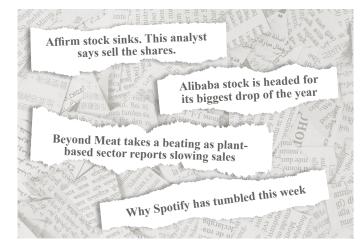


Reflections

First Quarter 2022



On a blustery February morning, in what was once a hilltop observatory high above Edinburgh, the LTGG Team huddled together for a day of reflection and debate. Outside, icy North Sea squalls were easily deflected by the centuries-old thick stone walls. But further afield, winds of market despair were ripping through the share prices of some of the world's leading growth stocks.

Tempest

After the past few years of unusually azure skies, it can be easy to forget that squalls are common in the LTGG portfolio and sometimes storms do roll in. Between October 2007 and February 2009, in the darkest depths of the Global Financial Crisis, the LTGG portfolio witnessed a drawdown of more than 55 per cent – the largest ever since the strategy's inception in 2004.

While that drawdown remains the biggest to date for LTGG, there have also been many others in excess of 10 per cent: the 2011 European sovereign debt crisis, the 2013 'Taper Tantrum', the 2014 China slowdown and the 2016 Trump-fuelled rotation to traditional industries.

Past experiences such as these can help to put the current tempest into some perspective, but we do not mean to belittle the forces currently buffeting the LTGG portfolio. At the time of writing, we are witnessing the second-largest absolute drawdown and the biggest relative drawdown in LTGG history. Its causes appear to be a harsh combination of worries about inflation, Chinese regulation, supply chain disruptions, and dangerous and tragic conflict in Europe with far-reaching geopolitical shockwaves.

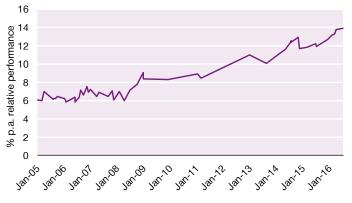
Our thoughts on what such matters may mean for the LTGG portfolio are laid out in the following pages.

However, what matters far more than the magnitude of any market storm is what one decides to do during it. When blue skies are hidden behind dark storm clouds, it is all too easy to lose one's way. Portfolio managers who start to feel seasick can be tempted to make knee-jerk, and potentially value -destroying, trades for their clients. Dyed-in-the-wool growth managers can be lured to supposedly safe havens.

In such troubled times, the LTGG Team focuses solely on what we have been entrusted to do - to invest in the few companies capable of extreme long-term growth. During the Global Financial Crisis, for example, we took the most difficult of investment decisions - to do nothing. In resisting the instinctive urge to tinker, we stuck to our core investment beliefs and process. No defensive plays and no short-term bets. Vincent van Gogh is credited with saying that "fishermen know that the sea is dangerous and the storm terrible, but they have never found these dangers sufficient reason for remaining ashore". We agree. Even in the wildest of seas, our focus is not on timing but on time in the market. We're never leaving our fishing grounds so long as we feel we can continue to find a small collection of the world's most exciting growth stocks and hold them through choppy waters for as long as we believe in their potential.

But to what consequence? For those LTGG clients who battled through many months of pain after first investing at peak shortly prior to the Global Financial Crisis, the subsequent decade would still deliver very handsome returns for their LTGG portfolios, as the chart below shows. Some of our clients invested in July 2008 and by the end of the year they were nearly 20 per cent down and 8 per cent behind the index, yet in the long term they are still 6 per cent ahead. Indeed, a client's starting point matters rather little – LTGG has delivered strong long-term performance for clients regardless of the timing of their initial investment.

Strong relative performance – regardless of the starting point



Source: StatPro, MSCI, FTSE. Net of fees.

As at 31 December 2021. Local currency. The chart shows the relative annualised since inception performance of all accounts with a track record of 5 years minimum in the Global Equity LTGG (Unrestricted) Listed Equities composite and the Global Equity Long Term Global Growth (restricted) composite relative to their indexes, in relation to each account's respective inception date. Why are we happy to remain at sea regardless of the weather? It is worth recalling that everything we do in LTGG hinges on one single premise: that the share price of a company will ultimately reflect its operational performance over the long term. It may not happen in the space of a few months or even a few years (investing over such a short horizon seems entirely speculative to us in any case), but we believe share prices tend to follow business fundamentals over a time horizon of five years.

There is ample evidence of this. Take the thousands of stocks in the global universe of equities dating back 30 years and categorise them according to their rates of earnings growth. Those with the highest earnings growth delivered the most significant share price outperformance on a rolling five-year basis; those with weakest earnings growth most significantly underperformed. Share price returns clearly and consistently followed earnings growth. It should therefore come as little wonder that we seek those companies with the most impressive fundamentals (ie the top quintile) so that we can deliver the most attractive returns for our clients over five years and beyond.

Delivered median total returns on earnings growth quintiles Rolling five year horizons (1992 – 2021)



Source: FactSet, FTSE, MSCI. The universe consists of all stocks listed in the FTSE World and MSCI ACWI Indices at each starting period and excluding repetitions.

It's worth bearing in mind that the three decades reflected in this exercise were far from smooth sailing for global equities. They included the Dotcom Crash, years of rising and falling interest rates, multiple wars, the Global Financial Crisis and a global pandemic. In other words, massive moments of panic and uncertainty. And yet, despite it all, the fundamentals bore through into companies' share prices over every five-year period spanning those three decades. What this means is that hold discipline, not sell discipline, is the more important determinant of value creation for our clients over time. Hold discipline is what enabled your LTGG Team to stay invested in the likes of Amazon, Tesla, Tencent, NVIDIA and Kering despite wild plunges in their share prices (sometimes halving or more) – such stocks now feature among the topperforming stocks in the LTGG portfolio since inception.

It should therefore come as little surprise that we make no attempt to provide running commentaries on the inevitable geopolitics, ever-shifting macroeconomics and short-term vagaries of stock markets. As interesting and important as that all is, there is no shortage of experts who are far better versed in such matters than we, and we're also conscious that even the best epidemiologists or Kremlinologists have struggled to accurately predict the events that have unfolded in recent times. Instead, we feel we can use our time more valuably by focusing on the fundamentals of the companies in which we invest and by asking ourselves what the coming five years and beyond may hold for their businesses. This is where we believe our skills and experience lie. Of course, if we think it's likely that current geopolitics, regulations or macroeconomics could materially bear upon our investment case for a company over the near term, we examine whether the business is robust enough to survive such headwinds and able to thrive in the long term.

Resilience

It should be clear by now that the LTGG Team does not return to shore when dark clouds move in. But we're only able to do this because we have faith in the resilience of the vessel – the LTGG portfolio holdings – because ultimately the soundness of their fundamentals determines how well the LTGG portfolio can weather these turbulent periods and thrive over time.

What gives us such faith in the seaworthiness of our ship?

- The average top-line growth of LTGG portfolio holdings is 30 per cent pa, several multiples greater than that of global equities. In 2021, half of LTGG holdings actually grew their revenues by over 50 per cent, seven of which by over 100 per cent. Meanwhile, earnings are growing around 30 per cent pa too.¹ These are remarkably robust fundamentals.
- Most strikingly, LTGG holdings on average spend over eight times more on capital expenditures and research and development than they do on dividends and gross share buybacks, meaning they are reinvesting in their future growth rather than paying out short-term rewards to shareholders – which is exactly the sort of long-termism that we seek. This is what fuels their growing competitive advantages relative to index incumbents who appear more fixated on short-term pay-outs.
- Strengthened balance sheets also mean that the portfolio in aggregate has been sitting on net cash since 2013, whereas global equities have remained squarely in net debt. Our portfolio, therefore, looks financially resilient, whereas the index appears fragile.

You may nevertheless be wondering about the LTGG holdings which aren't yet profitable - surely, they are too fragile to remain afloat in choppy seas? While 15 holdings do indeed post negative earnings at the time of writing, the majority of them are actually highly effective cash-generating machines and therefore give us no cause for concern. However, there are seven holdings that have negative earnings and negative cashflows: Coupang, Carvana, Delivery Hero, Beyond Meat, Peloton, bilibili and BeiGene. Their common story is aggressive reinvestment for their future growth. We take comfort in that many of them could dial back their spending if necessary. But one or two names, such as Peloton and Beyond Meat, do face non-trivial operational headwinds. We are patiently engaging with and monitoring these companies to determine if they can remain comfortably above water until their operational progress strengthens - though it bears recalling that they account for only a small fraction of the portfolio.

Most LTGG holdings (well over 90 per cent of the portfolio by weight) are in a far stronger place than they've ever been despite share price movements in recent months. Shopify has,

1. Five-year compound annual growth rate based on a representative LTGG portfolio to 31 December 2021 (in GBP). for example, seen revenues nearly triple and gross merchandise value on its platform more than double over the past two years, and yet, at the time of writing, its share price has fallen back to near pre-pandemic levels. The share price of Zoom has fallen back to near pre-pandemic levels, and yet its revenues have more than quintupled and its highest-paying customers have guadrupled since then. Moderna was not only turned profitable in 2021 but did so with a strikingly high net margin of nearly 70 per cent. It has also grown its cash and equivalents by over 13-fold over the past two years, meaning it has ample funds to reinvest in its line-up of future mRNA-based vaccines beyond Covid – and yet its share price has fallen by around 60 per cent from its record high in September 2021. Meanwhile, Affirm's share price is at a record low - nearly 70 per cent below its January 2021 IPO price - even though over the past year the gross merchandise value on its platform has more than doubled, its active customers have roughly tripled, and its number of merchants has risen over 20-fold.

Inflationary headwinds...and tailwinds

An investor's instincts may infer that inflation should be damaging to growth stocks. However, the reality is likely to be far more nuanced over time. Our focus is as always stock-specific.

For example, while semiconductor prices have rocketed due to supply chain disruptions, isn't that beneficial for our holding ASML, which has seen enormous demand for its lithography machines and whose revenues are growing over 30 per cent pa? The same may be said of NVIDIA, whose graphic processing units are driving top-line growth of over 60 per cent pa. And while many auto companies have struggled due to chip shortages, Tesla has demonstrated striking resilience thanks to its unparalleled vertical integration. By insourcing its chips, making its own circuit boards and writing its own code, it was able to deliver a new record of nearly one million cars in 2021 (an 87 per cent increase on the year prior) with a higher operating margin than any other large automaker (nearly 15 per cent). Vertical integration is also a hallmark of other LTGG holdings such as BioNTech. Building capacity in markets such as South Africa, Rwanda and Senegal, it is looking to disrupt convoluted Big Pharma supply chains with a much more flexible and modular model for its laboratories.

Rising gasoline prices (which have jumped 40 per cent in the US in the past year) may indeed spell underperformance for the LTGG portfolio relative to the index in the near term because, unlike the index, we do not hold any oil majors that would benefit from such fossil fuel inflation. On the other hand, rising fuel costs could precipitate even greater demand for your holdings in electric vehicle makers Tesla and NIO and battery maker CATL. And while the media and markets fixate on short-term rising fuel costs, let's not ignore the far more powerful deflationary force of declining battery costs by around 17 per cent pa over the past decade.

Even if energy prices were to soar further from here, the energy intensity of the LTGG portfolio – using Scope 1 and 2 emissions as a proxy – is over 13 times lower than that of the index, suggesting that LTGG holdings are likely to be far less sensitive than other stocks.² Consider for example that Amazon is the top corporate buyer of renewable energy in the US and Europe and it expects to power 100 per cent of its activities globally with renewable energy by 2025. Again, this is helped by another compelling deflationary force – the declining cost of solar energy by around 14 per cent pa over the past decade.

So, despite all the current market woes, one thing seems clearer than ever to us: an acceleration in the energy transition feels increasingly probable and many of our LTGG holdings are either spearheading this or benefiting from it.

The examples go on. Isn't the fact that there has been a 40 per cent increase in the price of used vehicles in the US over the past 12 months a good thing for our holding in Carvana, the online marketplace for used cars? Isn't the fact that the cost of sequencing the human genome has fallen by nearly 18 per cent pa over the past decade a phenomenal positive for our holdings in Illumina, the maker of genome sequencing machines, as well as Moderna and BioNTech that use sequencing to develop revolutionary new treatments?

All said we are not complacent about inflationary pressures; we're attentive to their nuances. Some holdings are likely to find a period of rising interest rates challenging, such as consumer finance company Affirm or Indian mortgage company HDFC. But as illustrated in the comments above, our assessment must look at the individual characteristics of companies. 'Stay at home' stocks such as Roblox or Netflix may benefit as consumers tighten their belts, but arguably other stocks such as Delivery Hero and Peloton may feel the strain. Many holdings appear to have substantial latent pricing power as a means of passing on cost increases - in recent months we have seen for example Amazon and Netflix hike the price of their subscription services. Meanwhile, luxury stocks such as Kering or Hermes are likely to be less affected than lower-ticket fashion brands, their customers being more immune to price inflation. Such heterogeneity in the portfolio matters. We take comfort that the majority of the LTGG holdings appear well-placed to weather a higher interest rate environment.

Inflationary headwinds...and tailwinds

Russia's appalling and tragic invasion of Ukraine has also been the subject of recent stock market anxiety. In terms of any direct financial consequences for the LTGG portfolio, there is zero exposure to Russian stocks. Any underlying geographic revenues from both countries are de minimis and several holdings – such as Hermès, Kering, Netflix and Amazon – have gone a step further to suspend their activities in the country.

However, the market also appears fraught about potential read-across to what this might all mean for Chinese stocks. We have already said that we do not spend undue time speculating on geopolitics, nor do we underestimate the risks of the unexpected, but it is perhaps worth recalling that China's top trading partner is the US, accounting for nearly 18 per cent of China's total exports in 2020, while other major partners include Japan, South Korea, Germany, the Netherlands and the UK. Russia only comes in at fourteenth place with a mere 2 per cent. Furthermore, China's top financial policy committee in mid-March called on the national government to return to stability and growth after a period of so much uncertainty.

The LTGG portfolio's carbon intensity is 15 tCO2e per USD million in revenue versus the MSCI ACWI carbon intensity of 199 tCO2 per USD million in revenue (based on a representative LTGG portfolio in USD as at 31 December 2021).

A global portfolio, not a globalisation portfolio

Our upside scenarios for all the Chinese holdings in the portfolio hinge far more on growth inside China's vast domestic market than expansion beyond it. For example, can the on-demand services platform Meituan capture more of China's grocery market in addition to food delivery? Can video-sharing platform bilibili attract more of China's Gen Z and increase engagement and monetisation? Can battery maker CATL continue to underpin China's transition to electric vehicles and renewable energy? We are also closely examining how such companies align themselves under China's common prosperity agenda by contributing to the national objectives for more sustainable and inclusive growth. Opportunities in China may also be more likely to materialise from more 'brand nationalism'. Our recent study of Gen Z in China highlighted growing confidence and optimism about life in China. For example, we've looked recently at companies such as Yatsen, which runs several of China's bestselling cosmetics companies despite having only been in business since 2016.

Conversely, apart from some holdings such as Kering and Hermès (which do have significant exposures to Chinese consumers), our upside scenarios for many non-Chinese holdings depend little (if at all) on the Chinese market – for example, Delivery Hero, ASML, Netflix, HDFC, Coupang, SEA and Carvana. There is also a possibility that in the event of geopolitical escalations with China, companies such as Alibaba may be less likely to expand overseas, which could open up the runway for competitors in other markets such as online services platform SEA (a recent LTGG purchase).

Staying the course

It should now come as little surprise that the current turmoil in financial markets was neither the reason nor the focus for our recent team gathering on that windy day in February, referred to at the outset of this piece. Instead, our meeting was an occasion to reaffirm and ramp up our commitment to our LTGG investment beliefs and process.

For example, we continue to experiment with identifying additional sources of ideas. We are exploring using machine-learning algorithms to identify companies that may warrant further research. We have also invited Baillie Gifford's risk team to independently study the LTGG portfolio to help us examine concentrations and, crucially, where the missed growth opportunities might lie.

We set ourselves a goal to try to meet in person with the management teams of every single holding in the portfolio in 2022. As much as we (and the planet) benefit from the increasing prevalence of Zoom meetings, we believe there will always be a need to visit companies from time to time to really get under the bonnets of their businesses. In recent months we have met in person with the leaders of Kering and SEA at our Edinburgh offices, and with Affirm, bilibili, Carvana, KE Holdings, Meituan and NIO at their respective headquarters.

We continue to draw on external perspectives. For instance, we recently sought the views of Dr Marcus Carter at the University of Sydney on the topic of children's gaming regulations, providing us with useful insights and engagement priorities for your holding in Roblox. We also commissioned a due diligence review by Huisheng Consulting into the Chinese property platform KE Holdings to gain an independent view on aspects of our investment thesis.

We also continue to review our existing holdings to determine if they still deserve a spot in the portfolio. For instance, Peloton's recent share price travails reflect what we believe to be deep-seated organisational and cultural issues in the company that have impinged on its operational execution. In recent weeks we have had several meetings with leadership following its recent shake-up, including with John Foley (Executive Chair and ex-CEO), Jill Woodworth (current CFO), Karen Boone (Lead Independent Director), Jay Hoag (also a member of the Board), and Barry McCarthy (the new CEO and former CFO of Netflix and Spotify). We feel we can chart a course to significant upside even if we ascribe zero value to Peloton's equipment business and focus exclusively on its powerful subscription business. However, this requires us to believe that McCarthy can turn around the cost structure in the equipment business within the next five years and that the subscriber base continues to grow healthily - aspects which we will be monitoring closely.

Our recent holding in Affirm offers a contrasting example. When we purchased the stock for the portfolio in December 2021, we believed it could plausibly take a 25 per cent share of the US credit card market over the next decade - ie a GMV of \$1trn. Assuming a blended take rate of 3 per cent and operating margins of 30 per cent, we felt Affirm could be looking at around \$7bn in earnings by 2032. At a conservative market multiple of say twenty-times, we believed Affirm could reach a valuation north of \$140bn - ie around nine times more than when we purchased it. We still have confidence in this scenario, but for the sake of argument let's now assume that things have become structurally much more challenging for Affirm, leading us to curb our enthusiasm. Let's assume the operating margin only reaches half of what we think possible. Let's also assume that the stock only attracts a market multiple of say fifteentimes. That would imply a valuation over \$50bn - ie five times more than its value at the time of writing and three times more than at the time of purchase. Arguably this is much too tame, and so not only do we continue to believe that Affirm deserves a spot in the portfolio, but we have also added to our initial position on the back of share price weakness.

It is this focus on sticking to what we do which gives us our sea legs when the seas get rough. To invest in the world's future giants, to ride the ups and downs along the way, to accept that we will often be called foolish and that, yes, we will inevitably make mistakes, means that all team members must also be very comfortable with being deeply uncomfortable. And while we take this work tremendously seriously, we strive not to take ourselves too seriously, for we must always keep learning, experimenting and improving. If ever you feel we are deviating from this LTGG mindset, please call us out on it.

Preparing for blue skies

Come rain or shine, gloom-mongers will forever rattle confidence in stock markets. We are happy to leave them to it. Their fixation on what might go wrong means there is never any shortage of downside scenarios. The far harder bit in our view, and the part on which we spend nearly all our time, is on imagining the upside.

If the companies in the LTGG portfolio deliver anywhere close to the level of operational performance that we expect of them in the years to come, then they are looking absurdly cheap today. We cannot pretend to know precisely when share prices will reattach to their underlying fundamentals, but we do know that patience pays off. And in this environment of depressed valuations, it feels easier than ever to chart a course for upside.

For those of us who remain at sea, exciting opportunities abound for companies that we believe could become the giants of tomorrow. We have added to some existing holdings where we feel their share prices have been unfairly punished by the market, such as South Korean ecommerce platform Coupang and (as already mentioned) Affirm. In recent months we have taken a new holding in the online gaming platform Roblox, giving us ringside seats to the evolution of the metaverse. We have also invested in the online services platform SEA, comprising ecommerce, gaming and digital finance in parts of Southeast Asia, Latin America and beyond - a stock that we have been getting to know over the past four years. In addition, we have invested in Ginkgo Bioworks, a synthetic biology company that may be heralding a new industrial revolution with biology at its core. We are also continually looking at fascinating new ideas, such as LONGi, a world-leading solar module manufacturer and Datadog, a monitoring and security platform for cloud applications.

So finally, after a long day of discussions, the LTGG Team braved the howling gales outside and returned to their homes. Their thoughts were not of the storms, but of resilience and future blue skies.



"We know nothing. We'll be back in five minutes with nothing more."

Important information and risk factors

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

	2018	2019	2020	2021	2022
LTGG Composite	40.7	8.4	10.7	104.4	-18.1
MSCI ACWI Index	15.4	3.2	-10.8	55.3	7.7

Annualised returns to 31 March 2022 (%)

	1 Year	5 Years	10 Years
LTGG Composite	-18.1	23.1	18.0
MSCI ACWI Index	7.7	12.2	10.6

Source: Baillie Gifford & Co and MSCI. Net of fees. US Dollars. Changes in the investment strategies, contributions or withdrawals may materially alter the performance and results of the portfolio. All investment strategies have the potential for profit and loss.

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