dakota

EPISODE 42:

A Scientific Approach to Manager Research

with Lockheed Martin

Robert Morier: Welcome to the Dakota Live Podcast. I'm your host Robert Morier. The goal of this podcast is to help you better know the people behind investment decisions. We introduce you to chief investment officers, manager research professionals, sales leaders, and other important players in the industry who will help you sell in between the lines and better understand the investment sales ecosystem. If you're not familiar with Dakota and their Dakota Live content, please check out dakota.com to learn more about their services. Before we get started, I need to read a brief disclosure. This content is provided for informational purposes and should not be relied upon as recommendations or advice about investing in securities. All investments involve risk and may lose money. Dakota does not guarantee the accuracy of any of the information provided by the speaker who is not affiliated with Dakota. Not a solicitation, testimonial, or an endorsement by Dakota or its affiliates. Nothing herein is intended to indicate approval, support, or recommendation of the investment advisor or its supervised persons by Dakota. Today's episode is brought to you by Dakota Marketplace. Are you tired of constantly jumping between multiple databases and channels to find the right investment opportunities? Introducing Dakota Marketplace, the comprehensive institutional and intermediary database built by fundraisers for fundraisers. With Dakota Marketplace, you'll have access to all channels and asset classes in one place, saving you time and streamlining your fundraising process. Say goodbye to the frustration of searching through multiple databases. And say hello to a seamless and efficient fundraising experience. Sign up now and see the difference Dakota Marketplace can make for you. Visit dakotamarketplace.com today. Well, I am very happy to introduce our guest today, Jason Chang, managing director and head of external equities with Lockheed Martin Investment Management Company. Jason, welcome to the show.

Jason Chang: Thank you. Pleased to be here.

Robert Morier: It's very nice to see you. And as always, Tim Dolan from Dakota.

Tim Dolan: Hi, Robert.

Robert Morier: Welcome back to the desk.

Tim Dolan: Thank you.

Robert Morier: Good, I was going to ask you about pumpkin spice lattes. I decided not to. I'm going to wait till later in the show.

Tim Dolan: We'll pass on those. I've never had one.

Robert Morier: Just in the interest of time. But it's great to see you, Jason. Thanks for being here. I'm going to very quickly read your biography for our audience. And then we'll get right into the questions. So, Jason Chang is the managing director of external equities for Lockheed Martin Investment Management Company. He has also overseen private equity and real estate during his time at Lockheed. Lockheed Martin Investment Management Company is the investment arm of the aerospace and defense company headquartered in Bethesda, Maryland. Prior to joining Lockheed Martin, Jason was a vice president for the alternative investments and manager selection team at Goldman Sachs, where he focused primarily on long-only manager selection for non-US global emerging markets in Brazil. Jason has spent time as an equity research associate at Morgan Stanley where he covered biotechnology. Jason has an MBA in Finance and Accounting from New York University's Stern School of Business, an MA in Medical Science from Boston University school of Medicine, and a BS in Biomedical Engineering from Northwestern University. Finally, Jason calls the greater Bethesda area home with his family. And we are very happy you are here. Congratulations on all your success, Jason.

Jason Chang: Thank you so much. Appreciate it.

Robert Morier: Well, as I mentioned, we are very happy. And we're very interested in your background. It's always interesting to see someone with a medical biotech background come into finance over time. So, what inspired you initially to pursue a degree in biotechnology engineering?

Jason Chang: Well, coming out of high school, I thought I wanted to be a doctor. And I was good at math, good at science. And thought it'd be a really good foundation for building a career in pursuing health care. I think I wasn't sure if I wanted to do biology, specifically, or biochemistry. And with a mathematical orientation, engineering seemed like the logical path. What I didn't know at the time was Biomedical Engineering was the second hardest major at Northwestern. So, in retrospect, if I could redo it again, I might take an easier path. But I can't really say I regret any of the roads I've taken since then.

Robert Morier: What was the first hardest major at Northwestern University?

Jason Chang: Chemical Engineering. They were paid the most, but they had to go through the most. And I think you had to be pretty much a masochist if you wanted to do Pre-Med and Chemical Engineering at the same time.

Robert Morier: That's amazing. So, at the time when I was trying to figure out how to program my VCR, you are predicting the next big thing in biotech. So, it's very impressive from our perspective. But all kidding aside, really interesting time in biotech to not only get your degree but coming out into Morgan Stanley covering biotech companies. I think it was only a few years before the Human Genome was released, at least the first draft sequences of the human genome were released. So, what was that like for you at that time at Morgan Stanley covering biotech companies when there was so much change happening within the industry?

Jason Chang: It was a challenge. I mean, as you refer to, my background had been in health care. It was more on the science side of things. It was quite the transition to go from science to thinking about it from a financial perspective. So, one, putting that together. But secondly, there was a lot of change going on in biotech. I wouldn't call it the wild, wild West. Definitely not like that. But there was a lot of change going on at that period of time. We were right between the cusp of the old approach, which was more focused on complex molecules, to biologics. Today, everything is in biologics. Everything's based off of antibodies, built off of organisms. So, as we were trying to transition between what had worked in the past to what was potentially going to work in the future, it was hard to figure out what would… the science between what would work and what wouldn't work. So, a lot of work… a lot of time spent at the time understanding the pathways, how someone was differentiated. And a little bit of guesswork at the time on, ultimately, which companies had the right approach.

Robert Morier: It sounds a little bit like manager research, so trying to figure out what worked, and what doesn't work, and what's going to work in the future.

Jason Chang: And it's constantly evolving. So even today, I think with some help from technology, there is still a bit of art to the approach and to the work that we do.

Robert Morier: Yeah, agreed, especially when you're considering people and the decisions that people make in terms of their investment portfolios. But you did start to really cut your teeth in manage your research, as I mentioned before, at Goldman Sachs. It was a great place. Actually, we overlapped for a bit, for a few years at Goldman. And the first half of your nearly eight years at Goldman came during a very interesting time, the great financial crisis obviously going on. So, looking back at what you were responsible for, which was primarily non-US public equities, what criteria were you generally looking for in those managers at that time?

Jason Chang: Sure, well, where I set in the GEMs team, we were primarily creating products or identifying products for the high net worth… the private wealth management platform. So as a result of that, there were two paths we could follow. We created strategies that fit into 3(c)(7) funds, so private funds where our clients would invest as… effectively a shareholder. Or they could get their own separately managed accounts through the rant program. That posed quite a bit of challenge back in 2007 because you had to invest, on the international side, through ADRs. If not ADRs, then they were creating P-notes, which people weren't that familiar with at the time. So, there were a lot of international strategies out there, but a lot of folks wouldn't run wrap. And that's because it was a more limiting universe. With ADRs, it had to be custody in the US. Clients couldn't have global custody. So, everything had to be US-based. And that actually pretty much limited a lot of the investment universe. Companies that you think today people would have easier access to like a Samsung didn't have an ADR. So that immediately cut out quite a bit of the opportunity set. It imposed quite a bit of a challenge in identifying managers who could generate excess return. You're trying to figure out the differences between how they ran an ordinary share portfolio versus an ADR portfolio. And often you could see big divergences in performance because they just weren't playing with the same set of tools or investment universe that they could do on the ordinary share side.

Robert Morier: Well, after eight years, you had left Goldman to join Lockheed Martin. So, we're very interested to learn more about your roles and responsibilities. But maybe for our audience who may not be as familiar with Lockheed Martin's investment management arm, can you tell us about the investment management company's role within the Lockheed Martin ecosystem?

Jason Chang: Sure, we're a fully owned subsidiary but independent from the corporation. So, in the past, and you see with a lot of corporate pensions, they may be part of the CFO'S office. They are linked to treasury, et cetera. At Lockheed Martin, over 20 years ago, there was a decision made to completely separate the two so that we can make decisions independently. We are not influenced by what's going on in the organization. I think that's to remain investment pure. It's been to the benefit of our plan participants and frankly, for our CFO and the folks in senior leadership, they don't want to spend time managing this. They have oversight. And the CFO and the treasurer and the controller sit on board. But we are left to actually focus on one thing, which is deliver returns for our plan participants. We want to remain pure and not have the corporation intrude upon and think about how are we investing? Are there considerations we have to think about? Our goal really is to come back and say, where are the best opportunities? And how do we invest to generate returns for our plan participants without thinking, oh, next quarter's earnings are coming around the corner; how do we manage… how do we think about investments, and is that going to impact quarterly earnings? That is not our primary goal, nor something that we have to think about or worry about. And I think having a separate investment management company allows that to occur and remain investment pure.

Tim Dolan: Jason, that's very helpful. And we'll dig deeper into that investment management process and sourcing managers. But for our listeners, maybe just an understanding of more of you and your role and your team, your colleagues, how you are built out from a research standpoint. Obviously, we understand you cover public equity. But who are the other key individuals on your team from a research standpoint?

Jason Chang: With the size that we have, we're a fully staffed investment management company. We cover all asset classes. We're organized by effectively verticals. But we do interact with each other and have a lot of conversations with one another. So, I oversee the external equity book. We have an internal equity book, global equity book managed by a portfolio manager and a managing director. We have someone who oversees fixed income and credit and another individual who focuses on absolute return strategies. We have a quant-oriented strategy internally that's run. They run risk parity, as well. We have private equity, of course, and then real estate. And in the past, we've had commodities. So, you think through any of the asset classes you would want to invest in, we have someone there or someone who has expertise. The idea being, at least in the pension, we want to seek as many opportunities as possible. And we have done so in the past. On the defined contribution trust, which we also oversee, you don't have some of the illiquids that are in that portfolio. But it's something to think about. Are there opportunities to put something in? So already having that expertise in-house allows us to be at the forefront of thinking, how do we innovate and deliver something more to define contribution clients? I think ideally in an ideal world, everyone would love to have a pension. But obviously we know the industry is not going in that direction anymore. But can we bring elements of how we invest in the pension to defined contribution side? That is something we're definitely seeking and exploring because I think that would be additive to our plan participants.

Tim Dolan: I'm curious on the internal equity portfolio, what style or asset class is it? And would you look at a manager to complement what you're doing? Or is that the allocation, on behalf of your plan participants, is that internal equity for that style?

Jason Chang: Yeah, the internal equity portfolio is another diversifier. So, when I think through our portfolio, we've got somewhere between 30 to 35 different strategies that we utilize for our global equity portfolio. Our PM internally runs a global core strategy. It brings in elements of top-down along with technical analysis. That's not something we see… or I see as much out in the marketplace today. So, it's a differentiator. It's a lot more nimble. He tends to trade around a little bit more. And so, for us, it complements a lot of the other investors we have. We tend to favor managers… or at least I like managers who have a little bit of a value bias. We definitely have growth. They have a quality bias. And they tend to be more longer-term investors, so the typical investment horizon is three to five years. That aligns with our longer-term focus on the pension. But I think for investment diversity, you do need some folks who are more-nimble, people who are a little bit more reactive, some who are more trading-oriented. So, as I'm trying to put a portfolio together, the benefit of our internal portfolio manager is he'll switch from growth to value. He'll look at the environment. He'll go from large cap to small cap. He'll look at some of the technical analysis, whereas a lot of external fundamental managers will say, you know what, that's a short-term noise. And we're thinking five years. Well, that doesn't really help me when, on a one-year basis, you may be under-performing. So, this allows us to stay a little bit closer to benchmark. We try to be somewhat benchmark-agnostic when evaluating managers. But on a total portfolio level, we do have a benchmark we're trying to beat. It's the MSCI ACWI IMI. And so, I have to keep in mind the different types of bets that we're making and taking. The internal portfolio, to answer your question, helps balance and create balance in our portfolio.

Tim Dolan: So, you touched on an interesting concept around managing the top-down, and then having your managers understand more from the bottom-up fundamental, longer-term look. And thinking about institutions like yourselves, some pension plans, DC, DB plans, a lot that we find use an institutional consultant as an outside resource, whether it is to help with the top-down or from the bottom-up research on your end. Do you all work with any outside sources, any investment consultants to help with either of those?

Jason Chang: We don't have a specific investment consultant that we're relying. On a lot of the asset allocation and research is done internally. That's not to say, though, that we won't seek help, seek advice from outside sources, when needed. It's more specific at the time. We're trying, again, to deliver returns as best as possible. And we're going to seek all the help that we can to do that. But the management of the portfolio is done primarily internally. We don't rely on an outside consultant, an OCIO, for instance, to help us run it. It's by design we're in touch with it. And we've staffed our team to a maximal basis to allow us to have maximum flexibility in instant reaction if something were to happen.

Tim Dolan: Got it. That's very helpful. And again, going more to the top-down and maybe put us inside the walls of your investment committee a little bit, thinking about how you're tilting the portfolio. I love the comment of we're more value-oriented, but we'll own growth. So, give us an insight of that asset allocation, where you all are seeing opportunities over maybe the next few months or even longer-term, that shift of capital, and give our insight there.

Jason Chang: Tim, you're asking a question I wish I had the answer to right now. It's incredibly difficult. I mean, I think internally, we have a lot of debate on are we in a growth environment, are we in a value environment? And I think this is a particularly difficult period of time because you're seeing signs on both sides. To be frank, I think our approach right now is to say, let's stay balanced. If you lean too far in one side, especially with the way factors have moved the last couple of years, you can really be offsides pretty easily. So, I think staying closer to core allows you the flexibility to switch back if you need to. I think there's also the degree of our managers constantly adjusting, as well. So, you don't want to necessarily override or tilt too much on one side because you may be overriding decisions. So, where we're seeing things right now, it's probably like the marketplace. Everyone's confused. And I'm not saying we aren't trying to figure it out. But there are so many conflicting signs that it's difficult, I think. That's where I rely back on identifying, and our team relies back on identifying managers who can generate alpha. And in this place, we're not trying to make a factor bet. I don't think that's a skill set I particularly have that is great. But I think I'm good at identifying managers who can find good companies. So, when I think through our portfolio today, a typical portfolio of our size might have somewhere like 20% to 30% of our risk coming from idiosyncratic risk… stock specific. Our portfolio today sits somewhere between 45% to 50%, I think that's a pretty good accomplishment that's been done on purpose the last couple of years because we want our alpha to be driven by idiosyncratic stock selection rather than making factor bets, because I think factor bets are incredibly difficult to manage over time.

Robert Morier: How are you integrating those risk management strategies into the portfolio? So, thinking about the portfolio holistically, what are the approaches or the tactics that you're taking in order to… maybe use your word confusion, eliminate or alleviate that confusion that can come from the portfolio?

Jason Chang: A lot of it, Robert, I think is systematic or a regular process of evaluating risk. I'm looking at the portfolio on a daily basis. We have predominantly separate accounts. So, the beauty that I have every day is I mark the market. And I know what managers are doing every single day a day. A day later, but I know what they've traded. I will review the portfolio holdings on a daily basis, but that's on a micro level. On a more systematic level, weekly, I'll look through what people have traded to get a sense of where things are moving. And then on a monthly basis, the team has a formal review. We'll run our portfolio through our risk model. We use Barra. And we'll identify the different types of factors that exist. And we'll say, are these within the parameters of what we're comfortable with? When I say we try to run a core portfolio or a neutral portfolio, that's not to say we won't allow the portfolio to tilt in one direction or another. But it's much more about risk management, not allowing to go too far out of the bounds on things. If we're too heavy on growth… go back two years ago. We had done quite well in our portfolio. But we looked at or looked at our footprint and we said, all of this is driven by growth. We need to balance it out. So, we started taking money from our growth managers and reallocating to our value managers. That benefited us last year in the difficult environment. We actually outperformed a little bit last year. And I think it's because the rebalancing, the active rebalancing that we took, not waiting too long. Don't wait for a quarter or a semiannual rebalance because that might be too late because things are changing so quickly right now. We'll evaluate on a monthly basis and decide, all right, do we need to reallocate our portfolio? That's done on my individual team. On the public equity team, we'll look at our entire portfolio on a monthly basis. But organizationally, we have an enterprise risk management system that's trying to do the same thing also, that's trying to bring in different asset classes. You get a lot of transparency through equities because people are used to it. But how do you deal with illiquids? How do you deal with private equity and real estate? What kind of bet do you have? The enterprise risk system is trying to help us manage that process, though I would have to say, a lot of risk models out there aren't great at dealing with private equity. So, you have to use it as a proxy, so to speak. We know that there are certain bets in private equity. It's probably more… smaller-cap. There's a lot of tech and health care in there right now. So, you have to keep that in mind when thinking about the exposure that you have. But that's how you look at it. It has to be something that's structured, that you do on a regular basis, and that you keep yourself… what's the word I'm looking for? But… disciplined in your approach, because if you don't, it's really easy to just allow momentum to take the portfolio in a particular direction. Even if you're doing well, you know that you're taking bets to do so. So, you have to keep that in mind when managing a portfolio. I think that's the most difficult thing for people sitting in my seat, is you're looking holistically, and you're trying to manage the short-term with the longer-term, three to five-year direction of where you are, where you want to orient a portfolio.

Tim Dolan: Very insightful and extremely helpful. And obviously, in your seat, you just touched on what's important to you all. And folks like myself, as a fundraiser, our job is to get in front of folks like you and present new ideas that you might not be familiar with. And in a concentrated portfolio of 30 to 35 managers in global equities, give us an insight. What's the best way to get in front of you with an idea that you may or may not know of? Or if it's more of a boutique or a newer manager, give some insight, like phone call, email, hey, we're going to be in town. Best practices, if you will, for our audience, because, again, at the end of the day, we think we have something great. And we'd love to show it to you from an idea standpoint. But we want to follow your lead and respect your process.

Jason Chang: Sure, so Tim, this is a relationship business. So, a big part of it is getting to know the people who you're dealing with, what they typically seek and how they're angling for things. So, we like more concentrated, higher active share strategies. That's something we consistently tell people. So, when I'm looking through a portfolio, I'm not necessarily looking to fill a bucket. We have growth managers, and I'm looking to replace that. But we don't think of it in a discrete function of, I've got my large cap growth bucket, and I need to fill it. I've got my small cap value; I need to fill it. We're looking for alpha generators. And we can portfolio-construct around it through overlays or through just different allocations that we make to managers. Where I find people on your side who are particularly effective for reaching out is one, they understand. They take the time and understand what's important. They're not just trying to throw product at allocators because we hear and get anywhere between 20 to 40 emails a day around it. Strategy that we like, we tend to track a little bit more. But I think it's more of, what is the edge with the strategy? What is it that you're doing differently from others that are out there? What do you think is more sustainable over time, because frankly, when I'm looking for a strategy, it can be interesting, but how sustainable is the alpha that's generated? How consistent is it? How, to a degree, predictable is it, because there are… as much as I say we don't fill a large cap growth bucket, what a manager does do, and I have to understand what they do, does perform a function. And I do want to define… so it's a growth manager that has a quality bias, but they think about valuation. They're kind of garpy, so I expect that to be a little bit more defensive in our portfolio. It's an edge in how they do research, an edge in how the book is managed, how they think about risk management. So, I think all of that is important on the front side. How do you gather our interest is to say, hey, this is what we're doing differently/ This is what this portfolio manager is doing differently. You should take a look at if you don't have that, it's something to think about.

Tim Dolan: I'd love to build on that because at Dakota, we raise money for high active share-concentrated, high tracking error managers. And with that, in some instances, come with a fee discussion. Obviously, the manager thinks they warrant a higher fee. So, I'm going a little off script here. But I'd be curious to understand… you said you allocate via separately managed accounts. So, there is a discussion around fees. What are those conversations typically like? And again, dealing with a PM that thinks their strategy is the best thing ever, and justifying a higher fee, but then you all have to be obviously good stewards of capital and mindful for your underlying plans holders. So, give us an insight around the fee conversation.

Jason Chang: I mean, you're hitting on my favorite part of the job. Not really. The discussions are difficult because, to your point, managers always feel like they deserve it. We've got the opposite side on our side. We've got an alternative option now. In the past, you didn't have passive. But we can always refer and invest in passive. I think with high active share-concentrated strategies, there's an understanding that there's higher risk. So as much as a manager may outperform, I like to often remind them that they can under-perform, too. And when they do, it can be on a massive point. So, two approaches to discussing fees. You can do it the traditional way, which is asset-based. And if you're going with a manager that's relatively small or a little bit newer, you feel like you have a little bit more leverage because when we come in at a reasonable size, we can become a pretty meaningful portion of someone's book that actually has value. That's the traditional way of thinking about it. When I arrived in 2014, I had a CIO who was very innovative in how he thought about managing fees. Our approach is more performance-based. That can be difficult for some state plans, for instance, because it's a harder concept to describe to their boards. For our CIO, he had buy-in from our board. So, performance fees are, you think about it as relatively low management fee. You pay on performance. And you're willing to pay above what the standard fee would be. So, I think there's an alignment of incentives there. When you don't perform, I'm not paying much to the point of passive or a little above passive, because that's effectively what I could have gotten and gotten benchmark returns. Or when you do outperform, I'm willing to pay up and above what your standard fees are, up to a cap. And why do we put a cap in? It's to prevent managers from going hog wild in terms of the amount of risk that they take. It has to be balanced. That said, any performance above a balance that we typically see, we'll put into a bank. And that's saved up for future years when they under-perform to allow them to get back to a high watermark. So, there is a hedge fund mentality in terms of how we approach fees. You're seeing more and more acceptance of that on the long-only side. And I think for a lot of long-only managers, they appreciate the fact that they can have different types of revenue streams. I think a lot of people still like asset-based fees. But to be able to look at and say, I have asset-based fees, when outperformed, I can earn even more, that creates massive alignment of incentives. And I think for us, we're happy to pay for out-performance because that's why we've selected you to the degree of it's an easier explanation for our board, also, to say fees are high, but we've gotten out-performance. Now there are CIOs who will say, if you've consistently found a manager that outperforms that much, why not still with an asset-based fee? But as we know, for every great manager out there, for every five years, within those five years, there's going to be one year where you under-perform. So, I think this creates a smoothing effect, if you will, over time. And I think it's really worked to our benefit, because when you go through more difficult periods that we've seen like the last two years, you're not saying, wow, I'm paying a lot for under-performance. I'm now at this point saying, managers have under-performed. They need to make it back. And hopefully, they bounce back, for the guys who have under-performed the last two years. Once they get back to the high watermark, we're willing to pay again. But they've also been paid for the periods of time prior to this when they had outperformed.

Robert Morier: And Jason, I'm curious, when I think about asset classes like international small cap or emerging markets, regional mandates potentially, it can be more difficult to, at least from the size of your plan, some of the things that you had mentioned previously… given the size of the plan, given the illiquidity of some of those asset classes, how are you approaching those less-liquid parts of the market as it relates to your portfolio and your strategy?

Jason Chang: You size it appropriately. I don't think you want to necessarily ignore the alpha that's there. In some cases, you can use more managers. So, if you can't get enough out of one manager… and we know you've cited asset classes where capacity does matter. International small cap, typically, people won't invest unless they have more than $200 million. Once they hit that level, all of a sudden, all the allocators come in. And before you know it, they're sitting at $2 billion. And they don't have the same liquidity and ability to trade that they did before. So, there's a delicate balance that you're trying to strike there. What I find works is asset classes that are inefficient, why not explore different approaches like portable alpha that allows you to look at more managers, capitalize on more alpha, and create and identify where efficiencies exist, and to not play in those areas as much, because it's just it's a losing battle more often than not? I think that allows you to go out and find more interesting strategies. But you have to be very careful, also, of not suddenly creating a closet index. With large assets, you can end up closet indexing. I think that's something we're acutely aware of. So that's why we have concentrated the portfolio a little bit more. Those areas where there's a lot of efficiency, use a little bit more passive. But still not fully give up on active, either. That's where you can be more targeted. A rifle shot, basically, with look at large cap value. Use a manager that's got somewhere between 8 to 15 stocks in a portfolio. Yes, most large allocators, they go, wow, that's way too much risk. But if you couple that with passive, actually, the risk is diversified as a result.

Robert Morier: You've mentioned concentrated a few times. 30 to 35 manager relationships is certainly concentrated. But when you're speaking with asset managers themselves, how are you defining concentration as it relates to the number of securities in their portfolio? We hear a variety of different ranges, from less than 10 to 50 to 100 constituting concentrated. What does concentrated mean from your perspective?

Jason Chang: I think it depends on the asset class and the opportunity set. You look at something like emerging markets, concentrated would probably be somewhere between 50 to 70 just because you have so many diverse regions in underlying countries and exposures. On the US side, for instance, S&P 500, Russell 1000, you can get pretty concentrated there pretty quickly. So, I think the conversation varies. Some people run a portfolio of 150 names. They go, I run a concentrated portfolio at 75. You sit there and go, that's really not that concentrated in comparison. So, I think you really have to assess it on an opportunity set. So beyond just the broad, if it's US or non-US, you also have to see the mandate, so how someone invests, how they define that. And you narrow it down further. If someone comes in saying, I focus on quality, more likely than not, they're probably not investing in utilities. They're not investing in telecom or real estate. Cut that out, and you go, wait a minute, the universe is suddenly smaller than that. They probably don't invest in energy or materials. It gets even smaller than that. So, if they come back and say, I invest in quality. I focus on good businesses. You cut out all that, that's a big portion. And they still say, I'm running a concentrated 40 stock portfolio. You go, is that really that concentrated when you actually cut all that out? Probably not. So, I think you have to assess it. Take it another way, Robert, also, concentration is not just purely on names. As I just referenced, it is investment style. It's sectors. So, you can run a concentrated portfolio in tech. Well, if I only focus on tech, that's concentration. But within that, how do you concentrate even further? I think that's something you have to take into account when you're thinking what concentration means to an allocator.

Robert Morier: Just one last question, we're always curious, just from your time perspective, where are you spending your time today in terms of asset classes within public markets? Are there any particular areas that are taking more attention?

Jason Chang: Small cap, frankly, it's rife with opportunity. But it's also under-performed versus large cap right now. So, I think there's a lot of potential built up there. A lot of coiled springs, effectively. And frankly, on the non-US side, probably more emerging markets. Everyone's concentrated into US large cap growth. Frankly, that's the bet that's worked for the last five, six years. And retail is heavily invested there. So that actually points to more opportunities elsewhere, because people aren't focusing on it as much. We're not saying we need to go out and replace managers right now. But we're always looking to upgrade where we can or lean into areas that we think people that are unloved or people aren't focusing on, because that's generally where opportunities exist. I think as an allocator, you're reacting a little bit at times. But you're also trying to figure out, where should I be sending the puck, to use the Wayne Gretzky analogy. And I think we're trying to figure out where that puck is, especially given how efficient markets are today with passive. You wonder at some point, does passive actually have blowback? And it works in the opposite direction. If you have a massive sell-off, passive is largely going to get hit because people are going to sell equity exposure. That means large cap names are going to get hit. And that means tremendous opportunities on the mid and small cap side of things. So that's where we're focusing on, really, outside of the US. And then within US, if we are focusing on something, it's more on the small cap side.

Tim Dolan: Jason, give our audience a little bit of an understanding. A lot of our listeners are new funds, small funds, diversity, equity, inclusion, minority- or women-owned. Can you touch on… obviously, that's a handful of topics. But just touch on the boutique mindset and how you think about newer, smaller diversity and different ownership styles. How does that fit in your global equity portfolio, just as a specific?

Jason Chang: We love boutiques because there's tremendous alignment often. People are younger. They're hungrier. They're looking to prove themselves. I find that people who are in boutiques often have a chip on their shoulder. And they're out to prove that they can outperform and survive. But they also run into issues because they are smaller, they're more asset-dependent upon the clients that they have. There is more organizational risk. I mean, you've seen a tremendous decline in the number of independent boutiques because it is getting… it's basically a model toward in favoring size right now because you have size from a marketing perspective. Think of from a boutique, often the challenge is how do I get across an allocator's… how do I get the attention of an allocator? You either have to spend a lot of time on marketing, and that takes time away from investing, or it's word of mouth. It needs to slowly grow over time. And you just have to live with the fact that you'd love to be $500 million, but you're going to have to manage $100 million for a period of time before you really prove yourselves and people find you. There is probably a little bit of a subculture within the allocators. We guard our secrets closely. The ones that are doing really well we want to keep to ourselves. But it's important to establishing a network and talking to other people. And I think that's where emerging managers can get a benefit, is you target the right people, you know that they have a network, they'll tell their other friends. They'll tell the other allocators this is something that's different that you're looking at. To answer your other question, Tim, I think for boutiques, for minority-owned organizations, ones that are run by women, there are a number of studies we've seen where female-run organizations have better performance. I'm not sure why. I think part of it is they may think differently. They don't fall into a groupthink. And in this business, there is a lot of groupthink. Minority-owned organizations, similar type of thing. So, I think it's incumbent upon us, as much as we like the easy, one-stop shop, you see a lot of different things, you have to look underneath a lot of rocks and spend the time. So, we will always take a meeting for anyone who comes to us, because for us, it just builds out our bench. So, no matter how small someone is, we'll take the time. So, I'd say the advice to a lot of emerging managers out there is remain diligent. Try to find the allocator who's well-connected. And if you can get yourself heard there, that actually will help you in the long-term. But it's a challenge. It is not easy in this marketplace today.

Tim Dolan: That is music to our ears, music to our listeners' ears. It's don't overthink it. You see a plan at Lockheed Martin, a behemoth, if you will, from a size standpoint. They're open. And you all want unique and interesting investment ideas, big and small. And we love hearing that. So, thank you for those words.

Robert Morier: Jason, quickly, you've also been responsible for private equity and real estate over the past decade at Lockheed. So, can you just briefly talk about the private equity book for Lockheed and areas of opportunity within PE that you may be specifically constructive on today?

Jason Chang: Yeah, it's been a couple of years since I last covered that specifically, been involved on the manager approval side of things there. Private equity, as you know, Robert, is a question for a lot of people right now, because it is illiquid. And people are trying to get as much as they could before. And suddenly, they have too much. I think for us, we are evaluating the exposure that we have. We're still on the lookout for managers. But I think the pacing is something we're looking at a little bit more closely. And you have the challenges of because it is illiquid, different set of questions. Can you get your exposure out? Can you get a return on… can you get your capital returned to you? I think that's forcing a lot of people to think about how they want to invest and allocate to China, for instance, because geopolitical risks, with the example of Russia where suddenly someone says, we're closing off the capital markets, that really freezes up a lot of things for how private equity would exit. So, I'd say from our side, we're continuing to look for people who generate returns, have good teams, have a wide reach. But I think there is a… I don't want to speak too out of turn for my colleagues on the private equity side, but I know they're looking at sizing and pacing right now, and saying, where do we want to focus, because the allocation has gotten bigger than it was a couple of years ago because market equity markets, fixed income has come down? Illiquids have stayed where they are. We'll see where they go about in terms of marking their marks. I think there's a general tendency to delay a little bit because they feel they can weather through. But if this continues down the path that we're seeing right now, I think there are a lot of books that are going to be hit, both on the private equity side as well as the real estate side.

Robert Morier: Bringing this conversation and your career full circle, how are you approaching the biotech sector as it relates to your portfolio?

Jason Chang: I love biotech. If you ask our managers, they will tell you that it can be risky. I find it reassuring when managers come and say, this isn't my expertise, I'm not going to focus on it, because it is too binary for some people. But we have biotech exposure. Generally speaking, a lot of the strategies that we have that have invested in biotech are companies that have a product out there right now. It's less about those that are in stage 2 or stage 3 and you're highly dependent upon that, especially if it doesn't work. We've seen over the last couple of months, if something doesn't work, a stock will go down 40% or 50% in one day. And that's a big hit and big bet to take. So, I'd say biotech is a growth area. But you have to find managers who have experience, can identify and understand the pathways that exist for different drugs. And some companies are platform-based. They have a pathway they think works. But there are multiple shots they can take on different types of diseases. So, I think it's an area that continues to be exciting for me. It's just like AI or technology. And there's growth potential there. But there's also, as we experienced coming out of '99 and 2000, just mentioning AI in a conference call or mentioning genomics on a conference call is not enough to guarantee that you're going to be successful there. We can throw a .com on everything back then, and we know how many things failed. So, we're probably seeing a little bit of that, frankly, through AI right now. There's a lot of hype. And there's, I think, people are beginning to sift through on, what does that actually mean to someone? And can they actually execute on it? I think those are the big questions. So, as it relates to biotech, it's, do drug platforms actually have the potential to take multiple shots because health care is… it's unpredictable. What you think may work perfectly suddenly has a side effect.

And that pretty much torpedoes an entire drug line that you're trying to get approved.

Robert Morier: Yeah, absolutely, with very long… time horizons, as well. So those are valuable insights. Thank you so much, Jason. Well, we are very grateful that you've been able to spend so much time with us today. We're also grateful to speak to someone who's been in manager research for as long as you have. So just a couple last questions. Just curious, from your experience, you've been in this now for two decades, how have you approached some of those times in your career where it's felt like uncharted territory, it feels like you're mapping something new? And how has that shaped your decision-making process?

Jason Chang: I think it helps to go back to the process. So, while you may be entering an asset class that you don't know, take Brazil for me back in 2010, knowing how you think about research and applying the same process or basis, you know that each asset class or region might be a little bit different. But having a consistent approach to how you think about breaking down returns, understanding the qualitative standpoint, understanding an investment process, testing that. I think you have to take very much a scientific approach to investing and, frankly, decision-making. We don't want to be preachers. We don't want to be politicians. We want to be more people who are scientists and take it in a systematic fashion. That actually… I think helps center you over the longer term. But it's really hard to do that because when you've got a lot of things… when things aren't working for you, no matter how hard you try, you can get really frustrated and you feel like you want to throw in the towel. But if you go back to having that scientific approach to it, I think that will help you win out over the longer term.

Robert Morier: Well, I think you just titled our podcast, A Scientific Approach to Manager Research. So, thank you very much. We appreciate it. Well, we always like to end these podcasts by asking our guests, the people who have shaped their careers, the people who have really shaped them as individuals. As you sit in your seat now working with a very successful company with a very successful team, we'd love to hear the individuals, the peoples who have helped you along.

Jason Chang: I've had a lot of mentors, colleagues who have influenced me over time. It's hard to name a specific person because I've taken so much from different people. I've got plenty at Goldman that I can look at who've been in the business even longer than I have, other allocators I've spoken to so. I'm going to duck on this one, Robert, and not name someone specifically. But can tell you that in this business, it is very much about maintaining those relationships and having people who can come and talk to you and say, hey, this is how we've dealt with this manager that you've invested in. We look at it as a two-pronged approach. When one is under-performing, we add to the other one and balance it out. It's like, OK, that makes sense. Or, hey, you may want to think about digging a little bit deeper, going through that network. I can't say any one specific person because the approaches are different from so many different people. But I think taking that all into account, I couldn't have asked for a better training ground than Goldman Sachs because you're exposed to so many different things. But also say Goldman prepares you only so much until you get to this side where I'm at right now being an allocator the experience I had with the CIO who I had when I came in Chris Lee, also helped me think about managing risk. I mean, it's one thing to go out and find the best managers out there. But you have P&L to look after at the end of the day. You have planned participants that are dependent upon you not losing capital. So, I can love the beauty in the idea of finding someone who's really good at stock selection. But I still have to manage my risk. That was the one thing Chris reminded me constantly, is, you can't lose money. And that's money that people are depending on you for retirement. When you take that into account, suddenly you go, whoa, I really can't take as much risk as I wanted to because that could be potentially harmful and something I can't recover from in the long term. So little bits and pieces from different people. But I think that's helped become and shape who I am today.

Robert Morier: That's excellent. And thank you so much for sharing that. Jason, thank you for taking time to be here today. Congratulations on all your success. We look forward to more accomplishments and following along in your career. So, we wish you nothing but the best.

Jason Chang: Great, thank you so much. Appreciate the time.

Robert Morier: Well, if you want to learn more about Jason and Lockheed Martin, please check out their website at www.lockheedmartin.com. You can find this episode and past episodes on Spotify, Apple, Google, or your favorite podcast platform. We are also available on YouTube if you prefer to watch while you listen. And finally, if you like what you're seeing and hearing, please be sure to like, follow, and share these episodes. We welcome your feedback. Jason, thank you for being here today. Tim, thanks as always. And to our audience thank you for investing your time with Dakota.