Baillie Gifford

Long Term Global Growth Q4 investment update

January 2024

Investment manager Michael Pye and investment specialist Carla Bannatyne give an update on the Long Term Global Growth Strategy covering Q4 2023.

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Carla Bannatyne (CB): Hello and welcome to this Long Term Global Growth update. As a reminder, Long Term Global Growth aims to deliver exceptional long-term returns for our clients by investing in a concentrated portfolio of what we believe to be the world's best growth companies. I'm Carla Bannatyne, an investment specialist in the team, and I'm delighted to be joined today by one of our decision makers, Michael Pye.

Michael, thank you so much for joining us.

Michael Pye (MP): Thank you, Carla.

CB: During this update, we're going to take a look back on 2023, provide an overview of performance, recent portfolio activity. But more importantly, we'll be looking at some of the areas of enthusiasm for 2024 and beyond.

Michael, I think 2023 might surprise some onlookers, in terms of performance for LTGG, given this macroeconomic backdrop of higher interest rates and inflation, because it seems counterintuitive that this is an environment which would be conducive to growth. So, I was hoping we could start by hearing your view on recent performance in the strategy.

MP: Thanks. Yes, of course. I think it's entirely understandable and fair that people would be concerned, interested, about the impact of inflation on high-growth companies. What I would say to our viewers, Carla, is that the purpose of this investment strategy is to invest in growth opportunities that persist, we believe, for decades. And when we think about those type of timescales, the fundamental progress that our companies make will be more consequential than short-term fluctuations in interest rates or whatever it is the Federal Reserve or bankers are deciding to do with interest rates.

So, to give some examples, interest rates have not impacted the extraordinary progress in Al computing power that NVIDIA's chips have underpinned. Interest rates won't impact CATL and Tesla from continuing to pursue advances in battery technology and electrification. Interest rates

shouldn't impact Moderna, if they're pursuing further refinements on their mRNA Covid vaccine, pushing that into other and interesting disease areas. So, the progress that you're seeing really is linked to the operational successes of the companies we're investing in. And that's what you're seeing reflected in share prices.

Another point that's very important to get across is, we take great care to ensure that the companies we invest in are in a strong financial position, so that they're not reliant on funding from capital markets, which has got more expensive recently.

CB: That's really helpful context, Michael. And you did touch on the exceptional performance that we've seen from NVIDIA, and it won't surprise viewers to hear that's been the top contributor on a one-year view, but also over a longer time horizon. It's been extremely successful investment for the strategy.

I would instead like to spend some time, however, talking about the top contributor for this quarter, but also more interestingly, it's been a top performer over one year and five years, and that is PDD Holdings, previously known as Pinduoduo, the Chinese online retailer. I think this is a particularly interesting example given that China has become somewhat of a hot potato. Some investors are deeming the risks, be they geopolitical or regulatory, just too great. So, I think it would be helpful if you would be able to provide a little bit of insight of how we're integrating that into our analysis.

MP: Yeah, of course, okay. We're not actually having a large percentage of Chinese companies in the LTGG portfolio. It's currently just under 15 per cent. And that just-under-15-per-cent doesn't come from the investors taking a top-down view on, you know, how much we allocate to China, or geopolitics. It comes from what we're trying to invest in; the best entrepreneurs that we can find, the best companies that we can find, anywhere in the world. And some of those entrepreneurs and companies are in China.

So, Colin Huang, the founder of PDD that you mentioned, is a very, very good example of that. PDD's foundational insight was that if they could aggregate customer orders and use the aggregated orders to obtain cheaper prices for manufacturers, you could create a fundamentally more affordable online shopping experience that you then make more social, and you then add a gamification element.

I think they memorably called it Costco meets Disney, or Costco plus Disney. What that has led to is that PDD, in the just over five short years since it became a public company, has actually overtaken Alibaba in market value, Alibaba being the incumbent ecommerce giant in China, which is a remarkable result. And PDD has now taken that success, that model, that affordable ecommerce model, and they've exported it under the Temu brand abroad, with great success.

And what that gets to is, PDD is a global investment opportunity. It started out in China, but it's a global company, and the overall point is the Chinese companies that are in the portfolio, those we think merit their place among the best companies in the world. There are many thousands of Chinese companies that we have no desire to invest in.

CB: Of course. I think it's interesting, when I look at your research, or the research of other members of the team, we spend a lot of time looking at cultural attributes of companies or the

contribution that comes from that visionary leadership, that ability to see many years into the future and take a company in a direction that hasn't been done before.

If I were to look at the most recent complete sale of the portfolio, that's Illumina, it's almost the process showing the opposite conclusion. So, it would be great to hear your view on some of the details around that transaction and why we decided to sell out of this holding after so many years.

MP: Yes, thanks. We have been very patient with Illumina. However, we have ultimately been selling down our holdings over the past year and we finally exited that holding in December, as you say. The fundamental problem with Illumina was execution. What we found was Illumina had a dominant position in gene sequencing and, in many ways, it still does, but it has allowed competition to make inroads, which has been surprising to us.

And at the core of this has been management's decision to try to acquire their subsidiary called GRAIL. Now GRAIL is developing a gene sequencing-based blood test for cancer. It's extremely exciting. However, the management team at Illumina unfortunately made a decision to try and acquire that business without seeking first a regulatory approval in the EU and the US.

That has meant that they've been forced to unwind it and, worse, that has caused such catastrophic distraction within the company that they've effectively taken the eye off the ball on the core business. And unfortunately, the team is not convinced that the management shake-up that's inevitably followed will be sufficient to fix things, or to get the growth rate back to a level that we would expect from a Long Term Global Growth stock.

CB: Of course, it's perhaps worth noting, however, that the advances that they have made in gene sequencing have enabled immense progress in mRNA therapeutics, which is directly applicable to two of the holdings in the portfolio, Moderna and BioNTech. These are two companies that almost shot to fame with their Covid vaccines, given the speed at which they were able to deliver to market, but also the efficacy of those vaccines in tackling the pandemic. These two companies have now fallen out of favour with the market quite drastically. And, as far as I understand, we take quite a different view. So, could you elaborate a little bit further on why that is, and what can we expect from here?

MP: Yes, Moderna and BioNTech are fascinating, we think, as an illustration of how the market can sometimes be potentially very short term. Now, you're right that Covid, while it hasn't gone away, Covid is now an endemic disease, not a pandemic disease. We're vaccinating now, really, patients that are clinically vulnerable as opposed to previously the entire population. So obviously, that means that revenues from Moderna and BioNTech, which make the vaccine, have fallen and they've fallen quite steeply, and the market is not particularly pleased about that. And the share prices have fallen accordingly.

What we think the market is missing is these companies now have a proven technology. So, it's proven with the Covid vaccine efficacy, as you say, and they have very huge cash reserves as a result of those vaccine sales. And so Moderna has \$13 billion on its balance sheet. BioNTech has even more, it's \$19 billion. And then if you look at what the companies are spending that money on, what can they invest it in?

It's hugely exciting extension space for mRNA technology. You have next-generation flu vaccines. You have vaccines for diseases that previously have no vaccine available at all, HIV and malaria. Vaccines for so-called latent viruses like Epstein-Barr virus, which are maybe not as visible, but do cause a lot of long-term health impacts. You have next-generation therapies for cancer, rare diseases.

The list goes on. And the other aspect that the market, we think, misses is that mRNA technology. So, this is where you're effectively programming human cells to make the therapeutic within the body, as opposed to manufacturing the therapeutic outside, and putting it into body, that is akin to computer code and therefore it's a repeatable process.

What that means is, if one of these companies has had a success, as they have with the Covid vaccine franchises, that success increases the probability that they can use that same code with modifications to go after other indications, go after other diseases. So, there's potentially a, we think, enormous undervaluation opportunity here. The CEO of Moderna, Stephane Bancel, recently said, in five years people won't think of them as a Covid vaccine company. Very exciting.

CB: That is a terribly exciting prospect. And while some of the holdings in the portfolio were able to enjoy some strength in 2023, it's certainly to be said that 2022 was a difficult year for the portfolio. We saw quite severe drawdowns, and it sounds as though there are still plenty market inefficiencies, which long-term bottom-up stock pickers can really take advantage of.

So, I would be keen to conclude by hearing about what you're most enthusiastic about going forward.

MP: Yeah. One of the consequences of having this strong performance in the portfolio is that we can take some capital from the strong winners and start to, if you like, lay the seeds for what we think will be potentially the outliers of tomorrow. So, an example I give is last year, in May, we made a small investment in a company called Joby, based in California.

Now, Joby is developing a fully electric air taxi. What does that look like? It has a pilot, has four passengers. It takes off and it lands vertically. That aircraft already exists. It is in service with the US military, helping with logistics on US bases in California. But the vision of Joby, the goal, is to launch what you might think of as a kind of Uber of the skies, an on-demand electric air taxi service.

Now that might sound quite futuristic. But it's worth bearing in mind, a decade ago, 2014, when we first invested in Tesla, that seemed quite futuristic at its time as well. And what we think we have in Joby is a really exceptional team, and founder in JoeBen Bevirt, who are pursuing what has the potential to be a huge growth opportunity.

If you think about, what would potentially be the demand for transportation that doesn't mean you're stuck in traffic? Or the advantages of clean, safe, quiet air travel over the current state of technology in that field, which is helicopters, which are very, very loud and therefore banned from most major cities, and often quite unsafe and obviously polluting.

So, there are these really interesting opportunities. And the thing Joby's pursuing, of course, is hard. It's a really hard challenge. It has high regulatory hurdles. The technical challenges are very difficult. It's going to be a number of years before they're able to operate that on-demand service

profitably. That is exactly the kind of situation that other investors are just not interested in at the moment, because it's a number of years away, and because it requires patience, and because it is just a very difficult area that may be very volatile for a number of years.

And so, we're very happy to take advantage of these types of opportunity, where companies like Joby get dramatically cheaper because of the circumstances, and we fully intend to take advantage of that for our clients.

CB: That's great. Growing up, The Jetsons was one of my favourite cartoons, so I've been patiently waiting for an aircraft just like the one Joby is working on so diligently. So, I'm very excited certainly about that.

Michael, thank you so much for your time today. I am very grateful to hear that Long Term Global Growth continues to do what we set out to do 20 years ago, and that is look for exceptional companies that are at the forefront of multi-decade opportunities.

Thank you again for your time and thank you to everyone who joined us in watching this update. Please do not hesitate to get in touch if you have any further questions.

Long Term Global Growth

Annual past performance to 31 December each year (net%)

	2019	2020	2021	2022	2023
Long Term Global Growth Composite	34.1	102.0	2.4	-46.4	37.2
MSCI ACWI Index	27.3	16.8	19.0	-18.0	22.8

Annualised returns to 31 December 2023 (net%)

	1 year	5 years	10 years
Long Term Global Growth Composite	37.2	15.3	13.6
MSCI ACWI Index	22.8	12.3	8.5

Source: Baillie Gifford & Co and MSCI. USD. Returns have been calculated by reducing the gross return by the highest annual management fee for the composite.

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