roadblocks?
The determinants of price

**Mood and Momentum**
Price is determined in large part by mood and momentum, which, in turn, are driven by behavioral factors (panic, fear, greed).

**Liquidity & Trading Ease**
While the value of an asset may not change much from period to period, liquidity and ease of trading can, and as it does, so will the price.

**The Market Price**

**Incremental information**
Since you make money on price changes, not price levels, the focus is on incremental information (news stories, rumors, gossip) and how it measures up, relative to expectations.

**Group Think**
To the extent that pricing is about gauging what other investors will do, the price can be determined by the "herd".
Three views of “the gap”

<table>
<thead>
<tr>
<th>View of the gap</th>
<th>Investment Strategies</th>
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<tbody>
<tr>
<td>The Efficient Marketer</td>
<td>Index funds</td>
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<td>The gaps between price and value, if they do occur, are random.</td>
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<td>The “value” extremist</td>
<td>Buy and hold stocks where value &lt; price</td>
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<td>You view pricers as dilettantes who will move on to fad and fad. Eventually, the price will converge on value.</td>
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<td>The pricing extremist</td>
<td>(1) Look for mispriced securities.</td>
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<tr>
<td>Value is only in the heads of the “eggheads”. Even if it exists (and it is questionable), price may never converge on value.</td>
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<td>(2) Get ahead of shifts in demand/momentum.</td>
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The “pricers” dilemma..

- **No anchor**: If you do not believe in intrinsic value and make no attempt to estimate it, you have no moorings when you invest. You will therefore be pushed back and forth as the price moves from high to low. In other words, everything becomes relative and you can lose perspective.

- **Reactive**: Without a core measure of value, your investment strategy will often be reactive rather than proactive.

- **Crowds are fickle and tough to get a read on**: The key to being successful as a pricer is to be able to read the crowd mood and to detect shifts in that mood early in the process. By their nature, crowds are tough to read and almost impossible to model systematically.
The valuer’s dilemma and ways of dealing with it...

- **Uncertainty about the magnitude of the gap:**
  - Margin of safety: Many value investors swear by the notion of the “margin of safety” as protection against risk/uncertainty.
  - Collect more information: Collecting more information about the company is viewed as one way to make your investment less risky.
  - Ask what if questions: Doing scenario analysis or what if analysis gives you a sense of whether you should invest.
  - Confront uncertainty: Face up to the uncertainty, bring it into the analysis and deal with the consequences.

- **Uncertainty about gap closing:** This is tougher and you can reduce your exposure to it by
  - Lengthening your time horizon
  - Providing or looking for a catalyst that will cause the gap to close.
Strategies for managing the risk in the “closing” of the gap

- **The “karmic” approach**: In this one, you buy (sell short) under (over) valued companies and sit back and wait for the gap to close. You are implicitly assuming that given time, the market will see the error of its ways and fix that error.

- **The catalyst approach**: For the gap to close, the price has to converge on value. For that convergence to occur, there usually has to be a catalyst.
  - If you are an activist investor, you may be the catalyst yourself. In fact, your act of buying the stock may be a sufficient signal for the market to reassess the price.
  - If you are not, you have to look for other catalysts. Here are some to watch for: a new CEO or management team, a “blockbuster” new product or an acquisition bid where the firm is targeted.
An example: Apple – Price versus Value (my estimates) from 2011 to 2015

Figure 11.3: Apple, Price and Value - 2010 to 2015

Aswath Damodaran
A closing thought...