

The Hunt for Pandemic-Related Investment Factors

Featuring: **George Bonne**, Executive Director, MSCI Research

Adam Bass:

This is MSCI Perspectives, your source for weekly research insights as investors respond to the COVID-19 pandemic. I'm your host, Adam Bass. And today is August 13, 2020. This week, the hunt for pandemic related factors. How do you spot them and how do you quantify their impact? For answers, we tracked down George Bonne, executive director on the core research team. George, thank you so much for being here.

George Bonne:

Sure. Thank you. It's a pleasure to be here.

Adam Bass:

So one of the consequences of lockdown, quarantine has been what the press has been calling the COVID-19. Basically, we're all eating too much. Sourdough bread, cupcakes, whatever your guilty pleasure. Now, I know you are someone who's fitness is important, but without asking you to get on a scale for us or anything, how have you been managing through that in terms of keeping fitness in your life?

George Bonne:

Well, I definitely had to adapt to my exercise routine. All the gyms closed, but fortunately, most of the hiking and biking trails have stayed open. So I've been getting on my mountain bike and exploring new mountain biking trails that I hadn't even known about before, like we've been exploring new factors and technologies at MSEI.

Adam Bass:

That's a perfect lead in. Thank you very much. We've talked to many within MSEI research in the last four or five months about the performance of some of the more well known factors, like value,

momentum. Pretty early on though, your team's research took a different approach. You went on a hunt basically for a new factor. Can you tell us a bit about that?

George Bonne:

Well, as we always say at MSCI, a factor is any characteristic relating a group of securities that is important and explaining their return and or risk. In other words is something that is a factor or has an influence on a portfolio's performance. And the COVID-19 pandemic has clearly had a large impact on the economy, markets, and portfolios, and therefore COVID-19 could be considered a factor. The question is then how do you identify and quantify it?

George Bonne:

We look to define a COVID-19 factor via a combination of existing factors, such that this new factor would perform well in an environment negatively impacted by COVID-19 as we saw in February and March. We did this in a number of ways from simply waiting by the inverse of factor performance during the selloff period to performing principal component analysis on the factor returns during the first two months of the pandemic period.

Adam Bass:

And what did you find in terms of performance?

George Bonne:

By construction, the factor performed well during the sell off in February and March. It then declined a bit in April and May when many of the most beaten down companies rebounded. But more recently in June and July when healthcare technology and large caps have taken back leadership, the factor has performed well again.

Adam Bass:

As the pandemic continued, your team got a bit more specific. I want to turn now to that research, which centered around the fact that so many companies and their employees had to very quickly adjust to working and operating remotely. What were you looking for this time?

George Bonne:

We look to capture that theme, which we termed remote operating capabilities or ROC. In other words, we look to identify the companies that were best equipped to thrive in the new environment of online sales, remote working, and contact lists, digitized transactions, and operations. And we did this by using natural language processing techniques to generate a list of keywords related to that theme. And then, mining the text of company documents to look for those key words in how they describe their businesses and the products and services they provide. With that information, we can actually quantify an estimate of how much each company is exposed to that theme.

Adam Bass:

And what did you find? How were different sectors impacted this time around with the ROC factor?

George Bonne:

Well, as you might expect, when we created a portfolio of the top 250 companies exposed to the theme, most of them were in the technology and communication services sectors, but there were companies from every sector and the ROC portfolio we simulated did outperform the MSCI USA index by over 10% in the first half of this year. And a large portion of that was due to industry bets. And you might say, we have the benefit of hindsight as this ROC theme wasn't quite apparent at the start of this year. However, the point was really to demonstrate that we had the capability to capture any given theme.

Adam Bass:

For both the COVID-19 and ROC factors, the written analysis you've done uses the word factors in quotes. So why is that? How do these differ from say size or price to book ratio factors?

George Bonne:

Well, these new factors are certainly more complex than just dividing one number by another number, but they still end up with an estimate of quantifying a company's exposure to some characteristic that we think could be a factor in the performance of a portfolio. So in that way, they are similar.

Adam Bass:

And as you mentioned earlier, especially when you were talking about the ROC factor, you relied on advances around artificial intelligence, which along with natural language processing, machine learning, these are terms we hear a lot, but how specifically have these advances affected your work? How did they help as you look to the existence of these COVID related factors?

George Bonne:

They have impacted it quite a bit. And we've been doing quite a lot in this area. As we've discussed with the ROC factor, using natural language processing techniques, we now have the capability to construct a factor based on virtually any preselected theme or topic of interest. And MSEI has already released a suite of such thematic indexes.

Adam Bass:

So you mentioned thematic indexes. Where generally do these tools take your research next, either future COVID factors or some of these other applications you mentioned?

George Bonne:

Well, we're also researching how we can dynamically identify the market moving themes and topics in real time. So for example, could we identify the ROC theme in early March when the pandemic just started? And we've also researched how one can use machine learning to make industry classifications and peer groupings of a company based on the language they use to describe their business and other data. And we're also using it to identify important nonlinearities and interactions between our traditional factors that are not captured by the linear model, and we're even using it to improve the risk forecasts and other elements of our risk models. More broadly, we're looking to see how these technologies can help us better understand portfolio performance, attribution, and ultimately to create better portfolios.

Adam Bass:

That's all for this week. Thanks to George and all of you for joining us. We hope you'll join us next week when our guests will be Rick Marshall, one of the industry's foremost researchers on corporate governance. Remember, it takes just a moment to subscribe to the podcast, leave a comment, or share with a friend. And for more from MSEI, check out the ESG Now podcast each Friday. Until next week, I'm your host, Adam Bass. And this is MSEI Perspectives. Stay safe, everyone.

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