



# Quant Investing Cheat Sheet

## The Vital 1% of the book Quantitative Value Investing in Europe:

### What works for achieving alpha

- All returns shown are yearly for European markets for the 12 years from 13 June 1999 to 13 June 2011.
- The market return for companies in the 17 country Eurozone countries for the 12 years were 30.54% in total or 2.25% per year.
- If you averaged the returns for large, medium, and small companies, the **single ratios** that generated the best return were:
  - [Price-to-book](#) ratio +10.92% per year (pa)
  - 12 months [free cash flow yield](#) +10.87% pa
- For **small companies**, the best single ratios were:
  - [6-month price index](#) +11.91% pa
  - 12-month price index +10.32% pa
- For **medium sized** companies, the best single ratios:
  - Price-to-book value +14.36% pa
  - Five-year average free cash flow +12.83% pa
- For **large companies**, the best single ratios were:
  - Free cash flow yield +10.81% pa
  - [Earnings yield](#) +10.64% pa
- We also tested the [Magic Formula](#) which worked best with mid-sized companies returning 9.05% per year. (Note that neither Joel Greenblatt nor the website ([magicformulainvesting.com](#)) has endorsed this study or had had anything to do with it)
- The [ERP5 strategy](#) worked best for small companies returned 12.95% per year.
- Single ratios did not do as well compared to if you used two ratios to select investments.
- The best single ratio's performance (achieved by applying a low price-to-book ratio to mid-cap companies) was at position 69 (the next was at position 91).
- All **two-ratio strategies** we tested substantially outperformed the market with even the worst performing strategy returning 114.4% over 12 years compared with the 30.54% of the market.
- [Stock Price momentum](#), both 6- and 12-months played a substantial part in all 10 of the best performing two-ratio strategies.
- The three best performing strategies all generated a total return of **more than 1000% (over 22% per year)**, and all either as first or second ratio, contained 6-month price index.
- Low price-to-book value was also very important as it formed part, either as first or second ratio, in three out of four of the best performing two-ratio strategies.
- Best **two ratio** strategies
 

RANK	FIRST RATIO	SECOND RATIO	TOTAL RETURN
1	PRICE INDEX 6M	PRICE-TO-BOOK	1157.5%
2	PRICE-TO-BOOK	PRICE INDEX 6M	1029.4%
3	PRICE INDEX 6M	EARNINGS YIELD 12M	1002.2%
4	PRICE-TO-BOOK	PRICE INDEX 12M	987.3%
5	EARNINGS YIELD 12M	PRICE INDEX 6M	814.4%
- The **most surprising result** we found, especially for value investors, is that [price movements](#) over previous 6- and 12-months (6- and 12-months price index) were in all the 10 best performing two ratio strategies we tested.
- We found that **valuation matters**, but it **must be applied in a different way**.
- For example, in the best performing strategy you first have to look for the 20% of companies that increased the most in price over the previous 6-months and then sort these companies by price-to-book and buy the 30 companies with the lowest price-to-book value.
- We looked at the past 12 years but what does this mean for my future investment returns? You may be thinking.
- We cannot say for certain, but we have a good idea. We know what strategies were very successful in arguably one of the worst 12 years in terms of stock market performance in at least half a century.
- For the next 10 years the top performing strategy we tested of buying the lowest 20% of companies by book value of the 20% of companies that have increased the most in price over the past six months will **most likely not be the best strategy**. But it will still give you great market beating returns.
- From June 1999 to June 2011 the strategy returned just under 1160%, compared with the market portfolio 30.54%. Does it really matter if the strategy falls to position 20 of the strategies we tested and generated a total return of 670%? Most likely not, because you would probably have **outperformed 99% of all investment funds worldwide**.
- This means that the strategies that performed the best over the past 12 years may not do so over the next 10 years, but they will still be amongst the top strategies in terms of overall returns.
- Do not for a minute think that it is easy to follow these strategies. If you see what companies they come up with you will immediately start analysing them and say, "There's no way I am investing in that industry now", or "Look at this company's financial statements, it's completely hopeless." That may be so with one or two of the companies that the strategy comes up with. That is the reason why we suggest that whatever strategy you follow that you invest in a minimum of 50 companies. This means that even if one of two companies go bankrupt, the others will make up for it and your **overall performance will still be outstanding**.
- We have done a **LOT** of testing since we wrote this book in 2012 and we really like the [Qi Value investment strategy](#).
- I hope that you found this cheat sheet of value and that it improves your investment returns. If it has, or if you have any comments, questions or suggestions please let me know at [tim@quant-investing.com](mailto:tim@quant-investing.com)

[To get these strategies working in your portfolio right now – Click here](#)