

- Disclaimer:** **00:22** This podcast is for informational purposes only. Information relating to investment approaches or individual investments should not be construed as advice or endorsement. Any views expressed in this podcast are based upon the information available at the time and are subject to change.
- Rob Campbell:** **00:39** Let's dive in. Our CIO, [Paul Moroz](#), is here to share some of the notable learnings from what I think is one of the more important rituals that we go through as a team every year, and that's our annual post-mortem process. And so Paul, to get us started, and as a reminder, what is the post-mortem process, why do we do it, and how is it structured?
- Paul Moroz:** **01:00** Thanks for having me, Rob. Yeah, happy to talk about our post-mortem process. We've been doing this for in excess of a decade at this point. And what it is, is it is a review and look-back on, effectively, our mistakes. What did we do that didn't work? What did we didn't do that worked really well? What do we effectively learn from those things? And the reason why we emphasize this is because if you're going to be a really great decision maker, you can't get locked into one particular view. You have to be open to different perspectives, you have to be constantly learning, you have to be separating yourself from the decision that has been made in the past.
- 01:58** And culturally, if you have an organization that gets locked in and maybe doesn't want to discuss these items, that's not so good. And so we've gone out of our way to open up our culture from some of the senior people [to] show a strong sense of humility and go back and explore those mistakes and ask ourselves honestly, "what could we have done better in the past?" We do that every year. Process-wise, what helps us too is our Research Lab team (our tech team within Research) puts together all sorts of data on our trades. And we track this by stock and by cohort going back over time, because of course your learnings can change depending on how the market moves. You might think that you have one particular learning and actually it's a bit of a shapeshifter; it evolves. That's just a brief summary of our post-mortem process and usually takes three or four meetings of the entire Research team to share those learnings.

- Rob Campbell:** **02:59** Well, I was going to say, I mean, the team has grown. And I think just the importance of this process—the fact that we do dedicate the first, call it, four research meetings of the year, every Wednesday, to making sure that we get through everybody.
- 3:12** You picked on something I wanted to ask you about though, which was just getting the right learnings or learnings being environment dependent. I think I've got a good sense for the benefits of such a process both investment-wise, learning-wise culturally...what are the drawbacks, though? Like what are the pitfalls in such a process, as well?
- Paul Moroz:** **03:30** Well, we talk about bull market learnings and bear market learnings. Sometimes what you learn is very specific to the market regime. There's actually a wonderful experiment that demonstrates this, and [maybe I spoke about this last year](#) Rob, it's called the Olds [and] Milner experiment. It was done in the 50s. Effectively, the scientists hooked a bunch of rats up to some electricity, and they were tapping into the pleasure centre of their brain, and whenever these rats went to a certain part of the—I think it they were in a Skinner Box—they went through a certain part of the box, they were sort of incited by the electricity, you get this positive feeling.
- 04:12** (And then they did something really neat at the end.) And of course, that attracted the rats to go to this part of the box. And then they flipped it at the end—and I think it might have even been a mistake in terms of connecting the electricity up properly—they weren't hitting the pleasure centre, they were hitting the pain centre. And of course, the rats didn't want to go there. So their learning was just based on the sensation of pleasure and pain. I like to bring that up because sometimes in the stock market, you get that sensation of pleasure or pain based on the results of the stocks.
- 04:45** The psychology, how other people trade those stocks, that is independent from perhaps the fundamentals and even knowing what's going to happen longer [term]. So it's very difficult as humans to sort through that, knowing that depending on the type of market you're in, you're getting hit with that pleasure or pain in your brain as a result of feedback from stock performance. I think in my mind, that's the greatest pitfall of this process—is you just need a lot of time for feedback to learn. And so, as we've done that, as each analyst or investor ages, your learnings stretch out. You don't sort of erase history, the learning sort of expands. It's a real time experiment.
- Rob Campbell:** **05:29** Interesting. I would imagine that for some people, perhaps those who are newer to the organization, or even those who've been here for a while, I mean, it might generate some pain to put yourself out there in front of the team and talk about the mistakes that you made and things that you goofed on.

- Rob Campbell:** 5:46 So it struck me in just participating in the process that it was important that you went first. Was that a deliberate choice as CIO to kind of set the stage? What's the thinking there?
- Paul Moroz:** 05:57 That's absolutely deliberate. Not only did I go first, but we went through a number of our senior people first, basically, to share with people that it's okay to make mistakes, and it's okay to share the mistakes, and it's okay to open up about them. That's a normal part of the process. And in fact, we had some feedback from some of our new analysts just how cool that was. At Mawer we might take for granted the culture we have, but that's very different than many organizations in the world, many cultures in the world, where you don't want to share your mistake because you're worried about maybe your job being in jeopardy, or maybe your pay being impacted differently versus your peers. So that is part of the program: you lead by example, and that's a case in point to that.
- Rob Campbell:** 06:49 Okay, great. Well, let's spend the next, well, most of the podcast really talking about what some of those key learnings are. Both ones of your own, Paul, but also what you thought were perhaps some of the more important ones that the team had raised.
- I don't know if it's the right place to start, but I'll start with just [the difference between errors of omission and errors of commission](#). Can you talk a little bit about that? And whether there were any good examples that came out of the past year with respect to individual stocks?
- Paul Moroz:** 07:18 Yeah, absolutely. So, omission is decisions [that you didn't do.] Errors of commissions, things that you did do that hurt you. And so we have to recognize that we're really in the business of making decisions, and that includes the investments that we didn't do. Some of my personal learnings [laugh]—let's start with errors of commission, and this is one investment—some of our clients and some of our consultants will remember this stock in the portfolio for a number of years, was a company called China Mobile, which is a state-owned telecom company in China. They still have close to 70% market share. But we had it in the portfolio for a number of years and a few of our portfolios, including [\[Mawer\] Global Equity](#).
- 08:08 It was always inexpensive when we did our valuation. It always seemed like there was a tremendous prospect for improved earnings growth. The missing link there was that the incentives weren't properly aligned.

- Paul Moroz:** **8:26** And the incentives and the ambition of the state ultimately didn't line up with the ambitions of a profit-seeking shareholder. We ended up selling it, and this is years ago when we sold it, but it still remains one of probably my greatest areas of commission, the investment in that security. And so I bring it up to share with people because that would be a classic definition of a value trap: a security that appears inexpensive, but it is inexpensive for a reason. And that's how it played out.
- 09:01** Now, there [are] other mistakes that I made personally looking back that I'd probably do differently, but remember too, going back to why this is so tough in terms of learning—the universe may have played out a little bit differently. So, you can imagine a different iteration of the universe or a different scenario where that wasn't an error at all, that was the right decision. And so, one of the things that I reflected on is in an error of omission, was a decision not to buy a company called Carrier. Now Carrier is an HVAC company or heating, ventilation, and air conditioning. So, they sell that type of equipment. They have pretty good market share in the United States and other places around the world.
- 09:48** But they were spun out of a company that was previously called United Technologies. And this was right kind of at the onset of COVID. The valuation looked attractive. There was a lot of things going for it. But at the time, the company had a lot of debt on its balance sheet. And this is one of the things that happens when you reorganize and spin out companies. Often the parent will shift debt and kind of saddle the spinout with more debt. That's what happened here. We took a close look at it, and we were concerned about the debt levels given the uncertainty with the pandemic. We made the decision to err on the safe, on the side of caution. We didn't add it to the [Mawer] Global Equity portfolio. And in hindsight, that was not the right decision; the stock did wonderfully well, their business performed well and debt kind of fell back in line. But that's an example on the other side. The decision that, at least for that scenario, the learning was, no, that would have worked out.
- Rob Campbell:** **10:48** One thing that as another member of our team was sharing, learning about a stock, so an error of commission, a stock that we own that went down, you had a comment just based on how the analyst was describing that stock. They were saying, “this was my pick, it was my stock,” and you stepped in to make a really good point on that, that I thought was important. Can you share just a little bit more on that?

- Paul Moroz:** **11:12** Yeah, well, I want to change the language. And I guess the lexicon of using possessive words and binding yourself to the stock or the security or the idea. The truth is, it's not your stock. It's simply an idea. And I think when we as humans over-emphasize our role in the universe, and attach ourselves to the stocks and the ideas, it's more difficult to let go of that, it's more difficult to make cleaner decisions. You almost have to take a Buddhist approach of indifference or detachment.
- 11:53** And I think that that helps in making decisions because that way, you can change your mind. If you have more information, it's easier to change your mind because when the information comes up, we're going to sell it or we're going to make the opposite decision. If you are attached to the security, if you let yourself become emotionally attached, then there's the risk of a behavioural error of a commitment bias or a home bias, or there're ways in various shapes and forms. So that was my feedback to that particular analyst, Rob.
- Rob Campbell:** **12:24** Let's move on to another learning that you had [with respect to 1/N](#) and mistakes made when you've been either too slow to get to 1/N, too slow to get back, or to move out of a position. Can you just talk a little bit more about that?
- Paul Moroz:** **12:39** Let's just start by talking about what do we mean by an "N?" There's so many securities in a portfolio that we think are wealth creating. If there's 40 or 50 securities in a portfolio, the number of those securities is what we call an "N." So it represents both a minimum standard that fits our investment philosophy; is it in the portfolio or not. And then if we're 1/N refers to the fact that, well, if we're uncertain about the world, we don't know which way it's going to go, the best strategy is just in absence of more information is diversification. So you basically divide your portfolio by the number of securities, the number of Ns, and you get 1/N.
- 13:23** What I think we've seen in the past—and we run the statistics on this—is, often as information comes up, we are slow to implement that information. And [with] a new idea, we might start out more slowly. And often what happens is we should be going to just that simple diversification principle right away. Once we've established it's an N, we go to 1/N. What should be the prudent weight in the absence of more knowledge? And I think the reason for this...sometimes it's just purely liquidity. Sometimes it takes time to get into a position or to get out of a position.

- Paul Moroz:** **14:05** But also sometimes it's just change management. And it's, again, these are behavioural errors. Do we have more comfort in a security that we know, versus a security that we don't know as well? I mean, this is an endowment effect, often. And it's maybe not because you even need more information, it's simply the result of discomfort in the error that you can make. So we've done a better job over time just simply by going through the stats of it and I think that there's still room for improvement when we look at the math of how we move our positions either up or down.
- Rob Campbell:** **14:45** Can you expand just a little bit more on that? With respect to some of the investment universes that we're investing in are fairly concentrated. You can have some large companies that command large positions in the benchmark. How does the 1/N approach change, if at all, in those contexts?
- Paul Moroz:** **15:03** I made a comment about how important diversification is. And my observation—I think I said something like, diversification is the ultimate confession booth because with time, you can make mistakes and it gets smaller. And it's really neat to reflect back over my time in [Global Equity](#) and prior to that, [Global Small Cap](#), over a decade. My insight was that mistakes that I was making in the moment that seemed like a big deal, because we were diversified, over a long period of time those mistakes just sort of folded in or melded into the return distribution. And that's really fascinating. If you stick to that principle of not getting too far away from 1/N, staying diversified, you get that benefit.
- 15:52** One of the conversations I have...but it's difficult, because sometimes you have so much conviction in the way the world's going to turn out, you want to take a position higher. And we had a great conversation with some analysts on a few of the technology names in the portfolios. And the question at the time from the analyst was, "there's a lot of good things going on here, have you ever considered taking the position, never mind 1/N, but above our self-imposed 6% position limit?" At Mawer, that's one of the risk-management tools we have, where any security, no matter how good we think it is, once it's at 6%, if it goes over that, we'll trim that back to manage risk.
- 16:38** We have this wonderful conversation effectively about the benefits of diversification and how these rules are in place so that we don't make that behavioural error.

- Paul Moroz** **16:46** And what ended up happening—it was a wonderful lesson that was shared with the group is—a number of those securities started to evolve in terms of their price. By the way, “evolved in terms of their price,” that’s a polite euphemism for, “went down substantially, corrected in terms of valuation.” Now, had we gone beyond that, it would have hurt a lot more. But that principle of diversification, 1/N, and our self-imposed limits, managed the risk. And I think that that analyst will find as their career plays out over the next 10 or 20 years, they’ll have that similar learning to me, of how important diversification is and how those stocks over time...just gets folded into the distribution when you do make mistakes, because that’s inevitable.
- Rob Campbell:** **17:33** Can I ask about that?
- Paul Moroz:** **17:34** Yeah, of course.
- Rob Campbell:** **17:35** As you, as one of the more experienced members of the team, what do you do when you see people learning things that you remember learning five, or 10, or 15 years ago? Do you let that play its course? Do you put in to offer your own perspective? I mean, how do you handle that?
- Paul Moroz:** **17:52** The best example I have is, if you’re listening to the podcast, and you have kids, it’s very much the same thing—in that you can do your best to coach and sort of manage risk. You make sure that there [are] safe places for learning so that the event doesn’t go to zero. When your kids are a couple years old, you just don’t drop them off at the playground by themselves and say, “Here you go! Good luck with risk management!” But what you do is you coach, and you teach, and you stay close and make sure that they are learning lessons. And it’s the same sort of version for portfolio management. That’s why we have a CIO, our Chairs, our Risk Manager. And that’s why we have our risk management meetings and to keep these things on track.
- 18:49** There were a few times where I stepped in or someone else stepped in. And the way I think you coach people through this is you don’t discourage their thought on the one side, but you just add to it. There [are] a few people where I point-blank told them, I said, you seem to be feeling really bad about this error of commission or error of omission, and my comment was, well, maybe don’t beat yourself up so much. Something could have gone the other way. That is part of uncertainty. You can’t always plan things exactly that way. So that’s one.
- 19:29** And there were a few others where—again, adding to their learning—where maybe there’s something else in addition to what you’re thinking. So that’s my approach to that.

- Paul Moroz:** **19:40** We talked a little bit about the learning around lexicon and attaching yourself to the stock. And so that was another example of that where that was actually a big part of that learning. And so it was a place where I felt that I wanted to step in and, again, not discredit the other elements of that—allow that reflection—but also suggest that there is another layer or level to consider in what went on.
- Rob Campbell:** **20:12** Fascinating.
- Paul Moroz:** **20:13** I also poked around a few spots, Rob, just to recognize that, with time, the learnings may change. This goes back to what we talked about before with bull market learning versus bear market learnings, and basically suggesting that you may find that this evolves. Again, I'm using the word “evolves” politely as a euphemism with time as you reconsider the learning.
- Rob Campbell:** **20:42** Can I ask about something you mentioned earlier? You talked about change management. And another learning that I noted that you had had was just about business or momentum, and how powerful a force that can be. Can you share a little bit more on that point?
- Paul Moroz:** **20:59** This is the progression in terms of learning as an analyst. Often what happens is people hang their hat on what is most tangible. And if you start off just out of school, and you're looking at a security and you're doing your security analysis, what's most tangible is that model you built in Microsoft Excel, and you have 1,000 lines and lots of numbers. The temptation is that that's your answer. And you're very excited that you found that a stock that's undervalued or overvalued.
- 21:34** Now, right away we start to take that away—that overconfidence—because we say, well, actually, what you're going to do is you're going to build some Monte Carlo analysis. And very quickly you realize if you plug in some assumptions that are a little bit to the left, or a little bit to the right, a little higher gross margin, or a little lower gross margin, a little higher capital intensity, or a little lower capital intensity, you start to get a very different result. Not only do you understand better how the company works, but you realize you don't know as much about the world. But still, over time, you realize that, that model that what you thought was concrete is actually kind of flimsy on an intellectual basis. It doesn't really prove what a company's worth. It's like a light in a really foggy, dark evening. You can kind of see it, kind of gives you a little bit of a guiding principle, but it isn't the exact answer.

- Paul Moroz:**
- 22:31** So what does this have to do with change management? Because actually, often when businesses are going well, when there's positive business momentum, there's modelling error that occurs. And the same thing when there's negative business momentum. We are slow both to incorporate that information, and then adjust that into our model. So I look at business momentum as effectively modelling error. And if you think about yourself in the business as an operator, this starts to become more apparent. Because imagine that things at your company are going really well; your reputation is really good. So that probably means you already have a couple more contracts in the bag, it's easier to hire people.
- 23:17** You may have one, some people that are joining, and they're joining the organization, and they're going to do wonderful things. And they themselves might attract more clients—there's just that positive flow. But imagine the other way around. Imagine a situation where there's negative business momentum, where all of a sudden, senior leadership is leaving the company. And they're probably leaving because maybe the customers are leaving. And then maybe they've left and they're going to steal employees away. There's just negative business momentum.
- 23:48** And so over time as an analyst, you're starting to recognize that what matters too is the delta, the change that occurs. And the learning was—and this is both in terms of our process of the Matrix where we plot quality against valuation, and within the model and our valuation models themselves—that when you start to see the world changing, it goes a little bit further than you think. There's actually something else going on. Business momentum has a pretty significant impact on things. It takes time to get trained up and realize, okay, well what's signal, what's actually important here, and what's noise? What's not really business, fundamental change of business momentum; that's just humdrum, common news?
- Rob Campbell:**
- 24:38** That's a great transition to another category of learning that I picked up on, which was just outside of maybe individual businesses and changes happening there, but regime changes.
- 24:49** Potentially, we're in a regime change with respect to the interest rate environment, and just observations of how difficult it is to deal with regime changes. What are some of the learnings or perhaps are early some of the observations around that you think would be worthwhile sharing?

- Paul Moroz:** **25:04** Well, it's tough because you actually don't know whether a regime is changing or not. As an example, let's get specific about what we could be talking about and that is, are interest rates going to increase across the board substantially? I'm not talking about a quarter of a percentage point move up as we normalize. But are we going to see the 10-year U.S. bond yield move from 1.8% to 3% or 4% as we're pricing inflation? That's a big question out there. If that's going to happen, you're probably in a different environment. If you have that sort of inflationary effect, the securities that may perform better are going to be different than if you didn't have that inflation that becomes a more permanent feature and if you didn't have a response to interest rates.
- 25:59** Now, here's the thing Rob—this is a tough learning, because we don't know whether this is going to happen or not. We just don't know. We're dealing with uncertainty. And I think the conversation that we had in terms of learning about a regime change, we talk about as if it's like, we can predict this. And the truth is, we can't. We're adjusting. Markets are such complex adaptive systems and the rules are constantly being rewritten. You shift and adjust. I think the learning is [you have to apply a level of Bayesian analysis](#). As more information comes out, shift and adjust. And we have tools to measure exposures in the portfolio, and do that. But you still don't know for sure.
- 26:42** Just as we were recommending to our team during the outset of the pandemic that your best strategy is try to be at two spots at the same time, consider multiple scenarios—that same sort of thinking applies today when we're contemplating a regime change. And it's going to be a great puzzle. If interest rates go up substantially to fight inflation, we know that higher duration stocks or growth stocks are going to get hurt more. We're also in the internet age; there's going to be lots of wonderful businesses that are created that don't require lots of capital, that are run on the internet, that scale up quickly. There's going to be lots of wealth created in those exact types of businesses. So it's a very difficult problem, but one not unlike any other problems we deal with uncertainty—you just have to manage risk through diversification and being in a few different spots at once.
- Rob Campbell:** **27:40** Talking about technology businesses and those that can scale up quickly, I noticed that as we went around the room (the proverbial room), different people seem to have learnings that, at least on the surface, appear to contradict each other. I can't remember who they were, but one learning was, “don't limit your compounders.” Perhaps to your point on momentum, when things are going well, don't get in the way. Versus, “hey, valuation matters.” I'm wondering with some of these contradictions, can you help to square those in terms of learnings for us?

- Paul Moroz:** **28:11** Well, they're both general rules. Unfortunately, there's a series of rules and algorithms to the stock markets. Like yeah, Rob, pick stocks that go up and if they're not going up, don't pick them. That's kind of the essence of what you're asking. But yet, both those rules apply. And that's what's difficult in being two spots at once because the market is complex. It's a complex adaptive system. Over time, I've found that stocks that actually don't give you a lot of headaches, that run their business very quietly, they just play their business plan out, they compound wealth, those are often your best investments. They're appropriate for the time, they've the appropriate culture, and they do wonderfully over the course of...I'm talking a decade or two decades.
- 29:01** I think a security that fits into that camp would be [Microsoft](#). It's a stock for the times, it has the right culture, it has very quietly just...the core infrastructure for a lot of what the world runs on. [Google](#) is probably the same way, by the way. Google might be a little bit more in the spotlight with antitrust issues. But over time, well, here's what happens: as securities get more expensive, as that compounding nature, that beautiful, boring, long-term, fundamental performance is recognized, more people invest in it. The odds change. Valuation changes. So it depends where you are in that cycle. And that's, I think, how maybe you square those two different ideas.
- 29:46** There comes a point where it doesn't matter how good the company is, that compounder. And of course, [we refer to compounders as the ability of companies fundamentally on their balance sheet to earn a high return on their capital and deploy that](#). It doesn't matter how good that is—if you pay too much for that, it can be a terrible investment. And that's a behavioural error that has occurred throughout the ages and will continue to occur. That substitution effect, that difference between company and stock. You have to be mindful of both those lessons and learnings.
- Rob Campbell:** **30:20** Here's another set of contradictory learnings that I'd love to get your take on: this idea of, “the importance and the benefits of sticking to the process” versus, “hey, I got too handcuffed by the process.”
- Paul Moroz:** **30:35** Here's my take on this. I think we have to step back. I'm going to set the context of this—maybe four years ago, at this point, Christian Deckart and I, [so Christian is our Deputy Chief Investment Officer at Mawer](#), had a series of meetings to investigate how companies run franchises. We actually talked to someone from McDonald's, we talked to someone from The Keg, we were trying to understand how you run a consistency of a franchise, and we were trying to steal ideas from other industries to apply it to investment management. And if you're listening to this, consider what we're saying here: we run this factory, this franchise. The problem we're trying to sort out is, well, how do we do that? How tight do we run this franchise?

- Paul Moroz:**
- 31:24** And where Christian I got to on quality control was that we need to provide people the frameworks to make investment decisions. [Our investment philosophy](#) is really a framework. We have to provide people with the frameworks within that for the process. So for example, our ESG tools and our forensic accounting checklist, those are really frameworks within the process. But aside from that, we have to also allow flexibility for our people to be creative and move around within those frameworks. That was a big difference from where, say, a restaurant franchise would manage things, because they would say to their franchisees, “okay, you guys do not have the power to innovate or adjust menu items or something like that. They run it tighter.” But it’s different in our business, there has to be that level of creativity.
- 32:18** I think when I hear that feedback from people who say, “oh the process saved me, versus, you have to be careful not to get handcuffed by the process,” I think getting handcuffed by it means you can go through the philosophy and process, but in a particular investment case, it doesn't mean that all elements of that are treated equally. There might be one particular risk where you actually have to allocate most of your time or one particular element. Maybe it's the valuation or maybe it's the character of management. And that's the difficulty of, as you grow up doing analytical work is, with all this information, what element is most important?
- 20:06** And could certainly appreciate the size of their TAM or totally addressable market if they are successful there.
- 33:03** So it doesn't mean you just drop everything and say, “well, I'm not going to do forensic accounting, I'm getting handcuffed by the process.” That's not true. You still have to look at that. But the emphasis might be on another element of it. And understanding and balancing how you manage your time, that's a really important element of what we do in really allocating resources. So that's how I would think about that, Rob. That's my take.
- Rob Campbell:**
- 33:30** I think that’s fascinating—we'll have to pick that one apart at some point later. One more contradiction for you, just another one I noted down, this idea that one of our analysts had that they stole from the Navy SEALs: “slow is smooth, smooth is fast.” Versus other members of the team who really touted just how much better they got with some of the tools that our Lab has put out that just makes them faster and more productive. Do you view those as contradictory in nature? Or is this another one of those puzzles?

- Paul Moroz:** **33:59** I would say it's a puzzle, probably more of a paradox, because I think that what “slow is smooth” means to me, is that sometimes you get a lot of benefit for thinking through things and spending more time on it and going through the work and building it yourself. Think about all these models that we build; is it that we get the answer at the end of it? Or is it that it is a process that allows us to think about how business works, what valuation could be in different scenarios, what sensitivities could be if the world changes? I think that's an example of “slow is smooth.” I think that in terms of decision making, a lot of that process relates to what people like Daniel Kahneman would consider System 1 versus System 2 thinking, and that's some behavioural economics work, really, that differentiates how your brain works.
- 35:03** System 1 is your fight or flight response. It is sort of your lizard brain, it is the immediate intuition or decision, and it can be prone to mental errors. And what taking your time and going through a process of slowing down often represents is you shift to this System 2 thinking, which [means] you're more reflective, you'll go through the math, you're less likely to get tricked by behavioural errors. So I think that's one element of it on “slow is smooth.” Now, the paradox—that doesn't mean that you can't use tools that increase productivity. And one of the great things that our Lab has enabled us to do is create tools that provide greater context.
- Paul Moroz:** **35:54** So as an example, we have this tool called “Matrix Reloaded,” which takes in information, and it can be tons of information on any number of statistics. Imagine the price to earnings ratio, or the dividend yield, or the free cashflow yield, or the valuation ranges for our internally built models, or calculations of interest rate sensitivity for our current holdings. What it'll do is very quickly, it'll pull this information in and it'll show you statistically where that security on whatever metric you're looking at, plots. So all of a sudden, we gain a huge amount of context very quickly, where we can look at a security and say, on this particular statistic, it plots in the 92nd percentile, or the 15th percentile. We've all of a sudden eliminated this “feeling,” but very quickly we've gotten context around something within the broader universe.
- 37:00** So you can still make fast decisions with that, that lead to errors. But I would say that the productivity gain that we're talking about is really about context. If you're to build out your own Excel spreadsheet out and figure out where security plots, I mean it would just take a lot more time and you don't get that context. So I think that both those elements are important. We can gain that context with those tools that have greatly enhanced flexibility with data and “slow is still smooth” in terms of managing System 1 versus System 2 and reducing behavioural errors.

- Rob Campbell:** 37:40 And temperament too.
- Paul Moroz:** 37:42 Exactly. Hopefully that resolves a little bit of the paradox or at least the way that I think about that.
- Rob Campbell:** 37:47 Awesome. One of the nice things I think about this process that we go through and I think just culturally as we talked about earlier, just the example that you set Paul by going first, is that some of these learnings aren't simply about stocks that we missed or got wrong, but really about all aspects of life. So just building on some of these more behavioural comments that we've been making more recently, just expanding the learnings to life at large—any notable learnings that you found from the team this year?
- Paul Moroz:** 38:16 Well, I think one of the themes, and it just comes with age, is when you're younger, you're always a lot more sure of things. And with age, you gain less conviction in how things will play out. You gain different experiences and you spend more time maybe freeing yourself—
- Rob Campbell:** 38:37 —You've just been burned more often [laughs].
- Paul Moroz:** 38:39 —you've been burned more often, but what you've learned is you don't have control, necessarily, over the way the world works out. It's not always going to work out the way that directionally you think it's going to go. So I think that that's a big one. And I think that relates into, as well, how you deal with the pressures of life. If you're focused on the past, something that you can't control; if you're worried about the future, this sort of anxiety around things that you may or may not be able to control; you can create your own headspace that isn't very healthy, and whether that's making investment decisions, or just running and managing your own life.
- 39:20 And so I think a big part of what we learned as a team—and I've spoken to some of the people about this—is, we have to manage through that and recognize that that mental aspect is actually a very difficult aspect of investing. And it's actually just a very difficult aspect of life. We have to be open and honest about that. And there is going to be times where, not only as colleagues but as friends, we have to help ourselves through these situations and stay grounded and manage our temperament and recognize that we can't always control the way the world's going to go. In terms of our own conviction, we have to embrace uncertainty in many different directions and just prepare ourselves for those. So that's both I think a stock market learning, an asset management learning, but also something that people can take away listening and apply to their own life.

Rob Campbell: **40:18** Great. Well, that sounds like the perfect place to end, Paul. We really appreciate you coming on and being so open and candid with a very vulnerable discussion that we have every year as a team. This post-mortem process, just personally, lots in there for me to think about and hopefully our listeners find the same.

Paul Moroz: **40:37** Thanks very much, Rob. Thanks for having me.

