Complexity in Corporate Finance

Complexity in Corporate Finance

- When you are discussing theoretical valuation, simplifying assumptions help to make explanation easier
- But what happens when you step into the real world
- We have already seen difficulties in identifying appropriate peer groups in Comparable Companies and Precedent Transaction methodologies

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- The first issue is to consider the company's position in its lifecycle
- High growth companies are very different to stable mature companies

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- A mature company
  - stable capital expenditure pattern
  - No large scale write-offs or restructurings
  - Trading multiples are similar across its sector
  - Price to Book ratios are stable and can be used to evaluate cost of capital
  - The ROE in the past is a good indicator of future ROE

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- But what happens if…
  - Investment is not in fixed assets but in R&D or software development - written off leading to losses
  - Balance sheet is distorted by gains on asset sales or write-offs
  - Trading multiples vary over time or across the sector
  - Historic investment was very limited compared to current and future investment which is projected to be high - what then for ROE?

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- Compare Apple to a Construction Company?
    - Apple invests heavily in R&D (which is not capitalised)
    - Construction companies historically have a poor record when it comes to bankruptcies but employ little capital in their projects
    - How do you calculate or compare ROE?

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- Think back to the Dot Com boom
- Return on Invested Capital was ignored
- Focus on scaling up fast and worry about the business model later - actually what Google did and got away with -
- Internet businesses proved to have few barriers to entry to generate even modest returns
- Who created an unassailable competitive advantage?
  - Addiction to amazing products - Apple
  - Monopoly - Telecoms companies, Amazon

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- The next problem is that results for each method always vary
- There is no right answer
- Is a wide range helpful or meaningless?
- What if you got this range of results?

- P/E Multiples $120 - $140
- EV/EBITDA $90 - $110
- DCF Model $80 - $120

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- When looking at the EV/EBITDA, companies who have to replace assets frequently - more capex - will result in lower values
- Companies with higher depreciation = lower EV/EBITDA
- Cannot compare companies across different sectors or industries - sometimes even within sectors

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- Although DCF valuation is often at the core of comparable analysis, the result is often communicated in terms of the implied multiple.
- Company X is worth a higher multiple than Company Y due to its higher margins, faster growth or superior cash flow generation
- This works the other way around with public companies - you can check your DCF results against the market multiples

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- Valuation is fundamentally about:
  - ROIC - Return on Invested Capital
  - Growth
  - Cost of Capital
- Valuation is therefore about forecasting the changes and balance between these three variables

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- Another way of looking at this
- Company values are higher depending on
  - Scale
  - Growth
  - Profitability
- This 3 dimensional matrix enables us to justify higher valuations and higher multiples for companies scoring higher on one or more of these variables

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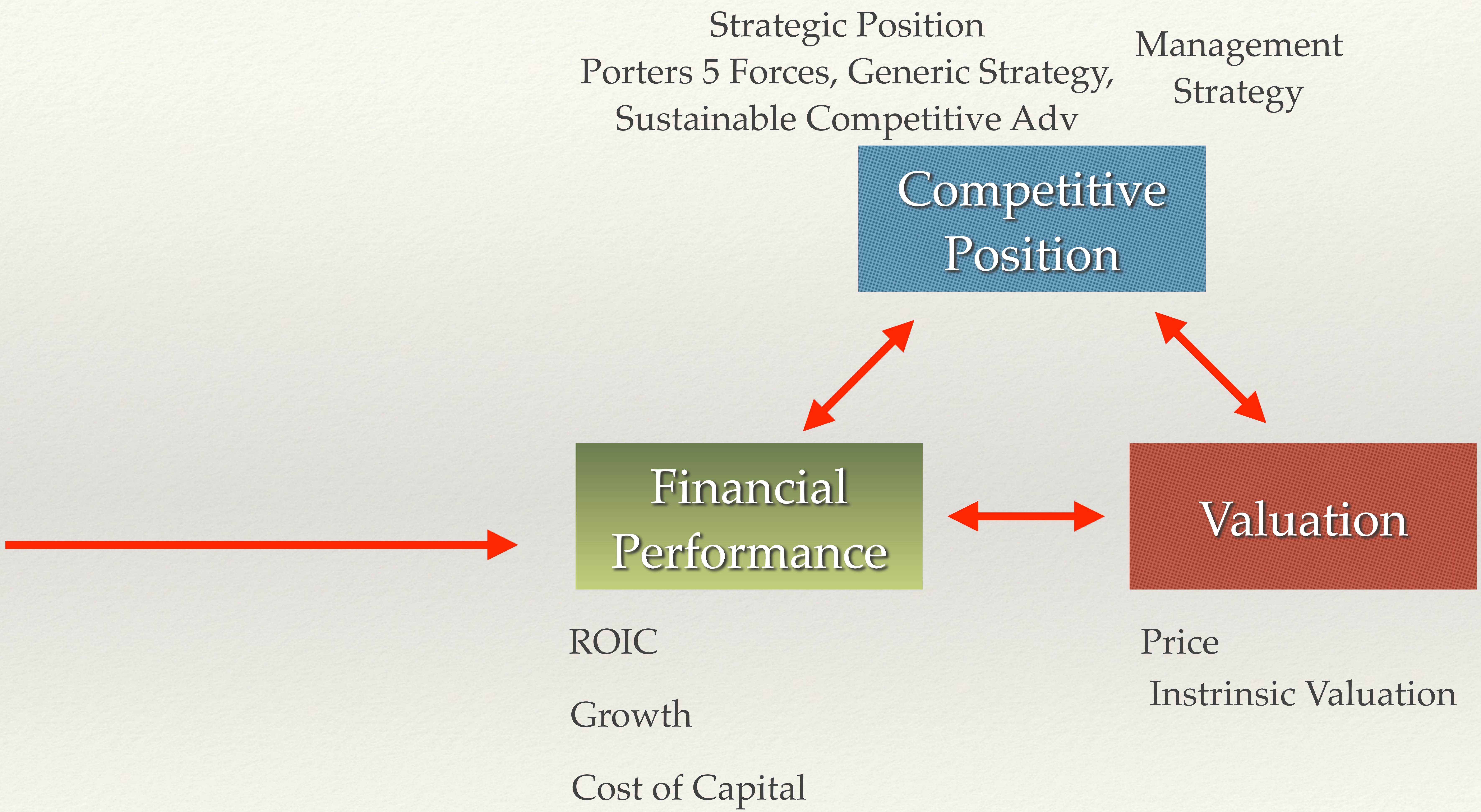
- Financial - value comes from ROIC and Growth, mitigated by Cost of Capital



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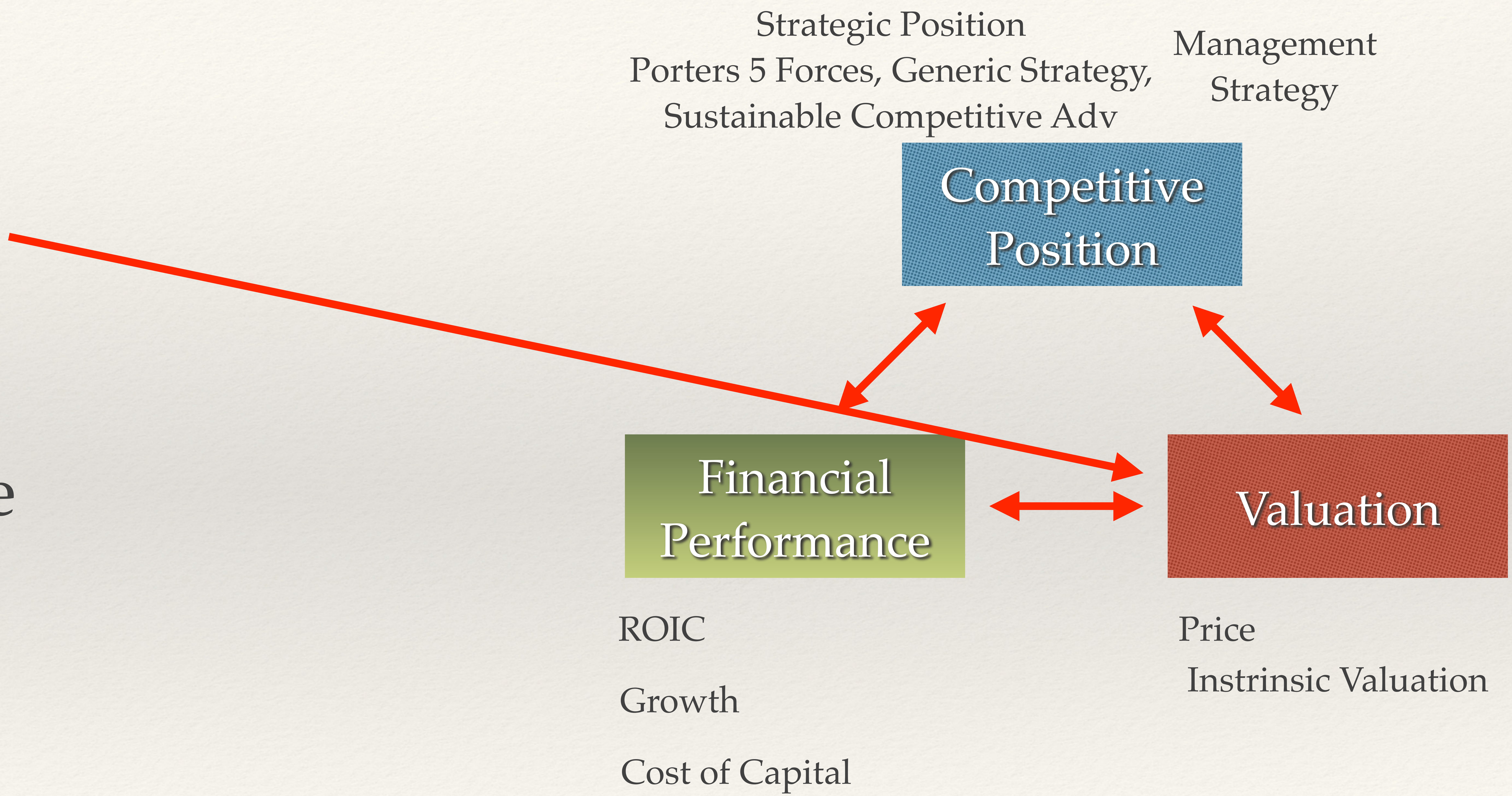
- PE ratio and other valuation metrics come from ROIC and Growth



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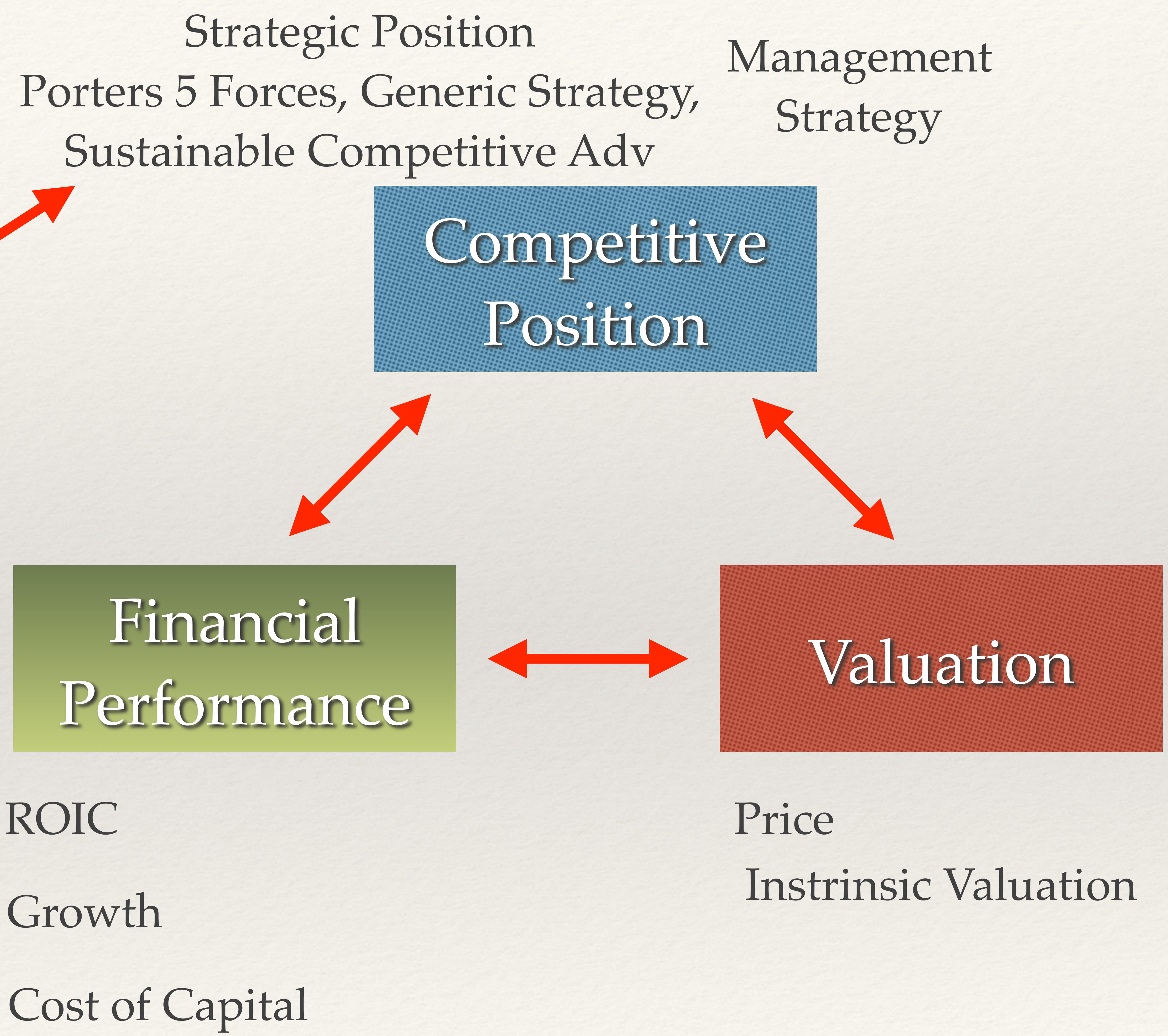
- Competitive Position such as Barriers to Entry, Power over Suppliers or Customers, Generic Strategies, Sustainable Competitive Advantage - all affect ROIC



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- The basic premise on valuation is to invest when the return exceeds current ROIC
- But if you have a margin of 30%, an ROIC of 50% and the project offers a return of 25%, should you invest?
- ROIC will be diluted but the return is still very high.

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