What Is The Market Telling Us ... And How To Invest Based On That

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This talk is based on the book “Expectations Investing” by Alfred Rappaport & Michael J. Mauboussin

A basic knowledge of Financial Accounting, DCF methodology is assumed
The Concept

Trying to understand market expectations and making an investment decision based on that is a simple concept and very prevalent.

Gerald Loeb in his book: “The Battle for Investment Survival” says: One should Buy a stock when....

- “The price of the stock must reflect a majority view that conditions affecting the company are bad, or soon will be bad, or will continue bad.”

“There is little to be expected marketwise, for instance, in buying the shares of a company with a strong growth trend if the current price places a liberal valuation on that growth for several years to come.”
Best long term results from this analysis..

- Are for companies which are in secular growth sectors..especially with S curve type of growth.

  - Growth about to explode, expectations generally low
  - Growth about to slow, expectations generally high
Microsoft

Source: Bloomberg
Pfizer

Source: Bloomberg
Investing based on Expectations

- Alfred Rappaport & Michael J. Mauboussin in their book “Expectations Investing”

- “Stock prices are the clearest and most reliable signal of the market’s expectations about a company’s future performance. The key to successful investing is to estimate the level of expected performance embedded in the current stock price and then to assess the likelihood of a revision in expectations.”
The Framework

- The most important element in owning a company’s shares is its “Future cash flow stream”
- The Future cash flow stream is uncertain.
- Financial markets are nothing but discounting machines. The price of a financial asset is the present value of its “expected” future cash flows.
- Discounted Cash Flow method provides a great tool for valuation of corporate value
Basics

- Equity Value = Corporate Value – Market Value of Debt - Value of Non Operating Assets
- Corporate Value = Discounted Free Cash Flow
- Free Cash Flow = NOPAT - Change in Working Capital - Change in Fixed Assets
- NOPAT = Operating Profits - Taxes
- Cost of Capital
The Process

• Estimate the Expectations implied by the Price (Reverse DCF)
• Analyze the Implied Expectations
• Arrive at a Buy/Sell/Hold decision
Estimating the Expectations

• Find the # shares
• Calculate the FCF

• Calculate the Net Debt
  Net Debt = Total Debt - Cash - Marketable securities - Value of non operating assets

• Estimate an inflation factor
• Find the consensus growth

• Identify the Forecast period

Data Source: Company, Bloomberg
Analysing the Expectations: I

- Identifying the key driver(s) of FCF

<table>
<thead>
<tr>
<th>Drivers of Free Cash Flow</th>
<th>Volume, Price, Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Growth</td>
<td>Volume, Price, Mix</td>
</tr>
<tr>
<td>Operating Margins</td>
<td>Price, Mix, Economies of scale, Operating Leverage,</td>
</tr>
<tr>
<td>Fixed Capital Intensity</td>
<td>Technology, Divisibility of Investment, Excess Capacity</td>
</tr>
</tbody>
</table>
Analysing the Expectations: II

• Analysing the key drivers:
  ▫ Reality Check
  ▫ Past Analysis
  ▫ Structural vs Cyclical
  ▫ Competitive Strategy Framework
  ▫ Destructive Technology Framework
Investment Decision

• If Price Implied Expectations are very different from what your view is there is an actionable idea of Buy or Sell.

• Before taking a final decision consider issues like:
  ▫ Margin of Safety
  ▫ Biases (Over Confidence, Anchoring)
  ▫ Expected Value (probabilistic approach)
Example 1: Infosys

- Infosys is one of the largest and most respected IT services company in the world.

- “Infosys pioneered the Global Delivery Model (GDM), which emerged as a disruptive force in the industry leading to the rise of offshore outsourcing”

- It has a market cap of USD$31.5 bn, Sales of US$ 5 bn, Sitting on Cash & Near Cash of US$3 bn and generates substantial free cash every year.

- The company employs more than 114000 people
Infosys: Price Implied Expectations

Price is implying a forecast period of 14 years for a 15% growth in FCF.

In general market is assuming stable pricing, stable to declining margins and stable capital intensity in effect implying volume growth as the key driver of FCF.

Data Source: Company, Bloomberg
Infosys: Analysing the Expectations

- Since 2003, the FCF has grown 35%
- Sales has grown 30%
- NOPAT has grown 29%
- Capital Intensity has helped the extra 5% growth in FCF

- Overall Sales growth has been the key value driver. Within that volume has been the main contributor
Infosys : Reality Check

• In the 14th year it will generate free cash flow of more than US$8 bn, this compares with IBM, which generated free cash of US$17 bn in 2009.

• Assuming a linear relationship between Sales and # of employees, it will have 800,000 employees. IBM has 400,000 today.

Overall this is not completely unbelievable
15% growth in sales seems not that aggressive relative to the 30% growth in the last 7 years.

But,
- What about market share?
- What about competition?
- What about regulation?
- What about Rupee/$?

Can margins help?
Can Capital Intensity help?
Investment Decision

- What should we do with Infosys?
- Is there a margin of safety?

- What are the:
  - Implications for Long only funds
  - Implications for Absolute return funds.
Example 2: Starhub

Market Price is implying a Negative growth in Cash Flows from here on

<table>
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<tr>
<th>Year</th>
<th>Disc FCF</th>
<th>Cum FCF</th>
<th>RV</th>
<th>Price</th>
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<tr>
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<td>2.56</td>
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</tbody>
</table>

Data Source: Company, Bloomberg
Food For thought

Are the expectations of Negative growth in Starhub Justified?

Thank You