

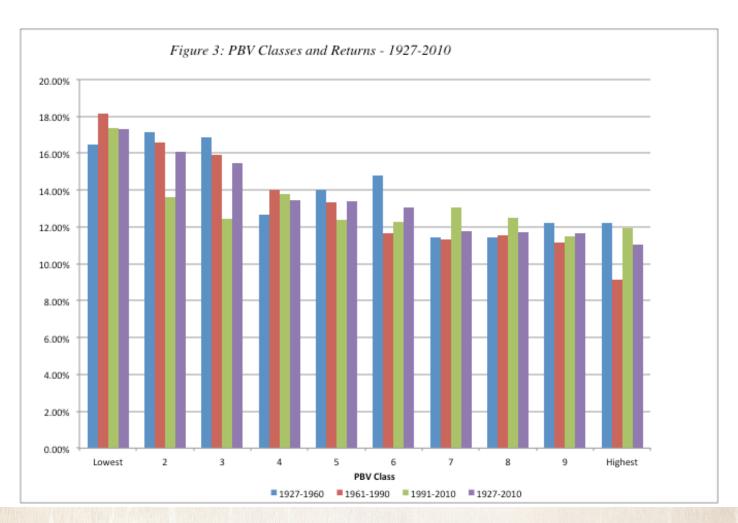
#### Value Investing: The Screeners..

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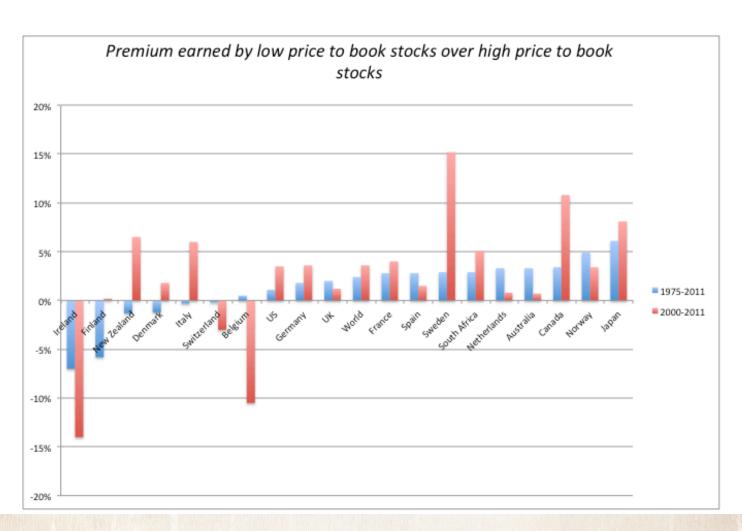
### The Screeners 14 15 16

- Tracing their lineage back to Ben Graham, the screeners try to find cheap stocks by screening for cheapness.
- There are four widely used value screens:
  - Price to Book ratios: Buy stocks where equity trades at less than book value or at least a low multiple of the book value of equity.
  - Price earnings ratios: Buy stocks where equity trades at a low multiple of equity earnings.
  - Revenue multiples: Buy stocks that trade at low multiples of revenues
  - Dividend Yields: Buy stocks with high dividend yields.

# 1. Price/Book Value Screens: Low P/BV stocks are winners..



#### Evidence from International Markets



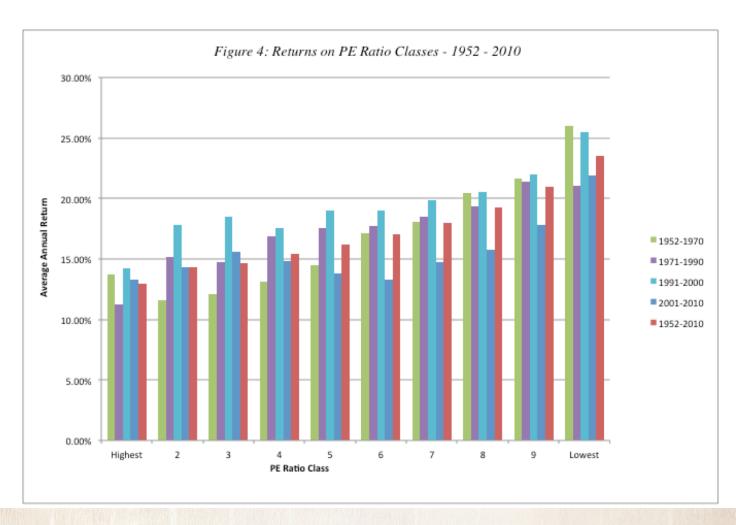
#### Caveat Emptor on P/BV ratios

- <u>A risk proxy:</u> Fama and French point out that low price-book value ratios may operate as a measure of risk, since firms with prices well below book value are more likely to be in trouble and go out of business. Investors therefore have to evaluate for themselves whether the additional returns made by such firms justifies the additional risk taken on by investing in them.
- Low quality returns/growth: The price to book ratio for a stable growth firm can be written as a function of its ROE, growth rate and cost of equity:

(Return on Equity - Expected Growth Rate)
(Return on Equity - Cost of Equity)

 Companies that are expected to earn low returns on equity will trade at low price to book ratios. In fact, if you expect the ROE < Cost of equity, the stock should trade at below book value of equity.

# 2. Price/Earnings Ratio Screens: The Low PE story has legs...



#### What can go wrong?

- Companies with high-risk earnings: The excess returns earned by low price earnings ratio stocks can be explained using a variation of the argument used for small stocks, i.e., that the risk of low PE ratios stocks is understated in the CAPM. A related explanation, especially in the aftermath of the accounting scandals of recent years, is that accounting earnings is susceptible to manipulation.
- <u>Tax Costs</u>: A second possible explanation that can be given for this phenomenon, which is consistent with an efficient market, is that low PE ratio stocks generally have large dividend yields, which would have created a larger tax burden for investors since dividends were taxed at higher rates during much of this period.
- Low Growth: A third possibility is that the price earnings ratio is low because the market expects future growth in earnings to be low or even negative. Many low PE ratio companies are in mature businesses where the potential for growth is minimal.

# A variant on earnings multiples: EV/EBITDA

EV/EBITDA = (Market value of equity + Debt – Cash)/ EBITDA

- The proponents of this multiple argue that it is better than PE, because it is less impacted by financial leverage and focused on a cash flow measure, rather than earnings.
- There are two counter arguments:
  - EBITDA is not a free cash flow, because you have to pay taxes and cover reinvestment needs.
  - As with PE ratios, you have to be careful about checking for risk in EBITDA and low growth or low quality growth (low return on capital)

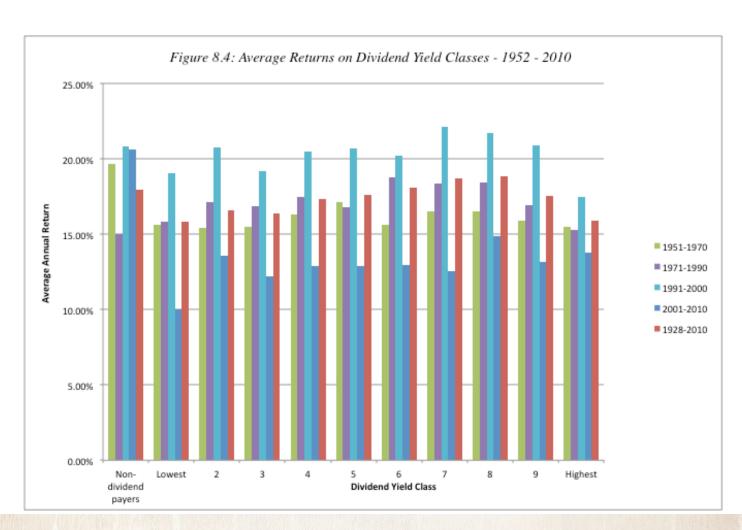
### 3. Revenue Multiples

- While not as widely used as book value or earnings multiples, there are some who look at companies that trade at low multiples of revenues as cheap.
- Since revenue multiples tend to vary much more widely across sectors, the "cheapest" stocks are defined as those that trade at low revenue multiples, relative to the sector that they operate in, rather than across the entire market.
- Studies seems to indicate that low revenue multiple portfolios outperform the market but do not outperform low PE or low PBV ratio portfolios.

### What can go wrong?

- High Leverage: One of the problems with using price to sales ratios is that you are dividing the market value of equity by the revenues of the firm. When a firm has borrowed substantial amounts, it is entirely possible that it's market value will trade at a low multiple of revenues. If you pick stocks with low price to sales ratios, you may very well end up with a portfolio of the most highly levered firms in each sector.
- Low Margins: Firms that operate in businesses with little pricing power and poor profit margins will trade at low multiples of revenues. The reason is intuitive. Your value ultimately comes not from your capacity to generate revenues but from the earnings that you have on those revenues.

## 4. Dividend Yields





#### What to watch out for..

- Unsustainable dividends: When you buy a stock with a high dividend yield, you are hoping that the dividends will not be cut or come under threat. While this may be a reasonable assumption across the entire market, it is also true that companies that are paying too much in dividends will be unable to sustain those dividends.
- Low growth: One of the costs of returning more in dividends is that there is less to reinvest, leading to low growth.
- <u>Taxes</u>: Investors who receive dividends have no choice on tax timing and may have to pay higher taxes on dividends.

## The Value Investors' Protective Armour

- <u>Accounting checks</u>: Rather than trust the current earnings, value investors often focus on three variants:
  - 1. Normalized earnings, i.e., average earnings over a period of time.
  - 2. Adjusted earnings, where investors devise their own measures of earnings that correct for what they see as shortcomings in conventional accounting earnings.
  - 3. Owner's earnings, where depreciation, amortization and other non-cash charges are added back and capital expenditures to maintain existing assets is subtracted out.
- <u>The Moat</u>: The "moat" is a measure of a company's competitive advantages; the stronger and more sustainable a company's competitive advantages, the more difficult it becomes for others to breach the moat and the safer becomes the earnings stream.
- Margin of safety: The margin of safety (MOS) is the buffer that value investors build into their investment decision to protect themselves against risk. Thus, a MOS of 20% would imply that an investor would buy a stock only if its price is more than 20% below the estimated value (estimated using a multiple or a discounted cash flow model).

### A Screening template

- 1. <u>Screen for cheapness</u>: You use a pricing multiple (PE, PBV, EV/EBITDA) to find cheap stocks.
- 2. Screen for low risk: You try to remove those stocks that look cheap but are risky, using your preferred proxy for risk. This proxy can be a price-based one (standard deviation, beta), an accounting measure (debt ratio) or a sector screen (no tech stocks...)
- 3. Screen for high growth: You also want to get companies that have, in not high growth, some growth in them. So, you may put in a minimum growth requirement.
- 4. <u>Screen for high quality growth</u>: Finally, you also want to remove companies that reinvest badly (earning low returns on investments).

# Determinants of Success at Passive Screening

- 1. Have a long time horizon: All the studies quoted above look at returns over time horizons of five years or greater. In fact, low price-book value stocks have underperformed high price-book value stocks over shorter time periods.
- 2. <u>Choose your screens wisely</u>: Too many screens can undercut the search for excess returns since the screens may end up eliminating just those stocks that create the positive excess returns.
- 3. <u>Be diversified</u>: The excess returns from these strategies often come from a few holdings in large portfolio. Holding a small portfolio may expose you to extraordinary risk and not deliver the same excess returns.
- 4. Watch out for taxes and transactions costs: Some of the screens may end up creating a portfolio of low-priced stocks, which, in turn, create larger transactions costs.