MAY 2022

JUMPERS IN THE HOT WASH

Tim Garratt, Client Director

A swift glance around the playground at the start of a new school term reveals a great deal about both expected growth rates and time horizons. Some children wear jumpers that are brand new but several sizes too large. Others sport older pullovers that fit tightly over rapidly expanding frames. Very few wear uniforms that fit perfectly though. Few parents have quite perfected the trade-off between futureproofing for anticipated growth spurts whilst simultaneously ensuring that their sprogs' jumpers don't look more like dresses.

In many respects, equity multiples are rather like those school jumpers. And in recent months, the market has been badly struggling to fit multiples to stocks, based on their individual growth expectations. It appears to have given up, removed the jumpers, taken them to the cleaners and stuck them on the same wash cycle. And it's a hot wash, so the woollens (a tad pricier upfront in anticipation of longevity) have shrunk the most, while the viscose and polyester have held up a bit better.

But as they're handed back to the school kids, there's now a big disconnect between the new jumper size and the requirements of their occupants.

The table below shows the extent of this disconnect on a backward-looking basis for the stocks in the LTGG portfolio. It’s a largely random plot, with little correlation between delivered growth rates and recent share price performance. But if there is a pattern, it’s that the faster-growing stocks have fallen more over the last 12 months.

Operational growth disconnected from share price

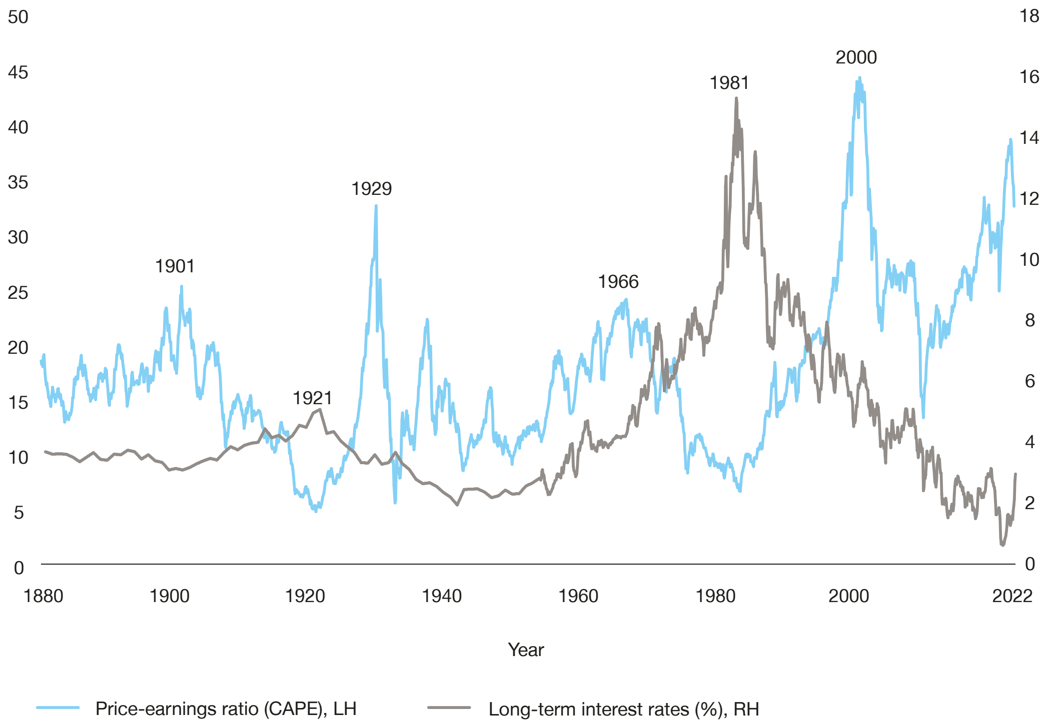
	Sales growth (Year-on-year %)			
Share price change (Year-on-year %)	**>10%**	**>20%**	**>50%**	**>100%**
>0%		Hermès International Dexcom Atlassian	Tesla Inc NVIDIA Cloudflare	CATL
-25%>0%	Workday	The Trade Desk Kering ASML Intuitive Surgical Amazon.com		Moderna BioNTech
-50%>-25%		Illumina Meta Platforms salesforce Tencent	Adyen	
<-50%	Netflix Beyond Meat	Peloton Alibaba Spotify Beike	Bilibili Pinduoduo Meituan Shopify Affirm Holdings Zoom Video Communications Coupang	BeiGene NIO SEA Limited Carvana Roblox
Total	**8.3%**	**47.7%**	**30.4%**	**13.6%**

Source: Baillie Gifford & Co. Data as at 30 April 2022.

We should be wary of spending too much time ascribing reason to this strange market irrationality. There are many black boxes and algorithms at work. But the most logical explanation is that faced with emergent inflation, the stock market is trying to process the imperative to discount future cash flows at a higher rate. Conventional wisdom dictates that the multiples applied to future earnings streams should compress in a more inflationary environment, so the market is grappling with the right ‘new normal’ multiple to attach to equities.

Based on a dataset spanning around 140 years of stock market history, students of CAPE (the Cyclically Adjusted Price to Earnings multiple) will point to a long-run average of just over 21x earnings. They’ll also flag that when long-term interest rates have notched up to the high single digits, the market multiple has commonly fallen to the low teens – and during a couple of exceptional periods (including 1981 when rates rose to almost 16 per cent), down into single digits.

Price-earnings ratio versus long-term interest rates



Source: Robert J. Shiller, U.S. Stock Markets 1871-Present and CAPE Ratio, http://www.econ.yale.edu/~shiller/data.htm

Given the highly uncertain macroeconomic backdrop, there is a very wide range of market narratives on where the stock market might settle. But we're spending little time on this question. This is partly because we have little to add by lobbing our guess into the mix. But it is also because we don't think that the ultimate market multiple will have a huge bearing on our ability to generate strong returns for our clients.

We hold this view because the remarkable arithmetic of compound growth, the eighth wonder of the world, means that there's scope for great upside in structural growth stocks, even if Mr Market settles on a very low multiple for them. In other words, the quantum and the duration of operational growth are more than capable of swamping multiple compression.

THE EIGHTH WONDER IN ACTION

This phenomenon can play out quite powerfully even for modest growers.

Between December '98 and September '12 (a period that straddles the dot com boom and bust), the ratings of both IBM and Intel halved (from 30x earnings to 15x earnings, and from 18x earnings to 9x earnings respectively). And yet the share prices of both companies more than doubled as the engine room of strong operational growth won out over the multiple compression. In school playground parlance, both companies' respective jumpers went to the hot wash but were then stretched outwards by the growth-y forms within.

And for companies that are operationally growing their earnings and cashflows five times, 10 times or 20 times faster than the speed at which the discount rate rises, this phenomenon is even more pronounced. Amazon's price-earnings multiple (so carefully scrutinised by so many sceptics from the outset) has fallen fourfold over the past five years, but investors have still doubled their money as earnings have exploded. The same applies to a host of other companies – from Meta to Tencent to Kering – where in each case, the multiple has more than halved but investors have posted positive returns over the same period.

Looking ahead, there will be many similar instances because we're in the very early stages of some deep transitions in our healthcare, transport and energy infrastructure, in our social habits, and in the ways that we shop, eat and work. Distinctive new and relatively immature companies are gaining traction. If their earnings streams have the longevity that we expect, there will be ample scope for making a great deal of money, even if they derate materially.

It's interesting to explore this dynamic in more detail following a period where many growth stocks have been taken to the metaphorical cleaners. We have no special insight into when the rinse cycle will end. But end it will. And as we reflect on valuations at the current juncture, a range of attractive long-term inefficiencies are on offer. Let's home in on three examples of current market dysfunction.

THREE ALLURING INEFFICIENCIES

1. Illusory cliff edges

The first dislocation affects stocks such as Moderna and BioNTech. Both companies trade on low single-digit multiples of their current earnings streams despite some of the most eye-watering levels of growth[1] that we have ever seen. This is truly hard to fathom but the most plausible explanation is an assumption on the part of the market that the Covid-19 vaccine revenue streams will fall off a cliff edge for both companies in due course, with nothing to take up the slack afterwards. To our minds, this reveals a profound market misunderstanding – and an exciting inefficiency.

There is plenty of evidence that both businesses have a strong (and increasing) chance of growing at very high rates for a very long time due to the modular nature of their platforms. Both companies are in rude financial health. Moderna has signed advance purchase agreements of $21bn; is throwing off c.$12bn per annum and carries $20bn on its balance sheet. These strong coffers provide the launchpad for the opportunities that excite us. Moderna talks of building a 'vaccine app store' for all manner of diseases – from respiratory conditions to cancer to malaria. The vision of CEO Stéphane Bancel is that, following a blood test at their local doctor, a patient returns a week later to pick up a vaccine that is tailored to their unique epigenome.

BioNTech enjoys broadly similar financial characteristics but is looking to disrupt traditional pharmaceutical supply chains in a slightly different way. The aim is to remove the local factors that govern where vaccines can be produced, with a modular shipping container facility that can be installed and run anywhere in the world. Updates to the production method or tweaks to the recipe of the vaccine itself could be transmitted digitally to any containers in the network. BioNTech is in discussions with South Africa, Rwanda, and Senegal to have containers arriving by the end of 2022. Each set of 12 containers will need four or five operators and be capable of producing some 40–60 million doses every year. The production system could be used to make other vaccines and drugs, for example, against malaria or tuberculosis.

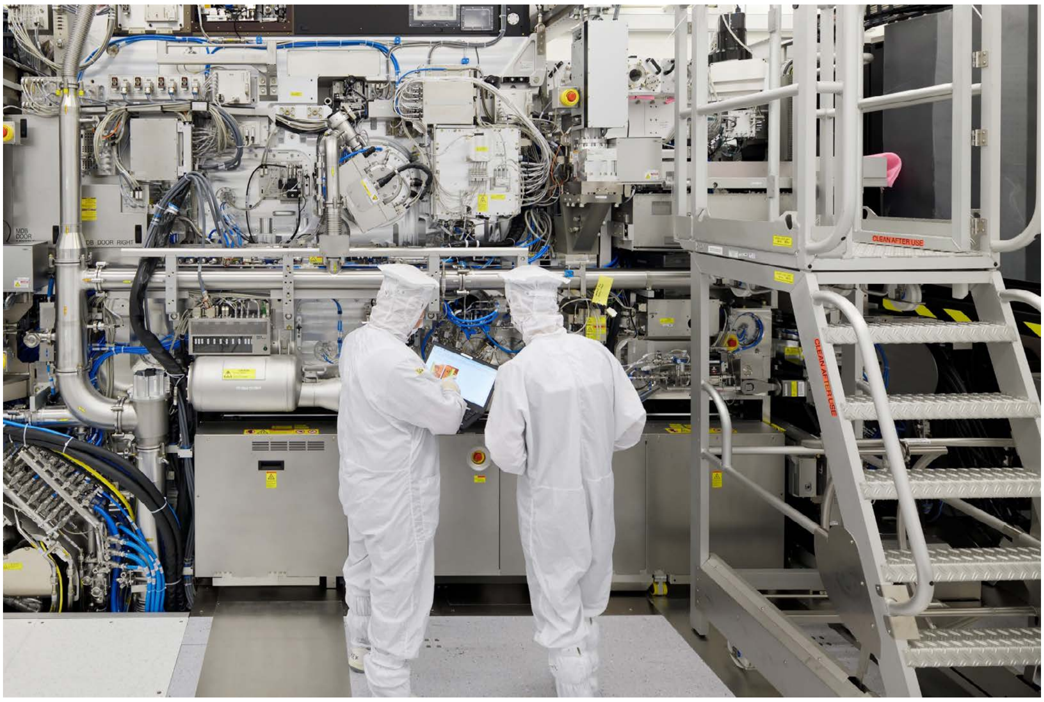
These transformational opportunities are passing the market by completely at present. A reversion to some fictitious 'pre-pandemic mean' is expected, reinforcing just how little the stock market understands the massive shakeout to healthcare systems in the coming years. Remarkably, the big pharmaceutical companies command multiples three times higher despite the cataclysmic threats to their wasteful business models.

[1] 39x year-over-year for BioNTech and 23x year-over-year for Moderna

2. Long-duration infrastructure

The next inefficiency relates to the companies that are collectively installing the infrastructure for the next decade. Let's take a trio of slightly different examples in ASML, CATL and Adyen. Each of these companies is, in its unique way, in the process of laying crucial foundations for our economy. ASML's Extreme Ultraviolet (EUV) machines are of systemic and unparalleled importance to the future of chip design. ASML has over a year's worth of backorders. Any escalation of tensions in Taiwan would be likely to further cement the company's advantage given its foundational importance to semiconductor supply chains. CATL meanwhile, is solving the world's most pressing problems in energy storage and resource intensity with its advances in battery technology. Adyen is a younger company, but again, operationally blossoming as it develops the essential plumbing for the global currency transfer market.

All three of these companies (two Dutch and one Chinese) help to remove costs for their customers. They provide essential products and services. And on that basis, it seems perfectly reasonable to expect their growth rates to hold up well over the next decade.



ASML's Extreme Ultraviolet machines are key to the future of chip design.

Now, we'd be the first to acknowledge that the road ahead is unlikely to be entirely smooth. CATL, for example, has just been hit by the double whammy of the 'uninvestable China' narrative and a transient growth air pocket of lockdown-related supply chain issues. But even if we assume that their growth rate falls by three quarters, and we throw in some additional EPS dilution, the company ends up on a single-digit multiple of earnings in a decade from now. In a similar vein, ASML and Adyen's growth rates could more than halve from current levels with the same valuation outcome.

This exciting dynamic illustrates the great scope to make an awful lot of money from today's starting valuations over the next decade, even if their multiples shrink from here.

The margin of upside for such holdings has rarely looked more exciting – a function of the market being so preoccupied with the immediate issues that it is completely missing the length of its respective runways for growth.

3. What if? versus What is?

Let's now turn to another current valuation anomaly. It has arisen because the market is suffering from extreme ambiguity aversion and attempting to chase quantifiable calculable near-term returns rather than possible outlier scenarios – an acute case of the Ellsberg Paradox[2] .

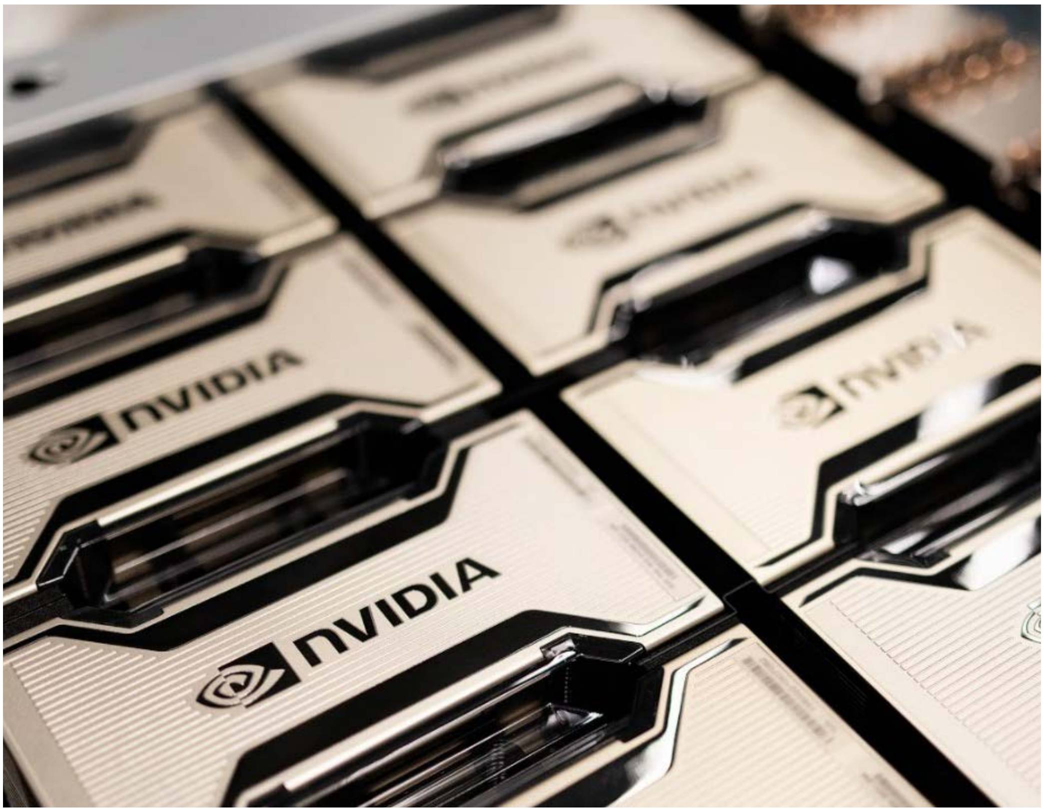
This presents a wonderful opportunity for the investors that are prepared to shift from the 'what is' to the 'what if' because currently, little or no value is being ascribed to the potential fruits of experimentation or unique cultures – to growth that could be radial rather than linear.

NVIDIA, the interactive graphics chip company is a case in point. It is priced on the basis that the current revenue streams (largely based on gaming and data centre optimisation) will gradually saturate. But NVIDIA's capabilities underpin computational drug design, climate change simulation, speech recognition, automotive control systems, industrial automation, and computer vision. These are inestimably massive markets in which NVIDIA is developing a systemically crucial role. In our eyes, it's perfectly plausible that NVIDIA's strong growth rate will be sustained, via radial growth from the core, for many years to come.

[2] Ellsberg paradox – Wikipedia

So, once again, it doesn't really matter whether the stock market ends up trading on 15 times earnings, 10 times earnings, or even less than that – because in any of these scenarios there remains abundant potential to make a great deal of money. NVIDIA's growth rate always bobbles around wildly from one quarter to the next but to put things into context, if the company's structural growth rate more than halves to, say 20 per cent pa, the company still ends up trading on a mid-single digit multiple of its earnings in 2032. So once again, there's an abundance of headroom.

When investors look back in a decade, they might well be surprised to observe that back in 2022, NVIDIA's market cap was less than a third of Apple and that the latter featured in many value portfolios. The benefit of hindsight might also reveal that the greatest risk in retrospect was a failure of imagination – an inability to imagine the scale and longevity of the earnings streams on offer to exceptionally adaptable companies.

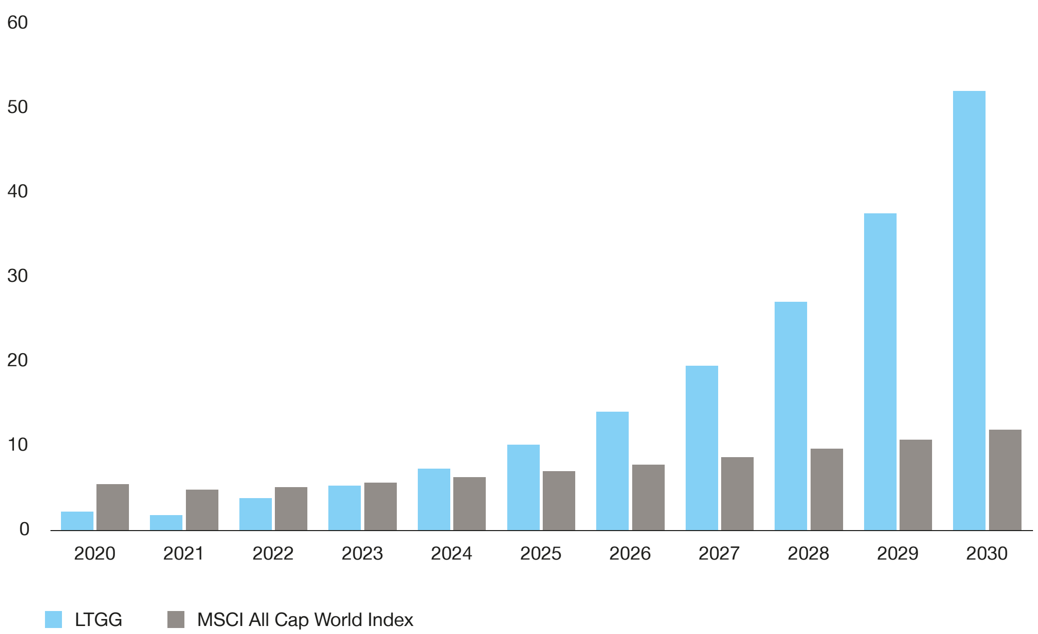


SOME OVERARCHING PORTFOLIO OBSERVATIONS

Stepping back from the stock specifics (and in the interests of demonstrating that we're not cherry-picking), it is worth making some broader portfolio observations. Since all bar five companies in the LTGG portfolio are cash generative, we can do this by looking at how the free cash flow yield is likely to progress when compared with the index[3] .

In recent years, the average rate of free cash flow (FCF) growth for the LTGG portfolio has been just shy of 40 per cent vs just over 10 per cent for the index[4] . If this trend continued in the absence of share price increases, the FCF flow yield of LTGG would very quickly catch up and overtake that of the index. The chart below illustrates the speed with which this unsustainable divergence would open up. An upwards valuation increase for LTGG would be the only way of closing the gap.

Free cash flow yield if historic FCF growth rates continue



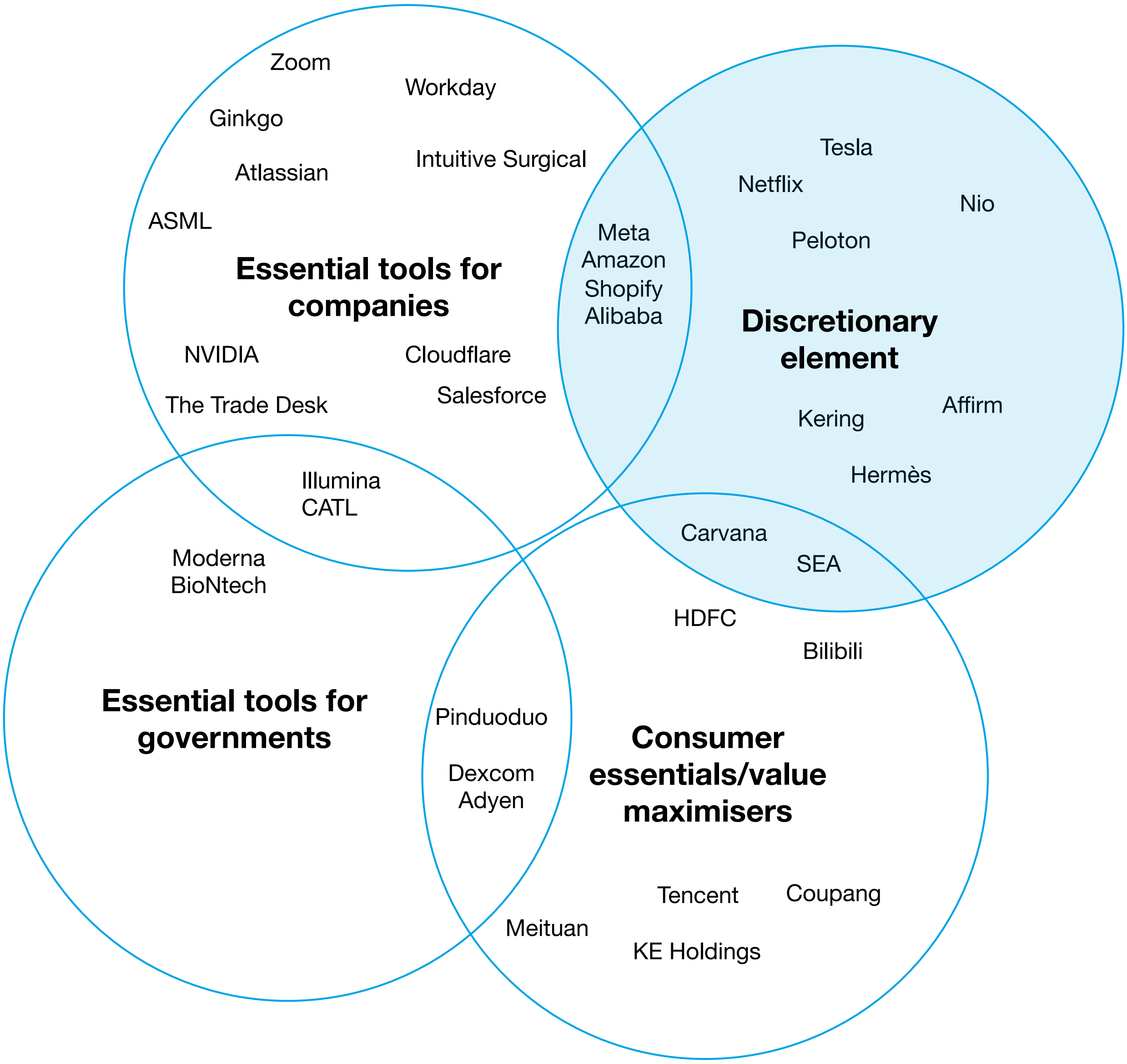
Source: Baillie Gifford & Co and underlying index provider. Based on a representative portfolio.

This may be compelling, but is this realistic? The world has changed. Won't historic cash flow growth slow? In the long term, it seems reasonable to suggest that cash flow growth can be sustained for a couple of reasons. First, the companies in the portfolio are, in aggregate, very well capitalised. Three quarters of the portfolio sit on net cash (vs a paltry 30 per cent for the indebted index).

[3]Why use FCF yield rather than Earnings? Because it is less prone to manipulation by index incumbents – who are inclined to juice their earnings by both cutting back on capital expenditure and research and development. (CapEx + R&D) / (Buybacks + Dividends) = 3.9 for the LTGG portfolio vs 1.6 for the index

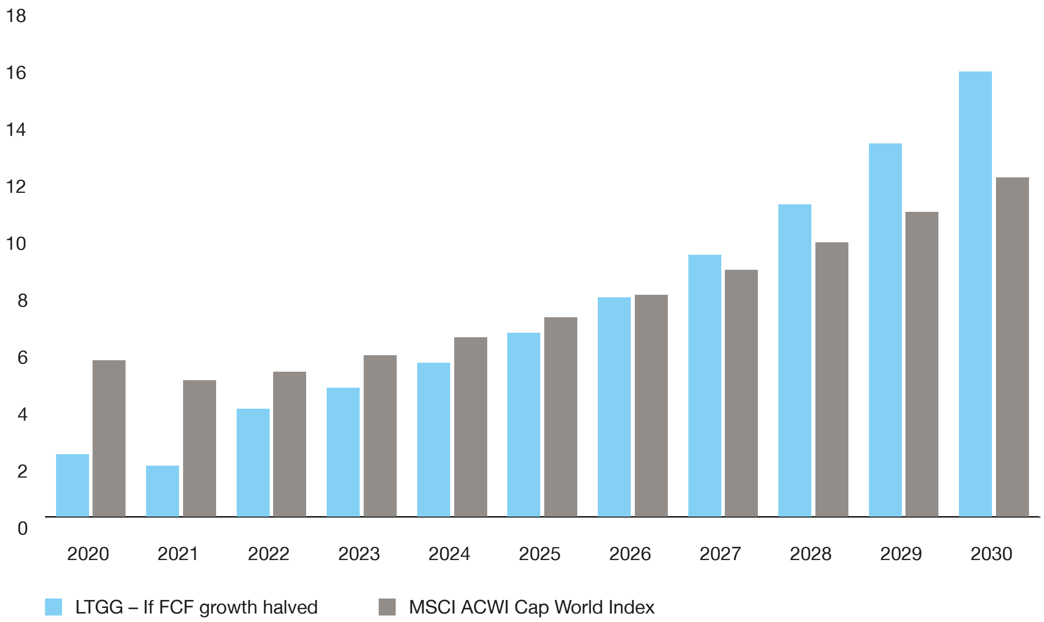
[4]Five-year Actual FCF growth for LTGG: 38.7 per cent pa and for the benchmark: 11.2 per cent pa

Second, any cyclical hit to the companies in the blue circle below can be broadly offset by the pricing power of the companies in the white ones.



But to test the scope for upside, let's be super conservative by assuming that LTGG's FCF growth halves (even though all evidence points to it holding up well). Then, let's give the index a dollop of charitable sanguinity by assuming that its historic FCF growth holds up fine. Then what's the picture?

Free cash flow yield if growth halves for LTGG and miraculously holds up for the index



Source: Baillie Gifford & Co and underlying index provider. Based on a representative portfolio.

Even in that gloomy scenario, the LTGG portfolio looks cheaper than the index on a five-year view. So all the evidence points to the scope for our clients to make a great deal of money from this starting point.

SOME COMMENTS ON THE INDEX

Having given LTGG a bit of a stress test, it's time to point out that we think we're being a bit too charitable to the index here. Capitalism is finally acknowledging that the corporate world is not separate from the natural environment, but part of it. As a result, at some point within the next decade, companies are highly likely to be forced (either by regulation, consumer behaviours or a combination of the two) to account for their external costs properly. Corporate earnings streams will see a radical adjustment and approaches to valuations will need to respond.

This is problematic for the index on account of its carbon intensity – and particularly so for some of the traditional energy index constituents that have held up the best of late in share price terms. As a case in point, let's take ExxonMobil. The current multiple of 15 times earnings looks compelling at first glance, but that's before we consider that ExxonMobil emits around 650 million tonnes of carbon per annum. At some point in the near future, those emissions look set to be priced properly. $100 per tonne looks likely on a 10-year view but even $50 per tonne of carbon would see the company taking a $20bn hit to earnings. Suddenly then, it's sitting on 70x earnings and looks a lot less cheap. And that's before we factor in scope 3, which accounts for the consumption of oil by customers and represents 90 per cent of emissions for most oil companies. Surely ExxonMobil could pass some of these incremental costs? Perhaps in the short term, they could, but that would surely hasten the long-term demand destruction. Suddenly then, the index looks a little less cheap and safe than presumed by a market which is currently unable to see beyond the fog of the moment.

CONCLUSION

Sponge wringers versus future proofers

Amid the current market melee, it's all too easy to fall into a couple of traps.

The first is a failure of imagination. By focusing entirely on the immediate, the market has lost any ability to price future prospects. Yawning, once in a generation, valuation anomalies are emerging.

The second is a failure to properly distinguish between price and value. The traditional growth and value boxes have a lot to answer for here and they look increasingly limited. But what might the alternative boxes be for an investment consultant or asset allocator going back to first principles?

One suggestion would be to make a distinction between the 'sponge wringers' and the 'future proofers.'

If you believe in a linear continuation of the current world, and stasis, then there's a rational argument for buying shares in the companies in the former category – those that are run with a 20th-century shareholder value mindset. The sponge wringing investors may well be able to extract some last drops of value from legacy incumbents in industries such as oil, utilities, pharmaceuticals, and banks. But their school jumpers will fit them for many years to come, and in time may end up being too big for their shrivelling frames.

If you believe that the world is going to progressively change – technologically, geopolitically, societally, economically – and you want to be a part of that world, then you need to back the future proofers. Seeking out adaptable companies with long term, 21st-century mindsets requires comfort with uncertainty, a high level of humility and a search for different perspectives. The jumpers of the future proofers will have stretched the most in a few years from now.

PAST PERFORMANCE

Annual Past Performance to 31 March Each Year (Net %)

	2018	2019	2020	2021	2022
Long Term Global Growth Composite	40.7	8.4	10.7	104.4	-18.1
MSCI ACWI	15.4	3.2	-10.8	55.3	7.7

Annualised returns to 31 March 2022 (Net %)

	1 Year	5 Years	10 Years	Since Inception
Long Term Global Growth Composite	-18.1	23.1	18.0	13.3
MSCI ACWI	7.7	12.2	10.6	8.4

Source: Baillie Gifford & Co. USD.

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MSCI

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Tim has been heavily involved with the development of Baillie Gifford's Shanghai office over the last few years and he also has a keen interest in helping to further raise Baillie Gifford's role in responding to the climate crisis.

Tim became a Partner of the firm in 2016. Prior to joining Baillie Gifford, Tim joined Arthur Anderson in 2000 before moving to AT Kearney where he managed a number of private equity projects. Tim graduated MEng in Aeronautical Engineering from the University of Bristol in 1999.

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