Hello and welcome to this programme from Baillie Gifford. The latest in a series where we talk to the fund managers of the group's different investment trusts. My name is Gavin Lumsden from Citywire and today, I'm speaking to Douglas Brodie, manager of Edinburgh Worldwide Investment Trust. Douglas is head of the Global Discovery Team at Baillie Gifford. He joined the company in 2001 and became a partner in 2015. A CFA charterholder, he graduated with a BSc in molecular biology and biochemistry from the University of Durham in 1997 and obtained a doctorate, a DPhil in molecular immunology from the University of Oxford in 2001. Good morning, Douglas. Thanks very much for joining us.

Thank you, Gavin and hello, everyone.

The past three years have been difficult for the investment trust and your team's style in investing. So, I was interested to read your commentary, when you said, "To us the prospect of robust returns is more attractive than at any time in recent memory." What makes you so confident?

Happy to elaborate on that. As you say, a difficult two to three years in the post-pandemic washout phase. All the inflationary interest rates shocks, but really, the enthusiasm that we allude to is rooted in what we seek to offer with the trust, which at its core is a portfolio built around understanding how the world is evolving. Which companies we think are best positioned to drive and benefit from that change. To do that, we look for smaller businesses. Those companies earlier in their lifecycle. Immature companies below the radar. Companies which we think will benefit from that change and are out there solving big problems. Essentially, aiming to access growth of a low base and retain special businesses as they grow and as they thrive and as they become successful.

It's an approach that requires patience. It's all about the long-term building of businesses. These companies often start out in their early stages. They will be investing. They will be in their cash burning phases and they will migrate to larger profitmaking cash generative businesses. Our portfolio straddles both those worlds, from the early to the proven and deliberately so. So, in having exposure to that and exposure to private companies, we think we get that full sphere of all the innovation that's out there. It is undeniably a distinct style, but we think it's worth having exposure to that across all economic cycles. In the current point, we have been very much out of favour.

To the point around enthusiasm, based on what we see, we think there are very valid grounds for thinking that we're through that point of maximum pessimism frankly, in this current, unusual cycle. Look, it's been one heck of a cocktail that investors have had to digest over these last few years. We think that the core contributors to that are now dissipating. Inflation is clearly rolling over. The

market seemed to tie itself in knots around exactly when the rate environment will change, but these things are washing through. The tides are turning and these pivot points tend to be amongst the most noisy, the most volatile periods and the clouds are lifting. In the absence of any unexpected shocks, we think that creates an environment where investor time horizons normalise.

Investors feels more comfortable projecting out and I still think we're in the foothills of that. This remains a market that is accurately near-term focused, but much of the real angst points, we think, are in the rear-view mirror. There's been this growing disconnect, I would say, between how stock markets have treated companies, particularly smaller companies, and the actual fundamental progress of these companies. When you combine that with this aggressive valuation reset, we think that tees it up for a pretty pivotal moment with the potential to shape long-term returns over the future. So being brave, being patient, that we think, can unlock significant future rewards. There're probably three things that I would keep coming back to that give us the enthusiasm.

The technological progress that we've built the whole strategy around is very much alive and well. The holdings are, by-in-large, doing what we want them to do. There're 90 companies in the fund. So, some will be doing better, some will be doing worse, but directionally, these businesses are doing what we want them to do and valuations look attractive and we think that presents a really interesting opportunity. I've backed that up by putting significant amounts of my own money into the fund over the past year as well.

So yes, you've got skin in the game, that's always reassuring to hear, I'm sure. It feels like the trust may be coming out of a storm, judging by the recent share price performance. Can I just ask you, what is encouraging you at a company and stock level?

I'll probably build on that earlier point that the opportunity for innovation and progress is very much alive. Entrepreneurs, innovators that we see, they are building companies that are creating products and services that we think will genuinely surprise people on a five, ten, 15-year view. Maybe the one that gets all the attention at the moment, is generative AI. I'm sure your viewers are very familiar with aspects of that. There're clearly some direct beneficiaries of AI. The chip companies, the cloud companies and there's almost a bit of a frenzy around that in stock markets, but it's pleasing to see many of our holdings using these AI capabilities to both expand their opportunity set. Adding aspects to their competitive edge and generally, contributing to these companies' strong execution.

I pick out companies like CyberArk, in the cybersecurity area. A company we've owned for some time now called Appian, helping companies to use artificial intelligence to improve their business

processes. Freelance agents like Upwork, that access the AI talent. The provision of tools to freelancers. So that's very much a live theme. I'd stress that really, the portfolio's expose to multiple different themes. Really exciting areas of innovation. Maybe to pick out a few. Close to my own heart here is just how we're seeing researchers and clinicians understanding and exploiting DNA. We have a significant portion of the fund exposed to this as a theme.

So, companies like Alnylam and Bean Therapeutics exploiting genetic insights and making them therapeutically relevant and repeatable through new drugs and new platforms. A company like Twist Bioscience, the leader in writing DNA. Nanopore, in terms of reading DNA with real precision. Companies like BillionToOne and Exact Sciences in diagnostics and screening. So, there's some real foundational tools that I think are very early in their potential uses. Another theme that we've come a bit more aware of, we're seeing incredible innovation in a wave of hardware and industrial type businesses. A sort of techno industrial revolution as it were. So, companies using technologies and approaches to revolutionise physical processes.

Tackling industries, frankly, where historically they've been relatively static. So, Relativity Space, they've advanced 3D printing capabilities. Companies like American Superconductor, using superconducting materials and power management systems. Astranis, redefining what's possible and the cost profile of geostationary satellites. Elsewhere, companies like TransMedics doing devices. Organ profusion. Really radically transforming the transplantation market. So, yes, a whole swathe of enabling technologies, I think really coming to the fore.

Fantastic. I wonder, what lessons have you learnt from the downturn since the end of 2021 and how are those reflected in the portfolio?

You learn lots of lessons as you go. We will get companies wrong. That's the nature of what we do, dabbling in early-stage businesses. It's the reason why we run a diversified portfolio, frankly. You don't come through a period like the last three or four years without genuine reflections on what you would have done differently, what you would have done better. I think in the past, we've talked about some of the pressures we think the companies were placing themselves under, in that era of abundant capital. Stock markets that were actively rewarding risk-taking, possibly pushed some companies to have ambition that, frankly, ran ahead of their ability to execute.

So being more questioning of companies. Interrogate their actions, what do their actions really signal? There is a clear requirement in what we do to be patient, but recognise the dangers of poor execution and be honest when that poor execution nullifies what might have been a great business opportunity. We've seen that recently with Teladoc and arguably, Wayfair was a little bit like that as

well. I think we've recognised that we need to be more rigorous with enforcing risk-reward upside. Especially when the risk-reward dynamics change very quickly. Either through price appreciation or a change in the backdrop. This will always be a genuine challenge for a strategy like ours, because we are looking for companies that can grow to be many times their initial size.

We'd be deploying a formal review process of companies which hit certain triggers and we think that's adding a degree of rigour to what is undeniably a hard exercise. Yet doing it in a way that is still very true to our philosophy. So, in the past, I think we've been good at critically assessing valuation and upside and sell discipline in companies that have progressed far down that commercialisation path. We've seen that with Tesla and Dexcom, two of our most successful investments which we exited over the past three years. Bring some of that valuation rigour to companies early on that journey. Tease out who can be special versus [marker 0:10:00] maybe this is as good as it gets.

The upshot of that is we weeded out some marginal ideas [unclear 0:10:05] tailor the portfolio. We've capped some of the our bigger, better performing names. Positions such as Axon and Market Access, where we felt that the market was beginning to catch up with our view. Maybe just to quantify it a bit, we exited 15 names in the trust's year to the end of October 2023 and about another six names since then.

So, there's clearly still uncertainty over the macroeconomic outlook and the direction for inflation and interest rates. Could you tell us about the work you and your colleagues have done around the financial sustainability of your holdings?

From where we sit, it does feel like the big battle against inflation, frankly, has largely been won. I think there's a clear pattern in core CPI and the next logical step is some kind of normalisation, but a recognition that maybe the central banks will probably play that one with a little bit of caution. Almost regardless of that, we think there's compelling historical evidence to support the notion that returns in small and mid-cap indices tend to recover strongly in those two to three years following interest rate rises. If we look back at the last six cycles and look at the Russell 2000, which is the US small and mid-cap market, it was up by an average of over 30% at that three-year point of the first interest rate rises. We're rapidly approaching that two-year point after the current cycle and the index is broadly flat.

For me, the historical lessons here are that the stock market have worked through the issues that were challenging them in the short-term. The things that tend to preoccupy them, but as your question suggests, companies need to survive these tougher times. On that point, we think the

EWIT portfolio is very well positioned. Our private holdings, in aggregate, are vert well capitalised. In some cases, extremely well capitalised. The portfolio, in aggregate, is structured with about 60% of the fund in earnings positive, cashflow positive companies. 40% in pre-profit cash consumptive businesses. Of those latter ones, the vast majority have really well-proven commercial traction. Robust cash positions to reach the milestones that we expect them to achieve.

Where companies have needed money in the portfolio, we've seen them raise that. We've had QuantumScape raised money. Nanobiotix raise money. American Superconductor raise money. Lots of companies have operationally extended their cash runways. So cut to the cash, we don't see funding as a material risk across the portfolio.

That's good to hear. So, share prices may take a knock, but the companies can get access to capital to grow their businesses. The launch of ChatGPT at the end of 2022 generated, obviously, huge interest in artificial intelligence and underscored the importance of big tech with the Magnificent Seven dominating US stock market returns since then. So, I wonder, how does the success of the likes of mega-caps, such as Alphabet, Amazon, Meta, Nvidia, how do those affect your case for investing in smaller companies?

These are very big, successful companies. They are dominant in their respective areas. I think it's worth remembering that several of them were the upstarts not that long ago. Maybe to cut to the point of why they've been so strong recently. I think they're almost perceived as the digital utilities. They're all different businesses, but they've carved out, I think, a place of dominance. Their own part of their ecosystem of the market is clearly defined and the market is very excited about the way that positions them around artificial intelligence and all these local language models. These are the companies that own the data. They host the data. They process the data. They are the tangible infrastructure, frankly, for how individuals and businesses can engage with AI.

In some cases, that's reflected in that immediate growth, but almost when you step back from it, a technology like generative AI is ultimately interesting because of the new problems that will be solved with it. What can individuals or businesses now do that they couldn't do before? What can be automated and what can be historically manual, that can now be done in a very automated fashion. The infrastructure of the cloud and the GPUs is required for that, but it's the tools, it's not necessarily the solutions. I think at this early juncture, that's where the momentum is. So, I'd expect that solutions opportunity to expand massively over the coming decade. That's very much fair game for smaller businesses to be involved in that.

I think it's almost analogous if you draw back to the dot.com boom times. The moves in the likes of Cisco, Dell, Vodafone, yet the subsequent decade was all about what were the upstarts at the time. The Amazons, the Googles, the Facebooks, the Teslas. They all made use of that infrastructure built by the others. So, it feels quite similar, to me, in terms of that. I think there's a history of the winners in any stock market era, have a habit of redefining themselves each time. There's changes in the backdrop. Be it regulation, the underlying technology architecture that these businesses are built on. You saw that with going from mainframes to PCs, to cloud. You've seen it from CPUs to GPUs and we suspect, in time, you will see it with quantum computing.

So yes, I think there's always that risk, but the observation of there being big winners, that doesn't surprise me. We are big believers in asymmetry, making multiple times your money. These companies have lived that and they've breathed it. That's great if you own them and I genuinely hope many of your viewers have. The only asymmetry with value is that that could be unlocked by future returns. To double or more, if you're a trillion, two trillion or three trillion market-cap business, that's really hard. Where the ratings are, these companies will have to deliver that through genuine economic value creation. So that law of big numbers ultimately catches up with them eventually.

If you take that Magnificent Seven, the cumulative market-cap across those is something like $13 trillion. If you look at our top seven listed businesses in our portfolio, it's less than 0.5% of that and we own some big, successful companies. I think that just tries to put it in a little bit of context. Asymmetry works when the base of which you have to grow is low. The market is inherently somehow sceptical around that. There's a mispricing and the potential for outsized return is vast and none of that, to me, intuitively applies to the Magnificent Seven. Maybe one little teaser to put out there. These are amongst the most analysed, most looked at businesses around and we think about the price moves these businesses have had and you try and link that back to anything around efficient markets. Just imagine how inefficient equity analysis is when you come down the market-cap scale and the amount of eyes looking at businesses expands massively. So just put that one out there.

Douglas, you mentioned you exited 15 stocks last financial year and I think, another six since then. Can we expect a more concentrated portfolio in future, as you double down looking for these phenomenal rare companies?

There're currently around 90 companies in the trust and around 14 of those that are private. That's actually down quite markedly. I think we peaked at about 120 or so. The range that we quote is 75 to 125. So, it may come down a little bit more, but we are in the lower range of where we operate. I

think there's been a few factors driving that. Some of which we touched on a little bit. We have been recycling capital out of some of our maturing ideas, pushing that back into earlier stage companies. We've cleaned up the tail, moving on from ideas where we felt we've given them, frankly, sufficient time. Maybe either the competitive dynamic had moved against them, the industry had moved against them. That's genuinely freed up capital to deploy into ideas which we think the market is most obviously mispricing in that long-term sense.

Companies where we think their relevance is increasing, but the market has derated them. A common theme there would be around the punitive discounting of companies which are yet to be profitable. That's not because they can't become profitable, it's just a reflection of their stage of development. They are perhaps, early, they are subscale. They are investing. They're investing in capex, R&D, etcetera. With a long-term hat on, that's the part of the market where we see the most potential for the returns to come from. We think there's about 20% or so, of the portfolio, that will crossover to be cashflow generative, earnings generative in that one-to-three-year view as these companies mature and as they execute. We think that's a wakeup call, frankly, for the stock market.

We touched on Nanopore-.

I was going to ask you. The portfolio is very skewed towards North America. About three-quarters of the assets there I was just seeing on the factsheet. I always find it encouraging when there's some UK companies in there. Oxford Nanopore, you added to the holding during the year. What's going on there? What's the positive story?

We've known this business for a good number of years now. [marker 0:20:00] Actually, the first private investment we did for the trust back in 2015. Listed in London, I think, 2021 and frankly, that's been-, as much as I'd like to champion the home market. It has been a challenge for them. The UK market isn't always the most receptive home for ambitious growth orientated businesses. I do have my frustrations with that. That said, I do find the Nanopore business fascinating. I think it is misunderstood, both by investors and by many of those in the sequencing community. So here is a technology that in real-time, can interrogate the universal code of life and it can deliver rapid biologically relevant answers.

It sees signals in DNA that other technologies miss. It can be used to understand genomes. See how dynamic those genomes are. It can answer specific questions and it gives, I think, incredibly fast actionable, clinically relevant data. That could be in the transplantation setting for organ matching. It could be around infection and epidemiology and I think in time, it'll be around cancer and oncology. So, we have the privilege, in terms of what we do, to see lots of profound technologies

and I must say, for me, Nanopore sits right up there with some of the most interesting ones. I guess it has had its challenges. It's been trying to commercialise that in a current sequencing opportunity that is, I think, somewhat static frankly and somewhat contained.

By that I mean it's primarily a research academic customer-based. It's obsessed with, I think, a narrow risk-averse understanding of genomes. It's not particularly growthy, frankly. You can almost see that in the growth profile of the gorilla in that area, which is Illumina. Breaking into that market structure, I think, has created some turbulence for Nanopore, but just the opportunity in sequencing for me. It's much more about moving away from this research setting into the clinic. Getting this technology close to patients, close to where the insight is most relevant. That's not about it being scientifically interesting, it's about a real-world relevance of this and with many diseases now having a clear link to genes and genetics and genetic regulation, I think the opportunity there is massive.

To do that, you need technologies deployable. You need low-cost sequencers. Ones that are designed for yielding answers, not just massive gigabases of data. That's for me, where the Nanopore technology excels. Look, it has been a difficult entry into markets for Nanopore. I do get that, but it hasn't escaped the gaze of the likes of BioMerieux, the multibillion-dollar French diagnostics business, who actually took almost a 7% stake in the business last year and talk about how this could transform aspects of infectious disease and treatment. Areas they know very, very well.

I must ask you about SpaceX. At nearly 10% of assets, it's your biggest holding. What are you looking for form the company this year? After all, any positive developments such as a flotation or an upwards revaluation could have a big positive impact on the trust and its shares.

Yes, it's our largest position in the trust at the moment. I'm sure your viewers are very familiar with the rocket launch side of SpaceX. Those super cool videos of rockets landing. I guess, you're probably less familiar with just how dominant SpaceX has become in that rocket launch market. How its hollowed out a really terrific position of being the lowest cost provider of putting cargo into orbit. With the next generation starship rocket coming along, it looks like they will further increase that lead. Perhaps into an unassailable position. This isn't just low-cost rocket launches for others. They are vertically integrating into that low Earth orbit satellite market with the Starlink technology.

So that's the always on, go anywhere, highspeed broadband connection that's allowed SpaceX, a genuine claim, to be the first global utility company. They've scaled that from a standing start just a few years ago, to have I think north of two million subscribers. That's what they've talked about towards the backend of last year and growing at a really interesting rate. New terminals coming on

off of faster and better speeds. I think there's huge options for how they evolve that Starlink business. That they've talked about how you can now use it to extend the roaming range for mobile phones. You can have laser linkages between these satellites. So, you can shuffle data faster than any other technology, all around the world.

That potentially does allow you to locate your datacentres in very low-cost locations. Having that always on, always connected thing is interesting from an Internet of Things and I think you'll start to see, probably, either private constellations for government or military use cases too. So terrific opportunity there. Potentially, tens of millions, if not hundreds of millions of users in time for this technology and new monetisation routes will come as this opens up. The starship comes on stream. Cargo costs could become lower again and I don't think it's hyperbole to think of SpaceX as a generation defining investment. So delighted to have it as the biggest position.

Explicitly, what we're looking for over the next year. Frankly, more of the same but maybe with this critical density, giving them both options in the rocket side and the satellite side. It's a well-capitalised business. Elon has mentioned how the Starlink business is already at a cashflow generative stage. Potentially, that does give them options around how they evolve the business side of SpaceX. There're no insights on us on the timing of that. Elon frankly, will do that when its good and ready and rightly so.

Is there any other theme that has surprised you over the last 12 months? Perhaps one that the market has not responded to.

Yes, I guess a theme that we've been increasingly aware of is, you're coming off the back of almost like a 20-year period where digital businesses and software businesses were almost the defining businesses of that time. They were the capital light, network effect high scaling businesses. Frankly, many industries are quite far down that route of digitisation and network effects and software adoption. I think it's pushing innovation and entrepreneurial actively down a different path. One which increasingly fuses hardware and software capabilities. It's one that's about making hardware devises, not just generating code. I think we've seen that in a number of our bigger holdings in the portfolio.

Arguably, our two most successful businesses were early adopters of this. You could argue Tesla, with its automation and self-driving. DexCom with the algos to decode the glucose signal from blood. Maybe if you think about some of our current holdings. Big holdings for us like Axon. The digital capabilities now embedded into the taser device and the body warn cameras use by police forces. Creating of digital files. Analysis of those files. Autogenerated transcripts, interrogation of

numberplates. Suggested actions, potentially, for police officers and building virtual training models. These are all things where you bundle hardware and software. Touched on SpaceX there, they're clearly a leader in that.

Again, I touched on Nanopore. They use very advanced software to decode the electrical signal as the DNA feeds through the Nanopore device. I think for me, it's more than just observations around companies doing this. I think increasingly, it's a combination of skills where businesses build their competitive advantage. The mastery of multiple domains is hard and it's less about that past 20 years of first mover advantage counting hugely and it's more about who's best. Who's really good at engineering? Who's really good at doing [unclear 0:28:.23]? Multiple domains and integrating hardware and software and it also opens up, I think, different monetisation routes. It's not that old hardware model that sells something once and be done with it. These are now recurring revenue opportunities and the hardware models, learning from the software industry and the whole rise of software as a service.

Are there any other developments on the horizon for the rest of the year that you're giving particular attention to?

Another big private company for us, might be worth touching on. Again, active in that hardware and software interface. A company called PsiQuantum. One of the leaders in quantum computing. One that we think has the most credibility at building a scalable workable quantum computer. I think what some of your listeners may be very familiar with, classic computing the transistors and frankly, some of the limitations around that. More the [unclear 0:29:21] reaching aspects of its limits. Again, when you now see some of these artificial intelligence algorithms, they almost max out in terms of the computational power that you can put towards them. I think quantum computing might be the next leap to really bust through some of these constraints.

So, computing no based around binary transistors, but cubits where you can hold multiple states. It's almost analogous to classic on-off light switches versus digital dimmer switches. That ability to have things in multiple states is more appropriate for when you want to do aspects of real-world scenario modelling. Hugely complex weather patterns. [marker 0:30:00] How propylene's fold. Building unbreakable encryption systems. Supporting algorithms that could go well beyond what conventional GPUs can do. Why PsiQuantum? There are several players in quantum computing, but they all tend to be obsessed with building the perfect cubit. Use a plethora of exotic materials and frankly, really extreme conditions to try and do that. PsiQuantum is unique, we think, and it starts with known scalable technologies.

Optics and light and photons. The way it controls them on an understandable silicon chip. In doing that, they get to build upon pre-existing scaling blocks. Understanding 50 years and cost efficiencies of the semiconductor industry and tweaking those things to make them quantum. We've been very impressed, frankly, with the progress so far. It's being championed by DARPO in the US. The US defence funding agency. They really recognise the importance of scalable error corrected quantum computing and the company talk about having one of these delivered within a five-year period.

Of the three things you've spoken about, tech innovation, operational performance, and the valuation opportunity, which do you think will have the greatest impact on long-term performance?

I guess the valuation correction over the past couple of years. That gap that's opened up in markets between smaller companies and [inaudible 0:31:31) companies. It's stark, frankly. When you combine that with what we think is the robust operational progress, we think that creates a very interesting start point. A strategy like this is all about capturing the opportunities presented by that long run innovation cycle. Human ingenuity. Breaking new technologies through and building businesses around them. Based on what we see, as I've alluded to, we think that's so alive. I think we've touched on many aspects of tht today. How that could change healthcare, communications, computing, automation and much of it's unaffected by the things that are influencing equity markets and frankly, been influencing the trust.

It's not driven by tighter funding environments. It's driven by structural shifts. New combinations of technologies and these things are underway. These things will deliver on a five-to-ten-year view. Many of the companies we see with the potential to really deliver change, they are the ones the market is shunning. That feels wrong. The market is reflexively punishing early-stage pre-profitable businesses, almost regardless of what the opportunity set is for those companies. That feels wrong and as a long-term growth orientated investor having done this for 15 years, it's quite weird to almost find what we do being treated in such a contrarian fashion.

People have held Edinburgh Worldwide for a good long time, say ten years or so. Witnessed the phenomenal increase in the share price and then have seen the opposite. So, there's a question really frequently being asked, "Do you see a substantial recovery in the share price in the medium-term, i.e., three to five years?"

Yes. Hopefully, I've hit upon aspects of that as we've gone through. I'd almost say in that near to medium-term, what has really hit the trust over the last couple of years is this inflationary shock and the interest rate environment and we invest in companies which are all about the generation of

future cashflows. The way people value businesses in the equity world are they apply a discount rate to those cashflows. In that interest rate environment, people have taken aggressive haircuts to the value of future cashflows of these companies. How much do you take that current environment and say, that will persist forever? For me, that feels harsh. [unclear 0:34:38] points around it being a very punitive environment for these types of companies.

It feels like many of the drivers of that inflation are exiting the arena and some of the elements that are still promoting inflation are arguably linked with higher interest rates. There is an element here, of central banks. They will be desperate to establish credibility, having been a little bit slow on the uptake and spotting that inflation. So that will come through and these things will wash out. That environment will shift. It's not just the valuing of these cashflows. I think the thing that we've seen is, there's almost this total cataclysmic falloff in how people think about businesses beyond the 18–24-month timeline. For me, if will be this normalisation around how people project out and they think about long-term businesses. So that's the near to medium-term. In that medium-term to long-term, I'd echo what I was saying around what we see coming down that innovation pipeline. It exists like it hasn't done before and that will be the big driver in the long-term. So hopefully, that answers aspects of that.

It certainly does. So, there's this huge macroeconomic headwind pressure on the holdings, but just to clarify. One viewer's asking, "Was there significant changes in the portfolio at the top of the market or before the recent decline?" Was a significant amount of new holdings added that changed the risk profile or is it all a result of this macroeconomic pressures that you've just described?

Detail on that will be in all the annual reports where we document things that we've done. What we've moved on from and what we've added. To keep it at a pretty high level, we are a low turnover strategy. We are not radically pivoting the trust based on a near-term view of markets. We own about 100 companies and the historical pattern has been between five to 15 new ideas a year. So yes, we did put some new ideas in, but it was certainly not out with that normal pace of idea generation and the big things that we use to fund that work were moving on from some of the companies that, for us, had delivered over that preceding decade. Tesla would probably be the biggest one that would resonate with people.

So, there's always an element of us recycling capital back into early ideas. That's where we think we have an analytical opportunity and frankly, at the moment, almost like a stock market opportunity because that's where people aren't paying attention. We did various bits of technical analysis that would look at our portfolio almost back in one year into COVID. Was there anything that we could

have radically done to reposition the portfolio? Stay true to what we do, but reposition the portfolio and the lessons there were not really. It's been this suppressive affect across multiple of our businesses, largely as a result of that interest rate environment.

Got a question about the board of the investment trust was involved with you, talking to you during that review. "What are you doing to restore the board's and shareholders' confidence?" You've touched on it already, but maybe say a bit more.

We have an annual strategy meeting with the board every year and we pose various topics for them. We explore how the trust has performed. Things that we could do. Thematic elements within the trust. The thing that we were keen to explore was around whether things that we were getting less than optimal in terms of holding sizes. Either at the top-end or the bottom-end of the portfolio. We did lots of analysis. It basically flagged that there was a challenge around holding things in the tail of the portfolio for a bit too long. Almost just consuming capital in an inefficient way. There was maybe this little bit of a signal in businesses that we'd done really well in and by that, I'm talking about, we'd made maybe two times, three times our money if this was getting to a bigger position in the trust.

Frankly there was probably a little bit of a feel-good factor around that because our hypothesis was working. There was maybe a signal around, some businesses, yes, they do kick on from that. They do become the Teslas the DexComs. There's also some that frankly, that's as good as it gets. It's differentiating between the really special and the good. We've tried to instigate processes into what we do that are better tuned to filter out those things.

Talking about the selling side, selling discipline, do you use stopping algorithms. "Does Douglas use any of these stopping algorithms to see stock in Edinburgh Worldwide or the open-end fund he manages?" He's just wondering do you use some kind of scientific [marker 0:40:00] basis to the way you sell stocks?

I think the gist of that question would be around stock loss mechanisms and almost like mechanical trigger points that would force an exit, just because the stock price is telling you you're getting it wrong.

Is that part of your approach?

It's not, no. We do track the performance of the companies, but I think if you overweight your process to taking cues just from stock prices, you fall into the trap of trying to beat the market, frankly. The market, as I've tried to hint going through this, it's riddled with inefficiencies, both analytically and time horizon related. It's horrendously inefficient and that inefficiency balloons out

massively when you come down the market-cap scale. So, I think to take your action cues around price signals is dangerous, frankly. Now, it can be a little bit of a prompt as to, okay, the market's telling us we're getting this wrong. Are we getting it wrong? Let's delve deeper into what the reasons for angst are, but linking direct actions to declines in prices, for me, feels very dangerous.

As I said earlier, there's a couple of questions around how Edinburgh Worldwide compares to some of the other investment trusts at Baillie Gifford. So specifically, we've got viewers asking, "How similar is Edinburgh Worldwide to Scottish Mortgage and also, to Keystone Positive Change?" What would your answer be?

I guess the clear differentiator for us is, we are much more active lower down the market-cap scale. So, for us, our typical idea would be around $500 million up to maybe two to three billion. That's the analytical sweet spot for where we put our ideas in. I'm less in touch with exactly where the market-cap limits are for those specific trusts that were mentioned. Generally, the majority of their ideas will be entered above those market-cap guidelines. They are global trusts. They're all global. They are all growth orientated. Keystone has the dual remit of the ESG entered into it as well. The actual idea overlap with Scottish Mortgage, at the moment, it's mostly on the private companies side and SpaceX would be the biggest one within that.

On the listed side, it's relatively low. I think we've seen this pattern across a lot of asset managers. That I think a lot of people have paid less attention to the small and mid-cap area in this more uncertain economic interest rate environment. It's been easy to a bit more dismissive, frankly, of early-stage businesses. I don't think that's just a Baillie Gifford effect. I think across the market, dedicated small-cap money has been largely ignored by other investors.

Talking of the private companies, we've got a question here from one viewer. She asks, "How do you identify private companies you invest in?"

That pure, where does the seed of the idea come from, it tends not to be that radically different from the listed side. It's being informed and interested around areas of change. Now, I guess there are quirks around the private company side. It can tend to be a little bit more inbound as to when particular companies are raising money. I think Baillie Gifford is well positioned to be on the radar list of interesting up and coming companies needing growth capital. We have a dedicated private companies' team in Baillie Gifford. We also have lots of investors like myself, that will traverse both worlds of mostly listed, but occasionally dabbling in private companies. A good idea is a good idea and we've got 100-plus investors across Baillie Gifford, all looking for interesting businesses. So, there's an internal network, an external network and various ideas get worked up accordingly.

Couple of questions on specific investment areas. "So, what are your suggestions or interest in generative AI?"

I touched on that a little bit in the context of the meeting. So, you are really in the early stages of a profound technological landscape shift here. I do get that. At the moment, the stock market is alive to that, but there are limited ways in which to play it, frankly. I touched on that with aspects of this Magnificent Seven, that the flood of money into businesses, which are just immediate beneficiaries of that. As I alluded to, in time it's how companies use this. How they adapt to it. We've seen that with CyberArk, frankly, which are businesses about privileged account management in the cybersecurity space. All of a sudden, you've entered this realm where computers can now impersonate people and launch hacking attacks in a way that feels incredibly credible to people that are on the receiving end of them.

So, companies are having to massively buildup their firewalls and protection to guard against that. Again, that's a second beneficiary of that, but there's a lot of companies—I suggested Appian was one that we're very interested in. Which is helping companies navigate this new world of AI because yes, it's a big topic in investment, it's a big topic in technology departments in big businesses, but most people in companies aren't technologists. They need to be shown how to use this, understand how to use this. Have it curated in a way that can actually solve problems relevant for them. That's where the business and the service opportunities, we think, will increasingly come.

Thanks, Douglas. Last question. "Do you see any merit in investing in carbon capture systems or carbon removal technology in general?"

I'm a little bit out of touch with exactly where that it. We have looked at a couple over the years. Largely on the private companies side. There's limited, to my knowledge, listed exposure to that. I think the initial take was yes, you might be able to technically do this. Can you do this in a way that is economically viable? In terms of the ideas that we've come up with as a team, we've seen more interesting opportunities and in fact, these would be nearer-term opportunities around battery technology and fuel cells. Yes, ultimately, carbon capture, if people manage to solve it and solve it in a way that can be done at scale and can be done economically, that would be hugely of interest and I would envisage very receptive to an investor community.

One to look out for, perhaps. I'm afraid that's all we've got time for, but thank you, Douglas, for your time and thank you so much for all your questions. I hope that what you've heard has proved helpful insight into Edinburgh Worldwide and some reassurance for its prospects going forward. If you'd like a further update, the trust is holding its annual general meeting at midday

on Tuesday the 5th of March. If you're a shareholder, you're welcome to attend or view proceedings remotely via a video link. In the meantime, thank you very much and goodbye.