MANAGEMENT DISCUSSION SECTION

Company Representative

Welcome to FactSet's Podcast Series, where we bring you conversations with top financial experts from M&A to market volatility. Today, we are spending 10 minutes with an internal FactSet expert, Andrew Kovacs. You already know Andrew if you've read our blog at www.factset.com/riskblog, as he is one of our frequent contributors. Andrew heads FactSet's portfolio and quantitative efforts in Australia including dealing with the growth and development of those applications. Today, he'll be speaking to us about choosing a risk management system and discussing some of the challenges to that process in his experience with working with firms.

Andrew, thanks so much for joining us today.

Andrew Kovacs, Head of FactSet's Portfolio and Quantitative Efforts, Australia

It's my pleasure.

QUESTION AND ANSWER SECTION

<Q>: So our purpose here is to briefly address what you've discussed at length in the FactSet Risk Blog and to kind of expand on some of your topics there. As an overview for those of our listeners who may not have read the blog, what you think are two or three of the greatest considerations that a firm needs to make when they're implementing risk?

<A – Andrew Kovacs>: Well, I guess it boils down to really two things. I think you could distill all of the points I made in the blog into two main factors. The first one I would say is whether or not you're considering a risk system for the right reasons. I think if a firm or a person at a firm can really sit down and think about that particular question and answer it honestly. And I think they're in really good position to move forward in trying to identify and select the risk system for their firm.

The second thing I think that everyone should really be aware of is how do they envision seeing this risk system fit into their current investment process. I think it's something that people often overlook but it's actually really important, because as soon as you implement a risk system into your firm, you should really have some kind of idea as to how it's going to affect how you do business day-to-day going forward. So those are the two main things I think that people should really consider when they're thinking about implementing a risk system

<Q>: So you bring up there and you also mentioned it in your blog that sometimes firms are implementing risk systems for the wrong reasons. Do you think most firms realize that they really do need risk or is there really something that you run into in the industry where a lot of them are just ticking the box?

<A – Andrew Kovacs>: Yeah, it's interesting. I think a few years ago I think box ticking was really popular or really common I should say not popular but because of the GSC I think that we're now seeing more than ever firms realizing that they actually do need some form of risk management. I mean when times are good and things are going fairly well, risk systems can actually seem a bit like an extravagance, especially to a smaller firm I think. But the GSC brought a lot of focus to many smaller managers and to managers in general that they need to think about risk in a much more defined way. They can't just -- it shouldn't be an after thought.

I guess in terms of box ticking, what's interesting is that in spite of all the market turmoil and everything that's happened in the last couple of years, we do still run into it, though it's less frequent and it's probably -- it's a little bit different than it used to be. I mean I've just actually worked with a firm here in Australia recently, who basically wanted to get risk into the firm for a very specific reason. It was mandated by a plan sponsor who gave them a lot of assets.

I guess from my perspective they're doing this for reporting requirements, which is not a bad reason in and of itself. But the mangers went so far to say that they don't even believe risk adds any value to their investment process. So they're obviously not doing it because they agree with the idea of a risk system in general.

They're simply doing it to satisfy some need outside of the firm. And I think it's a missed opportunity for them. They could have used this as a really good chance to reevaluate the way they do things currently and potentially improve the way they manage all their portfolios not just the ones that they're reporting to this particular plan sponsor.

<Q>: Would you agree with the statement that every firm would find some utility in implementing a risk management system?

<A – Andrew Kovacs>: Yes. I'd say that the answer is yes, but in varying degrees. I think anyone in the investment management community would agree that investing is a balancing act between risk and return. In other words, you don't get return without taking on some kind of risk. And I think that a fund manager or the like isn't doing anyone favors by not attempting to identify as much risk is possible.

If you think about it, fund managers and plan sponsors and everybody, they're exhausted in their search for alpha, right. Why aren't people, or why isn't the same rigor applied to the risk management process. It's just one of those things. I can't see any justification for not looking at risk in some way, shape or form. So, yeah, I think that everyone should be looking at risk.

<Q>: Many firms are using a standard model for their risk system. Can one model truly solve the risk management problem? Is that what we should be striving for? And maybe also have you found that many firms do use just a single model, if you could tell us a little bit about that.

<A – Andrew Kovacs>: Sure. Yeah, I guess in the blog I sort of mentioned that, whether correctly or incorrectly, some firms do try to use a single risk model when in fact they have multiple investment strategies. And so ultimately I think the answer does depend. So let's take a couple of different examples. If a firm specializes in a specific investment area, so let's just say they're a pure domestic equity shop. Maybe they're a global balanced or a domestic long/short portfolio. Then in those specific cases, perhaps a single model would be sufficient. But even in these really specific investment strategy cases, it might be a good idea to even have a second risk model and that's something they'd probably see come out of the GSC.

You might want one risk model that reflects your investment horizon, but then because market conditions can change, it might be good idea to have a second shorter term risk model that responds to these changes in the market conditions. And so even in the cases where previously it would be sufficient to have one risk model, they're now actually looking at having two, one for their investment horizon and that dynamically reflects changes in the current market conditions.

On the other hand, if a investment firm has multiple strategies, so maybe they have a domestic equity fund or funds,. They have got global balance fund or funds and they have fixed income strategies for domestic in-country markets and what have you. Then in this case, I would say that having a single multi asset class global risk model would be insufficient if you're looking at those funds individually.

So if you're looking at all of your strategies in aggregate than yes, you need a probably one large multi asset class global risk model. But if you're looking at those individual portfolios on an isolated basis, so let's look at the [inaudible] every portfolio to try and use that global multi asset class risk model might not be an appropriate measure of risk. Is it better than nothing? Well, that's a whole different question that perhaps we'll address later. But I would say that in general you don't want to use one large risk model to try and cover all of your bases. In general I'd say that's a safe assumption.

<Q>: So you mentioned that integration and especially as we're talking about implementation of multiple models that as a firm that maybe does various strategies. I wanted to ask about the key data types in your opinion and the keys to getting it right in sort, especially if you are looking at something that's a more complex roll out of a risk management system.

<A – Andrew Kovacs>: Yeah, that's definitely really important and it's probably one of the most -- it's not overlooked, but it's sort of -- it's not thought about enough in terms of looking at risk systems. People think risk system thye'll go out buy some software. It'll have a risk model integrated and the rest is easy. And the fact is that there's actually a lot of data that goes into risk in

general and then if you're trying to really incorporate risk into your overall investment process, it can get quite complicated and there's a lot of other data types and considerations that you should keep in mind.

And maybe first I'll try to tackle the question or the idea of what are the most important data elements or data types to consider. And that's pretty straightforward, I think. The most important things, if you're going to try to do a risk, is to have a risk model first and foremost, whether that's one or many. That's a moot point at this stage. You're definitely going to need to have accurate portfolio and benchmark data and, believe it or not, pricing is actually something that is pretty important as well. So a lot of people don't think about pricing, but whenever I am trying to help a client set up a risk solution, one of the things that comes out is there's slight differences between portfolio and benchmark with calculations of weight and things like that. And that can just stem from something simple like pricing.

So just making sure that all these four data types are sorted out and accurate and meaningful, is really important. Now beyond that, especially if you've got a large array of investment strategies and you have lots of asset classes and things like that, the security of descriptive data is probably for my money the next most important thing. And that's really because you want to increase the coverage of the risk model as much as possible, because what you'll find is that while as everyone knows there's no perfect risk model and the coverage of most risk models are also not going to be perfect, there are ways to improve that. So for example, if you've got a balanced portfolio and you've got a lot of unlisted assets in your portfolio, those are not going to be covered by the risk model. So we need to figure out some way to get those covered and having descriptive data about those, like the terms and conditions, for example, of unlisted asset allows us to potentially model that security or at least generate exposures for that security so that we can get it added to the risk model and therefore increase the overall coverage of our risk analysis.

So those are the first and second tier types of information that I think are really -- or data types that are really important. But beyond that I think that it's equally -- you can argue that fundamental and economics data could be very important to the risk solution. And if for no other reason – it's a way of allowing the risk team to communicate with the non-risk personnel out of firm and externally. And what I mean by that is this. We often generate numbers in the risk world that, while meaningful internally, don't really mean much to a fundamental money manager or to an external client that we're talking about maybe exposures to factors and we're talking about high level risk numbers like just predicted tracking error and MC VAR, things of that nature.

If we can sort of put that information or at least equate it to terms that they're more familiar with, we're going to, I think, win a lot of battles in terms of communicating the significance of risk and the importance as well of what the numbers mean. So just in terms of exposures, you might say that a portfolio is highly exposed to a size in a particular risk model. And if you can basically bring in some market capitalization information into a similar report and put that right next to it, to that factor, you might be able to sort of explain like look, size is essentially just a measure of your exposure to market cap relative to the benchmark and being able to communicate that to a non-risk person can be really useful.

The other reason why I think fundamental and economic data can be really, really useful is because we talk a lot and it's become much more important over the last year or so, is stress testing or scenario testing. And having access to all this additional market data means that we can create stress tests that are relevant or that aren't standard, anyway because I think part of the problems lately is that everyone does the same type of generic stress tests and some systems come with those prepackaged and the fact is that we can't really anticipate what's going to happen next, so we should be trying to come up with different types of stress tests and having access to lots of different data allows us to do that.

And I guess the last thing in terms of data integration that I'll mentioned and this isn't about data itself it's just about the integration of the data, is that you need to have a system that can actually integrate all these things. And I think that, that's a really important thing to sort of keep in mind, if you're trying to implement a risk solution and more at a firm. So if you care about things beyond just risk, having a system that can do many things at once is really – so keep those things in mind that, there is a lot of important data out there, and make sure that when you pick a system that it has the ability to incorporate that data and ideally if possible, it can already have a lot of that data incorporated already.

<Q>: So we're talking about risk today, and I wanted to know what the greatest risk is for a firm that's about to implement a risk system? So the greatest pit-falls that you think that firms fall into when they're making that choice?

<A>: The problem I see the most is that, people try to do too much too quickly and that's particularly true for a larger shop. Now a smaller focused equity shop, for example, the decision making process and implementation is usually fairly straight forward and pretty painless. But if you've got a very large shop, with lots of different portfolios and asset classes and strategies well, it can be a very large task to try to implement risk. And I think that it can be almost be overwhelming.

And so one of the things that I often try and stress when working with firms is that, look, the goal doesn't necessarily have to be get it all done today. I mean, the goal is to get all asset classes, all strategy and everything covered eventually, but what we should do is focus on the things that you already understand well perhaps, maybe that's a particular asset class or a group of portfolios or what have you, and let's sort of create a checklist, let's get one asset class or one group portfolios up and running so that you're happy with the results, and then move forward from there.

So you have a sense of accomplishment because you've achieved something. So at least part of your overall investment universe is covered and then you can sort of start checking off other assets or portfolios on the list as you move forward. So I guess in general I'd say that trying to do too much too quickly is the biggest mistake that I've seen, because it just sort of – I guess it makes people frustrated with the entire process. And if you get frustrated, then there's a chance that the whole thing might fail anyway. So just move slowly and methodically and I think that you'll be happier with the end results and you'll get it all right.

<Q>: It just sounds like people are getting way too excited about implementing risk. Well, thank you so much for joining us today, Andrew. We're really happy to have you on our podcast and of course we will see you on the blog.

<A – Andrew Kovacs>: That's right. Thanks a lot, Michelle, for having me.

Company Representative

Of course. Thank you for listening. In our discussion with Andrew Kovacs today, he mentioned many of the key datasets that can be critical or helpful when integrated with a risk system. FactSet is proud to offer a range of data integration options as well as risk solutions. Our products and services are supported by implementation experts like Andrew to help guide your firm through the process of implementing a risk system, whether you're looking at standard tracking error stress testing, Monte Carlo virus simulation or anything else. If you'd like to learn more about FactSet's risk solutions, email podcasts@factset.com, that's podcasts@factset.com. You can also visit us on the blog to hear more from Andrew and other contributors from our risk team at www.factset.com/riskblog.