

SMACOM,s New Composite Score under Development

Factor investing has been gaining attention. Composite approaches involve a combination of value, quality and momentum factors.

TOKYO, JAPAN, February 2, 2023
/EINPresswire.com/ -- SMACOM's New Composite Score under Development

As mentioned in earlier articles, factor investing has been a notable topic of research and experimentation, especially in equity markets, and it has been widely deployed in the asset management world. While our previous focuses in this area were on value, quality and momentum factors, here we will discuss composite approaches, which involve the three aforementioned factors. Note that the score is a representation of the factor value using a scale from 1 to 100 points.

To review the previous articles, we will first take quick a look at the performance of value, quality and momentum factors. The related backtesting was performed as described below. First, several factors were chosen from each factor category, and the four systematic risk factors (market beta, size, book-to-market ratio and size nonlinearity) were excluded from each factor chosen. We thus called the resultants risk-adjusted factors. The risk-adjusted factors were weight-averaged into a single factor in each factor category according to original FTRI methodology. The investment ratio (or weight) of each stock was calculated with the assumption of a target portfolio risk of 5% annually. The investment universe was composed of the stocks listed on the Tokyo Prime market

	Value	Quality	Momentum	TOPIX
*Return	15.28%	9.89%	14.21%	3.07%
*Risk	9.95%	7.71%	11.83%	17.62%
Risk-retrun	1.54	1.28	1.20	0.17
Max drawdown	-15.26%	-6.98%	-16.58%	-56.23%
Positive return percentage	67.02%	63.35%	61.38%	57.89%

*Return and Risk are annualized (including dividends)

Source: FactSet

Table1 Performance of value, quality and momentum factors

	Value	Quality	Momentum	TOPIX
Value	1			
Quality	0.37	1		
Momentum	0.07	-0.01	1	
TOPIX	-0.08	-0.04	0.11	1

Source: FactSet

Table2 Correlation between each factor and TOPIX

Table 3 Performance of composite and other factors

	Value	Quality	Momentum	Composite
*Return	15.28%	9.89%	14.21%	19.13%
*Risk	9.95%	7.71%	11.83%	8.00%
Risk-retrun	1.54	1.28	1.20	2.39
Max drawdown	-15.26%	-6.98%	-16.58%	-8.57%
Positive return percentage	67.02%	63.35%	61.38%	73.82%

*Return and Risk are annualized (including dividends)

Source: FactSet

Table3 Performance of composite and other factors

(i.e., what was formerly known as the first section of the TSE), excluding shares in the financial sector, and the backtesting sample period was from January 2007 to December 2022. The rebalancing frequency was monthly, and transaction costs were not considered.

□Table 1□

□Table 2□

Table 1 shows the performance of each factor, and the word “TOPIX” indicates the TOPIX, including dividends, as a reference. The results demonstrate that each of the factors has a higher return, a lower risk and a higher risk-return ratio than the results for TOPIX. Regarding the characteristics of each factor, quality factor has the lowest risk and the lowest maximum drawdown. Momentum factor, on the other hand, has the highest risk, and the value factor is located between them in terms of risk. Given this sample period, the return of value factor is the highest, followed by the momentum factor.

□

Next, we will take a look at the correlations among the three factors. Table 2 illustrates the correlation between the monthly returns for each factor and TOPIX. Two important facts can be confirmed from this table. First, the correlations among the factors are low, especially with the momentum factor being almost uncorrelated with the other two factors. Second, the correlation between each factor and TOPIX is also almost zero. These results indicate that by synthesizing the three factors, it is possible to create a more efficient portfolio that is market-neutral and allows investors to enjoy the benefits of diversification.

Therefore, we constructed a composite factor that is composed of value, quality and momentum factors, and we then backtested the performance. First, several factors were chosen from each factor category, and conversion to risk-adjusted factors was performed using the same method mentioned above. These risk-adjusted factors were weight-averaged into a single composite factor in accordance with original FTRI methodology. The investment ratio (or weight) of each stock was calculated with the assumption that the target portfolio risk was 5% annually. The investment universe, the sample period and the rebalancing frequency were the same as those relevant to the above backtesting.

□Table 3□

Table 3 shows statistics on the performance of the composite and other factors. The composite factor achieved the highest return, although its risk was as low as that of the quality factor. As a result, the risk-return ratio improved significantly to approximately 2.4. The maximum drawdown of the composite factor was also suppressed to just over 8%, and monthly returns were positive for 141 months, or approximately 74% of the 191 months of the sample period. These results can be attributed to the fact that, as shown in table 2, synthesizing value, quality and momentum factors led to a more efficient portfolio with benefits of diversification that also maintained market neutrality.

We have introduced SMACOM's new quantitative scores (Value, Quality, Momentum and Composite scores) in a series of four articles. In recent years, with the rapid development of machine learning, new factors have been developed using alternative data. We will take another opportunity to introduce these factors and their relationships with traditional factors.

SMACOM: <https://www.ftri.co.jp/product/smacom/en>

SMACOM free trial (below):

<https://www.ftri.co.jp/eng/index.html#company>

Disclaimer (https://www.ftri.co.jp/eng/pdf/SMACOM_Disclaimer-EN.pdf)

SMACOM's new quality score under development

SMACOM's new momentum score under development

SMACOM's new value score under development

Public Relations Office

Nikkei Inc.

pr@nex.nikkei.co.jp

Visit us on social media:

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/614279440>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.