### Portfolio123 Virtual Course: Choosing Designer Models By Marc Gerstein

#### Topic B2 – Value

The first of the three Designer Models styles we'll examine up close is Value, the style most people have heard of, the granddaddy of all styles. It's also the style that is easiest to misuse.

This is the style that derives most directly from the Dividend Discount Model discussed in the basic content cited in the Introduction. By way of summary:

- The ideal fair price of a stock is computed as D/(RR-G) where D is dividend; RR is required rate of return; and G is expected growth rate.
- Due to numerous real-world impracticalities (also discussed in the introductory content), we don't actually use the formula for computation, but instead, as a logical launch pad to other approaches that we deem likely to lead us to stocks that are more likely than not to be priced reasonably in relation to ideal DDM valuation.

# **Practical Valuation Concepts**

For reasons more carefully spelled out in the <u>Strategy Design course</u>, some algebraic substitution and reshuffling give us formulae for ideal Price/Earnings and Price/Sales rations:

- P/E = 1/(R-G)
- P/S = Margin / (R G)

We can swap EV (Enterprise Value) for Price if we are willing to work with Operating Margin in lieu of Net Margin. We can also do a straight-up substitution of Cash Flow for earnings in the P/E formula (the reason being that the rationale for use of Earnings and Cash Flow are the same; these are the sources of potential future dividends, and both benefit from the customary investment-community fiction that all funds (profits) have been distributed to shareholders but much of the money is returned by them to the corporation for purposes of reinvestment).

While these ideal formulae suffer from the same implementation difficulties as classic DDM, they are useful because of the way they call our attention to why valuation ratios are what they are or should be what we believe they should be.

- Interest rates are included in the equation (part of R) in a position that makes it clear that as rates rise, ideal valuation ratios must fall.<sup>1</sup>
- Growth is located within the formula in a position that makes it clear that as growth rises, fair valuation ratios likewise rise.<sup>2</sup>
- Risk in included in the equation (another part of R) in a position that makes it clear that as risk rises, ideal valuation ratios must fall.<sup>3</sup>

The roles of interest rates and growth as elements of valuation are widely discussed. See, for example, the overwhelming and accurate tone of media discussions to the effect that increases in interest rates (i.e., increases in an important component of R) hurt stocks and vice versa. As to the role of Growth, we have the substantial body of folklore surrounding the PEG ratio, which makes it clear that higher growth rates increase the magnitude of a fair P/E.<sup>4</sup>

The role of quality in the art and science of valuation is largely ignored in popular discussion. Yet it's critical. Extreme attention to quality is an important aspect of the what makes Warren Buffett a successful investor as opposed to others, who unwittingly settle for low-P/E stocks associated with low quality companies. We'll discuss this further in the next topic, when we cover Quality.

#### Value Versus Glamour

First, let's start by recalling that value isn't everything. In the Introduction material, I discussed how we cannot assume in the market that P=V (Price=Value). Instead, we should assume P=V+N (Price = Value + Noise).

Glamour is the opposite of value. It falls under Noise. It means buying stocks without reference (or with diminished reference) to the relationship between price and the necessary factors that make a fair price what it is. This happens as stocks trade on news stories, popularity, ideals, reputation, image or emotion. Or, as academicians say, it's trading on glamour.

<sup>&</sup>lt;sup>1</sup> Because R is a positive number in the denominator of a fraction, as it gets bigger, the value of the overall fraction decreases.

<sup>&</sup>lt;sup>2</sup> Because G is a negative number in the denominator of a fraction, as it gets bigger, the value of the overall fraction increases.

<sup>&</sup>lt;sup>3</sup> Because R is a positive number in the denominator of a fraction, as it gets smaller, the value of the overall fraction increases.

<sup>&</sup>lt;sup>4</sup> The rhetoric surrounding PEG is accurate as far as it goes, but it's often incomplete. Many assume historic growth rates are what matter; in truth, its expected future growth that counts. Also, PEG ignores the important role payed by R.

## **How To Evaluate the Value Style Rank**

A high rank for Value means the strategy, on average, owns stocks whose prices are reasonable relative to key here-and-now fundamental metrics. Specifically, we use Enterprise Value to Sales and Price to Free Cash Flow.

The lower the Value Style score, the more the model relies on Glamour.

### What Makes for A Successful Value Strategy

All else being equal, low valuation metrics must and will succeed. The variations we see reflect all else not being equal.

When considering the market as a whole, and whether it rewards or punishes Value consider the following:

- Interest rates and expectations of future changes
- Market expectations for future growth
  - This is why PEs decline as profits peak; the market expects future growth to shrink or turn negative
  - O This is why PEs rise during bad times; it's based on expectations that growth will turn upward. (And this is why commentators, most of whom have no idea what makes for a proper PE, express outrage that PEs are so high during recessions, and why those who follow their "stay away" advice always wind up watching with frustration as what they deem the ignorant mob drives prices up and away from them; in truth, it is they who didn't get it.)
- Market expectation for risk
  - If it appears to you that value in general is out of favor, don't buy into that simplistic idea that the market has taken leave of its senses. Even aside from growth or interest-rate fears, consider overall risk. PEs, however high or low they may be, have to move down when the market gets antsy.

These are general issues that impact the market. They are relevant to your use of Designer Models only to the extent you focus on models that hedge or attempt to use market timing, which will be discussed in a future Topic. But they are relevant to whether and to what extent you choose to focus on the Value style rank.

When considering individual strategies with high ratings for Value, we know going in that key valuation ratios of the portfolio's holding are on the low side. Beyond that, the model's performance record would, all else being equal, reveal how how effectively the model has been teasing out expectations regarding growth and/or risk. But, of course, as

we'll keep seeing, all else is rarely if ever equal. Hence our need to consider Value as one, but not the only, relevant stylistic factor.

#### *IMPORTANT:*

<u>Backtest data cannot help you in this inquiry.</u> Since model are created with full access to information on which stocks succeeded and which stocks faltered, it is possible, and depending on one's empirical analysis skills, possibly easy to create simulated success with a model that uses low valuation ratios but does not account for risk or growth. When live money is on the line, such a model cannot be expected to succeed (although periods of temporary success may occur based on good luck). With live money (i.e. when you don't know ahead of time which stocks did well and which ones did not), the only way a value strategy can succeed over time it to effectively address growth and risk.

## Must You Reject A Glamour (Low Value Rank) Model?

No, not at all. In a world of P=V+N, it's perfectly reasonable to focus on N (of which Glamour is a subset). If you are such an investor, however, you'll want to take note of the Momentum rank, which will be covered in Topic B4. But before we get there, let's turn to Quality, which will be our next topic.