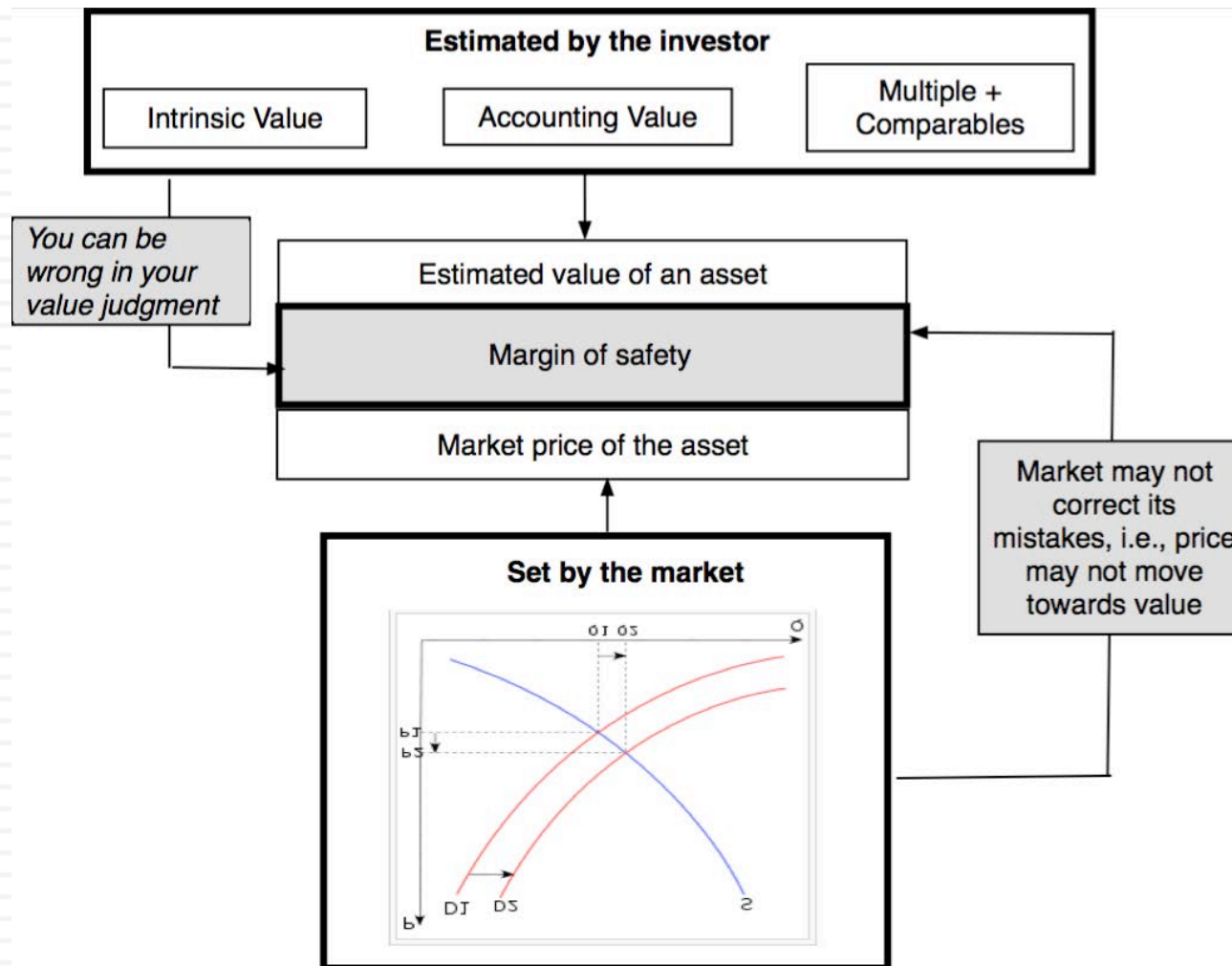




THE MARGIN OF SAFETY: TOOL
FOR ACTION OR EXCUSE FOR
INACTION?

You can be too conservative!!

The Margin of Safety



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.

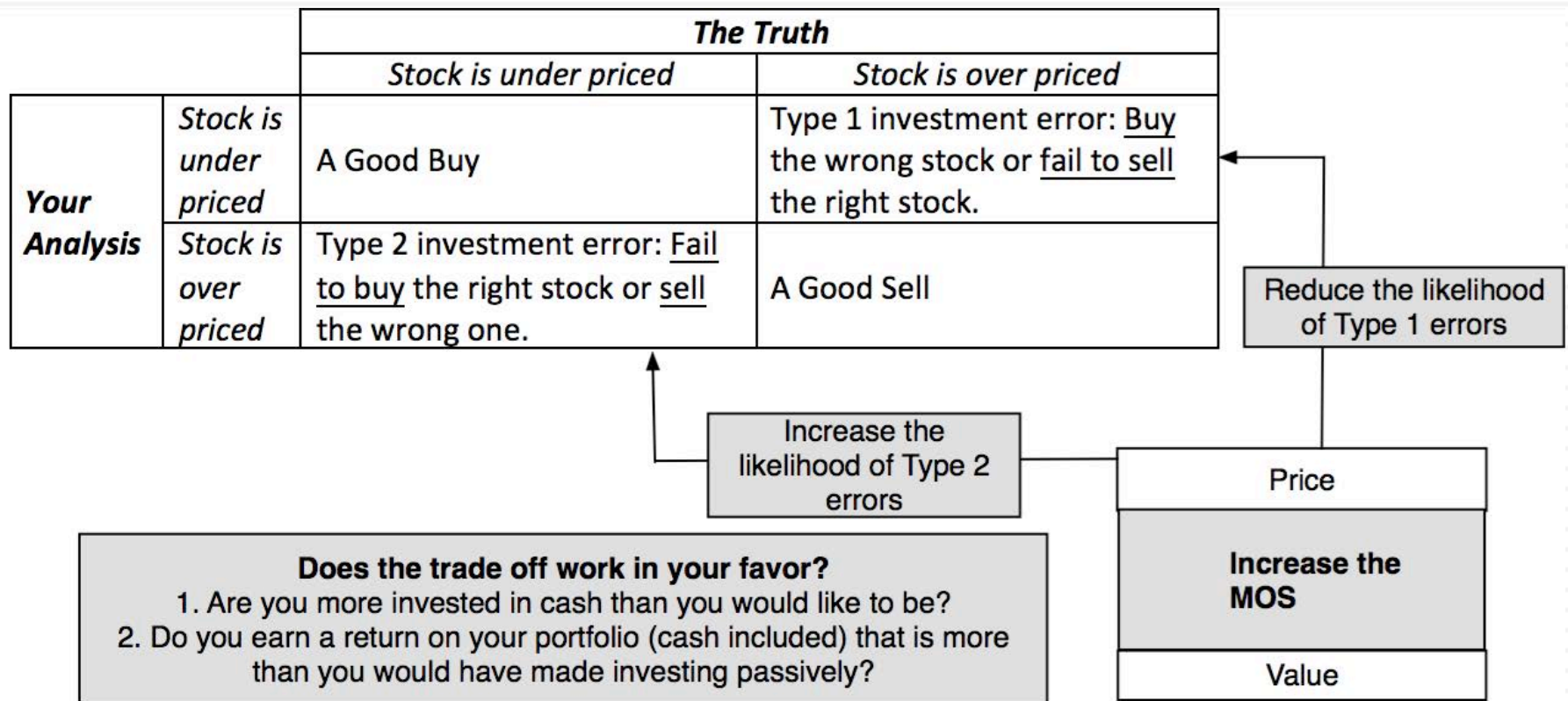
□ Potential Benefits

- 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



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.