

Disruption Week 2024

An infrastructure renaissance

November 2024

Watch this Disruption Week conversation to find out about the firms preventing flooding, repairing roads, upgrading the power grid and keeping datacentres cool.

Your capital is at risk.

Leo Kelion (LK): Welcome to the first of our webinars, on revitalising the US's infrastructure. I'm Leo Kelion, editor and host of Baillie Gifford's *Short Briefings* podcast.

In September 2017, winds of over 100 miles per hour and torrential rain lashed Puerto Rico, not once but twice. Hurricanes Irma and Maria ripped walls off buildings, flooded neighbourhoods and cut three million people's electricity supply. It was the largest blackout in US history, and the decrepit state of the island's power grid prior to the storms magnified the impact.

Utility poles were rotten, connections corroded, and trees near the cabling untrimmed. It took nearly a year to get everyone reconnected. Puerto Rico highlights where chronic underinvestment leads at a time when the weather's becoming wilder. But as you're about to hear from investment manager Michael Taylor, the US's plan to spend over \$2tn on energy, transportation and broadband infrastructure should create a once-in-a-generation growth opportunity.

Let's begin Disruption Week.

Hello, and welcome. This webinar is about 45 minutes, and we'll take questions from you, the audience, during the last 15. We'd love to hear what you want to know, so please use the 'Ask a Question' tab on your screen to send your requests. Michael, thanks for joining me. Great to have you with us.

Michael Taylor (MT): Morning, Leo.

LK: Infrastructure probably isn't the first thing that comes to mind when our audience thinks about growth. So, can you tell me why you're excited about finding exceptional companies in this sector?

MT: I think that's a fair observation. If you look at the history of a number of these businesses, they haven't really grown. And what's more than that, they don't even do anything that's particularly exciting. When we're talking about infrastructure businesses, we're talking about companies that mine gravel or sell telegraph poles or install heating and ventilation systems. But I think the future here is not well represented by the past. These companies are going to become exceptional growth businesses because they confront an exceptional problem.

What do I mean by that? Well, US infrastructure is in an appalling state, in my view. And we've got some external verification for that statement. So, the US Society of Civil Engineers, which looks at the problems of infrastructure in quite a granular way, brands US infrastructure a 'C-', and that rates roads, it rates water systems, it rates the grid, and so on. And so, there is an enormous problem here. And I've got a few facts, actually, to bring it to life.

A quarter of bridges in America are structurally deficient or functionally obsolete. Fibre broadband penetration is lower than Colombia. My personal favourite here, a good proportion of water piping in the northeast is made of lead or wood. And up to half of all America's clean water is lost to leaks each year.

So, this is an absolutely enormous problem. And in fact, that Society of Civil Engineers puts a number on it. They suggest that the required investment to get up to speed here is several trillion dollars. The US has already signed acts into being worth more than \$2tn. And I think that gives us a scale of what is required here. It's an absolutely enormous problem. So, these boring companies with boring histories are about to look, in my view, a lot more exciting.

LK: You say there's an enormous problem. Your focus as an investor is the US. Is the opportunity then that much greater to invest in infrastructure there than elsewhere?

MT: The problem is particularly acute in the US, but it is echoed elsewhere in the world, particularly in the Western world. So, viewers in the UK will be familiar with the difficulties the United Kingdom has in doing any infrastructure problem, getting the planning, finding the funding. The situation's not quite as bad in Europe, but there are echoes. It is notable, however, that in certain parts of the world they have no problem in finding the money and getting projects off the ground. So China, notably, has invested enormous amounts in infrastructure.

But as you mentioned, Leo, my specialism is the US, and I think it's particularly acute there because infrastructure is in a poorer state, but also because there are other linked themes going on. So, the world may be deglobalising. In a deglobalising world, America wants to bring manufacturing back onshore. That's great. But to do that successfully, you need to have the infrastructure to support it, the grid to supply the power, the roads and ports to move the traded goods, and so on. So, yes, a problem echoed in a number of different parts of the world, but particularly acute in the United States.

LK: President-elect Trump, of course, comes back to power in January. Do you need to build in a risk that he scales back some of the infrastructure planned spending that President Biden signed into law?

MT: Yes. So, who knows what President-elect Trump will choose to do. And I think it's a fair observation that a number of these acts which have brought that \$2tn-plus into being are partisan acts, the Inflation Reduction Act, for example. However, what gives me some comfort is that while they're partisan acts, I think the question of infrastructure and the need to renew it is a bipartisan issue. And that is because the flaws, the faults, really affect Americans' day-to-day lives.

So, the average American spends 38 hours a year stuck in traffic, commuting to work, and that number is going up. A structurally deficient bridge that collapsed is of course a terrible risk to health and safety as well. So, the faults and flaws of US infrastructure are having meaningful impact on the lives of day-to-day Americans. And I think that makes it a bipartisan issue.

There are a couple of further points I'd like to make. The second one is it's not just a question of, oh, it's taking too long to get to work, or the grid is not as reliable. It's becoming a question of national security. So, as America reshores things like semiconductor manufacturing, it does that because it wants security within its own borders. To have the capability to produce something like a semiconductor, you do need reliable power sources. Semiconductor manufacturing takes a lot of water, so that system needs to work well. So, getting this right works on a national security level, too.

The final part of the issue is it's probably fair to say that Donald Trump is not as supportive of issues like electric vehicles as President Biden was, but a lot of central influence for the infrastructure world is done at a state level, not a federal level. So, if California or New York want to make investments in the renewable energy space, say, they can continue to do that regardless of what President-elect Trump chooses to do.

LK: This sounds like a big opportunity. Why do you think the markets currently underappreciate the sector then?

MT: I think it goes back to the question of the boring histories of these businesses. Part of the reason US infrastructure is in such a bad state is that maintenance spend has been cut. And a number of my businesses live off maintenance spend. So, as that dwindles or is stagnant, these businesses haven't experienced growth. And the market will tend to look back at that dull history and use it to extrapolate forward. What we are able to do as long-term stock pickers is say, okay, there's a big issue here. We think there are emerging megatrends, and we have the patience and the time horizon to wait for that to come through.

LK: And the other factor is wild weather, isn't it? I gave the historic example of Puerto Rico at the start, and it's not that we're necessarily seeing more storms, but we are seeing more intense storms, more category fours and fives. How does that play into your thinking?

MT: Exactly. So, we certainly are seeing both wetter weather and also the most severe expressions of that. These storms are getting bigger and more damaging. And that's important, not just because of the impact they can have on local economies. It influences how cities have to be designed. So, when you design, say, a storm drainage system, you do so to cope with the most severe weather that you might come across. So, a city might say, as they plan their infrastructure, we need to plan for a storm as severe as might happen once in 100 years. That kind of event is becoming a lot more frequent.

To give you an example, the city of Austin, Texas experienced three once-in-100-years storms within five years in the last decade. So the city has to plan for more extreme events, what might have been a once-in-200-years storm. So, that means more drains, more capacity to store the water, etcetera. And that requires a lot of investment.

LK: And I think we can bring up a graphic showing the number of storms there's been in the US costing over \$1bn in damages. Can you just tell us exactly what our audience can see there? Talk us through.

MT: Yes. What we can see is a very clear trend. It's bottom left to top right. Weather is becoming wetter and it's becoming more severe, as we just mentioned. And that feeds into the planning process at the municipal level. A city planner will see this. He's thinking not just what has happened. These systems last for a long time. We're going to have to plan for what might happen in 10 years or 20 years. And if this trend continues, it's going to put a lot of stress on municipal infrastructure.

LK: And we sourced that data from the financial filings of Advanced Drainage Systems. Baillie Gifford's one of the biggest institutional investors in the company. Can you tell me what it is particularly about that that makes you think that it's capable of outperformance?

MT: What a wonderfully named business, Advanced Drainage Systems. I told you they were boring. I couldn't give you a better example. So, Advanced Drainage Systems does exactly what it says it does. It makes drainage systems. But what's interesting about Advanced Drainage Systems is it makes them out of plastic. Most drainage systems in the United States are made out of concrete.

Now, the growth opportunity for this business is twofold. One, we need more drainage. Wetter weather, all the points that we've just discussed. So, there's an ongoing secular trend. At the same time, there is a shift from concrete to plastic. Now, the reason that happens is that concrete tends to crack. It doesn't last as long. It's also expensive and difficult to install. Plastic drains are much lighter, they last for longer, they lose less water, etcetera. So, we can see a real structural growth story for a business which sounds pretty boring.

On top of that, we can layer on what I think is absolutely crucial, which is the question of competitive advantage. So, in the plastic drain market, Advanced Drainage Systems has the majority of sales. It's about 60 per cent. And that gives it economies of scale, so it invests in itself. This could be a distribution fleet or it could be in its manufacturing capability. Fun fact for you, Leo. Advanced Drainage Systems has the largest plastic injection moulding machine in the world. And

that's just one example of the capabilities the company has. So, I would frame it as an exciting secular growth story in a boring wrapper, and a strong competitive advantage.

LK: And we can bring up a photo of that machine that you just talked about. In fact, it's so big, it doesn't quite fit into the photo. That's the team standing in front of it who manufactured it. Can you tell us just a little bit more about how ADS puts it to use?

MT: What I think is particularly exciting and interesting about that machine is, yes, it's huge, but it's also mobile. So, what Advanced Drainage Systems does is they will identify areas of particularly acute demand and they will move their enormous injection moulding machine to that pocket of demand. Now, having a machine that large allows them to manufacture large pipes, it allows them to manufacture very efficiently and therefore be cost-efficient, and it's something that the smaller local players, that generally Advanced Drainage Systems competes against, can't do.

So, it must be quite frustrating if you've got a small plastic pipe business and suddenly the city that you are beside starts to invest in its drainage systems, and then along comes the world's largest plastic injection moulding machine to compete against you. It doesn't strike me as particularly fair, almost. And that is the essence of competitive advantage.

LK: It's amazing that they can move that about. You mentioned that ADS is using recycled plastic for its products, which makes them lighter. It also means that they can build them quicker than out of concrete equivalents would be. Are there other advantages to it as well?

MT: Yes, absolutely. So, one of the big bottlenecks in US construction at the moment is the question of labour. There is an increasingly acute labour shortage. And I hear this from almost every construction business that I talk to. And it's here that plastic drains have an interesting role to play in easing that problem. Concrete is much heavier, so to get it into the ground, you have to have far more employees, labourers. You have to have far more trucks so that the congestion site becomes much more crowded. And if any of those crews don't turn up, it could be the train crew, could be the trenching crew, then your whole project slows down.

Plastic, much lighter. So you need fewer trucks, fewer people. You can get it into the ground and covered up much more quickly. And that is an enormous benefit, at the moment, to US construction and infrastructure businesses that are facing that supply of labour shortage.

LK: So, that's Advanced Drainage Systems. Can you give us another example of a company that Baillie Gifford's invested in, in this sector?

MT: Well, the one that immediately comes to mind is a business called Stella-Jones. Now, this is not a Welsh celebrity. This is a wooden pole company that actually is based in Canada. These wooden poles are used to support the grid. They're telegraph poles. They hold up wiring. Now, I mentioned earlier that maintenance budgets have been cut over the years. And a clear example of that is in the grid. Telegraph poles are only meant to last about 50 years, but the current grid was generally

constructed in the postwar era. So, those poles are too old. They're falling down. They're not up to standard.

And so, what Stella-Jones can do is meet that increasing maintenance demand. At the same time, the grid is expanding, what it is being required to do is changing. We are used to having a centralised source of power, a big power plant like coal or oil or gas, and taking that electricity to lots of homes that only use a little bit. In a more renewable world, power generation tends to be more dispersed, so wind farms, solar farms that can be anywhere.

At the same time, the way we use power is changing. The more houses have electric vehicles, and the more chargers they require, then the voltage needed goes up. So, that changing nature of the grid means that we're going to have to build more power lines, use more telegraph poles. And also the weight of those wires is going up because the voltage is going up, so we need more of them per mile. So, there's a good, very interesting demand story there. At the same time, Stella-Jones also has the majority of that market. It has just over 50 per cent of supply. So we have a great demand and we have a good supply story to back it up.

LK: So how does it have such good supply, because it's not growing these trees itself, is it?

MT: That's right. This is fascinating. So, what Stella-Jones has is about 100 tree spotters. And to understand why that's important, we need to realise that not every tree can be used as a telegraph pole. They have to be taller than most. They have to be straight. They can't have too many branches because the knot in the wood where the branch meets the trunk weakens the pole. So, the tree spotters go around continental North America and they find these exceptional trees to be used as telegraph poles.

Often, a plantation owner or the owner of the forest will have the option of cutting that tree down today, even if it's not ready to be a telegraph pole, and realise the cash. What Stella-Jones has to do is convince that owner to leave it in the ground for another five or ten years, and as compensation, they will pay a premium when it comes due. However, for that to work, a plantation owner needs to believe that Stella-Jones will still be there in five to ten years. So there's a reputation and a trust angle, too. So, Stella-Jones knows where the trees are and it has the relationships to be able to turn them into telegraph poles when the time comes.

LK: And so if there's a lack of these trees, why doesn't the industry just use metal poles instead?

MT: Interesting question. So, the most obvious answer is metal poles are much more expensive, three or four times the price of a wooden pole. They do have some advantages. They can carry very heavy voltage wires. But that cost differential means that they tend to be used for the longer-term transmission. What telegraph poles are used for are the more local part, and that's what I think is the most interesting at the moment, so to connect homes with electric vehicle chargers or to connect local solar or wind power.

There's also one or two other interesting things about today's wooden pole. It seems counterintuitive, but a treated wooden pole is a more robust solution in a world of wildfires than a metal pole. With appropriate treatment, they can resist heat and they don't burst into flames unless they're totally engulfed, whereas metal poles tend to buckle in the heat. So they've actually become surprisingly popular in areas like California.

LK: Gosh, that's interesting. So, that Stella-Jones getting advantage from dominating supply, do we have any other infrastructure holdings that share in that characteristic?

MT: Yes, we certainly do. And I would say that in almost every example of an infrastructure business that we own, it is absolutely critical to have that supply advantage, because often these are commoditised products. A pole is a pole is a pole. So you need some sort of supply advantage to get robust pricing. There is no better example than Martin Marietta Materials, which is a very longstanding holding of Baillie Gifford. This is a company that produces aggregates. That's their Sunday name. For the rest of the week, they are rocks. They are bits of gravel.

Aggregates are used in a number of different ways, highway building, the construction of datacentres require often aggregates in their foundations, or shorelines, dams, etcetera. There are many uses for these aggregates, and they go into infrastructure projects. However, they're very heavy, and that limits how far they can be economically moved because the cost of the fuel at a certain point begins to outweigh the cost or the value of the aggregates. And that limit is about 60 miles.

So, it lends itself to very localised markets, particularly as it's difficult to set up new quarries at the moment. Nobody really wants them in their backyard. They're pretty loud, they're pretty dusty. So, there are not many new quarries coming into existence, so you get these local monopolies of about 60 miles, and that lends itself to very strong pricing. Martin Marietta Materials at the moment hasn't seen much in the way of volume growth. It's been a wet period in America, so construction is more difficult. But it has seen very strong pricing, and that is what we look for.

LK: And you mentioned the difficulty in getting planning permission for new quarries, but the company has been growing through acquisitions, hasn't it?

MT: That's right. We have this very strong pricing story. We do expect volumes to grow as well. And that leads to excellent cash flow. And what is critical for these businesses is that they have the ability to deploy it in productive ways. So, Martin Marietta has that through mergers and acquisitions. So, not many new quarries being built, but there are a number of them to buy, so Martin Marietta has deployed this cash in its target markets around the southeast, Florida and the Carolinas, in Texas as well. It can then use its expertise in how to run these quarries well to make them more profitable. So, a very handy outlet for capital.

LK: We are long-term investors. When we buy a stock, we look to hold it for five to ten years or longer. Looking ahead over that time span, is there a possibility that the construction industry

moves towards using more recycled materials, perhaps sourced from the demolition of old infrastructure, rather than needing quite so much aggregates from Martin Marietta?

MT: It's a very interesting question. With Martin Marietta, as with the other examples, we're building not just a demand-side story but a supply-side one as well. So, any potential risk to the supply side is something that we pay very close attention to. And you're right, recycled aggregates is one avenue. However, it's a nuanced picture. Recycled aggregates have some uses, but in others, they're not appropriate. So you can use recycled aggregates from roads to build other roads. It's not quite as straightforward as smashing up the road and putting it in another. You need to wash the bitumen off, etcetera. So there is a cost to it. But a certain proportion of new roads can now be built with recycled aggregates.

On the other hand, however, for certain construction uses, recycled aggregates are simply not appropriate. Now, I didn't think I'd ever be saying this on a live webcast, but the shape of the stones is very important. They have to be of a certain size, a certain roundness, so they fit together in a way that's appropriate for construction. You certainly can't have them being covered in bitumen. So, some uses for recycled aggregates, other cases not really appropriate.

LK: How are you finding these companies, because it's not just by reading filings and listening to conference calls from your desk here in Edinburgh, is it?

MT: I do a lot of listening to conference calls and reading filings from my desk in Edinburgh, but I also get out and about and try and find these companies. So my team and I spend a lot of time in the United States, as many US investors would, but what we try and do, however, is not just go to the coasts, to the Silicon Valleys or the New Yorks of the world. Many of these infrastructure businesses are in less discovered places, in the Midwest, in the Ohios of the world. And so, we like to try and get out there, meet companies on their own terms.

At the same time, they sometimes come to us. That was the case with Advanced Drainage Systems. They came through Edinburgh. Now, you mentioned we are one of the largest institutional holders of those shares. That's true. And it's also true that we have a long-term time horizon. So, on average, we will hold shares for seven or eight years. That is attractive to the company itself. They want us on their shareholder register, in my view, because we can have good, constructive long-term dialogue with that business. So they'll come through, they'll offer meetings, and that's exactly what happened with Advanced Drainage. I saw that invitation. What on earth is this? And then I got into the wonderful world of plastic drains.

LK: Excellent. That's our reputation working to our advantage. We will be coming to audience questions soon. So, if you haven't already done so, please do submit one via the 'Ask a Question' tab on your screen.

But Michael, before we do that, we've talked about the need for more telegraph poles in the States, and that's partly being driven by the growth in the number of datacentres which are used to power

AI, run the online services that we use. There's over 5,000 of them already in the States, and the number's going up by 9 per cent a year. So, is there another investment opportunity there?

MT: Yes. You can characterise datacentres as being infrastructure themselves. They provide the means to do economic activity to their customers. But to support that bit of infrastructure, there needs to be a foundational layer below it. And the most pressing issue to support a datacentre at the moment is the question of power. A datacentre, particularly ones that support the AI revolution that we're experiencing, are extremely power-hungry. They're full of NVIDIA GPUs, and NVIDIA GPUs consume lots of energy. These are the processing units that do the computing.

Now, in a cluster within a datacentre, the number of GPUs is going up and up and up, so from hundreds to thousands, tens of thousands, even potentially in the future hundreds of thousands. And having that many power-hungry processing units beside themselves creates lots of heat and requires lots of energy to come in. So, we're trying to identify businesses that can solve those problems.

One example would be a business called Comfort Systems. They install heating, ventilation and air conditioning units. And datacentre needs for those products are extremely intense. I've mentioned how hot it can get inside it. You need lots of air conditioning. You need lots of ventilation. Comfort Systems will come along and provide a service to the datacentre owners, solving that problem for them.

LK: And these datacentres often change, don't they, from the point of inception to completion, because these NVIDIA GPUs that you mentioned, and other equipment, is evolving at such a fast pace. How well-placed is Comfort Systems to deal with that?

MT: Comfort Systems is one of the largest players in the space. And that's important because it gives them sight into best practices in the industry. So, you're right, datacentres are changing. In particular, the number of GPUs is going up, as I mentioned, very, very quickly. And so, Comfort Systems within its network will be able to see where very large clusters of GPUs have been put in place and how the ventilation and air conditioning needs were met. It can then take that learning and bring it to the other areas of the country where datacentre growth is equally as strong, but they haven't quite got to the cluster size yet.

So, national expertise, the sharing of best practice, and also the reliability. We mentioned earlier on there is a labour shortage in the United States. That probably plays into the hands of the larger companies that can offer attractive benefits. So, Comfort Systems has the expertise and the labour pool to get the job done.

LK: So it really works to their benefit.

MT: Absolutely.

LK: Time for some audience questions now. Let's see what you've sent in.

Okay. Looking at the iPad here, the first one we've got is, how do you make sure you keep up to speed with US political and fiscal policy?

MT: I use many of the sources that the audience here will use today, regular news sources. We also have access to economists from various research houses. But one of, I suppose, the key sources of insight we have is the company themselves. So, yes, I am interested in US fiscal policy and so on, but these are extremely complicated documents. When I talk to an infrastructure business, they're even more interested than I am, and they are particularly interested in the bits of legislation that matter to that company.

So, we'll have very productive discussions with the CEO of Advanced Drainage Systems or the CEO of Comfort Systems and so on, because their knowledge is very deep. And we'll challenge them on it. It's also worth saying that they're knowledgeable not just about the federal situation, but the state-level legislation that really impacts those businesses.

LK: Okay, I've got a question here about some of the companies we haven't talked about. Are there other parts of the US infrastructure spend that you've investigated and decided not to invest in? If so, where and why?

MT: Yes. I'll frame this conceptually first. For me, it's absolutely critical in these businesses to get the supply side, the competitive advantage consideration, right. Because actually, historically, infrastructure's been a pretty good way to lose money. Infrastructure projects are enormously expensive. They require lots of debt. They're complicated. They overrun. If they overrun, if the money runs out, that's very negative for a supplier. So, there's quite a few risks here.

What I look for is a company with an advantaged supply-side situation. We mentioned a few, the Stella-Joneses, the Martin Mariettas and so on. What I try and avoid are pure commodities. Even although the demand side might be as strong, if you are just... Say, I've looked at commoditised steel manufacturers. If your product and your supply-side situation is just the same as everyone else, that lends itself not to the attractive pricing growth that we see at Martin Marietta, but pricing volatility at best that we see in, say, some of the pure commodity industries. And often because if you combine that volatility with businesses that can be quite capital intensive, like steel, you've got a quite dangerous mix.

So, whilst there can be lots of growth in those businesses, I think the risks are too high to give me – or at least, it's very hard to have – a supply-side insight.

LK: We've got lots of questions here, so I'm going to go on.

MT: Brilliant.

LK: The next one's a multiple choice. Which of these three subsectors is the biggest growth area? Energy transition, digitalisation, or renewing essential infrastructure?

MT: That's a good one. From a pure demand point of view, probably digitisation, probably B. There's lots of growth there. But it strikes me that they're all quite interlinked. So we might be very optimistic about digitisation, but we can be optimistic all we like – if there is no power, if there is no means to support it, then it will go nowhere. So it's also linked to C, renewing the basic infrastructure. So I would regard them as being hand-in-hand.

And at Baillie Gifford, we run portfolios. We don't just pick stocks alone. So, we can have access to both. So, when I look at our portfolios, I get very excited by seeing the companies that are powering digitisation, that are powering artificial intelligence revolutions by GPUs. And I also get very excited by them sitting beside the Stella-Joneses of the world, the Martin Mariettas of the world, the Eatons, which supplies the transformers that feed datacentres. So I think the most powerful approach is to invest in them both.

And of course, we're just talking about demand here. Let's not forget that you have to take into account the valuation. And it's my view that a lot of boring basic infrastructure companies are not valued particularly highly, whereas the more obvious digitising stuff tends to be.

LK: I've got a question here, going back to Advanced Drainage Systems. The audience member asks, I understand the advantages of plastic against concrete, but isn't plastic bad for the environment, especially when it needs to be disposed of?

MT: Yes. So, that's a really important point. There are a couple of angles to it. One, about half of the raw material that goes into a big plastic drain is recycled. And it's recycled from plastic bottles and regular stuff. Often, it's being saved from landfill. I think Advanced Drainage Systems, I'm pretty sure this is right, has been maybe to date the largest consumer of recycled plastic in the United States. At the same time, I would go back to the point that these drains tend to last a long period of time. So, when you manufacture a concrete drain, one, it's very, very energy-intensive to do that. You're using a lot of power, a lot of heat. And then it's more energy-intensive to get the thing into the ground.

And if it breaks in 20 or 30 years, then you have to get it out of the ground and you have to replace it with another energy-intensively produced concrete drain. So, the plastic side of the equation has an advantage at that point as well.

LK: Okay, next one. What's the expected growth rate of the companies mentioned? How long will this infrastructure investment wave last? Five years, ten years, longer?

MT: I'll take that second bit first. Infrastructure trends tend to last for long periods of time. I'll give you some facts to illustrate the grand sweep here. So, public infrastructure spend as a proportion of GDP in the United States peaked around, I think it was 2.5, 3 per cent of GDP in the 1960s, and it has been falling and falling and falling ever since. It reached a nadir in the last decade, in the 2010s, of just over 1 per cent.

Now, I think as that starts to turn, it's going to be an equally long... So, I can't say it's going to be 30 years or what, but I think this is ten years-plus because the need is so pressing. And also, once it starts to work, once you start to support the economy of tomorrow and these datacentres provide their worth, I think a positive feedback loop begins, because people can see the benefits, and they start to generate a return for the underlying investor that then wants to invest more. So, I think this is long scale.

As for the growth rate, it'll be cyclical in a number of these businesses. But the key thing is, more than previously. Take Stella-Jones. Stella-Jones was growing volumes at a low single-digit rate. Pricing would fluctuate. We are of the view that that can accelerate from a volume point of view to mid or high single digits, and then we can layer on pricing. Now, pricing won't be even because you're negotiating with utilities. But we think the telegraph pole part of Stella-Jones can grow well into the double digits.

And what's really exciting for me is that's just a revenue line. When you're growing partly through price, you're going to realise, most likely to realise, increased gross margin, and then you're going to be able to leverage your other costs as you grow. So, I think volumes will inflect at the same time as margins, and that'll feed down into a very attractive bottom-line figure.

LK: I'm going to squeeze a couple of quick ones in, so quick answers to these. Are dividends part of your investment case?

MT: They can be, but with growing businesses, we expect them to be... They're probably a junior part. We're looking for a business that can reinvest itself, that can grow. That's just for the strategies I tend to work on. We do have an excellent dividend growth strategy. But for my areas, we're focused more on growth than capital return.

LK: And last one. When you visit a company, what's the key thing you're looking for to identify its potential?

MT: When we're visiting a company, what I am trying to do is assess the management of that business, often. So, that's their candour, their knowledge of the business. I am trying to move them away from the boilerplate presentations they'll often give at conferences and engage. Sometimes it's [at] a more granular level. Sometimes it's the opposite. I'll take a step back and take the business out of just talking about the quarterly numbers to ask, what is really happening over five years? So, to get both the bigger picture and something more granular.

And often, there are a few questions you can ask which will identify whether or not these businesses are really on top of their operations. If any of your audience ever happens to be meeting a CFO, ask them how long it takes to close their books. For some companies, a few hours. For other companies, it'll be weeks. And I think that kind of question can tell you something interesting about the complexity of the business and how on top of it management teams really are.

One of the things I really like about infrastructure businesses is often they're either family run or they're off the beaten track, they're not glamorous. So you get management teams that are excellent and they're absolutely into what they do.

LK: That's great. We haven't had time to answer all your questions, but we'll aim to respond to some of those that we didn't get to on our Disruption Week website. Details of that coming up in a minute.

Michael, first though, before we wrap things up, could you leave our audience with one final thought?

MT: Absolutely. The message from me is that the opportunity here is massive, both in the magnitude of the spend and the duration, how long it's going to last for. And what we can do at Baillie Gifford is take a stock-picking lens and find the absolutely best supply-side stories within that very attractive demand picture to find the companies that can really grow their profits at an exceptional rate for the long term.

LK: Michael, that's a great place to leave it. Thank you for speaking to me.

MT: Thanks, Leo.

LK: And I hope you, our audience, have enjoyed this conversation as much as we have. If you want to find out more about this and the other week's topics, please visit **bailliegifford.com/disruptionweek**.

And make sure to register for tomorrow's session on private company investing. In it, we'll discuss why our long-term approach gives us an advantage when building relationships with founders, and we'll explore some of our most recent holdings. We'll also shortly publish a writeup and recording of today's session in case you want to recap the themes and the companies that Michael talked about.

And, as always, if you have any specific questions, don't hesitate to get in touch with your client contact or email us at **disruptionweek@bailliegifford.com**. But for now, I look forward to seeing you again soon.

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