THE MARGIN OF SAFETY: TOOL FOR ACTION OR EXCUSE FOR INACTION?

You can be too conservative!!
The Margin of Safety

Diagram:
- Estimated by the investor:
  - Intrinsic Value
  - Accounting Value
  - Multiple + Comparables
- Estimated value of an asset
- Margin of safety
- Market price of the asset
- Set by the market

Notes:
- You can be wrong in your value judgment
- Market may not correct its mistakes, i.e., price may not move towards value
Why have a MOS?

- Reasons
  - Your value estimates have error in them. You can be wrong and very wrong, in some cases.
  - Even if your value estimates are right, the market price may not move towards that value.

- Potential Benefits
  - Less likely to invest in over valued stocks, because you have a buffer of safety.
  - Less likely to invest in assets that have significant downside risk.
MOS: Differences across investors

1. **Value Approach:** The way in which investors can estimate value can vary:
   a. Intrinsic Value, estimated from a discounted cash flow model.
   b. Asset-based Value, usually estimated from accounting balance sheets but perhaps also from liquidation estimates.
   c. Relative Value, estimated using a multiple and peer group pricing.

2. **Magnitude:** The magnitude of the MOS used can vary across investors, increasing with how conservative they are.

3. **Fixed or Variable:** Some investors have difference MOS for different assets, whereas others used a fixed MOS, no matter what they are investing.
Myth 1: Using a MOS is costless

<table>
<thead>
<tr>
<th>Your Analysis</th>
<th>Stock is under priced</th>
<th>Stock is over priced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock is under priced</td>
<td>A Good Buy</td>
<td>Type 1 investment error: Buy the wrong stock or fail to sell the right stock.</td>
</tr>
<tr>
<td>Stock is over priced</td>
<td>Type 2 investment error: Fail to buy the right stock or sell the wrong one.</td>
<td>A Good Sell</td>
</tr>
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</table>

Does the trade off work in your favor?
1. Are you more invested in cash than you would like to be?
2. Do you earn a return on your portfolio (cash included) that is more than you would have made investing passively?

Reduce the likelihood of Type 1 errors

Increase the likelihood of Type 2 errors

Price

 Increase the MOS

Value
Myth 2: If you use a MOS, you can afford to take valuation short cuts

- A MOS is only as good as the value that it is based off. If your value estimates are wrong, your MOS is just a percentage variation on a random (or close to random) number and can only damage you as an investor.

- If you are conservative in your value estimates, your values will be biased down and attaching a MOS to this “conservative value” is double counting or even triple counting risk.
Myth 3: The MOS should be the same across all investments.

- On an investment where you can estimate value with certainty and price differences are guaranteed to disappear at a finite point, you should not have and should never use a MOS.

- On any other investment, your MOS should vary across investments, increasing with riskier investments (and less efficient markets) and falling with safer ones (and more efficient ones).
Myth 4: MOS of the Sum = Sum of the MOS of the Parts

- The MOS for a stand alone investment will be larger than the MOS for that same investment in a portfolio, for the same reasons that the variance of a stock as a stand alone investment will be higher than the variance it adds to a portfolio.

- It follows then that using a MOS to accept or reject individual investments will bias you away from stocks that derive the bulk of their risk from company-specific risk factors.
Myth 5: The MOS is an alternative to other risk measures

- If you don’t like conventional portfolio-theory based risk measures (like beta or betas), you should look for an alternative measure of risk to use in valuing assets.
- The MOS cannot be that measure, since it comes into the decision process after you have estimated value, not before.
If you want to use MOS:

1. **Self Examination**: Make sure the MOS fits your needs as an investor, given your
   a. Portfolio Size
   b. Investment Philosophy
   c. Concentration/Diversification
   d. Beliefs about market

2. **Sound Value**: Spend time developing a valuation approach that yields a reasonable and an unbiased estimate of value.

3. **Be Flexible**: Try to create a MOS measure that is flexible and varies across investments.
MOS Determinants

1. **Valuation Uncertainty**: The greater the uncertainty in estimating value, the higher the MOS.

2. **Source of Uncertainty**: The more company-specific the uncertainty, the lower the MOS, with the drop a function of how diversified you are.

3. **Market Efficiency**: The more efficient a market is at correcting its mistakes, the smaller the MOS.

4. **Pricing Catalysts**: The greater the likelihood of a price catalyst (that will cause the price-value gap to close), the smaller the MOS.