Dear All,

I back tested Magic formula and F-score strategy, the results is

Thanks for your message Situ laoshi. It’s pretty useful.

**1. regarding to magic formula on differenct sectors： this article is interesting and could be considered to be incorporated into our model**

**[https://blogs.cfainstitute.org/investor/2018/10/17/mr-markets-split-personality-can-sector-driven-factors-help/](https://blogs.cfainstitute.org/investor/2018/10/17/mr-markets-split-personality-can-sector-driven-factors-help/" \t "https://mail.yahoo.com/d/folders/1/messages/_blank)**

I have considered to filter out financial and utilities sector before, I tested on DJI, not too much difference. so I ignored it. I will add it on SP500 and NDX 100, will let you guys know when I finished.

Two things needed to confirm with you.

1. ROIC: I used gross profit/ total assets instead of EBIT/ (net working capital + net fixed assets).
2. EY: I used Book-to-Market Value not EBIT / Enterprise value.

I got this idea from the article attached below and already compared two methods, the revised formula did better than the original one . Do you think that’s reasonable?

<https://zhuanlan.zhihu.com/p/40032563>

**2. If we want to incorporate tech names into model portfolio, and hold for long term, there are quantitative momentum facotors. I am reading some**

**research papers and try to summarize most recent quant research on how to quantify technical momentum. A Switzerland based quant manager**

**recently presented his method on ranking technical sectors based purely on momentum. I can write a summary with some basic python code.**

Thanks, We could try EMA with **Feibonaqi sequence, I did this one before, the results is not bad.**

1. **The most important thing is to reshuffle portfolio at least annually.**

Do you mean update financial statement annually or quarterly?

1. **I believe if we incorporate momentum factors, portfolio may need to be reshuffled weekly if not monthly.**

Yes or even daily with momentum factors.

5. Some quant funds have different levels of rebalanching

weekly/monthly: position rebalancing ( add on winners, cut losers, if one position gets too large, then adjust it)

quarterly: with new earnings report, calculate trailing 4 quarters fundamental numbers and re-screen

1. Finally, we need to also consider asset classes: equties, bond, precious metal, commodities.

With all of these factors and asset classes, this portfolio could be pretty hard to copy and have active trades every week.