Investor webinar: your questions answered

March 2024

Your capital is at risk. Past performance is not a guide to future returns. A Key Information Document can be found at scottishmortgage.com

00:00:09

Stewart Heggie (SH): Hello and thank you for dialling in to this live webinar. I'm Stewart Heggie and today I'm joined by the Scottish Mortgage managers Tom Slater and Lawrence Burns. The purpose of this webinar is simple, for Tom and Lawrence to answer your questions. It's due to last 45 minutes. At that point, if we still have questions coming in, we'll carry on and stop on the hour mark. If you do have a question, the Q&A function should now be live on your screens. Now, whilst those are coming in, we'll begin with some that have been submitted in advance.

Well, Tom and Lawrence, what a difference a year makes. Since we were sat here 12 months ago, the share price is up by over a third, about 50 per cent since its lows during the year. Many had doubts over the valuations of private companies in terms of them being too high and now some are suggesting that the valuations are too conservative. There are also fears over growth company prospects and now they're posting excellent operating results. Finally, we're answering questions on the board.

And now we have a bold announcement that the board will make at least a billion pounds available for buybacks over the next two years. Tom, we've had a few questions on this announcement, so that's where we should begin. Perhaps you could kick us off by sharing a little bit of the thinking behind that.

00:01:26

Tom Slater (TS): Yes, of course. So I think the starting point is that we have a longstanding commitment to use buybacks to keep the share price and the asset value of the trust as close together as we can under normal market conditions. But over the past two years, we've had some other calls on our capital.

So we've paid back more than £400 million worth of debt. That's because of the declines that you've seen in the value of some of our listed assets. We wanted to make sure that we retained a strong balance sheet. Then we've also supported some of our private companies in doing follow-on fundraisings in a more difficult, more capital-constrained environment.

So, while we were having to deploy capital into those areas, there's been less available for buybacks. The shares have moved to a much wider discount to our asset value than has been the case for some time.

So this has been a really active topic of discussion in the boardroom and we reached the point where we felt the balance sheet was in a very strong position. We had some capacity and headroom in our ability to invest in private companies. We feel very optimistic about the prospects for our companies, both public and private.

So we felt it had reached the point where we could make a significant commitment to buying back shares. We know a discount is not a good thing for shareholders and so we were in a position to do something about it in line with what we've done historically.

00:03:10

SH: Because it's been revealed in the press recently than Elliott Investors have been building a stake in the company and that has now reached about 5 per cent. What influence did that have on the actual buyback announcement, the decision to take it then?

TS: Yes. So we engage with all of our shareholders or significant shareholders on this topic. We've had constructive conversations with them among others. But the decision is the board's and the board has to make the decision in the best interests of all shareholders.

SH: And I suppose when it comes to Elliott, the one name that will stick out for a number of investment trust investors would be Alliance Trust. Do you think that's a replay of that situation?

00:03:58

TS: I think the only things really in common are the name Elliott Partners and an investment trust. The shares were sitting at a significant discount and, we think, a portfolio with attractive prospects. So of course that's going to attract investors looking to make a return for their clients.

But there's a significant degree of alignment. They were looking at the discount and thinking about, how does that discount close? We were looking at the discount and thinking about, how does that discount close? They're looking at the private portfolio and thinking it's underappreciated by the market. We're looking at it and thinking it's underappreciated by the market. So, as I say, those conversations have been really pretty constructive.

SH: Well, some shareholders clearly have wanted to see more buybacks whilst there's others that think that the money should be invested in companies. I think the point is that both of those are right and that balance is required. However, we have had a few questions coming in, asking, does this buyback mean that you have run out of ideas?

00:05:08

Lawrence Burns (LB): Perhaps I'll start on that. We definitely don't think that's the case. There's a few different ways of looking at it. The first would be, through this period we've continued to take new holdings. We've taken advantage of the market situation where we can as well.

So one of the examples we've talked about here has been, we took a small holding in a Korean ecommerce company. We'd admired it for a long time. We looked at it at the IPO. We struggled a bit then at that valuation to see how you could make multiples of upside.

Then we've come back to it a couple of years later, having continued to engage with the company, where they've grown very impressively, 20 per cent plus revenue growth year after year. They've gone from heavily loss-making to generating 1 to 2 billion of free cash flow. The shares are 60 per cent or 70 per cent cheaper than they were and we've taken advantage of that. So you've seen some of those new ideas still come through.

00:06:17

Then, I think if you bring it right up to where we are now, Tom and I had a meeting the other day and we were talking about new ideas. We had several that we were discussing very enthusiastically for the portfolio. I think for us, that number was higher than what we've seen in the past. So, rather than us being low on new ideas, actually it feels like we have more now than we have had over the last couple of years, if anything.

Then I think the final point I'd say is, we continue to look very seriously and deeply at some of the opportunities within AI. Now, not all of these are going to necessarily come with new business models immediately, but when you've seen changes in the computing paradigm in previous eras, desktop Internet, mobile Internet, and now with AI, each time they divert new business models.

I think that, over the long term, also gives us enthusiasm that we'll have a great set of companies and opportunities continuing to fill Scottish Mortgage for the many years ahead and today.

SH: Well, you've mentioned private companies. There's currently, I think, about a 26 per cent allocation to privates. I suppose one of the notable changes over the past couple of years compared to the preceding years has really just been the closure of the IPO market, particularly for late-stage growth businesses.

So, for Scottish Mortgage, we saw none in 2022. We only saw one last year in 2023. However, that market seems to be showing some signs of life again. Lawrence, what can you share with us on the dynamics at play in that market and the prospects for portfolio companies actually listing?

00:07:28

LB: I think it feels different than it has done over the last two years. As you rightly say, there haven't been a huge number of IPOs. We're now seeing IPOs come through, whether it's Reddit, whether it's Instacart, a number of them.

A few signals from our side. One, I woke up this morning for the first time in a while and saw that one of our private companies had filed to list in Hong Kong and were looking at doing that. So that's one example, but I think we're seeing more broader signals. We're getting more testing-the-water emails than we have in a very long time. That's companies reaching out and saying, we'd like to talk because we're thinking of IPOing.

I was traveling in Asia a few weeks ago and what was different was that this was a country trip where I had lots of companies that were again wanting to set up meetings because they were thinking of IPOing in the near term. So I think it feels like there's a very different market dynamic at play now. Whether that lasts, we'll see, but it feels very different from the last two years.

The final point I'd make is, if you look at our private companies, two-thirds of our exposure has come from the top ten companies. Those are large private companies. Nearly half by weight is generating cash. These are companies that, when the market conditions are right, are in a position to IPO.

So I think that gives us a lot of conviction as we look out over the next year or so where you've got companies in the private portfolio that are in a healthy place and you've got markets that seem to be more willing and tolerant of IPOs in this environment. That bodes well.

SH: You've got some private names in the portfolio that have increased quite significantly in value. Would you consider taking profits on any of those, perhaps via the secondary market?

00:09:04

TS: So the way that we look at these companies is, do they address a big opportunity? Is the likelihood of addressing that opportunity growing or shrinking? Is the opportunity itself growing or shrinking? So you start with that lens. Now, for a public company, there's very little friction to adding, reducing, selling. In private companies, there's a lot more friction, but that doesn't mean it's impossible.

So, first and foremost, we think of it as a company rather than a private company or a public company. Then you think about implementation. Now, the balance of answering those questions and the friction involved in transacting these companies means we haven't really done that in a significant way to date. But if we felt like a company was overvalued, that we could realise that value, then that's something we'd consider.

SH: Do you think these companies are conservatively valued?

00:10:16

TS: So I invest in them because I think they're conservatively valued. We've looked at these companies. We're excited about the opportunity.

SpaceX is our largest holding. I think there is... Take the launch market. They did 93 orbital launches last year. The market in total is about 30 launches if you go back a couple of years. So they've grown that market by a factor of three over the past couple of years. All of their competitors in the launch market have disappeared. It's growing rapidly and it's just about the only player in town.

At the same time, they've launched their satellite telecoms business. They announced at the end of December they had, I think, 2.3 million subscribers. That was up from a million subscribers one year ago, so growing really quickly. I think Elon Musk is on the record as saying it's now... That business is generating cash. It's really exciting.

So I look at these companies and I get excited about them and I think they're undervalued. That's why we've decided to invest in them. However, I don't value them. I don't turn up for work and say, this company is worth X. We have an independent team that uses an outside party to value these assets. I have no say in it whatsoever. The point of that process is to try to come up with our best estimate of the fair market value. We think it's really important that investors have no say in that. But I think there's huge potential there.

00:11:54

SH: We've had some questions on the amount that you actually have invested in privates. So there's one here saying, over the last couple of years you have had about 25 per cent to 30 per cent invested in private companies. Should we expect that allocation to continue or do you have an ideal allocation in mind?

TS: Shall I keep going? So that level is closer to the limit than we would want it to be and at times we've been over that limit, which means we can't deploy new capital into private companies. That's really a reflection of the declines in the value of our listed assets over the past two or three years. At the same time actually some of our private companies, our largest holdings, have been doing really well and raising capital at higher valuations.

But I think being close to that limit is actually really quite unhelpful from an operational point of view. I think if you looked at the period prior to the past two or three years, that would give you a better sense of… Around about 20 per cent to 25 per cent is the level that we've been at for probably five years prior to that.

SH: Yes. I want to just move on slightly from privates. We've had some questions on the Magnificent Seven stocks that have been driving returns, particularly for the US market. So in 2023 their combined return was about 80 per cent while the other 493 companies in the S&P 500 were pretty much flat. You have four of these stocks, NVIDIA, Meta, Tesla, and Amazon, which, combined, make up about 18 per cent of the portfolio.

00:13:28

So some shareholders have been in contact, asking, are these too expensive? One of them was, Tom, how much fuel do you think these stocks have left in the tank?

TS: Lawrence, why don't you start on that one and talk about fuel in the tank?

LB: I think the first thing we'd say is that we're quite wary of when the financial markets or the media group companies together as though they're identical, so the idea that the Magnificent Seven are one uniform block that are going to have similar outputs from here. So we'd really want to talk about them on their individual merits.

I think the companies we hold within that have been Amazon, NVIDIA, Tesla, and Meta. I think for each of those, when we discuss the upside scenarios, we see ways that we can still make quite a lot of money from here despite large absolute market caps. I think a lot of that has to do just with the power of technology and the sheer size and scale of the markets we're looking at.

Maybe if we just give one example around Tesla, if Tesla is able to make autonomy work, that is hugely valuable. They have the ability to leverage that technology as a software not just on their own fleet but on other companies' fleets, other cars' fleets. They have the ability to leverage that to go into other areas of AI like robotics. So you do get these potentials that, even at quite large scale, if some of these companies succeed, the outputs are still very worthwhile for shareholders. Tom, you might want to add some more examples.

00:14:54

TS: Yes. I think I totally agree with what you're saying. Don't think of these stocks as a group or having shared or common drivers. If you look at Tesla as a very longstanding holding, I think this year is a quieter year for them, but on the automotive business, as they've pushed towards the mass market, the number of units that you can sell goes up massively. At the same time, they're making great progress in their AI systems.

If you look at all the reviews of the latest vision of their full self-driving software, it's a massive leap forward. They're also finding really interesting adjacent areas to deploy this technology into in robots. Cars are really just robots on wheels. If you have the ability to process the environment around you, you can deploy it into other markets. Then, finally, stationary storage. So I feel like there's a lot to go for in that company.

I do think there is just this broader sense in which the early winners that we can make out from what's happening in AI are amongst these largest companies because they have the technical founders to really understand what's going on and they have the use cases to deploy the technology into. I think the market is, to some extent, coming to a conclusion that these are the companies that really benefit from some of those trends.

00:16:25

LB: But I do think one important point is that if the promise of AI holds true and it does half of what people are hoping it might be able to do, the impact of that in the long run is going to be broader than seven companies. Both in new business creation but also as AI providing really a toolset for a wide range of companies, particularly companies that are innovative, that are data-rich, that are technology-focused, the ability to use and leverage that toolkit to improve competitive position to improve market opportunities.

So I think, over time, we'd hope that some of that enthusiasm around AI, that has been quite narrowly expressed by the market, becomes broader. We hope we have companies more broadly also that benefit from that.

SH: We actually had a question specifically on artificial intelligence, saying, AI seems to be the buzz term in investment at the moment. What are you doing around AI and can you provide some tangible examples? So, maybe just thinking beyond the Magnificent Seven.

LB: You want me to start? So we've been trying to think about what AI means and could mean for a very long time. No one is going to get this exactly right, but it is somewhere we feel we should be spending a lot of our time and attention trying to understand. We've held NVIDIA in part for this reason going back to, I think, 2016.

00:17:41

I think there are different layers of the opportunity set for AI for SM. The first layer you could call the enablers. That's companies like NVIDIA making the chips that enable AI and make that possible. They have a 90 per cent market share or so in terms of chips that are being used to train generative AI. That's been phenomenal for them and their position.

Then you have the impact on the broader semiconductor market because GPU demand is growing rapidly and growing rapidly at scale and is increasing demand across the board. ASML has been a beneficiary there. It's lithography technology that enables companies to make the most advanced chips in the world. They're particularly helpful at the leading edge.

Then, if you go down to another layer, you have the cloud service providers that are buying the chips from NVIDIA and then making them up into the cloud to allow companies to use different AI. So you've got Amazon Web Services there and that's part of the enthusiasm behind Amazon. You have the enterprise software companies that we own like Snowflake that are also helping enterprise customers in this regard.

00:18:50

Then you have a much broader layer, and that alludes to what I was talking about before, where you get into companies that are using AI as part of their toolset. It's giving them better tools to do things better. For some companies it's really material, for some it's mildly beneficial, and there's a spectrum there. So Tesla is one where it could be hugely beneficial in the ability to accelerate what they're doing with robotics and autonomous. Then you have smaller examples. It could be Spotify, the ability to do a podcast in your voice but in any language in the world.

SH: Oh, dear.

LB: Translated through. So in future you could do the SM webinar in ten different languages in your voice. You have Ocado using it for robotics in warehouses. You have advertising companies using it to do better personalised advertising. There's a huge breadth of examples of where, across that portfolio, we see our companies leveraging AI.

Then the final one is the one I alluded to before, which is, we expect new business models over time to also come out of this.

TS: Yes. I just think there's... What business in what industry would not benefit from additional intelligence in its systems? I think another way of looking at it is, you can really conceptualise demand as infinite. What really matters is, what's the price? At what price can you supply that demand? Because that'll determine the size of the market.

00:20:16

SH: We've got some stock-specific questions. There was one that jumped out because it was on Ferrari and we don't often get asked about Ferrari. So it's, the trust holds Ferrari, which is a good company. What is the investment case on the stock rising to a multiple of its current value? What, if any, part does Lewis Hamilton signing have to play on its future success?

LB: So I think in terms of quality, Ferrari is a phenomenal company. Since its IPO, it has delivered about a ten-times return. It's been one of the biggest top contributors for SM. It offers us also exposure that's quite different.

What it's really about is, we see it as being a luxury company. This is a company that is delivering one of the world's most exclusive and iconic products and it is able to do that in a way that others cannot because it draws on a legacy of racing history going back not too far off a century, racing history and glory. To link that to the Lewis Hamilton point, the hope would be that Lewis Hamilton helps continue and extend that racing history and that glory that refills the heritage of the brand.

00:21:24

But it's also an aspirational icon that generations of people have dreamed of owning that symbol of success and wealth. What that means is, you have a very strong competitive position. You have a customer base, and we've seen it through this period, that is... It's entirely about supply. So Ferrari only make 14,000 or less than 14,000 cars a year and they're able to set what price they want really. You've seen them massively increase prices through this period and the customers have happily taken them.

What you also see is that their VIP customers... This, I think, really shows how exclusive these products are. If you want to own a limited-edition Ferrari, you usually have to go and buy multiple Ferraris before you get on the list to be a good-enough customer to get a limited-edition Ferrari.

So you've got customers that are price-insensitive. So, through this economic environment, it has grown rapidly. You've got strong operating margins. You have the ability to gradually over time increase the number of cars to give you that multiple of upside over a long time period because you're starting at 14,000. To put that into context, I think Porsche does 300,000 cars.

00:22:28

SH: Right. On some of the other stock-specific questions, there's one on... We've had a few on PDD coming through. So the FT recently raised concerns about transparency, accounting practices, and corporate governance at PDD. This is a large holding for Scottish Mortgage. What is your assessment of the situation?

TS: I think Lawrence should keep going. You can tell how influential Lawrence has become at Scottish Mortgage where none of us are wearing ties at this event. So I think we should just let him run.

LB: So we've been through the FT article about PDD. I don't think there was anything there that was even new or worrying to us. When you look through some of the arguments, I think they're things like, they're listed in the US, not Hong Kong. So have they courted the type of investors that can understand the business? I think that, for example, is one of the arguments I think is very unfair.

00:23:32

When you look at who is one of the PDD's largest shareholders, it happens to be Tencent. Tencent have the best track record there is of investing in Chinese consumer Internet, being a Chinese consumer Internet company themselves. They're on the board. They've helped PDD scale its business through being a customer acquisition tool.

Tom and I were in China in May and we had breakfast with a Tencent executive and he spoke absolutely glowingly about the execution capabilities of management. So I think the idea that they don't have investors that understand them is a bit unfair.

I think if you go through some of the other ones, it was, competitors aren't feeling the impact. One of the reasons we sold Alibaba was because it was very much feeling the impact on the ecommerce side both with PDD and ByteDance. If you look at some of the initiatives launched by Alibaba and JD, they've tried to counteract the growth of PDD. Because actually most of the market growth is going to PDD and ByteDance at this point in China.

Then, globally, when we've looked at Temu, we've spoken to ecommerce companies around the world about how they're dealing with Temu and what they're seeing in the market. We've used a third-party provider of data that has allowed us to understand how fast it's growing because it's not broken out within the accounts. So all of these are points of triangulation that has given us some comfort around them.

00:24:54

I think we would have to accept that PDD is an unconventional company. That's not always a bad thing. Tesla is an unconventional company. Apple under Steve Jobs was a very unconventional company. So there are things there that we have to monitor and be careful of, but unconventionality alone doesn't lead to it being a bad investment outcome. For us, it has been one of the top contributors. It is growing its revenues 126 per cent year on year, operating profit 140 per cent year on year.

We do think that it's one of our riskier holdings in the sense of geopolitical risk and Chinese domestic regulatory risk. The way we're trying to deal with that is to just be a little bit more cautious about the holding size and how we deal with that over time. So I think it is one of the companies we see as having the highest risk profile. We're aware of what's been in the FT. Some of those are points that we've raised with the company in the past, but overall this is a company that we think is making tremendous operational progress.

SH: Lawrence, I'll give you a rest from being first responder. We've got some questions coming in on the back of the initial chat on the buyback. So it's, Tom, how will the buyback be financed and have you begun buying back?

TS: So, yes, we have begun buying back. We started... Well, I guess the first thing to say is, we've been buying back for...

00:26:22

SH: Forever, right?

TS: Forever. The difference is the quantum. So it's not that we go from not buying back to buying back. It's just that we're going to allocate more capital and we have indeed been allocating more capital ever since the announcement. Funding... So in the first instance it comes from cash and from sales of listed equities. We'll see over the course of time if that remains the principal source of cash, but it's selling assets.

Again, what do you want to use your capital for? As Lawrence says, we've got lots of ideas, lots of things we want to buy, but we also don't want the value of shareholders' assets sitting at a significant discount to what they're really worth. So it's just getting the balance between those things right.

SH: There's one last question on Elliott. Given that they are activist investors, are you expecting them to try and force you to take certain actions?

TS: As I said in the earlier question, we've had constructive conversations with them. I think there are significant areas of alignment. I think the question would be better directed at them in terms of what they might or might not want to do. As I say, the conversations so far have been pretty well aligned.

SH: We're heading back to China and the United States. So ByteDance has been in the press a lot recently or, more specifically, TikTok in the United States. How do you see this situation developing?

00:28:11

LB: I think trying to guess the outcomes of Congress and US politics is very difficult. I don't think we can give an answer of where that goes in terms of... One of the debates is, will ByteDance be forced to sell its US TikTok business?

I think in some ways to show that unpredictability, when you went back a few years ago, one of the main persons or political persons in the US pushing for this was Donald Trump. He has now done a 180-degree turn and is now in support of allowing ByteDance to keep TikTok in the US as I understand it. So that in some ways shows how difficult it is to predict US political outcomes.

But if you take a step back of why we own ByteDance and why we're comfortable owning it despite that unpredictability, if you Google ByteDance to try and see what's been talked about in the press in terms of their revenue numbers... And I take them with a pinch of salt, but there are numbers that are publicly available there. I think in the third quarter of last year they had revenue of $29 billion. That was growing 40 per cent year on year.

00:29:15

You compare that to Meta, which is also doing really well, but it has revenue of about, I think, $30 billion. Meta is valued at $1.2 trillion. ByteDance we are valuing at $248 billion. So that gives you some idea of why we think this is such an extraordinary opportunity with ByteDance.

Then you go, well, isn't that just because you might lose the US business? But if you go through the same media outlets, the media outlets would claim that in the second quarter about 5.8 billion of revenue came from outside of China, not just the US but outside of China. So what that would seem to be saying is that the majority of the business today is being generated from China and the majority of the value.

Now, I think there's a great opportunity in the US and if they were unable to hold that, you'd lose a bit of that opportunity. But we think a lot of the valuation can actually be ascribed not just to even outside of the US but effectively to ByteDance, or Douyin as it's called in China, where they've been really successful at monetising, advertising for a lot longer, through local services, and through ecommerce as I mentioned earlier.

So hopefully those points give a bit of feel. We don't know what the US political outcome is, but we think either way ByteDance from here is potentially a very good investment.

00:30:32

SH: ByteDance is obviously one of your largest private company holdings. There's a question in here. Can you comment on the dependence of long-term returns coming from large private companies successfully IPOing? Do you actively encourage companies to IPO?

TS: So I think what is important about companies IPOing from a narrow Scottish Mortgage perspective is that it's a clear pricing event, that it gives people comfort on the value of these things in our book. Hopefully, and I believe, it's going to realise a lot of latent value that sits in our portfolio. But the starting point for us is, what's best for the company, not, what's best for Scottish Mortgage in the short term? Because we think what's best for the company will ultimately be best for Scottish Mortgage.

Now, there reaches a certain point in a company's lifecycle where its scale, its need to reward its employees, etc.... I think it just makes more sense for it to be a public company. But equally you don't want to push companies into public markets prematurely because the very short-term mindset that dominates Wall Street can make that a pretty difficult place for companies to be. Indeed, through 2020-21, there were a number of our companies that went public that... We told them, we don't think you should be doing this at your stage in the company's development.

00:32:14

But you go back to what we're trying to invest in these companies. We can handle the technicalities of whether they're private or public, but those are just technicalities. Back to, is it a company with an attractive and growing opportunity and is there the chance that they can capitalise on that growing or shrinking? That really determines everything for us.

SH: Shareholders obviously cannot see the underlying financials of private companies, so we have a question here. Do you track the underlying fundamentals of progress for privates such as EBITDA growth and can you comment on that?

TS: Yes. So we do... There's this tension between respecting a company's right to privacy as a private company and trying to be as transparent with shareholders as we can be. I think, Lawrence, you touched on the point before that half of that top ten set of companies are profitable or cash-generative. That's a significant surge in cash flow from the private portfolio versus 12 or 18 months ago.

The reason that's happening is because companies are adapting to this different world that we find ourselves in. Interest rates are no longer zero. They're five. The IPO market has been closed. It's not a source of new capital. There's been very limited activity in private markets.

00:33:46

So companies are looking at this and saying, right, I need to be able to fund my own operations. Whereas I could rely on the market before for funding expansionary projects, today I need to finance them from the cash flow of my own business. So you've seen this surge in cash flow, improvement in EBITDA, at the same time as we've continued to see very strong growth in the top line of these companies.

LB: If I could just on the data point, in general we tend to get more granular data on the companies we hold privately than we have available publicly on the listed ones because they can share data with you. They're not sharing it to the world. So you get access to a data room and that has far more granularity than you'd actually get from a company's annual report. So, in most instances, not all but most, you actually end up with more datapoints rather than less.

SH: I vaguely remember... Was it Thumbtack? I vaguely remember you said you received something from them and it said, well, this is what's going right and this is what's going wrong, which you never see from a public company.

TS: Yes. That's right. It's just that. I think there is such pressure on public companies to spin everything as a positive. Private companies don't have that dynamic at all.

00:34:59

SH: Tom, you mentioned discount rates and what the underlying companies are doing, but there's a question here. What are the biggest lessons that you've learnt over the past three years, specifically the potential volatility of discount rates and the effects on current company valuations?

TS: Yes. So I think any investor that isn't constantly trying to evaluate what they've experienced and trying to improve is on the wrong track. So we've had endless conversations about what lessons we can take from what's happened over the past two or three years.

I think that the point about discount rates is, the value of any company is the present value of the cash flows that it will earn in the future. If you're discounting those back to today at zero, then that gives you a very different outcome than if you're discounting them back at 5 per cent because those cash flows in future become less valuable.

The challenge for us is that when we invest in very high-growth companies, actually a very significant proportion of their value lies quite a long way into the future. That's when the cash flows generation will come. But that's also a really intrinsic part of what we do.

We're really clear about what we're trying to do. We're trying to invest in the world's greatest growth companies. So when you go through a period of unexpected rate rises, a completely seismic shift in the interest rate regime, then we're clearly vulnerable to that. It's an intrinsic component of what we do.

00:36:52

But maybe onto the point specifically about lessons from a fundamental company analysis point of view, I'll pull one out for you. The way we think about things is, where is this company going to be five years from now? What happens if things go right? How good could it be?

But I think one question we've put a bit more emphasis on is, what about today's business? Because you have to encounter the dramatically shifting landscape that we've faced over the past two or three years with today's business, not where you might be in five years' time. So I think in our company analysis it has led us to focus more on resilience and robustness today alongside that imagining what the future company can be.

I think the other interesting one for me is, when you looked at opportunities two or three years ago… Share prices have moved quite a long way. For companies that had predictable, steadily growing profits, you could look at them and say, I think this company has become a lot more expensive because the share price has gone up a long way. Whereas for actually companies where it was much more about potential than it was today's profitability, you could look at it and say, well, actually, if it does X, then maybe you can justify the rise in share price.

00:38:10

So I think it made those far-out growth companies look more attractive relative to their immediate cash-generative peers. So I think that's another lesson in terms of at what point in the rate cycle you would consider those different types of growth, the Ferraris versus the Teslas.

SH: This was slightly in connection with that. So it says, over the last few years… Sorry. Has the last few years' experience made you want to have less debt for the trust itself?

TS: So if we look at what we're trying to do with debt, we think these companies are going to generate attractive returns. One of the unique advantages of the investment trust structure is that we can deploy modest gearing to enhance that return. Now, obviously it enhances the return in whichever direction. So when the markets are going up, it boosts the returns. When the markets are going down, it boosts the negative return.

I think we've experienced the negative side of that equation over the past couple of years, but that doesn't put me off from believing that actually over the long run these companies are going to create value, over the long run markets go up, and actually deploying modest gearing. We've very proactively managed that through this cycle to make sure it doesn't become anything more than modest gearing. But, no, no change in view there.

00:39:40

SH: Lawrence, you were talking about a trip to India, a recent board meeting, and there's a few questions coming on India. So I'll just take one of them. There seems to be very limited Indian exposure within the trust. Yet it has a high-growth economy that is increasingly tech-driven with a huge population. How does the team view India as an investment landscape?

LB: I think it's an investment landscape we should naturally be very interested in. It's a large economy. It's dynamic. It's growing. That was the underlying rationale for visiting it just a few weeks ago. Currently, in terms of direct exposure, Scottish Mortgage has a small holding in HDFC Bank, which gives us the growing financialisation exposure to India.

Part of that trip was trying to find a broader range of growth companies. I think we're going to keep trying to do that. I think two of the friction points have been, one, finding the management team and the people that we feel very comfortable backing over the long term with the right outlier-type businesses. Two has been that unless you have that kind of outlier ability, at the moment in India you're paying very high valuations for businesses that aren't necessarily growing that fast. So that's one thing that we're dealing with as we look through that landscape.

00:40:57

Then I think one of the ironies in some ways of the trip, and I messaged Tom in the evening about this, was that one of the more interesting presentations I heard was actually from, I think, Meta's head of India about the huge opportunity actually for India for Meta in terms of digitising. Actually it was one of their most attractive markets for various different reasons and the ability to deploy AI to improve what they were doing.

So it's also not the case that some of our larger tech companies also aren't benefiting from the scale and size of the opportunity in India, but we're going to keep trying very hard to find the right underlying Indian opportunities as well. Because it would be really shocking to me if, over the next few years, there weren't some that would emerge.

SH: I've got a question here on Moderna. The share price has fallen 75 per cent from its peak in 2021. What do you see as the catalyst for this turning around?

TS: So Moderna became a household name with its COVID vaccine. I think one of the biggest challenges for them since 2021 has been around, what's the level of vaccination that we're going to see against COVID on an ongoing basis? Certainly last year, last season, it has turned out to be a lower level than people expected.

00:42:15

Now, this actually isn't rational. If you look at vaccination levels for COVID versus flu, I think it's about one-third. Does that sound about right? Yes. About one-third of the population that gets flu vaccines actually ends up getting a COVID vaccine. But actually the death rate for people infected with COVID is and remains higher than for flu.

So this isn't necessarily the rational position. I think that rational position is partly impacted by vaccine fatigue after what we've all gone through over the past few years. I think it's partly because the issue of vaccination has become politicised, particularly in the US.

So a lot of what has driven the share price has been around that COVID franchise. That's not what gets us excited about Moderna. It's that what has happened with COVID has validated the platform and actually that you can then use this technology to go after… Whether it's other respiratory diseases like flu, like RSV, in a more precise, targeted way, where you can include multiple vaccines in one shot.

00:43:30

Whether it's to go after latent viruses, so this whole host of viruses to which we don't have vaccines that people get infections to and they stay in the system and cause lots of complications later in life. Or whether that's in cancer, where you can use these vaccines to help the immune system do what it should have done naturally and identify the cancerous cells.

So I think as you start to get the results of the clinical trials in all of these different areas, I think that's what changes sentiment around the Moderna stock price. It may be worth flagging that Stéphane Bancel, the CEO of Moderna, was on our Invest in Progress podcast, which you can hear… Shareholders can hear directly from him on how he views his prospects.

SH: Very good, Tom.

LB: You don't need AI to always do advertising. Sometimes a human can do it.

SH: We've had some questions on the back of some of the comments around Tesla. So the thoughts on Aurora and its autonomous driving business versus what Tesla is doing?

TS: I'll take that. I'm really excited about Aurora. It is an autonomous trucking business. I think that the trucking use case is quite different. So it's mostly freeway miles, which in some ways are a lot simple than trying to navigate city streets.

00:45:03

On the other hand, you have a much heavier, much larger vehicle, so there's even less tolerance, if that were possible, for any errors in driving trucks than there is in passenger vehicles. But also there are aspects about it that are easier. As passengers, we're very sensitive to if a car isn't going fast enough, if it's more cautious, whereas actually a load on the back of a truck doesn't care about that sort of thing.

So, anyway, I think what Aurora is... Again, it's on the podcast. You can hear from founder Chris Urmson. But this is someone who's been in the industry since it started. He was at Carnegie Mellon University and then at Google and their Waymo subsidiary.

What I think his or Aurora's superpower is is their ability to partner and bring other people with them, whether that's with the truck manufacturers, whether it's with the tier-one suppliers, the supplier of equipment, people like Continental who are doing that for them, or it's the shippers, and actually bring this ecosystem towards an autonomous future.

00:46:21

So they're in the late stages of validating that technology. I think at the end of this year, start of next year, these things are going to be on the road, doing commercial miles. Then actually the value of the road transport business in the US is actually really quite concentrated on a relatively small number of shipping lanes. So actually you don't have to have a nationwide rollout for this to be a huge business.

SH: Certainly the podcast on it I found hugely interesting. I never actually thought I'd get excited about trucking, but I think I was. We've had a question on Gingko here. What is the opinion of Gingko, which has been held for a very long time?

LB: You want that one?

TS: Sure. So Gingko is a synthetic biology company. So what that means is, they're looking at using or optimising biological processes for producing chemicals or other products. The challenge for them is around demand basically and potential customers understanding what they're capable of, what you can actually do with these products.

So what you've got to do is educate the market and actually grow that demand. Because as you scale, you can get much more efficient and you can produce these things much more cheaply. You get better in a similar way to manufacturing semiconductors with scale.

00:48:01

So that business just continues to work away at stimulating demand. It gets better each year in terms of its systems and services. It's had a tough time as a public market company because a lot of these projects don't conform to a typical P&L model. You maybe get some payment for services, but often you get a royalty downstream once the product is produced. So your revenues from a piece of work might lie sometime into the future.

I think the market has really struggled to appreciate that as a business model. So, back to the topic we had earlier of maybe companies that came to market too early in their lifecycle. But the potential of the technology remains undimmed.

LB: And they did use the markets to raise quite a lot of capital as well, which...

TS: Yes. That's a good point. In a time where others have struggled, that fortress of a balance sheet has been really important for them.

SH: Lawrence, perhaps one for you. Any comments on ASML given the recent move in the share price?

00:49:09

LB: It's been pleasing to see. I think a lot of it links back to what I was saying earlier. I think one thing you've noticed this year is that the increasing demand for GPUs at scale are becoming such a material part of the overall chip market that it's starting to move some of the broader supply chain.

ASML, I think, has been a beneficiary of that because where ASML are strongest and where they have a monopoly are on the leading-edge lithography devices you need to produce leading-edge chips. So if there's increasing demand at the leading edge, that benefits them. They've done very well there.

I think we had this ongoing debate, which is healthy, of, going forward, what is lithography's right share of the semiconductor capex? We'll keep debating that and thinking about the holding size, but we do see them as a clear beneficiary both of the general expansion in compute and also within AI.

SH: I'm aware of time. We're now at 51 minutes. So we'll maybe take three more questions. So this is a question to each manager. What is the single most exciting stock in the portfolio for the next five years?

TS: You can go first.

LB: This goes back to the many ideas, choosing which of your children you prioritise. I'd do a slightly more general one and go... I found it interesting that over the last 18 or 24 months we've had, understandably, a lot of questions about our private companies. But I think if you actually look at the top ten private companies and the data we've released on them, I think far from being the Achilles heel, they're closer to being Scottish Mortgage's secret weapon.

00:50:51

These are companies that are doing incredibly well. They're growing strongly. They're showing either cash generation or material improvements in cash generation. And actually they're still early in their growth potential of where they could get to from today. So I think those top ten private companies in many ways would be some of the ones I'd be keenest on in terms of what they could do for shareholders over the next five years or so.

TS: Yes. I think just picking… I would pick two. I think in terms of impact, SpaceX over the next five years… It's astonishing what they're achieving with Starship. With the test that they did a week or two ago, they demonstrated they could move fuel in space. They could go and park one of these rockets up there and now refuel it in space, which hasn't been done before.

Then you could literally send something the size of a skyscraper to the moon, land it on the moon, and then fly it back to Earth. The impact of that on what humankind is capable of is just astonishing. So I think the impact they're going to have over that time period is going to be enormous.

00:52:04

On a more mundane level, a stock in the market to be excited about, Meituan, local services business in China. It's just about entirely Chinese. There's no geopolitical issues there. It's continued to consistently churn out 20 per cent growth in a pretty tough economic environment in China. It's very lowly valued.

It's made some very significant investments in new opportunities over the past two or three years. I think we've reached the point where either they'll really crystallise some value from those investments or they'll start to scale back the pace of that investment, which will allow their profitability to grow really strongly.

So, a tremendous management team, a really thoughtful leader in Xing Wang, who has been there, really driven, really aligned with shareholders. I think that's really exciting on a five-year view from a stock price perspective.

SH: Good. Well, someone's looking for conviction from you both in the portfolio. Why do you remain so confident in your portfolio, its value, and the performance?

LB: There's a multitude of reasons at the individual level, but if you wanted to do a holistic one, it would be, I think we've been in the fortuitous position to back a number of truly extraordinary individuals.

One of them is Wang Xing that Tom just mentioned, but there's a lot more that are motivated to build a business and make an impact over the very long term and that face huge opportunity sets, that are now being given a new toolset with AI to improve what they do at a rate that we would have thought impossible five or ten years ago.

00:53:48

We're continuing to see technological progress happening both within our companies and outside them that is giving us that conviction that actually this still very much has the potential to be a great era for growth investing.

TS: Yes. I would agree with that. We've been through a pretty volatile period as Scottish Mortgage shareholders, the extreme positive returns of 2020 and then the more difficult period since then. But actually, if you just park that for a minute and actually look at the progress in the companies, they've continued to grow strongly.

I think you've seen three headwinds. One has been this valuation compression. We've talked a bit about discount rates, about the near-term multiples coming down. We've seen growth slow. Now, it still remains at a pretty decent clip, but it's slower than it was. You've seen estimates for earnings come down. I think all of those headwinds that we faced are feeling more like they're going to be tailwinds going forward.

00:54:58

But the underlying progress of the companies in these really exciting areas has remained pretty consistent throughout. Yes, they've had to rebalance. Yes, they've had to adapt to a different financial environment. But the underlying progress has absolutely been there. So I think that for me is the north star. That's why we look at these companies and remain really excited about it.

SH: Well, as a last question… I'm going to put it in here because I think this is now going to be four webinars in a row where you've been asked exactly the same question, because people seem to be interested in your personal finances. Have the managers increased their personal stakes in Scottish Mortgage?

TS: Yes.

LB: Yes.

SH: Well, thank you both. That's been really interesting. That's us now out of time. This session has been recorded and will be available on the website soon with a transcript. Before we go, I'd like to remind you that the best way to keep up to date on Scottish Mortgage is by signing up to our emails. You can do so by visiting the website scottishmortgage.com.

Finally, as you've already heard, if you'd like to hear more about our companies, the second series of our podcast, Invest in Progress, is live. Please feel free to subscribe and listen wherever you get your podcasts and give us feedback. Thank you very much for joining us and for your ongoing support.

00:56:16

Annual Past Performance To 31 December each year (net%)

	2019	2020	2021	2022	2023
Scottish Mortgage Investment Trust	24.8	110.5	10.5	-45.7	12.5

Source: Morningstar, share price, total return, sterling.
Past performance is not a guide to future returns.

Risk factors

The trust invests in overseas securities. Changes in the rates of exchange may also cause the value of your investment (and any income it may pay) to go down or up.

Unlisted investments such as private companies, in which the Trust has a significant investment, can increase risk. These assets may be more difficult to sell, so changes in their prices may be greater.

The trust invests in emerging markets, which includes China, where difficulties in dealing, settlement and custody could arise, resulting in a negative impact on the value of your investment.

The trust can borrow money to make further investments (sometimes known as "gearing" or "leverage"). The risk is that when this money is repaid by the trust, the value of the investments may not be enough to cover the borrowing and interest costs, and the trust will make a loss. If the trust's investments fall in value, any invested borrowings will increase the amount of this loss.

The trust can buy back its own shares. The risks from borrowing, referred to above, are increased when a trust buys back its own shares.

The trust charges 100 per cent of the investment management fee and 100 per cent of borrowing costs to capital which reduces the capital value.

EBITDA, or earnings before interest, taxes, depreciation, and amortization, is an alternate measure of profitability to net income.

Important information

This communication was produced and approved at the time stated and may not have been updated subsequently. It represents views held at the time of production and may not reflect current thinking.

This content does not constitute, and is not subject to the protections afforded to, independent research. Baillie Gifford and its staff may have dealt in the investments concerned. The views expressed are not statements of fact and should not be considered as advice or a recommendation to buy, sell or hold a particular investment.

SCOTTISH MORTGAGE INVESTMENT TRUST

Baillie Gifford & Co and Baillie Gifford & Co Limited are authorised and regulated by the Financial Conduct Authority (FCA). The investment trusts managed by Baillie Gifford & Co Limited are listed on the London Stock Exchange and are not authorised or regulated by the FCA.

A Key Information Document is available by visiting our Documents page at scottishmortgage.com

Legal notice

London Stock Exchange Group plc and its group undertakings (collectively, the "LSE Group"). © LSE Group 2019. FTSE Russell is a trading name of certain of the LSE Group companies. "FTSE®" and "Russell®" are trade marks of the relevant LSE Group companies and are used by any other LSE Group company under license. "TMX®" is a trade mark of TSX, Inc. and used by the LSE Group under license. All rights in the FTSE Russell indexes or data vest in the relevant LSE Group company which owns the index or the data. Neither LSE Group nor its licensors accept any liability for any errors or omissions in the indexes or data and no party may rely on any indexes or data contained in this communication. No further distribution of data from the LSE Group is permitted without the relevant LSE Group company's express written consent. The LSE Group does not promote, sponsor or endorse the content of this communication.

Managed by
Baillie Gifford™