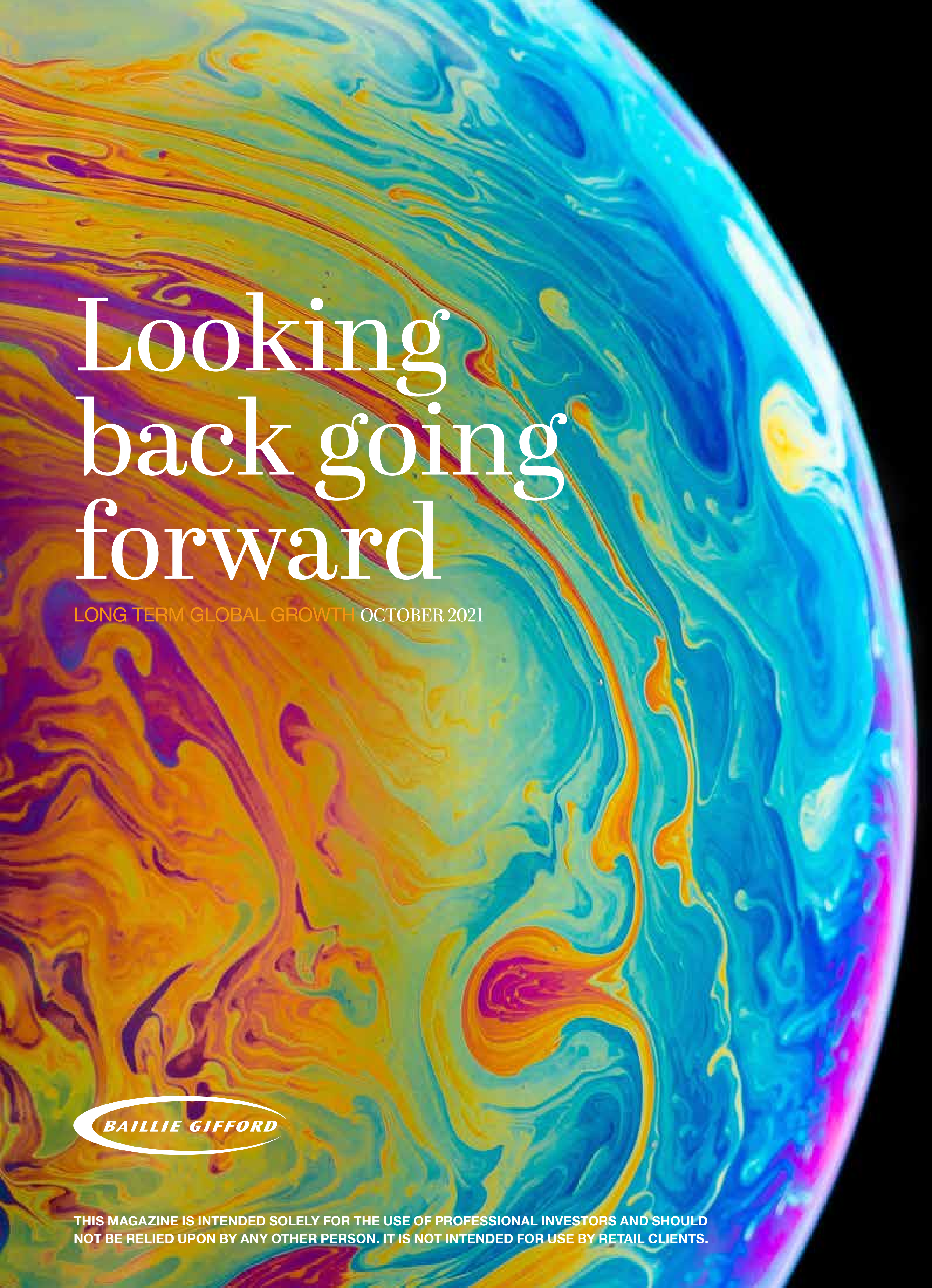

ESG SPECIAL

Looking back going forward

LONG TERM GLOBAL GROWTH OCTOBER 2021

BAILLIE GIFFORD

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Welcome to this ESG-themed special edition of Looking Back Going Forward

Since the early days of the Long Term Global Growth (LTGG) strategy, we have incorporated questions about company behaviour into our investment process. This started rather bluntly by asking: "Are your people better than their people, and if so why?" Over the years this morphed into a more encompassing question about culture and adaptability. Then in 2015 we added: "How do you contribute to society?" Earlier this year we further enhanced this to: "What societal considerations are most likely to prove material to the long-term growth of the company?" The refinements point to our desire to continually become better investors.

These questions have never been purely altruistic in nature. Rather, we are looking for companies that give credible answers because it points to them having the foundations in place for longevity. This in turn signals an ability to unlock sustainable growth opportunities and superior returns for our clients. So environmental, social and governance (ESG) considerations have always been deeply embedded in how we invest. The following articles provide more colour.

'A question of character' details how ESG considerations sit at the heart of our 10 Question Stock Research Framework, which we use to examine companies. For example, our concerns about changing consumer attitudes to fast fashion weighed on the long-term growth opportunities for international clothing retailer Inditex, and were a contributing factor to LTGG selling its stake. Likewise, when discussing Beyond Meat, we consider both its decision to shun genetically modified organisms because of its opposition to their use in the wider food chain, and the fact that production of its plant-based products emits less methane than those made from farmed animals. Measuring the impact of such factors is central to our long-term investment decision-making process.

As long-term shareholders, we then try to engage with management to enhance our understanding of a company's character, monitor developments, and gauge receptiveness to our concerns. We provide support but also challenge the leadership when appropriate. The article 'Staying engaged' explains how we define and maintain these relationships.

The existential threat posed by climate change has altered the way we think about longevity and increasingly feeds into our company analysis. As a minimum, we now expect our holdings to publish certain environmental disclosures and ambitions. De-carbonisation isn't currently part of LTGG's mandate but the team is discussing whether it should be, both internally and with our clients. The article 'Feeling the heat' – an abridged version of a forthcoming paper – takes a closer look at how sustainability feeds into every investment case.

Social issues – the long neglected middle child of ESG – can also materially affect companies' long-term growth. In 'Working It out' we share our approach to labour conditions, while 'Inside and out' explores the importance of diversity and inclusion. How a company treats its people matters to its talent retention, innovation, productivity and ultimately its growth.

As companies scale and become subject to increasing public scrutiny and tougher rules, we look to how they can pro-actively engage with regulators and learn from their mistakes. For more, see 'Rules of the game'.

Finally, we're acutely aware of the shortcomings of headline ESG data, which is often based on estimates and can involve different ratings agencies issuing disparate scores. It is no replacement for our own stock-level analysis and engagements, which we carry out as part of our investment process. However, we're also encouraging our holdings to make their own disclosures more comprehensive and comparable. The article 'ESG data: filling in the gaps' provides more detail.

ESG is a significant opportunity for LTGG. The types of businesses we invest in and the curious entrepreneurs we back lend themselves to leadership in the global response to the huge challenges facing our planet. The possibility of companies turning ESG into a sustainable competitive advantage is exciting and additional to the other long-term opportunities beneficial to our clients. There are lots of challenging conversations ahead, but LTGG is keen to play a role in the necessary societal changes to come.

We hope you enjoy this ESG special and, as ever, would welcome any feedback. If you'd like to read more from the LTGG team, please visit **ltgg.bailliegifford.com**

Mark Urquhart
Head of LTGG Team

A question of character

Rigorous review helps LTGG make sense of a company's behaviour and decide if it is worth investing in. In an update to an article published in 2018, we explain how

"The key is to always fall back on what's right. When in doubt, do the right thing. This always pays off in the end"

These noble sentiments were expressed by a renowned chief executive addressing a graduation ceremony in Boulder, Colorado. Strong ethics, he proclaimed, are conducive to long-term success. At the time his own company was riding high on a decade of colossal growth that had delivered an eight-fold rise in its share price.

Just two years later, the same business imploded and filed for bankruptcy. Investigations later revealed that management hadn't been doing 'the right thing'. Far from it. This was Lehman Brothers, and the CEO was Richard Fuld. The rest is history.

As investors, we can learn at least two important lessons from Fuld's words, albeit not in the way he intended.

Lesson one:

Examining a company's integrity, its ethical considerations and its sense of responsibility helps external shareholders understand how that company is run and how it may prosper in future.

Lesson two:

It's easy to get 'Lesson one' wrong.

We know this first-hand. But while management platitudes are sometimes used to conceal impending catastrophes such as Lehman Brothers, the more common challenge facing long-term investors is to detect what is often a gradual, subtle atrophy in a company's behaviour. For instance, we held the Brazilian oil company Petrobras on behalf of our clients from 2004 to 2011 – a period in which it grew to become one of the largest positions in the portfolio. During our holding period, the company was listed on the Dow Jones Sustainability Index, received the Global Reporting Initiative's highest rating for transparency, and was ranked number one among the world's oil and gas companies for sustainability. There was no catastrophe, environmental or otherwise, that led us to eventually sell the holding. Instead we grew increasingly concerned by the gradual creep of the Brazilian government into its affairs as the political backdrop changed. And matters later came to a head in a corruption scandal years after our exit.

Whether you call it corporate governance, corporate social responsibility, ESG, responsible business conduct or sustainability, the underlying concept is the same. It is simple: a company's character matters. It matters to customers, employees, management, shareholders, stakeholders, society and the planet. But it is also qualitative. It is non-financial, imprecise, subjective and variable over time. No company is invulnerable to potential behavioural failings and no investor is immune to missing the warning signs. But the odds of making better judgements about a company's character can be greatly enhanced, reducing – albeit never eliminating – the risk of mistakes.

We do this by doing what we do best: examining company fundamentals. We seek to ask the right questions and get to know companies deeply. We don't apply simplistic ESG screens, rankings or elaborate quantitative models. We don't feel they provide the full picture. They are dependent on the quality of their inputs, which can be lacking, and are inherently backward looking. Rather, our own firm's structure, investment philosophy and processes are far more important to us.

Former Lehman Brothers chairman and chief executive officer Richard Fuld.
© Getty Images North America

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Our firm

Baillie Gifford is a private, unlimited liability partnership and has been since it was founded over a century ago. This rare structure underpins much of what we do today. Crucially, it means we are not beholden to external shareholders' short-term interests. This means we can take a truly long-term view, with a minimum investment horizon of 5 to 10 years. Our average holding period is about a decade, and some companies have been held in the Long Term Global Growth portfolio since its launch. In our experience, the odds of a company achieving a successful combination of compelling growth and longevity are tied to its character. Good corporate behaviour increases the probability of exceptional payoffs. In the words of Georg Kell, founder of the United Nations Global Compact, which promotes sustainable corporate behaviour: "A company's long-term financial success goes hand in hand with its record on social responsibility, environmental stewardship and corporate ethics."

Baillie Gifford does not hold centralised 'views' on companies. Each investment team and each individual investor has the autonomy to voice opinions and share analyses, contributing to a culture of diverse thinking, healthy challenge and continuous dialogue. We accept that you never have the full picture, as companies are forever changing in terms of size, people, opportunity sets and regulatory environments. But through our research and a learning process built upon interaction and iteration, we remain vigilant to shifts in a company's behaviour that may enhance or undermine our investment thesis.

Moreover, as owners of shares on behalf of our clients, we have certain responsibilities and rights. We must be good stewards of our clients' capital. To achieve this our investment managers continually engage with companies' leaders. And they do not simply accept 'best practice' principles, but recognise that the right governance structures for a company depend heavily on its age, stage of development and operating environment.

We also recognise that shareholder proposals are a common way by which environmental, social and governance issues are brought to bear on a company. Thus proxy voting is an important mechanism by which to exert influence. Examples include proposals to increase disclosures on sustainability reporting, diversity, and wider employee rights. Every proposal is scrutinised by a member of our dedicated ESG team. Our decision not to outsource any of our decision-making allows us to assess every resolution on a pragmatic case-by-case basis, in conjunction with our investment teams.

Going a step beyond proxy voting, our low portfolio turnover and our patient ownership provide opportunities to exert further influence on companies by engaging in discussions with their management.

OUR DECISION NOT TO OUTSOURCE ANY OF OUR DECISION-MAKING ALLOWS US TO ASSESS EVERY RESOLUTION ON A PRAGMATIC CASE-BY-CASE BASIS

Baillie Gifford's headquarters in Edinburgh's city centre.

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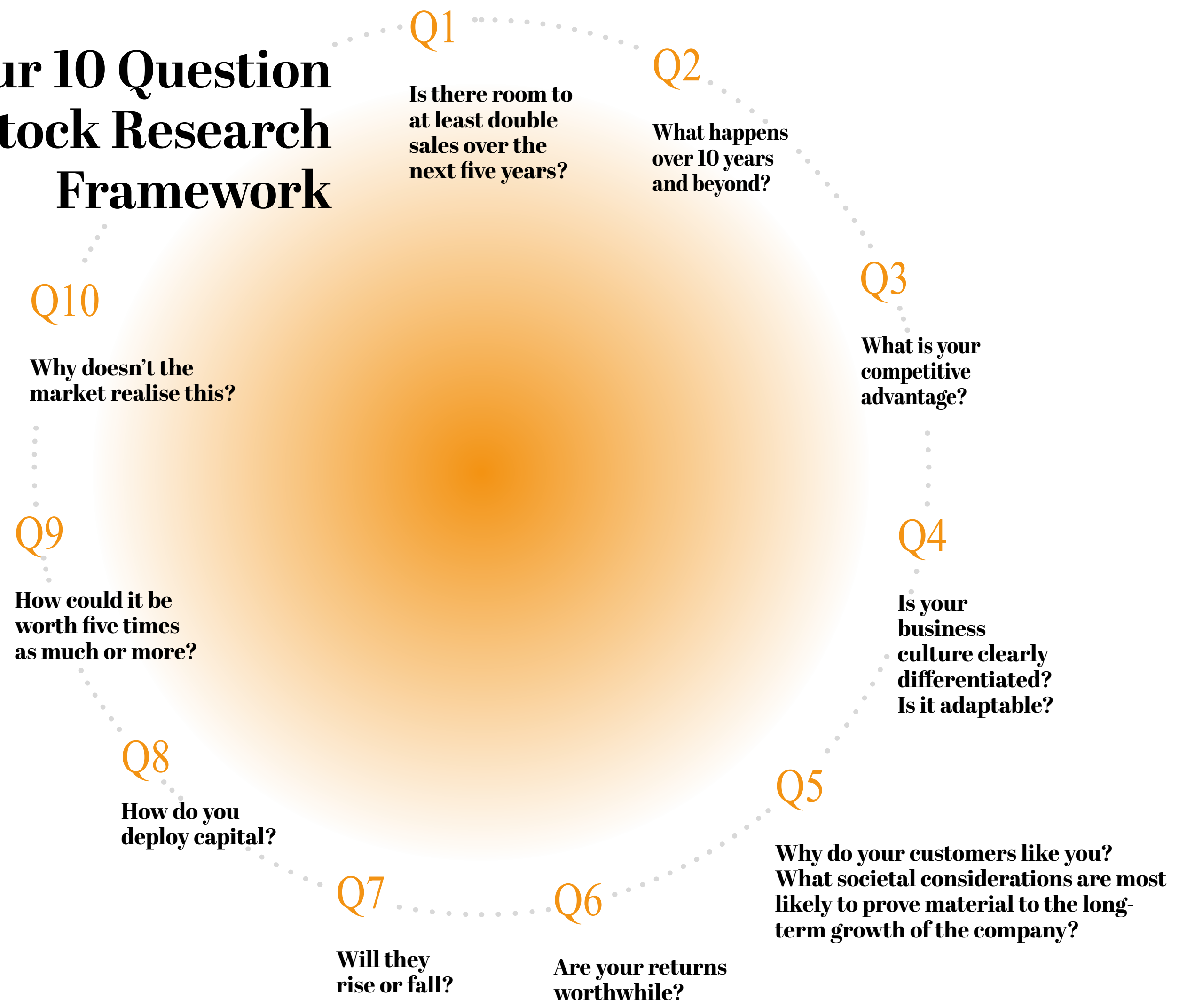
Our LTGG philosophy and process

The investment philosophy of Long Term Global Growth revolves around optimism, long-termism, a global outlook and an obsession with growth. Our ambition is to find companies that will quintuple in value over a five to 10-year period. We consider business fundamentals such as a company's market opportunity, returns, capital deployment and sustainability of competitive advantage. Important too are the intangible notions of culture, adaptability, and social and environmental factors affecting long-term growth. In other words, an analysis of corporate character is intrinsically built into our investment process. This is because in our search for the best growth companies in the world, we recognise that corporate character matters just as much as operational performance.

Our 10 Question Stock Research Framework



Our lens for analysing companies in this manner is our 10 Question Stock Research Framework. This is designed to be a robust and repeatable test. We use it before we invest, and then again over time. But it is not inflexible. For instance, we recognise that many companies in the portfolio have grown to such a scale and are driving technological change to such an extent that they have important societal consequences. So in 2016, we expanded Question 5 from simply "Why do your customers like you?" to also ask "Do you contribute to society?". In 2021, we extended the question further to ask: "What societal considerations are most likely to prove material to the long-term growth of the company?"

Our research typically considers factors such as the nature of the product or service, tax, environmental impact and labour relations. Question 5, for instance, featured prominently in our analysis of the Chinese electric car manufacturer NIO. Its stated mission is to relieve China of its notorious air pollution. The company's Chinese name Weilai literally means 'blue sky coming'. Question 5 is also relevant for Beyond Meat, whose plant-based meat substitute products use 93 per cent less land and emit 90 per cent fewer greenhouse gases than traditional animal proteins. And it also helped us consider Dexcom, whose continuous glucose-monitoring devices improve the quality of life of diabetes patients.

Our holding in luxury brand conglomerate Kering provides an example of how a company's response to this question can change positively over time. It has adopted a trailblazing approach to environmental sustainability, which is now a central pillar of its culture. Kering has published an environmental profit-and-loss account since 2015, and seeks to positively influence every step of its supply chain from raw material production and processing to manufacturing. In 2017, its largest brand, Gucci, implemented a fur-free policy throughout its range. And in 2019, Kering began engaging directly with investors through an ESG roadshow. Following our feedback, the firm altered its long-term incentive plan towards more ambitious targets while also including gender diversity and biodiversity metrics.

While Question 5 is the one most obviously related to a company's sense of wider responsibility, considerations of a company's character are also embedded into other questions. For example, Question 2: "What happens over 10 years and beyond?"

This was particularly relevant during Roche's attempted takeover of Illumina in 2012. Though the offer was at a significant premium to the prevailing share price, we opposed the bid. We felt Roche's valuation of Illumina did not reflect the immense potential for Illumina's gene-sequencing technology to transform the healthcare industry and improve the lives of hundreds of millions of people. Fast forward to early 2020, and Illumina's technology was instrumental in sequencing the genome of SARS-CoV-2, allowing biotech companies to develop innovative mRNA vaccines for Covid-19. The sequence took less than 48 hours to complete and another 48 hours were all it took to design the vaccine itself. We fought for Illumina's independence to ensure it had the chance to reach its transformative potential. With its market capitalisation nearing 10 times what it was in 2012, we believe that Illumina remains at the start of its journey. Question 2 therefore helps us to look beyond the market's short-term focus. In the case of Tesla, that means going beyond its electric vehicles and considering the vast potential for its energy generation and storage business, and what implications that might have on energy efficiency and the environment.

In 2021, we extended the question further to ask: "What societal considerations are most likely to prove material to the long-term growth of the company?"

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Baidu headquarters in Beijing. © GREG BAKER/AFP/Getty Images

Question 4 asks: "Is your business culture clearly differentiated? Is it adaptable?" For example, we think there is a lot to admire about Alibaba's culture. It has a desire to move leadership down the generations, and says it has never supported the notion of a single leader. The firm employs a similar partnership structure to our own, and it recently took more than a year to decide on its six new core values. One of these is teamwork, as recently demonstrated when it sought to engage and educate regulators on the capabilities and implications of some of its developing business areas.

The Australian collaborative software company Atlassian has shown adaptability as it ended sale and support of its significant in-house data centre products, in order to migrate its business to the cloud. The move to a cloud-only option will dampen revenues in the short term, and it may even cause some adverse customer reaction, but it is the right long-term decision for the business.

Advertising tech firm The Trade Desk has also shown itself to be adaptable by launching a new web-tracking solution called Unified ID 2.0. This was a response to data-privacy challenges against the use of traditional third-party cookie trackers. The innovation not only enhances data privacy and control for users but also supports targeted advertising for the benefit of the entire digital advertising industry.

Netflix is an example of a company whose corporate governance policies are not considered 'best practice'. However, our research and engagement with senior management and non-executive directors indicate that the TV streaming firm's governance structure is both pragmatic and supportive of its long-term strategy. Its culture deck, created in 2009, is still revered as the model for corporate culture. But recent discussions suggest Netflix continues to look forward rather than stand still.

In contrast, a meeting with Trip.com in 2020 raised concerns over a lack of thought about the environmental issues of air travel over the next decade. An underwhelming answer on culture – suggesting the company had addressed the issue by matching its salaries to those of its rival Expedia – struck a further downbeat note. It didn't help that we had just been impressed by Meituan, an innovative competitor, in meetings shortly beforehand. We sold our holding in Trip.com shortly afterwards.

We also sold Baidu in 2019 after a decade-long holding period because we noticed cultural atrophy over time. Baidu seemed less adaptable to competition from innovators like Bytedance, creator of the hugely popular video-sharing app TikTok, and super-apps like Tencent's WeChat. We felt that Baidu's management was becoming increasingly autocratic and our long holding period helped us notice subtle cultural deterioration.

Mike Cannon-Brookes (left) and Scott Farquhar, co-founders of Atlassian. Cannon-Brookes has said the firm will get all its power from renewable sources by 2025. © Atlassian

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Question 8, "How do you deploy capital?", can also reveal much about a company's character. For instance, in early 2021 Peloton announced that it would invest more than $100m in air and ocean freight deliveries after admitting that its product wait times did not meet its standards. Shortly afterwards, it announced plans to spend an additional $400m on a US manufacturing facility. This was a positive development as it highlighted the firm's recent success and demonstrated a willingness to sacrifice near-term profit margins and share price to provide a better long-term experience to customers. Similarly, in early 2021 we supported Meituan's deep investments in grocery shopping infrastructure and autonomous delivery. CEO Wang Xing told us before its IPO in 2018 that he was striving to create a business that would last a century. Meituan aims to deliver one hundred million orders per day by 2025. At present, it delivers close to 40 million. Investments like this will be key to achieving its long-term goals.

Gathering responses to our 10 Questions over time helps us to understand the fundamentals of a company's behaviour. This built-up knowledge can be especially helpful during times when a company faces stress. For instance, we learned a lot about whether companies would 'do the right thing' during the Covid pandemic. We wrote to the management teams of each of our portfolio companies telling them that we supported any steps they took to help employees and society in the short term. Many companies did just that and more.

Covid responses:

Dexcom donated 10,000 of its glucose-monitoring devices to hospitals

Peloton donated bikes, initiated subscription holidays and extended free trial periods

Shopify offered loans to help small and medium-sized businesses navigate the testing trading environment

Amazon created 100,000 new jobs

Netflix created a $100m fund to help cast and crew members affected by impacted films and TV shows

A healthy dose of humility

We believe our approach provides us with valuable advantages in understanding companies' attitudes and behaviours. This helps us distinguish empty rhetoric from sincere intent. But there's one last aspect of our approach worth stating: being honest about the difficulties we face. While we have never had so much insight into aspects of company character, we face ever-increasing complexity at significant scale. There will always be unknowns and grey areas. We will inevitably make some investment mistakes. This may be because companies fail to execute as we would expect, or because there are negative behavioural shifts in their governance and stewardship. Often it is a blend of both. We accept that. That is being honest about our appetite for risk and reward. But going the extra mile to understand a company's character as part of our fundamental analysis helps us to be broadly right in our assessment of corporate behaviour most of the time. And doing so can deliver enormous returns for clients and society alike.

Staying engaged

When LTGG decides to invest in a company, it's just the start of what's intended to be a long-term relationship

We have always been adamant that stewardship is part of our ethos. However, we have never taken a holding with the intent of advancing a corporate agenda. In Long Term Global Growth, we buy because we believe that the companies that we invest in are already concerned with being long-term in approach and will flourish by having a purpose beyond shareholder value.

In 2020, UK regulators defined stewardship as "the responsible allocation, management and oversight of capital to create long-term value for clients and beneficiaries", adding that this should lead to "sustainable benefits for the economy, the environment and society".

This mirrors LTGG's own ambitions. Our 10 Question Stock Research Framework requires us to:

- ask what might happen over the next decade and beyond
- seek insight into corporate culture
- explore a company's relationships with its stakeholders
- assess a firm's contribution to society
- scrutinise how an enterprise's investment strategy supports long-term growth

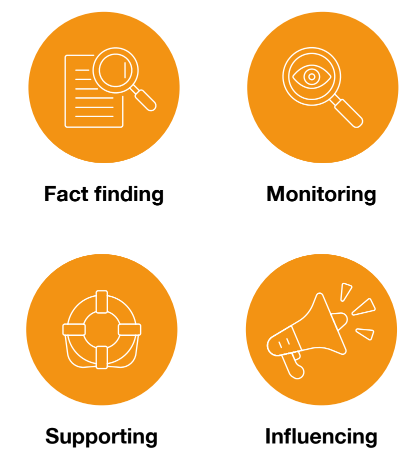
One advantage to LTGG having only a handful of stocks in its portfolio is that we can build meaningful long-term relationships with management teams and boards over time. In doing so, we continuously refine and develop our answers to our 10 questions. This is what underpins our engagement.

Talk of 'engagement' – as with 'ESG', 'responsible investing' and 'stewardship' – is ubiquitous in the finance industry, but often poorly defined. So it's important to be clear what we mean by the term.

Firstly, we don't believe there's a single formula for it. Just as we analyse companies in their own context and on their own merits, so our engagement with their leaders should be specific to each situation. And we are wary of prescriptive policies and rules. By their nature these are reductive and blind to nuance.

Instead, we shape our interactions by drawing on a small number of principles we expect our holdings to respect: prioritisation of long-term value creation; a constructive and purposeful board; long-term-focused remuneration with stretching targets; fair treatment of stakeholders; and sustainable business practices.

With these ambitions in mind, our goals for engagement fall into four categories:



These are each of equal importance. We acknowledge that our clients' and other observers' focus is often on the 'influencing' part, given the desire for there to be measurable consequences. But it takes time for influence to make a difference, and it nearly always builds on fact finding, monitoring and support.

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LTGG follows this approach across its portfolio. Amazon is one of our longest-standing and largest holdings, and we have engaged with it over a wide range of topics over the years since our first meeting in 1999 – five years before our first investment. We've spoken with the company about disclosure and reporting, remuneration, board makeup, management succession, tax, data privacy, sustainability, environmental efforts, supply chain management, and of course management of employees from head office to the fulfilment centre floor.

These stewardship activities have evolved over the years from being more transactional in nature – fact finding and focused on AGM agenda items – to interactions that challenge and influence.

That's not only because our relationship matured, but also because Amazon itself matured.

Founders and management learn over time what is best practice and most appropriate for their business. Baillie Gifford can draw on its experiences as a long-term investor to help younger businesses in this regard. This is especially true for newly public companies, which, almost overnight, are held to new sets of standards.

Yet ESG scores and ratings are often based on how much companies disclose rather than their fundamental business practices. This inherently disadvantages innovative but less mature firms. It's one reason we are wary of such metrics. Another is the wild inconsistency between different data providers. So rather than rely on such ratings, we engage directly with founders and other leaders to support and influence them as they develop their own practices and disclosures, especially those relating to stewardship and sustainability.

Our engagements with two recent portfolio additions – Beyond Meat and Peloton – demonstrate this.

COWS ARE A PARTICULARLY INEFFICIENT WAY TO CREATE PROTEIN, REQUIRING ABOUT 15,000 LITRES OF WATER TO PRODUCE EACH KILOGRAM OF BEEF

Beyond Meat's founder Ethan Brown is tackling climate change by addressing one of its biggest contributors: livestock. Farmed animals account for about 15 to 20 per cent of global greenhouse gas emissions. Cows are a particularly inefficient way to create protein, requiring about 15,000 litres of water to produce each kilogram of beef, according to the Water Footprint Network.

Yet an ESG rating agency recently scored the company poorly on water risk management, essentially because Beyond Meat hadn't disclosed enough detail about its operations. As a result, it ranked in the bottom quartile of surveyed packaged food producers, while Nestlé – which sold nearly $7bn worth of bottled water last year – made the top quartile. This was despite the agency's own report acknowledging that plant-based burgers used about 99 per cent less water to produce than beef burgers.

So what's the best way forward? We agree that water usage is an important consideration and that companies should disclose relevant details. But a low ESG rating shouldn't prompt a sale. Instead it's further cause to provide support and influence.

Before the report's publication, we had already talked to Beyond Meat about its need for policies and infrastructure to make better environmental disclosures possible. The company has created an ESG steering committee and shortly plans to publish a sustainability report based on industry standards. We intend to stay engaged.

LTGG also has a nascent relationship with the home fitness firm Peloton. In early 2021 it stumbled over its initial response to a safety issue with its treadmills. It resisted a recall and clashed with the US Consumer Product Safety Commission, which had highlighted a risk to children. Peloton subsequently acknowledged that a recall was indeed required and that its initial response had been "a mistake". Chief executive John Foley and other management have been transparent and responsive, and admit the experience was a wake-up call.

We are encouraged that the company is willing to learn. And from a shareholder perspective we are pleased that Peloton's management contacted us at the time to suggest a call to discuss the issue. Though still a relatively new holding, our relationship with Peloton bodes well for the long term, and shows the benefits of us having known and invested in the company in private markets ahead of its 2019 flotation.

There have, however, been instances when companies haven't been receptive to engagement, leading us to sell our entire stakes. This happened two years ago with US sportswear firm Under Armour and the Chinese search conglomerate Baidu. In the former case, senior management were overly focused on short-term market reaction. In the latter, the CEO's micromanagement was stifling talent. In both situations we had tried to communicate our concerns and reiterate support for the companies' long-term growth, but to no avail.

A Google store in the Chelsea neighbourhood of New York.
© TIMOTHY A. CLARY/AFP/Getty Images

More recently we have exited a 13-year investment in Google's parent company, Alphabet. The main reason was that having reached a market cap of $1.8tn, we believed it was unlikely to grow a further five times in size. But we might have had more confidence if we'd had a closer relationship with senior management. As early as 2011, we described the company as being "frustratingly opaque". Its leadership's aloofness and the firm's increasingly evident cultural blind spots, such as its standoffishness with regulators, led us to suggest in 2018 that "the biggest threat to Alphabet is Alphabet". These issues now threaten its expansion into new growth categories. Alphabet's employees thrive on solving the world's hardest problems. But commercial success in the cloud, hardware and autonomous driving requires more than just intellectual prowess. It requires collaboration with suppliers, distributors and other stakeholders.

Of course, in a long-term portfolio with relatively low turnover, most engagements don't lead to such decisions.

Many centre on fact finding – not just getting to know new holdings better, but also understanding how the ones we have owned for longer change over time and handle fresh challenges.

This can be company-specific: for instance, hearing how Moderna thinks about remuneration, how Alibaba interacts with China's regulators, and how Tesla's bolstered board affects its ambitions. There are also issues that impact all holdings, such as modern slavery and climate change. Here engagement starts with fact-finding questions about exposures, policies and ambitions. The replies then underpin how we monitor and influence the companies' behaviour over the following years.

When it comes to monitoring, we're conscious that ambitions are rarely achieved overnight or challenges solved that quickly. But regular engagement and follow-up conversations help us to recognise change. This is evident with some of our high-profile holdings. Tesla's corporate governance is more robust and its health and safety record has improved. Amazon has raised wages for its workers and advocated for a higher minimum wage. Facebook has implemented numerous measures to moderate problematic content.

THE STRENGTH OF OUR RELATIONSHIPS ALSO PROVIDES US WITH A SURE FOOTING WHEN WE DO FEEL STRONGLY ABOUT AN ISSUE

This is good to see but none of these companies has 'finished' improving. Tesla's CEO remains idiosyncratic and the firm could better manage its public communications. We have spoken to Amazon about its behaviour during the unionisation vote in Bessemer, Alabama and repeated our wish for it to improve its disclosure of social practices. Facebook continues to grapple with misinformation and abuse on its platforms. Likewise, for large and long-term endeavours such as supply chain transparency and decarbonisation, we will continue to engage with our holdings for years, if not decades, to come.

We are frequently asked for evidence that our engagements have prompted change. We hesitate to make such a claim. We don't consider ourselves activist investors and we believe that the few companies we pick are extremely well run from the outset. It's not for us to dictate microscopic details of strategy or culture. However, we can offer decades of experience gained across a range of businesses and geographies. We can also bring our long-term view, which is often received as refreshing. And we can ensure companies have our support when appropriate. This has led several of our holdings to collaborate with us over new policies and disclosures. Examples include Alibaba's first sustainability report, Beyond Meat's planned ESG reporting, and our current portfolio-wide conversations about climate change.

The strength of our relationships also provides us with a sure footing when we do feel strongly about an issue. One example is luxury goods maker Kering agreeing to incorporate ESG targets into its leadership's financial incentive plan. Another is us supporting shareholder resolutions for Facebook to enhance its reporting on child exploitation and platform misuse.

Underpinning fact finding, monitoring and influencing is the fourth category of engagement: support. This can be provided in different ways.

One clear-cut example was LTGG telling all its holdings in March 2020 that in the face of the pandemic we were comfortable with management putting the long-term interests of all stakeholders ahead of meeting their quarterly targets.

Support can also be implicit. It's what we don't do, such as not bombarding companies with short-term questions. Support can also be offered in reaction to external events, such as LTGG opposing Roche's bid for Illumina nearly a decade ago, or more recently retaining our stake in Meituan and Pinduoduo at a time others were selling out because of regulatory intervention. Equally we accept that bad things can happen internally that require us to offer our support. Examples include Tesla's Model 3 'production hell' in 2018, and public concerns about Zoom's data security in the early days of the pandemic.

We strive to get to know our investments well enough that problems are neither a surprise nor so destructive of former hypotheses that exit is the only response.

Finally, we can offer support when nothing fundamental about the company has changed, but for no good reason other investors have got nervous and sold. Under such circumstances LTGG might let management know it is holding firm, and even take advantage of the share price dip to increase our stake.

This last point brings us full circle with a reminder that engagement and patient long-term investing go hand in hand. Our holdings benefit, and so do our own investing skills – both of which serve the interests of our clients. These flywheels mesh unusually well. If we treat companies more thoughtfully then they will treat us more seriously and thus we become better investors.

Feeling the heat

Many of LTGG's holdings could become role models in the battle against climate change, but more work is needed to track their efforts

Long Term Global Growth recognises that we are the first generation to feel the effects of climate change and the last that can do something about it.

The recent Code Red report from the UN's Intergovernmental Panel on Climate Change made clear that efforts to further wring the sponge of fossil-powered business models will entail awful consequences for our planet and dreadful investment returns. We believe that the focus must now be on more energy-efficient and less carbon-intensive solutions.

Our starting assumption is that if we act decisively global warming can be limited to a 1.5C (2.7F) rise. But time is running out. Scientists suggest that to have even a 50 per cent chance of success, we must halve global emissions by 2030, halve them again by 2040, and achieve net zero by 2050. Net zero for the planet is the point at which the levels of greenhouse gases in the atmosphere would stabilise, ending the sharp increase in heat-trapping emissions that have brought us to such dangerous levels of global warming.

From an investment perspective, this should be treated as the minimum level of ambition.

The time frame is daunting but also galvanising. And it tallies with LTGG's stock-picking philosophy of focusing on companies capable of driving rapid change or thriving within it.

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Exposures and opportunities

The carbon footprint of LTGG's portfolio is much lower than the industry norm. But so what? That some firms pollute more than others is self-evident. It's more useful to ask if our holdings are a part of the problem or contributing to the solution. In this vein, we look for areas of opportunity.

New technologies

The stock market consistently fails to process and price in the implications of the exponential changes to come.

Wright's law is the notion that progress increases with experience – that each doubling of the number of units a business produces drives a fixed percentage improvement in production efficiency, with corresponding cost savings. This is known as the 'learning rate'. Strikingly, the figures for solar panels (about a 25 per cent fall in prices per doubling) and batteries (about 18 per cent) are on a par with those for silicon chips.

The shift from high to low and then near-zero added cost in switching to greener energy tech is profound. That is why the opportunity for our portfolio holding in Tesla is so interesting. It also forms the foundation of the case for the stake in Chinese electric car company NIO. And it led us to recently take a holding in CATL, the Chinese battery company.

There are also exponential price declines in alternative protein. This is why the cost of Beyond Meat's plant-based burgers continues to fall. This should help the firm take a meaningful share of the $500bn processed meat market over the next decade. If cows were a country, they'd be the third largest emitter of greenhouse gases behind the US and China. So by reducing the consumption of beef and other animal-based food, Beyond Meat could prevent hundreds of megatonnes of emissions every year.

© NIO Inc.

New business models

The investment cases for the likes of Shopify, Pinduoduo, Delivery Hero, Meituan, Alibaba, Amazon, Coupang, Hermès and Kering are predicated on them processing, manufacturing and distributing their wares at increasing scale. We look to them to demonstrate climate leadership and adaptability.

Kering is a case in point. Its open-sourced environmental profit and loss (EP&L) accounting approach and its industry-wide Fashion Pact initiative could have significant ripple effects. The former involves the firm sharing details of how it measures the environmental impact of both its own operations and those of its supply chain, and then converts this into a monetary value. The latter is a three-pronged commitment it spearheaded to tackle global warming, restore biodiversity and protect the oceans. The release of Kering's comprehensive biodiversity strategy in June 2021, underpinned by EP&L data, was a further pioneering move.

Amazon needs to do more to influence a shift away from the 'extract and discard' production model that underpinned global growth over the past century. We have spoken to the company about allegations it has destroyed millions of returned and unsold items and we've encouraged it to improve related disclosures. Over the past couple of years, we have seen signs of positive overall progress. In 2019, Amazon co-founded The Climate Pledge with NGO Global Optimism and has made three commitments:

To be net zero carbon across its business by 2040

To deliver half of Amazon shipments with net zero carbon by 2030

To power its operations solely with renewable energy by 2025

As part of these efforts, it has become the world's largest buyer of renewable energy.

Some of LTGG's holdings also have a very large opportunity to reinvent wasteful supply chains. Our clients' holding in Chinese social ecommerce platform Pinduoduo is cutting out layers of inefficiency within supply chains by matching consumers directly with farmers, removing a string of intermediaries.

However, if we see signs of enduring flat footedness, we respond. The recent sale of Inditex, whose business model is predicated on fast fashion, was a case in point. We felt it had blind spots to climate risks and other factors that were limiting its scope for growth.

© Amazon

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Dematerialisation

One upshot of the shift to an increasingly information-rich economy is that we are learning to do more with products that aren't physical. Jensen Huang, founder of the graphics and AI chips specialist NVIDIA, puts it well: "There will be a larger market, a larger industry, more designers and creators, designing digital things in virtual reality and metaverses than there will be designing things in the physical world."

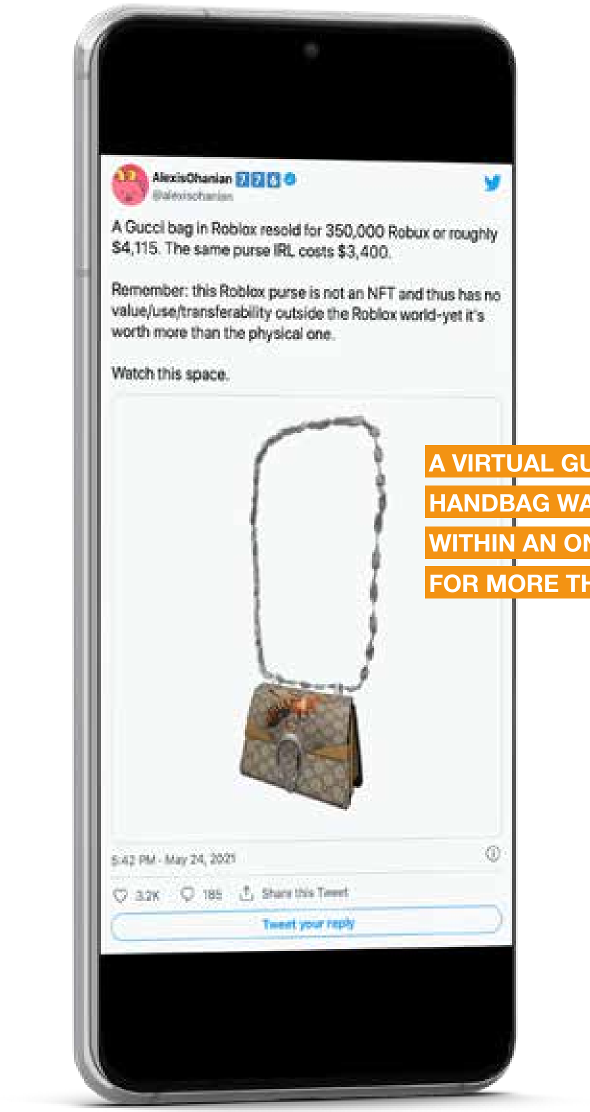
In one eye-catching example, a virtual Gucci handbag was traded within an online game for more than $4,000. That's more than the price of its real-world equivalents.

Our online lives will still require matter and energy, but will use them more efficiently. It's interesting to contemplate the potential emissions that might be prevented by people avoiding travel and hotels, and instead using virtual working tools provided by Zoom, Atlassian and a number of our portfolio's other enterprise software holdings.

Opportunities to influence

Some LTGG holdings can have a major influence on how the public thinks about climate change. For instance, more than 100 million households have watched David Attenborough's Our Planet, funded by Netflix. The TV show educated viewers about how humanity impacts other species and their habitats. Likewise, Netflix's Seaspiracy documentary raised issues about marine life biodiversity.

Less positively, Facebook, another holding, permits adverts by climate change denial groups. There is a clear tension between the damage this causes and the platform's desire to safeguard freedom of speech. But the company has started taking proactive steps to educate users about climate change and to discourage false information. And we are encouraged by its new Climate Science Information Centre.



A VIRTUAL GUCCI HANDBAG WAS TRADED WITHIN AN ONLINE GAME FOR MORE THAN $4,000

More to do

LTGG's portfolio has more exposure to the upside opportunities of climate change than to its downside risks. The complete absence of any fossil fuel-related holdings and a leaning towards asset-light business models help in this regard.

But some areas require focus and improvement.

1. Better disclosure and data

At present, only 17 of our 38 companies actively report scope 1 and 2 emissions. Scope 1 concerns emissions created by directly owned or controlled sources, such as factories. Scope 2 covers those resulting from the generation of electricity, steam, heating, cooling etc used by the reporting company.

That's not good enough. So in recent months we've explicitly flagged to the laggards that we expect scope 1 and 2 disclosure as a minimum standard. Ideally we'd like scope 3 emissions as well – covering other indirect sources, such as employees commuting to work and consumers using the reporting firm's goods.

This is important because LTGG's holdings need to be on the front foot to understand the implications of carbon being properly priced via regulation and/or market forces. They should also tackle the fact that the currently approximated data is based on multiple overlapping sources that are often contradictory. Estimated scope 1 and 2 data is not fit for purpose, with farcically inconsistent figures from different providers.

The complexity of scope 3 means disclosure here will take longer to become commonplace despite its importance. Some industries are going to find it easier to do their sums. For example, 'downstream' figures – which take in the usage and disposal of a company's products – are easier to calculate for a car maker or miner than an ecommerce platform or investment manager. But we expect scope 3 disclosures to become a growing discussion point in our conversations with managements.

2. Clearer ambitions

Once disclosure has improved, companies should be able to set clear carbon-reduction goals based on achieving net zero by 2050 at the very latest, and ideally well before.

But we're keenly aware that there are very good and very bad ways of doing this. It shouldn't mean continuing to finance carbon-intensive fossil fuel activities while finding ways to absorb carbon dioxide elsewhere, and then using creative accounting to balance an emissions score. We want companies to reduce their direct emissions as much as possible, only using offsets as a last resort to manage the rump.

Those offsets should be credible and verifiable, based on the standards of the Science Based Targets Initiative or credible local alternatives. And that means avoiding double-counting – for example where a reforestation project might be counted both towards the host country's own targets as well as those of a company that had bought related credits. The climate only sees the benefit once.

In the years to come, we plan to actively report on how many LTGG holdings have met our expectations and actively engage with those that haven't. The risk for any company that fails to make serious decarbonisation commitments is that it is destroyed by some combination of regulation and customer backlash over the course of the next decade.

At present, our clients' Chinese holdings are notable for a lack of net zero commitments. However, President Xi Jinping's recent Net Zero 2060 announcements should change that. We expect Chinese firms to catch up and overtake many of their global counterparts as a result.

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WORKDAY, THE PROVIDER OF CLOUD-BASED ENTERPRISE APPLICATIONS, HAS A LONG HISTORY OF ENGAGEMENT

© Garrett Rowland for Workday.

3. Ongoing engagement

As part of discussions with each of our holdings, we are attempting to home in on the most impactful climate-related changes they could make to their business models.

One of those conversations is with ASML, the semiconductor equipment manufacturer. It aims to cut its direct emissions to zero by 2025. We are reflecting on how properly costed resources or emissions – such as energy, water and fluorinated greenhouse gases – might disrupt the geography of the current semiconductor supply chain. We are also exploring the physical risks of climate change, both in terms of disrupting access to fresh water, which is critical for the big chip fabricators, and the 30 to 40-year outlook for sea level rises and other flooding.

We are also engaging with Coupang, the South Korean ecommerce platform. It is already moving to a more sustainable model by using eco-packaging and returnable bags, as well as setting up more logistics centres to shorten delivery journeys to customers. About 70 per cent of South Koreans live within seven miles of one of its warehouses. As yet it has no climate-related disclosures or targets, but we expect to see progress on this in 2022.

Workday, the provider of cloud-based enterprise applications, has a long history of action on climate change. It started buying renewables in 2008 and set its net zero ambition in 2016. It uses 100 per cent renewable energy, has offset all its past emissions and is one of the few US companies to have set an internal carbon price. We expect it to have set targets for wider scope 3 emissions by the end of 2022. We will monitor its progress as a climate leader with interest.

There are numerous other examples, and in our view this kind of long-term engagement or monitoring is more influential than proxy voting. In any case, we deliberately try to invest in companies whose leaders share our values and long-term horizons.

4. Improving information sources

The most helpful perspectives on the world's environmental challenges will come from outside the financial services industry and the data providers it relies on, which is why we seek expertise from elsewhere.

For example, Baillie Gifford's work with the Deep Transitions Futures Project involves a collaboration with the University of Sussex's Science Policy Research Unit and the Utrecht University Centre for Global Challenges. The initiative is exploring what kinds of investments are needed to achieve a better future and how society might need to be fundamentally re-ordered. It's an acknowledgement that technological change alone won't be enough.

We're also keen to further our understanding of the systemic changes that must be made to our food systems. Agricultural production accounts for about 30 per cent of current greenhouse gas emissions. Our tie-up with the James Hutton Institute in Aberdeen is exploring new models of carbon-negative farming. And in China, our relationship with Fudan University is exploring new models of agriculture. We are also developing a scholarship and intern programme with the Low Carbon College of Shanghai Jiao Tong University.

In addition, we have a fruitful firmwide relationship with Mike Berners-Lee, a carbon expert from the Institute for Social Futures at Lancaster University. He and his team have reviewed several of LTGG's portfolio holdings and explained the limitations of using some data providers. Next, they plan to help us develop better scope 3 estimates and refine our thinking about biodiversity.

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What next?

New concepts

Over the coming months and years, we plan to develop our thinking around a couple of important concepts.

The first is that of 'avoided emissions', which some holdings are already starting to estimate. Zoom, for example, lays claim to 55 million tonnes of avoided emissions over the course of 2020. But how to attribute benefits in a robust and rigorous manner?

The second is that of 'temperature alignment'. This is the notion of taking each holding's climate targets and converting them into a portfolio-level temperature rating. Establishing whether a portfolio is aligned with a 1.5C world or a 3C world is undeniably appealing. But in our view the models and data used by MSCI and other ratings agencies are inadequate. We would like to create a more rigorous and credible process.

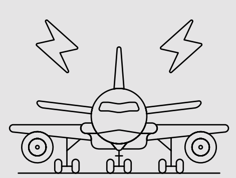
Carbon pricing

We would also like to conduct further work on companies' sensitivity to rising carbon prices. At present, only about a fifth of global emissions are priced, and the weighted average price of carbon emissions is currently a paltry $2 per tonne. It is generally recognised that the price needs to reach about $100 per tonne to achieve the 1.5C target. A key question is whether we should encourage more of your holdings to follow Microsoft's lead by setting an internal carbon tax.

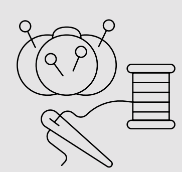
New opportunities

Baillie Gifford is a growing investor in private companies. Many of these are being driven by the global push for decarbonisation, and provide LTGG with a fascinating window into future opportunities. These holdings include:

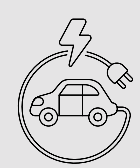
Lilium and Joby, which are both developing electric-powered aircraft



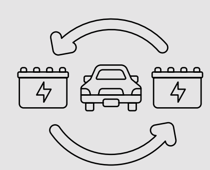
Bolt Threads and Ginkgo Bioworks, two companies using biology to develop new materials and other products



ChargePoint, which runs an electric vehicle charging network of its own as well as providing its technology as a service to others

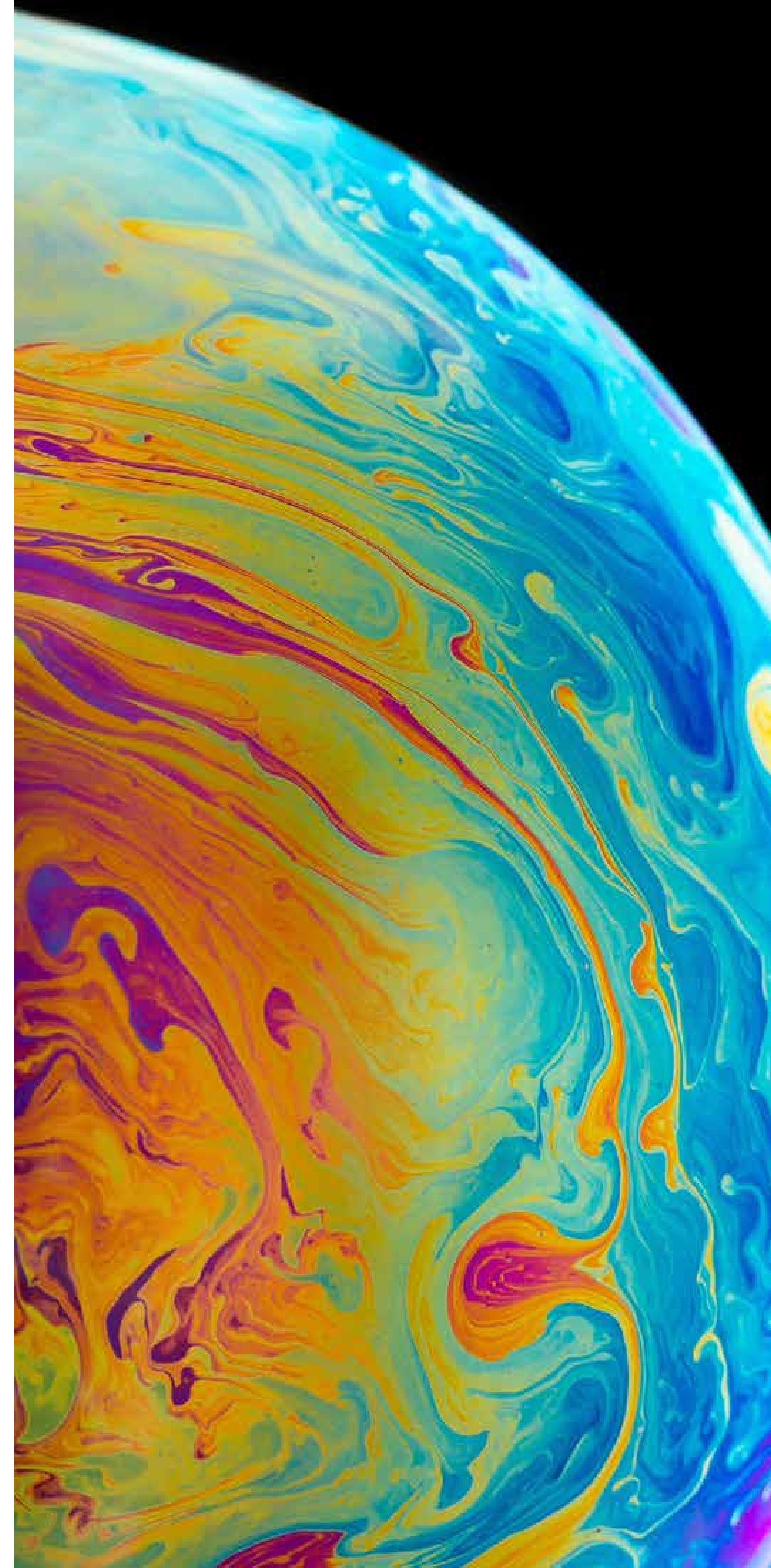


Northvolt, which makes high-performance lithium-ion batteries for cars, renewable energy generators and others



All of these are candidates for inclusion in our portfolio. In addition, we're monitoring a range of hydrogen technologies.

As always, some of the greatest opportunities will stem from second-order effects and we need to be open-minded. What might abundant cheap oxygen – a by-product of hydrogen production – mean for sustainable fisheries or the economics of space travel? What might abundant free energy mean for water supply and distribution given the energy intensity of desalination? Which industries might emerge if traditional meat farming declines?



Conclusion

The LTGG approach is well suited to both navigating and benefiting from what might be the most important and urgent transition in humankind's history. The companies we have invested in have a golden opportunity to step up and lead. As long-term shareholders, it is our responsibility to help them to capitalise on our clients' behalf.

*A longer version of this article will soon be available at **ltgg.bailliegifford.com***

Working it out

How companies take care of employees' wellbeing and develop their own corporate culture matters more than ever to LTGG

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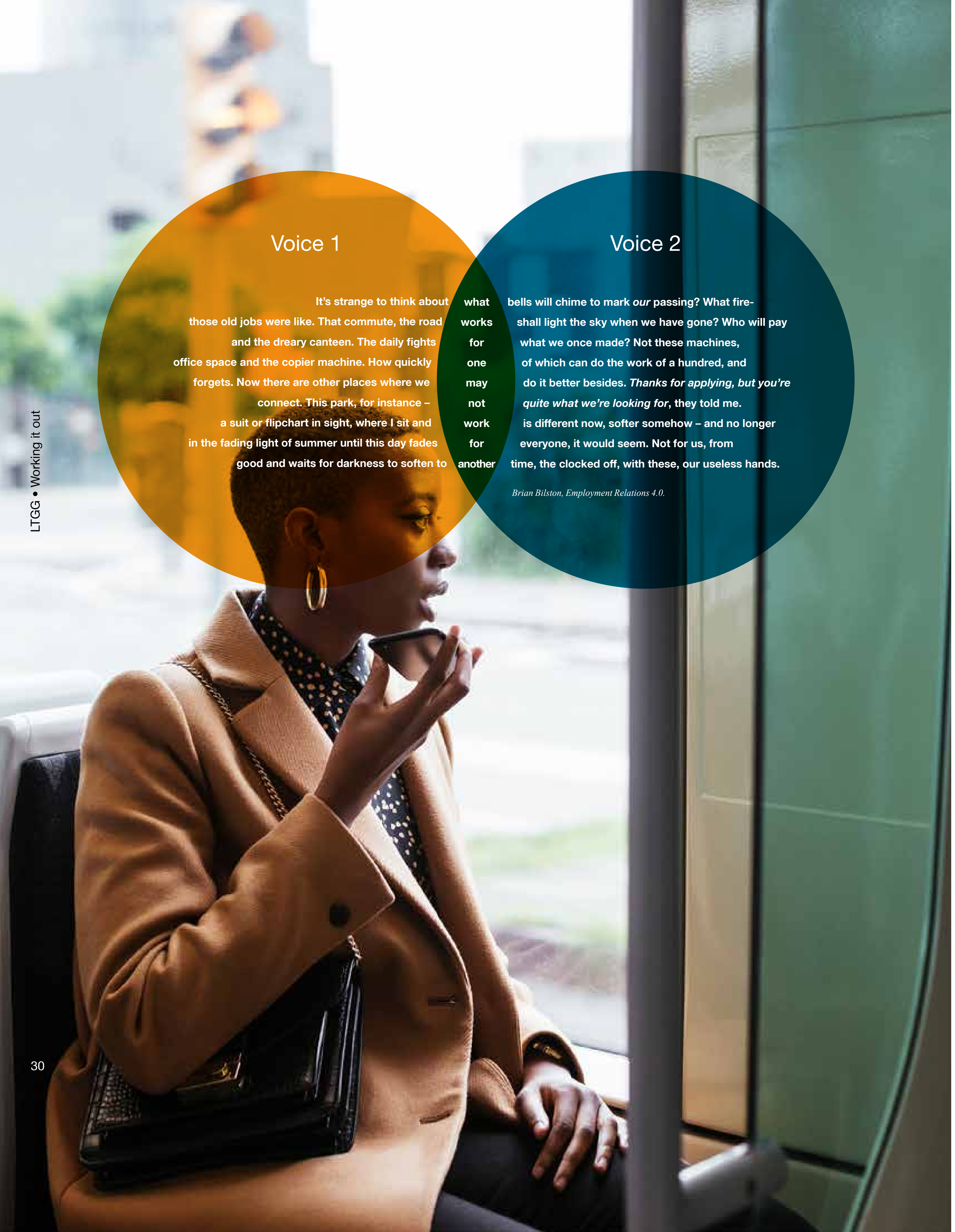

Invited to ponder the future of work, poet Brian Bilston responded with a poem in two voices. One lamented the passing of a generation of workers, concluding: "Work is different now, softer somehow – and no longer / for everyone, it would seem. Not for us, from / another time, the clocked off, with these, our useless hands."

The other voice brimmed with excitement about the new world of work in the 21st century, incredulously querying past tolerance for the "dreary canteen", the "daily fights for office space and the copier machine".

Bilston's poem illustrates the overlap of one paradigm with another. Specifically, where exciting tech-enabled opportunities, such as remote working and automation, intersect with concerns about displacement and equality in the workplace.

Available labour data also points to both progress and challenges. For instance, nearly 15 per cent of jobs are estimated to be at high risk of displacement due to automation. Yet strikingly there is no sign of this resulting in fewer jobs. Certain occupations do appear to be experiencing job loss, such as machinery workers, but the Organisation for Economic Co-operation and Development suggests that cost efficiencies afforded by automation may in fact contribute to greater consumer demand, creating more jobs elsewhere and an overall gain in employment.

Commendably there's also been a reduction in child labour. In 2016, there were 94 million fewer youngsters in the global workforce than in 2000. This is in part thanks to growing international focus on companies' supply chains. However, firms cannot become complacent. The International Labour Organisation estimates that one in 10 of all children worldwide are still in work, nearly half of whom are involved in hazardous tasks.

This illustrates that while large numbers of people have benefited from better living conditions over the past couple of decades, not all of society has improved. Many feel dissatisfied, frustrated and poorly treated. Many worry about a future devoid of opportunities to work and to advance. Given the speed and prevalence of technological change, workers are having to be more adaptable than ever to changing jobs.

> Bilston's poem illustrates the overlap of one paradigm with another. Specifically, where exciting tech-enabled opportunities, such as remote working and automation, intersect with concerns about displacement and equality in the workplace

We in the Long Term Global Growth team believe that companies must also adapt to the changing expectations of their workers and of society more broadly. We know that the turbocharged performance we seek from your holdings is demanding, and can create strains both for management and employees. To justify a place in the LTGG portfolio, a company's management must be able to anticipate and react to the scale and speed of progress. This is vital for companies to grow sustainably in the long run and generate superior returns for clients.

So how do we analyse this?

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We're working on it

Baillie Gifford does not limit its analysis of labour issues, or indeed any ESG issues, to simplistic screening processes or box-ticking. Such an approach is prone to flaws, not least that disclosure by many companies is still limited and those that haven't mastered the 'exam technique' get marked down regardless of underlying performance. Instead, we seek to delve into the issues facing each company on a case-by-case basis. Whenever we feel there is a potential material risk to long-term performance, we will engage with management before considering appropriate voting action and/or an investment decision.

As a minimum, we expect all holdings to operate within the 10 principles set out by the United Nations Global Compact and we monitor company performance accordingly. Most relevant to our analysis of labour issues are six principles, which call on businesses to:

— support and respect the protection of internationally proclaimed human rights

— make sure that they are not complicit in human rights abuses

— uphold the freedom of association and effective recognition of the right to collective bargaining

— eliminate all forms of forced and compulsory labour

— abolish the use of child labour

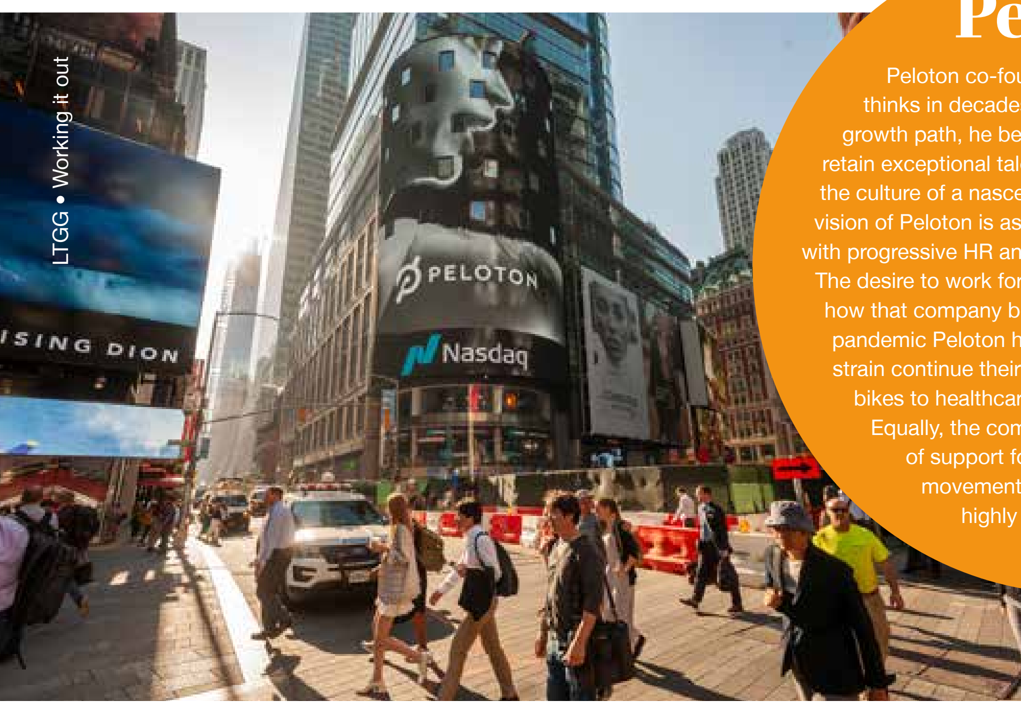
— eliminate discrimination in respect of employment

Furthermore, as signatories to the United Nations Principles for Responsible Investment since 2007, we encourage companies to make appropriate disclosures. This might include, for example, disclosures on employee injury rates in manufacturing or warehouses, as well as due diligence on supply chain labour standards.

For LTGG, as we seek to invest in companies for five to 10 years and beyond, they need to demonstrate the ability to go above and beyond minimum standards to meet the expectations of workers and society. This means bearing a degree of responsibility for societal changes they contribute to, and recognising the leadership roles that many can play given their unprecedented influence. This isn't just about 'doing the right thing', nor is it about merely reacting to the shifting short-term focus of media headlines. Companies that are proactive and engage stakeholders to create opportunities for workers in the long term will have an above-average chance of success over the coming decades. Companies that aren't risk fossilising as talented workers look elsewhere. This will cause innovation to falter and productivity to suffer; it may also invite regulatory penalties. Ultimately the result will be weaker returns for our clients.

No company is perfect. For many it's a matter of learning from mistakes. By engaging with our holdings, we try to understand their direction of travel and ambitions on labour issues where they may be material to future growth. Often our meetings consist of fact finding and monitoring. Depending on how we believe a company is progressing, we will challenge and support management as appropriate. Here follow some examples of our engagements:

Aligning interests



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Peloton

Peloton co-founder and CEO John Foley thinks in decades. To continue its exceptional growth path, he believes Peloton must attract and retain exceptional talent. Foley is preparing to develop the culture of a nascent business into one at scale. His vision of Peloton is as a non-hierarchical, modern brand with progressive HR and diversity and inclusion at its core. The desire to work for a company is often influenced by how that company behaves. It matters that during the pandemic Peloton helped customers under financial strain continue their memberships, while also gifting bikes to healthcare professionals and hospitals. Equally, the company's early announcement of support for the Black Lives Matter movement struck a chord with its highly diverse workforce.

Moderna

While Moderna is well-positioned to attract talent, its strength comes from an exponential mindset preached and practised by CEO Stéphane Bancel. He encourages employees to think in multiple rather than in marginal terms, to challenge their thinking, and to move away from incrementalism towards new dynamic ways of operating. To reinforce these behaviours, Moderna employees are eligible for equity awards, determined by long-term key performance indicators. All of this plays a vital role in the strength and speed of Moderna's business. The company might not have been successful in developing the Covid-19 vaccine if, prior to the pandemic, it had not spent time developing a long-term collaborative approach across its workforce. It appears that Moderna's technological breakthroughs largely depended on exponential thinking by its workforce within an interdisciplinary approach across molecular biology, physics, chemistry and data science.

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Atlassian

Co-CEO Scott Farquhar's long-term vision for Atlassian and its corporate culture is to "unleash the potential of every team" by overcoming friction. This is defined as anything that hinders teams from performing at their best. Atlassian is built to be open, inclusive, fair and just. Employees champion a culture which is about more than a 'job' – it's about a mission. Atlassian believes that companies that have a mission of people, community and planet at their core will attract and retain the best talent and deliver greater value. Empowered employees are engaged employees.

ITS CORPORATE CULTURE IS TO "UNLEASH THE POTENTIAL OF EVERY TEAM" BY OVERCOMING FRICTION

© Atlassian

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Adapting cultures

Netflix

With more than 200 million paid subscribers and $25bn in annual revenue (growing at nearly 25 per cent a year), it's perhaps surprising to hear Spencer Wang, vice president of finance, tell us that Netflix's culture needs to change. But this is a company which has long kept complacency at bay. As Netflix becomes more international and reaches more audiences, management recognises that its content must reflect the lives of the populations it serves. To do so, Netflix's work environment needs to be diverse and inclusive, representative of its global reach. It began on this journey in 2018, when it appointed Vernā Myers to a newly created role of vice president of inclusion strategy. This was followed by co-CEO Ted Sarandos stating he wanted to empower employees by putting a strong emphasis on diversity and inclusion, which he believed was the foundation for the next generation of great content. We are seeing signs of success as ideas from teams of young people in regional offices percolate up to management, such as its successful new catalogue of Hindi-language shows.

NETFLIX'S WORK ENVIRONMENT NEEDS TO BE DIVERSE AND INCLUSIVE, REPRESENTATIVE OF ITS GLOBAL REACH

© Getty Images AsiaPac

Alibaba

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ALIBABA'S PARTNERS TOOK OVER A YEAR TO AGREE ON THE COMPANY'S SIX CORE VALUES

When Jack Ma founded Alibaba in his kitchen, he had to pool his money with 17 colleagues to form a partnership because no bank would finance the business. Today, the Alibaba Group is a global leader and more than 20 years old. It believes its success is driven by a workforce committed to a set of values, but the company recognises that those values must evolve to stay relevant to its growing workforce of 250,000-plus employees. Alibaba's partners took over a year to agree on the company's six core values, suggesting that they are more than corporate-speak. Daniel Zhang, chairman and CEO, believes these values codify the lessons and beliefs that Alibaba's co-founders historically passed on verbally to new employees. These values are seen as a vital guide for Alibaba employees to make decisions that will see the company flourish into the next century.

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Growing pains

Beyond Meat

Beyond Meat experienced management churn in 2021, replacing its chief financial officer, chief growth officer and chief people officer. CEO Ethan Brown is frank in discussions that its culture doesn't suit everyone. He is a missionary for plant-based meat and its role in saving the planet. He expects staff to go the extra mile – they refer to this internally as 'going beyond' – given the urgency of the societal problems the company exists to solve. For some, this serves as inspiration. Others find it too demanding. Brown is unapologetic about his exacting standards, but he is thoughtful about nurturing employee wellbeing. As a young company focused on managing exponential growth, wellbeing has perhaps taken a back seat until now. We are confident that Beyond Meat is taking this seriously as an important component of long-term success, and will continue to monitor progress.

© Beyond Meat

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Amazon

In spring 2021, Amazon workers in Bessemer, Alabama decisively and controversially cast their ballots against forming a union. There were several media reports of an intimidating anti-union campaign by Amazon. When we discussed this with Tessie Petion, Amazon's head of ESG engagement, she clarified that while the company was not in favour of unionisation, it accepted the employees' right to choose. Petion believes that Amazon's communication with staff was reasonable, but concedes that its messaging focused on the financial merits of working at Bessemer and the implications of union dues/membership on pay, over the underlying reasons for a vote in the first instance. There was a reflection that staff motivation was more than financial, and that Amazon should instead communicate steps taken to protect employees' welfare. For example, the $15 per hour wage provided by Amazon, plus the benefits and training package, is good by industry standards. It is clear Amazon has been challenged by and is learning from this experience. Jeff Bezos, founder and executive chair, acknowledged: "We need to do a better job for our employees. While the voting results were lopsided and our direct relationship with employees is strong, it's clear to me that we need a better vision for how we create value for employees – a vision for their success." We continue to monitor.

ASML

As with many companies in the electronics industry, certain 3TG or 'conflict minerals' (tin, tungsten, tantalum and gold) are required for ASML's products to be made and function. We have discussed with management the potential use of these minerals in the firm's lithography equipment supply chain, and how it works with suppliers to understand how they are sourced to ensure principles of sustainability are upheld. ASML is committed to a conflict-free minerals policy and closely monitors the use of conflict minerals in its supply chain. Additionally, the company supports international efforts to ensure the mining of 3TG minerals from high-risk locations does not contribute to conditions of armed conflict or human rights abuses in the Democratic Republic of the Congo or any neighbouring countries. ASML has also led the industry in encouraging suppliers and sub-suppliers to have policies and due diligence measures in place to ensure the 3TG minerals are responsibly sourced. We continue to monitor.

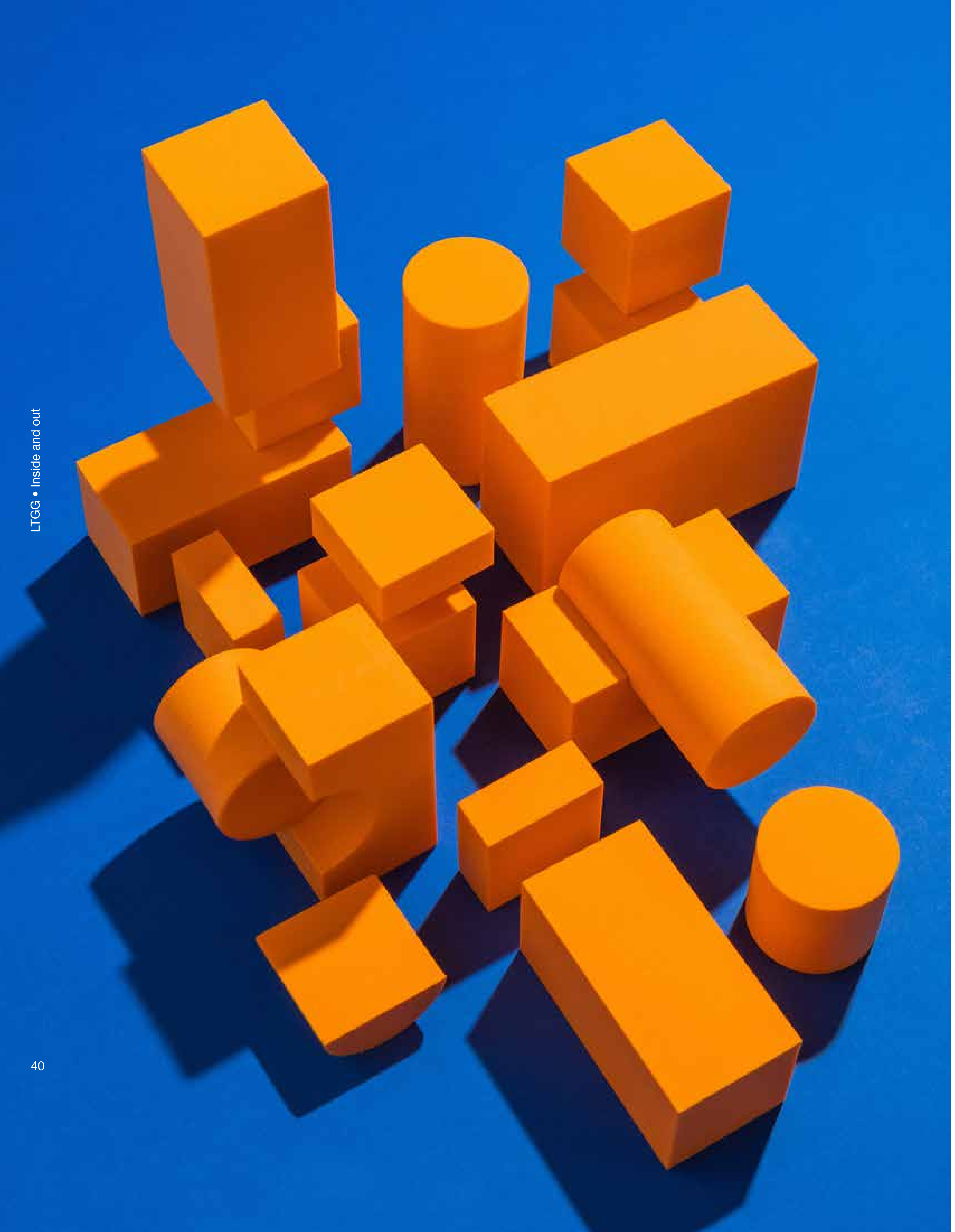
© ASML/Bart van Overbeeke

ASML IS COMMITTED TO A CONFLICT-FREE MINERALS POLICY AND CLOSELY MONITORS THE USE OF CONFLICT MINERALS IN ITS SUPPLY CHAIN

© Bloomberg/Getty Images

Meituan

There are approximately 80 million gig workers in China. More than nine million of them earned income from Meituan in 2020. Much like in the West, a societal issue has arisen with regard to these workers. It began with reports of impossible deadlines and low wages. Meituan swiftly responded by vowing to improve working conditions for its vast network of delivery drivers. Now it's a case of who is responsible for social security payments. Meituan's management team told us that the firm was fully responsible for covering the drivers' personal accident insurance. However, the team said that social security was a much more complicated issue given differing local policies. For example, the Nanjing government announced guidance requiring businesses to cover basic social security payments for full-time employees, and 60 per cent of Meituan riders fall under this classification. This illustrates the growing pains of companies transforming society, highlighting not only the rapid rise of the gig economy but also labour issues which accompany it. The importance of strong culture and adaptative management has never been greater. Companies are not only having to remain nimble amid a changing competitive landscape and new threats of disruption, but must also be alive to the changing regulatory climate. We continue to monitor and engage with management.



Inside and out

Companies that draw on a wide variety of voices from within their own workforces to advance diversity and inclusion are often better aligned with their customers' needs

In our research and engagement, we place most emphasis on those issues which could have a material impact on the long-term sustainability of a business. Diversity and inclusion (D&I) is often one of the major considerations. Many of our portfolio companies well understand its importance, while others are waking up to the potential risks of ignoring it.

As with most things, the assessment of diversity and inclusion needs to go beyond the optics – the headline statistics and ESG scores – to a fuller exploration of the motivation and actions behind them. At Netflix there has been a very conscious decision both to structure the workforce to reflect the global population and to be deliberately inclusive. Netflix added inclusion as a cultural value in 2017, believing it to unlock its "ability to innovate, to be creative, to solve problems" and thus better entertain existing and future subscribers. This is part of a broader strategy to tell stories that others aren't, and represents a deliberate inversion of the traditional Hollywood-centric approach.

Netflix published its first inclusion report earlier this year. It shows good progress, but the firm continues its drive to have this reflected on screen. This starts with the writers and involves the internal Netflix community. To this end, the company has established the Netflix Fund for Creative Equity. It will invest $100m over the coming five years in organisations that help members of under-represented communities get training and find employment in TV and film.

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Why is this important to LTGG and what is its impact on the investment case and the potential upside for the business? This approach to content moves Netflix away from a one-to-many model and towards a many-to-many dynamic. Not only is that a disruptive hook that encourages deeper engagement, but it is also more effective because content for one audience can find new audiences in unpredictable ways. Although content will be created for smaller audiences, the company can track when shows and movies break through to other unexpected demographics. This feedback loop should allow Netflix to continue to improve and build a larger loyal subscriber base.

Diversity is important to the home fitness brand Peloton's growth for similar reasons. In order for it to be truly mass market, its on-demand exercise classes must appeal to a diverse range of people. For this reason, both the firm's instructor base and its senior leadership team have become more diverse in terms of gender, race and nationality over the period of our ownership of the stock.

One of the company's priorities is to further increase the diversity of its instructors, so that its content library caters to as many different people as possible. A positive step in this direction has been its addition of German and Spanish speakers. Their classes serve not only its international markets but also Spanish speakers in the US.

Beyond these initiatives, which promote the company's long-term growth, the management team announced the Peloton Pledge last year. This is a commitment to pay hourly employees better rates, at a cost of $80m over the next four years. As a result these workers, who are disproportionately non-white, will get $19 per hour. That compares to Amazon's equivalent wage of $15 and the $7.25 federal minimum. In addition, the firm pledged to ensure these staff get access to learning and development opportunities. Peloton has also set aside a further $20m to help its non-profit partners fight racial injustice.

Adyen, which operates a global payments platform, believes diversity is a key driver for innovation and its ability to service and grow a multinational merchant customer base. The 'Adyen formula' – key principles that support the company's culture – calls on staff to include other people's perspectives to sharpen their ideas. The aim is that each of its teams encompasses a broad set of philosophies, with emphasis placed on 'intellectual diversity'. This doesn't necessarily correlate with diversity of race or gender, but the company recognises that these factors can nonetheless play an important role.

In 2020, the company formed a diversity, equity and inclusion working group. It prioritised areas for improvement in the spirit of its formula. They include a more balanced representation of genders. Today female staff are 34 per cent of the total, 29 per cent of team leads, and 16 per cent of management. The firm is also making efforts to recruit new workers from historically under-represented groups and giving all staff regular unconscious bias training.

> The 'Adyen formula' – key principles that support the company's culture – calls on staff to include other people's perspectives to sharpen their ideas

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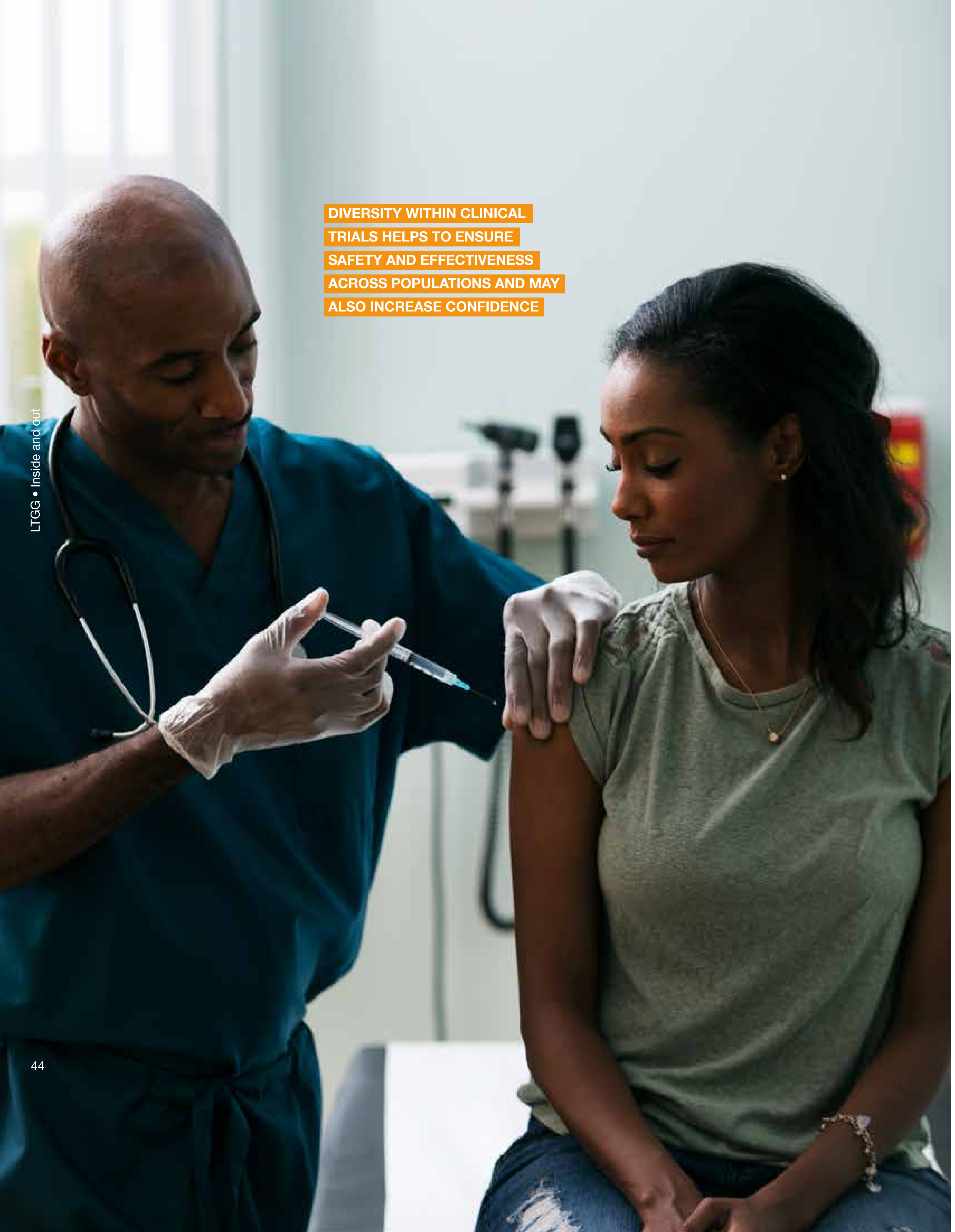


DIVERSITY WITHIN CLINICAL TRIALS HELPS TO ENSURE SAFETY AND EFFECTIVENESS ACROSS POPULATIONS AND MAY ALSO INCREASE CONFIDENCE

Much like Adyen, Shopify views diversity and inclusion as a driver of innovation. The company's goal is to create more entrepreneurs and to align itself with their success. Shopify sees these entrepreneurs as a source of energy, and wants to enable them rather than put obstacles in their way. It sees this as a democratisation project with which its own fate is bound. It's not just that Shopify is being inclusive. Its business won't succeed over the long term unless it can encourage people from all communities to become entrepreneurs. To that end, Shopify practises outreach on an industrial scale. Last year it ran more than 1,000 classes, workshops and meet-ups for local communities, and has further initiatives under way.

The case of Moderna and the development of its Covid-19 vaccine provides a different perspective on D&I. Inequality in medicine is nothing new, but it's our understanding that 'equitable design' is not just an ESG issue; it's also good science. Unrepresentative clinical trials could miss side effects suffered by some groups. And researchers could fail to recommend therapies for certain people because they were under-represented in trials. These are both commercial and societal failures.

Ensuring racial and ethnic diversity in clinical trials was especially important for the development of Covid-19 vaccines given the disease's disproportionate toll on people of colour. Studies indicate that people of colour and particularly Black adults have historically had lower vaccination rates and been more likely to express concerns about vaccines. Diversity within clinical trials helps to ensure safety and effectiveness across populations and may also increase confidence. Given this, we were encouraged by Moderna acting to slow enrolment into its Covid-19 trial to ensure there was minority representation. It took the decision despite the risk of its programme falling behind that of its closest competitor, Pfizer.

While Moderna is trying to ensure equitable representation, more recent conversations with Dexcom, the manufacturer of continuous glucose monitoring systems, have been a little disappointing. With approximately half a billion individuals living with diabetes globally, the market for its devices is considerable. We recently spoke to Dexcom's management about international expansion and specifically its plans for India and Brazil. Together the two nations account for roughly 20 per cent of the diabetic population. We detected reluctance to expand into certain geographies based on deflationary economics. While this is rational and capital preserving, it's not indicative of a patient-driven culture.

While there is always more to be done, we can conclude that it is increasingly important for companies and organisations to represent society as a whole. Nowhere are we more conscious of this than in our own organisation – we know it's important to clients. If you would like to hear more about Baillie Gifford's approach to diversity and inclusion please visit our website or speak to your client contact.

Rules of the game

Regulations are often complicated to draft and challenging to follow, but companies that engage rather than resist can wind up better off

Rules have existed ever since social groups first strove to organise themselves. Harmonised weights and measures on the silk and spice routes, a national currency in seventh century China – these were the beginnings of regulation.

Rules help nurture order and stability. But things can get complicated quickly. Our interactions are now covered by a vast patchwork of legal restrictions, contractual obligations, self-regulations, co-regulations, certifications, accreditations, policies, standards and norms. Each can demand or forbid certain conduct, and the regulators involved have varying levels of independence from government. Regulations may also reflect differing industries, economies, societies and value systems, and often vary over geography and time.

An additional challenge is the way many of today's businesses mutate. They straddle traditional industries and sometimes create new ones as they grow rapidly, and can launch products to billions of people in an instant.

Evolutions and revolutions

The rules we live by evolve, reflecting changes to technology, society and the economy. The economic historian Professor Carlota Perez has documented many of the paradigm shifts experienced since the Industrial Revolution – from canals to railways to steel to mass production to the current rise of information technologies – and their accompanying regulatory frameworks.

The chart illustrates the time lag between the development of a new technology (shown in black) and the introduction of related rules and regulatory institutions (shown in orange) designed to address social and economic concerns. Regulation can be slow to catch up. It took more than 70 years from the Ford Model T's launch in 1908 for the first US state, New York, to make seatbelt use mandatory. And even now, their use is not compulsory for adults in New Hampshire.

This reflects the fact that regulatory change in the real world is far messier and less linear than the chart suggests. There are inevitable confrontations between defenders of the old regime and vanguards of the new. For example, in the space of just five years the US signed the Paris Agreement on climate change, withdrew, and then signed it again.

What makes all this even more challenging is that technological change is occurring at unprecedented speed. Since LTGG's inception in 2004, we have witnessed the likes of Facebook, Amazon, Alibaba and Tencent reach such scale and herald such profound transformations in our lives that they are now being subjected to immense public and regulatory scrutiny.

Regulators and others also need to form opinions about things they didn't grow up with, such as cryptocurrencies and facial recognition. These can be harder to get to grips with than supermarkets, automobiles and other more concrete entities. Whatever the regulatory response, company managers need to acquire new skills. Being long-term investors, we continually examine business leaders' ability to adapt to the new rules of the game, or better yet to proactively and constructively contribute to the rules.

WHAT MAKES ALL THIS EVEN MORE CHALLENGING IS THAT TECHNOLOGICAL CHANGE IS OCCURRING AT UNPRECEDENTED SPEED

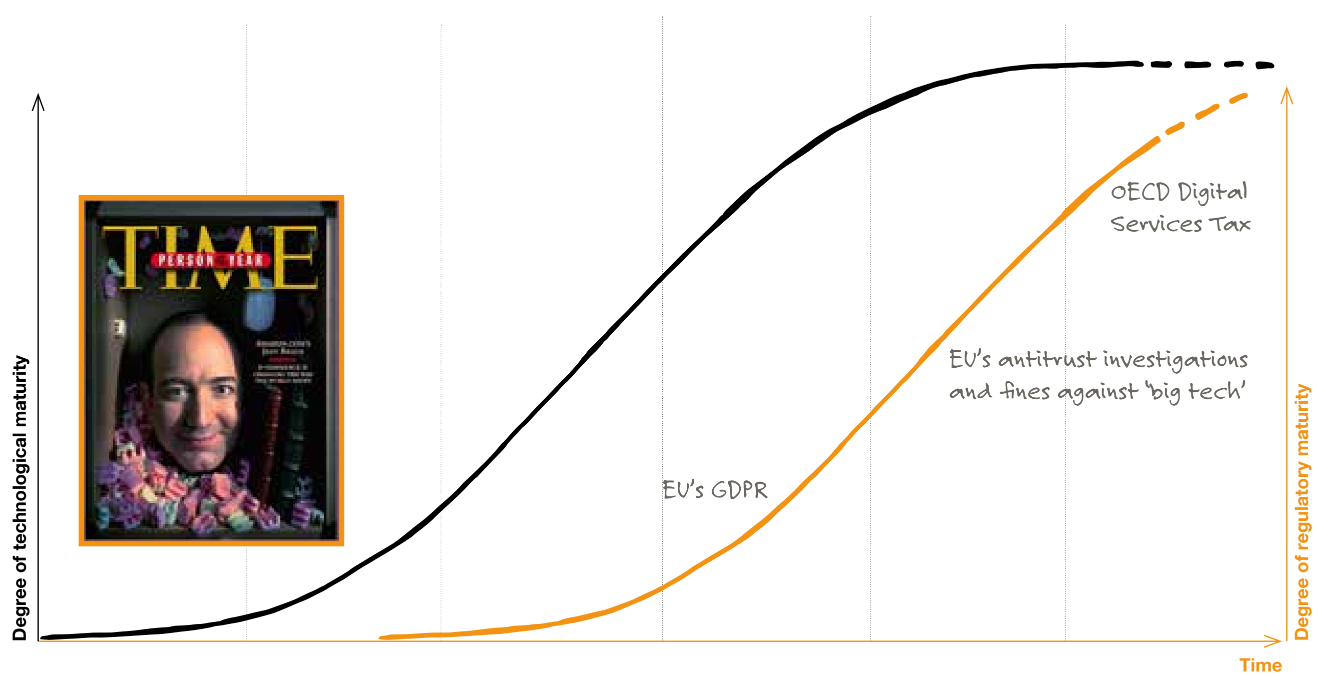


Image: © imago stock&&people

© Jake Rowland /Esto

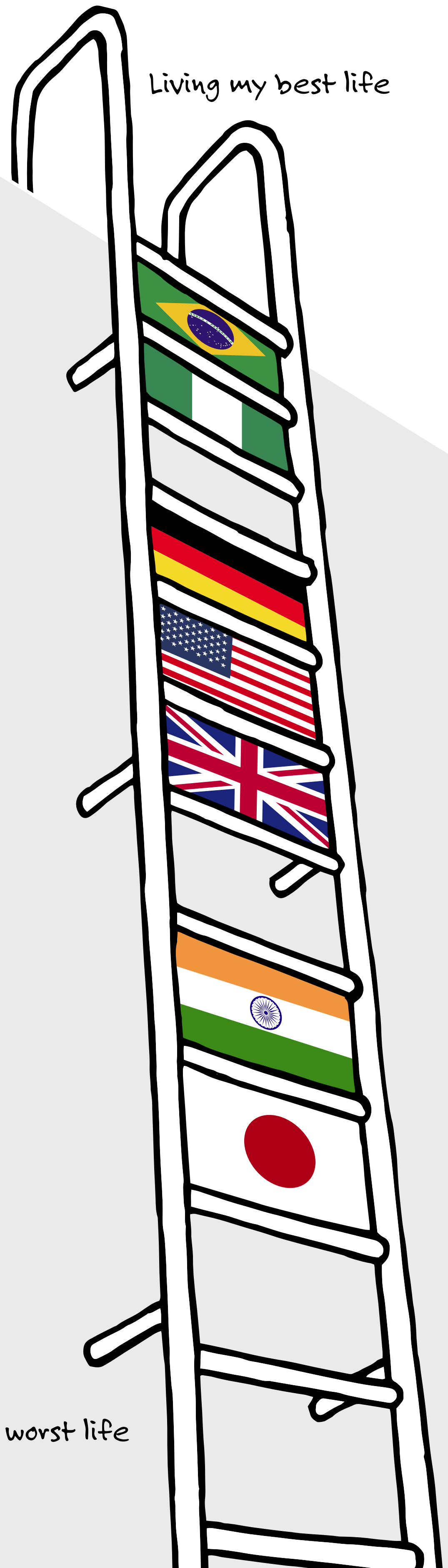
Differing perspectives

The standardisation of shipping containers in the 1950s made international trade more efficient, driving globalisation to fresh heights.

Today's 'containers' are digital, and cross-border trade has accelerated again. We are more connected than ever, making it easier for companies to reach huge audiences. But one size doesn't fit all. There are strong regional differences in attitudes and perspectives that need to be considered. These don't solely reflect the fact different markets are at different stages of economic development, but also that their citizens hold different religious and political beliefs.

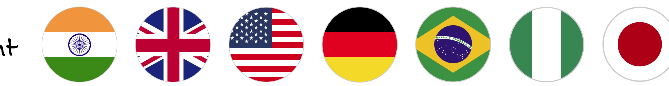
This adds further complexity. Local regulations reflect localised attitudes and can't always be imposed by an external body in the same way the dimensions of shipping containers could be dictated in the past.

This represents the 'ladder of life'. Let's suppose the top represents the best possible life you could have, and the bottom the worst. Where do you stand?



Differing attitudes...

How important is it for women to have the same rights as men?

Very important  Less important

Over the past 20 years do you feel your country has become more diverse? Do you think this is a good or bad thing?

Good  Bad

How important is it that people can use the internet without government censorship?

Very important  Less important

Is it important that media can report the news without government censorship?

Very important  Less important

How important is it that people can say what they want?

Very important  Less important

Source: Selected questions and responses from Pew Research Center, *Global Attitudes Survey*, 2019; and Pew Research Center, *Global Views of Cultural Change*, 2019.

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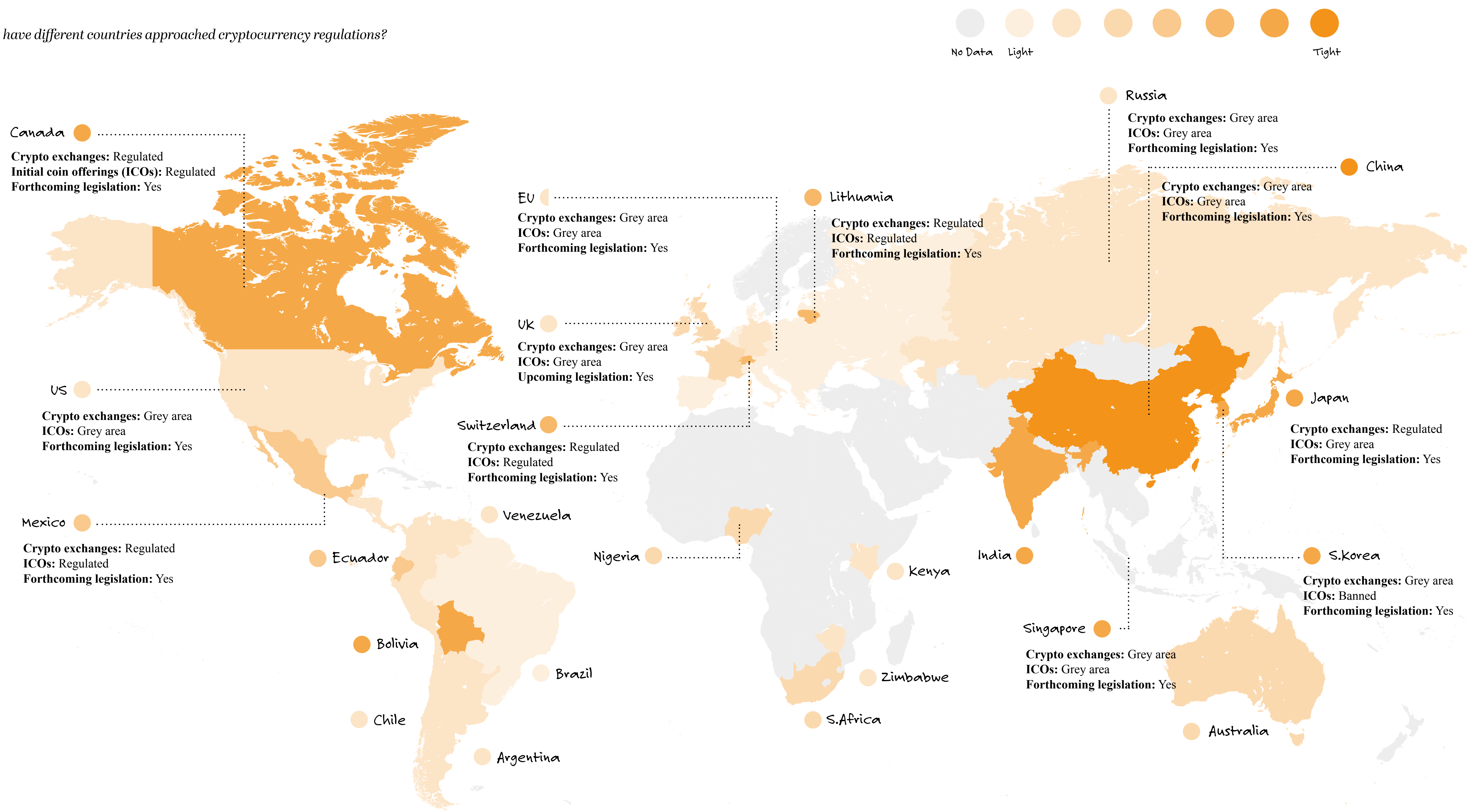
...lead to differing regulation

How have different countries approached cryptocurrency regulations?



Source: Visual Capitalist, 2019.

Into the morass

Moral panics coupled with the struggle of keeping up with innovation's frenetic pace can lead politicians and their regulators to seek easy answers. There's an appealing simplicity to slogans like 'Break them up!'.

But the reality is there are no easy solutions, only trade-offs. Sacrifices must be made. Nuance is needed.

A regulator's notebook:

Amazon favours its own products over those of third-party sellers.

This is anti-competitive and needs to stop! Let's prevent companies from self-preferencing.

That would stop Amazon from placing its own brands on the premier shelf-space to grab customers' attention!

...Wait, this is what department stores have always done! Is our plan to entirely overhaul retail?? Or just online marketplaces? Is that fair?

Facebook pays too little tax!

~~This is tax evasion. Illegal!~~

This is tax avoidance. It's legal, but it exploits loopholes in international rules to shift profits to low-tax nations.

Let's impose a national tax on online platforms!

...Wait, what if our neighbouring countries also impose their own digital taxes, but in different ways? Even more loopholes? Retaliations?

We need an international approach. Do we support OECD plans for a digital services tax?

Online advertising is bad news for data privacy.

The problem is third-party cookies. They share our internet browsing data.

Let's applaud Google and Apple for blocking third-party cookies in their browsers and operating systems! It's a big data privacy win!

Starved of data, advertisers will flock to Google and Apple's own advertising tools. So it's a win-win for them too!

...Wait, these guys are already huge! Will competitors die? Are we creating an antitrust issue?

?

Facebook lets hate speech run rampant!

!

Like any publisher, Facebook must be liable for what is said on its platform. It must hire more content moderators.

...Wait, is Facebook a publisher? Or just a platform? Or something new and in between?

Should Facebook decide what its three billion users can or cannot say? Is Menlo Park the global epicentre of acceptable speech?

What about smaller competitors that can't hire thousands of moderators? Are we creating an antitrust issue?

Amazon is a monopoly and is abusing its market dominance!

Break it up! Big is bad! Break it up! Big is bad!

The proof: Amazon has about a 40% share of US ecommerce, and a 10% share of US retail.

Wait, is that market dominance?

...and would splitting off AWS solve the retail issue?

But what about the market abuse?!

The proof: lower prices, more consumer choice, more convenience, no lock-in... Wait, is that abuse?

Is this about anti-competitive behaviour or just the power of network effects?

Unfettered financial innovation in China could destabilise its economy.

Stability is the priority. Let's crack down on innovation.

Fintech providers (eg Ant Group) must be regulated like traditional financial institutions!

...Wait, will millions of previously underserved small businesses now find it harder to access finance?

...Will debt repayment efficiency be impaired by curbs on big data?

?

Could heavy curbs on financial innovation in China be destabilising?

>>>

Observations and opportunities

Given all the complexity involved, it's little wonder that regulations and bureaucracy are often perceived as costly burdens to businesses and the public. And that rules and officialdom are characterised as obstacles to efficiency and growth. Of course, mistakes and clumsy regulations occur. But the reality is nuanced.

The economist Professor Mariana Mazzucato has highlighted how states can spur on new technologies. This is not solely about top-down prescriptive practices, such as the goals described in China's five-year plans. It's also about the subtler opportunities created as a regulatory by-product.

For instance, Facebook has been subject to intense regulatory scrutiny. This encouraged it to amass tens of thousands of content moderators supported by sophisticated AI tools. It has also established an Oversight Board, which is intended to act as an independent body. While not without their flaws, these are industry-leading initiatives. And though costly, they may lead to new business opportunities. Perhaps Facebook will one day provide content moderation as a service to other businesses, rather as AWS provides cloud computing to its customers.

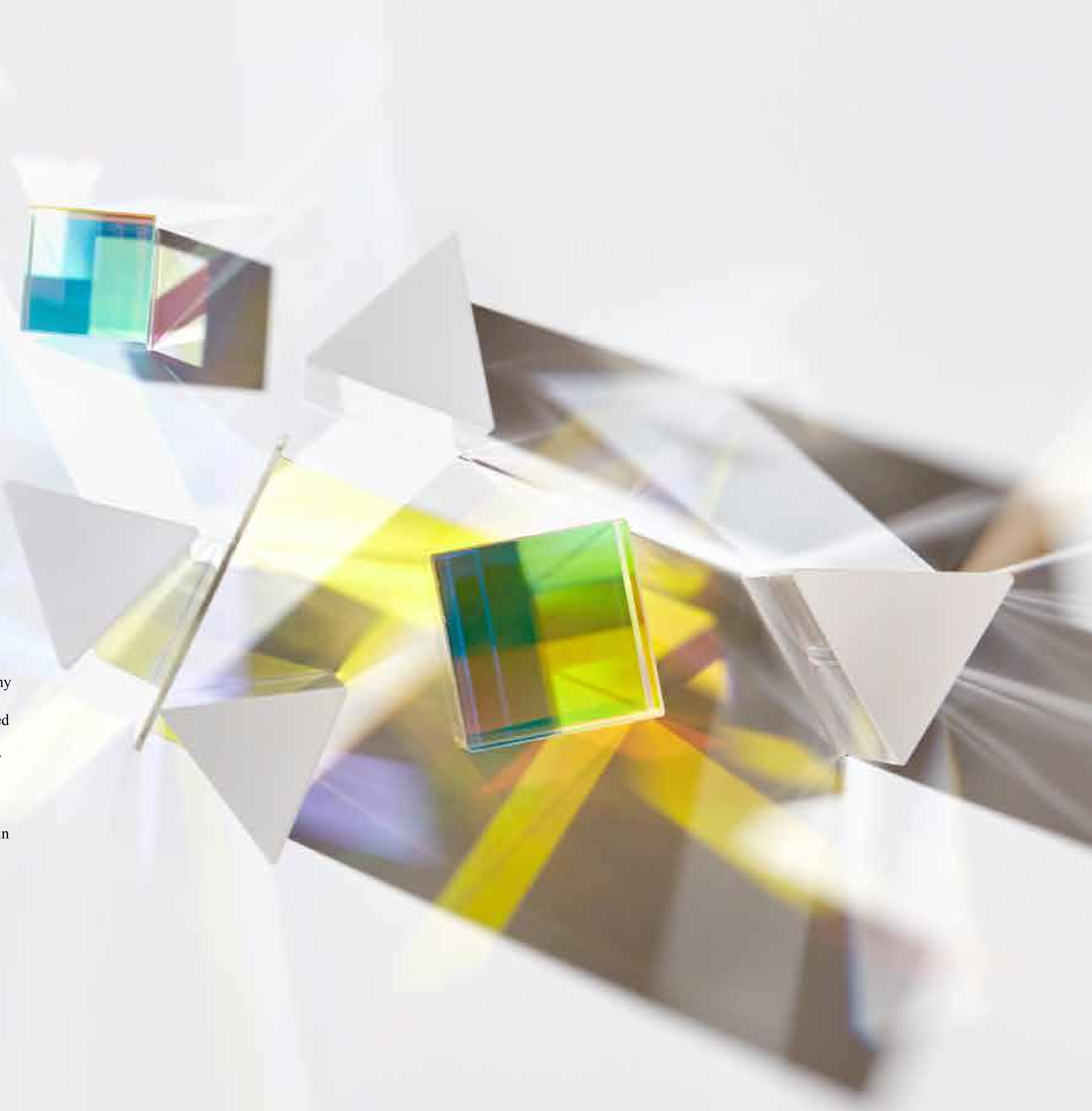
Similarly, the regulatory push to use electric vehicles could be an additional growth driver for Carvana, the online used-car marketplace. Its founder, Ernie Garcia, suggests that because EVs require less maintenance than internal combustion engine vehicles, large automakers may in the future have less incentive to expand their costly servicing networks. He recently mused that Carvana's impressive logistics network and fixation on customer service could equip it to fill any resulting gaps in demand.

Another example: many investors spend an inordinate amount of time worrying about the costs of new Chinese regulatory measures levelled at large tech-enabled companies such as Alibaba, Pinduoduo and Meituan, among others. But provided the fundamentals of our long-term investment theses remain intact, sensible rules that strike an appropriate balance between innovation and stability can bring benefits. They may reinforce the longevity of companies that can not only adapt but also lead in a more regulated environment.

> We look for companies that demonstrate thoughtfulness and adaptability

What can we take from all of this? When LTGG thinks about regulation, our approach to investing considers both materiality of impacts and alignment of interests. On the former, we carry out stock-specific analysis to distinguish which regulatory evolutions may materially affect a company – for better or worse – over the coming five to 10 years and beyond, and which changes are merely 'noise' to be tolerated along the way. As for alignment of interests, we look for companies that demonstrate thoughtfulness and adaptability when navigating regulatory changes. These companies are willing to learn from their mistakes, and proactively engage with regulators to take advantage of opportunities that align with the long-term goals of the societies and environments in which they operate.

Some holdings will inevitably fall foul of regulation. But others that master the rules of the game stand to generate asymmetric returns – for our clients, society and the planet.



ESG data: filling in the gaps

Available metrics suggest there is still room for improvement in at least some of our holdings' behaviours, but the headline numbers only tell part of the story

Given the meteoric rise of ESG-influenced investing, you'd be forgiven for thinking there was enough relevant data to guide decisions. But this is far from the truth. Despite decades of research into corporate responsibility, growing interest in sustainable finance, and an entire industry devoted to churning out ESG data, there are still significant gaps in our knowledge.

We know very little about the environmental impacts products and services have over their full lifecycles, and even less about their social aspects. Increasing numbers of companies are publishing ESG progress reports, but the quality, comparability and coverage of their data are underwhelming. Estimated figures are still commonplace, even for very large companies. In some industries and some parts of the world, robust data is almost non-existent. Unsurprisingly the ratings agencies often give companies divergent ESG scores, as can be seen by how far some of the dots stray from the line on this graph. This indicates the divergence between scores given by two of the ratings agencies to the same companies. And it raises questions about how meaningful their conclusions are.

Rather than shrug off this challenge on the basis that it's just too difficult, we are encouraging our holdings to make their disclosures more comprehensive and comparable. Where appropriate, Baillie Gifford is also working with third-party providers so we can receive better data. We hope this will not only complement our own research but also be a useful resource for our clients.

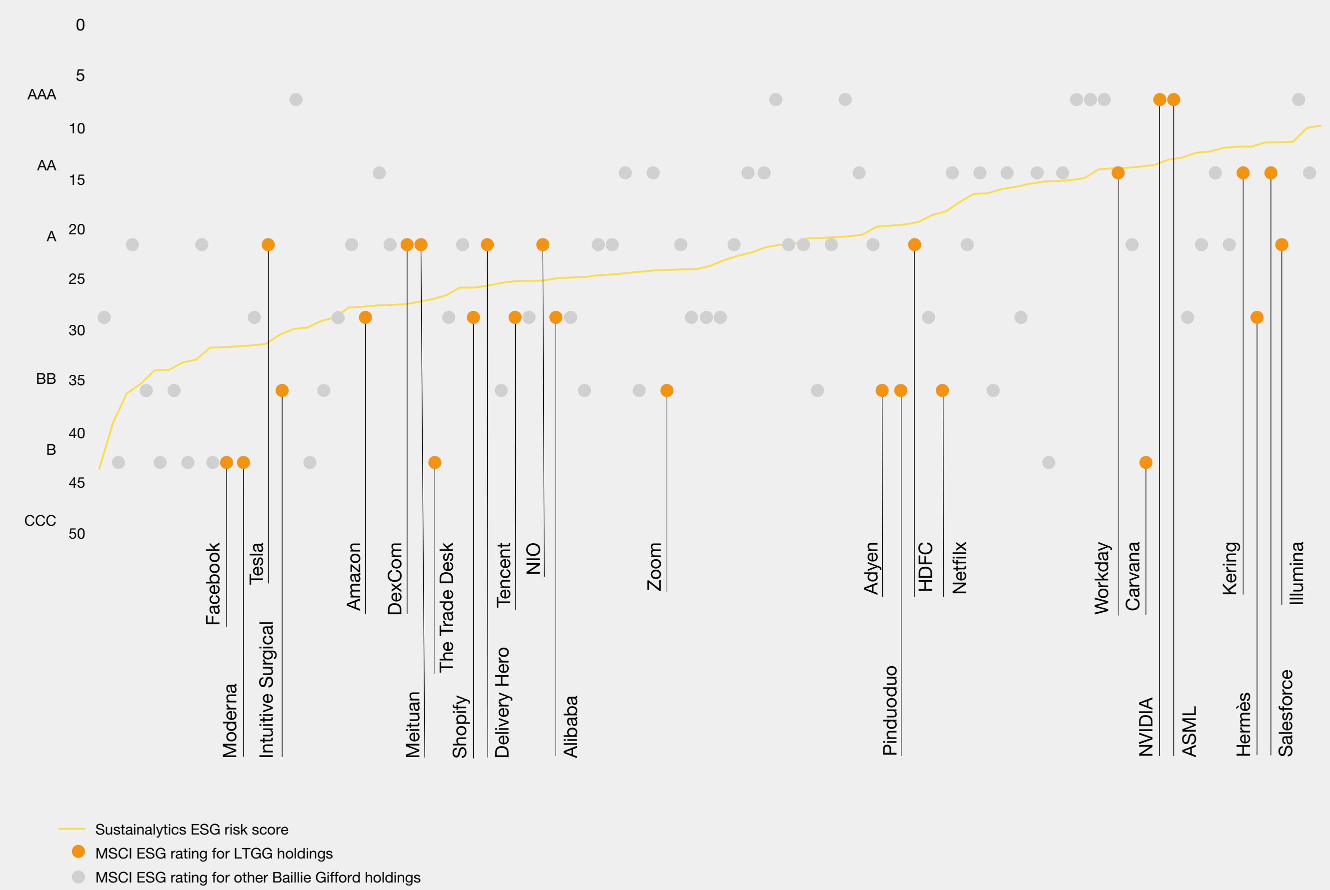
One example of this involves collating data for our LTGG TCFD[1]-aligned report, plus our SFDR[2]-aligned Principal Adverse Impacts publication, which we expect to release in early 2022.

What follows is a snapshot of the LTGG portfolio based on the limited ESG indicators available to us today. We treat them as an output of the process rather than an input. So while we can use the data to test our convictions, it's no replacement for the much deeper stock-level analysis and engagements carried out over LTGG's investment process.

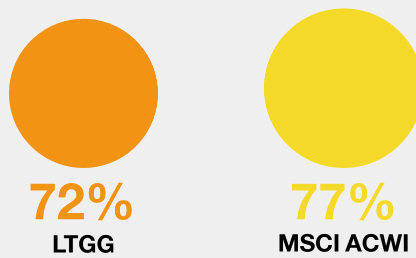
The metrics date to 30 June 2021 or those most recently reported, and are considered correct at time of publication. They were collected via the Factset platform from MSCI, Sustainalytics, ISS and BoardEx.

1. Task Force on Climate-Related Financial Disclosures
2. Sustainable Finance Disclosure Regulation

Selected holdings – ESG scores



Board independence



What is this indicator? The percentage of our portfolio's board members that meet MSCI's criteria for being independent, weighted according to the sizes of our holdings.

What the data tells us: The vast majority of LTGG company board members are considered independent. This suggests most holdings appreciate the external skills and experience that independent board members can provide as their businesses scale and mature.

What we think: Data on four holdings, together accounting for nearly 8 per cent of the LTGG portfolio does not feature in the MSCI database. Also, some holdings have many more independent board members as a proportion of their boards than others. This ranges from 33 per cent at Tesla to 82 per cent at BeiGene. This statistic does not account for different governance structures in different regions. For example, Dutch payments company Adyen's 100 per cent independent supervisory board skews the result. Furthermore, it doesn't recognise that innovative disrupters in our portfolio are very often at an earlier stage of maturity than index incumbents. As a result, their board memberships rarely comply with 'best practice' and are still evolving. Finally, it provides no insight into board dynamics, board effectiveness or how challenging or collegiate the board is. All these factors influence how much we trust management and the board to take a long-term view to look after clients' interests as minority shareholders.

Our approach therefore remains based on our 10 Question Stock Research Framework and ongoing engagements with management and board members.

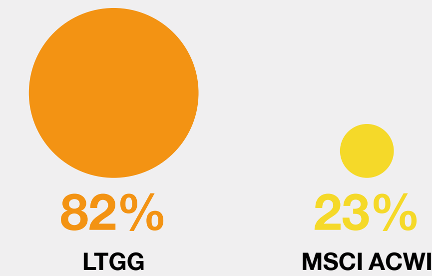
Board gender diversity

What is this indicator? The portfolio weighted average percentage of board members who are female.

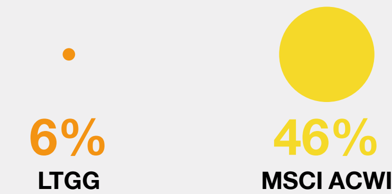
What the data tells us: Just over a quarter of LTGG companies' board members are female, indicating that progress is still needed to increase gender diversity.

What we think: As usual, the average figures mask significant differences at stock level. More than 60 per cent of Kering's board members are female and Amazon's figure is 40 per cent, but there are no female board members at all at Pinduoduo, Meituan or NIO. Being a backward-looking snapshot in time, the data does not reflect efforts to improve, nor does it inform us about ethnicity, national origin, knowledge and experience or educational background – all of which are as important as gender for genuine board diversity. As a starting point, we expect boards to have made reasonable progress towards both gender and ethnic diversity, or to have at least set out a clear roadmap as to how they will achieve this. If the composition of the board or its subcommittees is very different from these expectations, then we aim to engage with the companies in the first instance. We may later consider additional voting action if appropriate. Of note is that following a recent conversation we had with NIO, its board appointed a female member; we are supporting Pinduoduo's selection process as it interviews female board candidates; and Meituan is similarly taking steps to select potential female members. Beyond the board, we expect our holdings to take steps to understand, disclose and, where necessary, improve diversity in their workforces. Relatedly, we are also seeking better data on gender pay gaps, employee turnover and collective bargaining.

Ownership



Founder-led firm (CEO/chair)



Widely held

What is this indicator? A 'founder-led firm' is a company whose founder serves as CEO and/or chair or retains significant influence. A 'widely held' company has no identified shareholder or shareholder group holding greater than 10 per cent of the voting rights.

What the data tells us: Across LTGG's holdings, 82 per cent are founder-led. That's much higher than the index-wide figure of 23 per cent. Only 6 per cent of LTGG holdings are considered 'widely held'. This is an extraordinary observation, illustrating how differently we think about governance structures and corporate ownership.

What we think: We believe it often takes influential and visionary leadership, backed by aligned and patient shareholders, for a company to spearhead disruptive change while remaining focused on its long-term mission. It's therefore unsurprising to us that most LTGG holdings are founder-led and very few are considered 'widely held'. We are sceptical of overly prescriptive policies and checklists when considering what effective leadership should look like, preferring instead to take a case-by-case view. However, the data doesn't tell us about the founder's other business activities, the depth of the management team around the founder, or attitudes towards shareholder rights and other stakeholders. Our focus is therefore on our fundamental research and ongoing company engagement to determine what works in practice for each company and how that impacts innovation and corporate culture.

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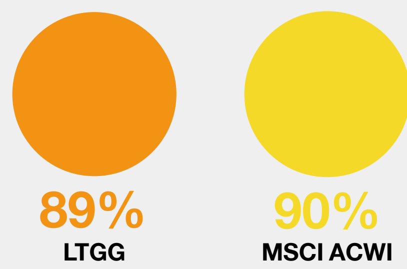
Responsible business conduct



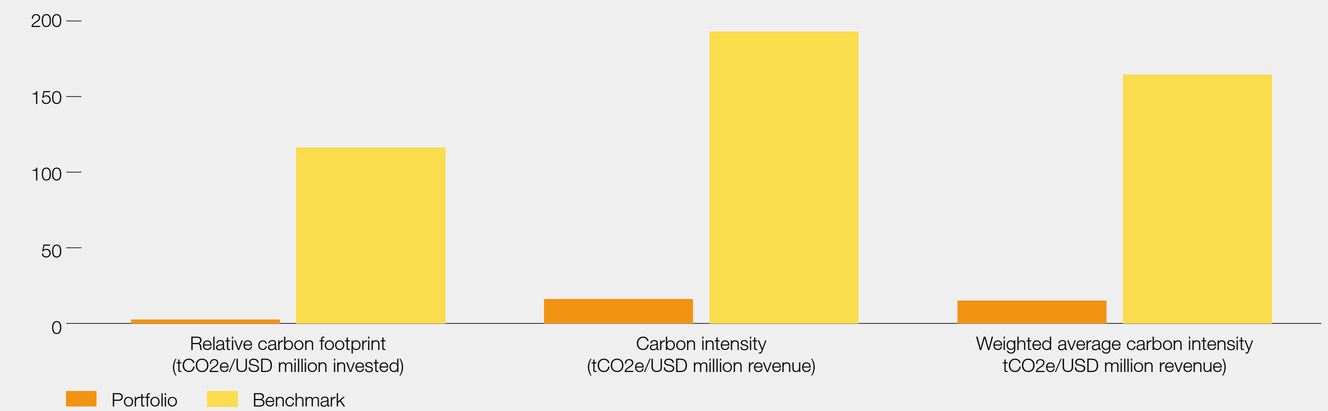
What is this indicator? Sustainalytics assesses companies' compliance with the principles of the UN Global Compact (UNGC). This provides a proxy for a company's social performance and exposure to corporate controversies.

What the data tells us: The data suggests that the vast majority – nearly 90 per cent – of LTGG holdings are deemed to be compliant. This indicates that most members of our portfolio conduct themselves responsibly in regard to society and the planet.

What we think: Sustainalytics' lack of information about some holdings affected our overall score. None of LTGG's holdings were deemed to be 'non-compliant'; however, some didn't 'pass' as the agency didn't hold the relevant data. In any case, we view UNGC compliance as the bare minimum required of our holdings. We expect all our holdings to respect internationally accepted human rights and labour rights throughout their business operations and value chains. We are seeking better data and disclosures about companies' approaches to taxation, supply chain due diligence, pay rates and labour rights.

Data on responsible business conduct can help us reflect on a company's behaviour, but it can't replace the deeper insights derived from our own fundamental analysis. We use our 10 Question Stock Research Framework to dig into aspects of corporate character. When we believe a firm's conduct falls significantly below expectations, we engage with management in the first instance. Then we may consider appropriate voting action or an investment decision. For example, we have spoken to Amazon on multiple occasions about labour conditions, Tencent about its relationship with China's government, and Facebook about data privacy and broader societal issues. That Sustainalytics features these same three companies on its UNGC 'watchlist' only serves to confirm why we're already engaged.

Climate change



Source: Baillie Gifford & Co and yoursri.com. Data for a representative LTGG portfolio. Benchmark: MSCI ACWI. As at 30 June 2021.

What is this indicator? The relative carbon footprint is the total carbon emissions of the portfolio per million US dollars invested relative to the MSCI ACWI benchmark. The carbon intensity is the total carbon emissions per million US dollars of revenue generated – this allows a comparison to be made with the benchmark to measure the portfolio's efficiency with regard to emissions per unit of financial output. The weighted average carbon intensity metric considers portfolio exposure to carbon-intensive companies.

What the data tells us: The carbon footprint, carbon intensity and weighted average carbon intensity of the LTGG portfolio are many multiples lower than those of the index. This suggests that LTGG companies are well positioned to adapt and thrive in a carbon-constrained world.

What we think: These metrics only refer to scope 1 and 2 emissions. Scope 1 emissions derive directly from a company's activities, including stack emissions and fuel use. Scope 2 emissions arise indirectly because of the use of electricity and similar resources generated externally. Many companies in the portfolio don't report scope 1 and 2 emissions. And scope 3 emissions aren't reflected at all. These are emissions resulting from activities involving assets that are neither owned nor controlled by the company but still indirectly impact its value chain, such as those that arise from the distribution and use of its products after they have been sold. The concept of 'avoided emissions' – such as from using video conferencing to reduce business travel – is also absent from this analysis. Moreover, the underlying data can be subject to a range of calculation approaches, assumptions and exclusions, which makes comparability between companies challenging.

When presented in absolute terms, the data is also heavily influenced by the size and profile of the company. For example, more than a quarter of the portfolio's scope 1 and 2 carbon emissions are estimated to come from Tesla, yet the electric car maker is a significant enabler of the transition to a low-carbon economy. Caution is therefore needed. Furthermore, climate change is not solely about carbon emissions. This data tells us nothing about biodiversity impacts and water use, for example.

While we believe climate change will present our portfolio with more opportunities than risks, we are far from complacent. There are many areas where we can improve our data and analysis. We are engaging with each LTGG holding about scope 1, 2 and 3 emissions reporting. In due course, we expect the companies to establish clear goals to achieve net zero emissions by 2050 at the latest. We also are working with carbon-footprinting expert Professor Mike Berners-Lee to identify data gaps and other limitations in several of our holdings, and he plans to help us develop better scope 3 estimates. We are also seeking better data on biodiversity and water intensity.

ESG collaborations: look before you leap

Baillie Gifford has long believed in working with others on ESG-related issues, but our approach is purposefully selective

Environmental, social and governance issues have never been more important. Baillie Gifford recognises the benefits of working with others to address them. We want to be ambitious, but we also need to proceed with care. There's a burgeoning number of ESG initiatives within the asset management industry, and we must consider the long-term impacts they could have on our clients. Simply scrambling to collect lots of badges or stamps of approval would do those clients a disservice.

Building productive relationships takes time. For instance, Baillie Gifford has been a member of the Carbon Disclosure Project (CDP) since 2002 and we continue to be an investor signatory. This provides us access to the data it gathers on companies' environmental behaviours as well as regional insights. In late 2020, we became one of the first to subscribe to the CDP's new temperature ratings methodology, which it developed in conjunction with the World Wide Fund for Nature (WWF). This will help us research the quality and consistency of company efforts to cut emissions in line with the Paris Agreement on climate change.

We also became an official supporter of the Task Force for Climate-Related Financial Disclosures (TCFD) in 2020, and we encourage our holdings to follow its guidelines when drawing up their own environmental reports. Baillie Gifford holds itself accountable to the same standards, and published its first firm-wide TCFD report in March 2021. LTGG is now in the process of producing its own TCFD report, specific to our clients' portfolio.

The attention our industry is now giving to climate change is a welcome, albeit belated, development. But climate responsibility is only one aspect of ESG. And we are engaging in other elements to benefit our clients.

One example includes joining a global reporting initiative roundtable hosted by the Investment Association. Discussions have covered tax reporting standards and working with the Sustainability Accounting Standards Board to settle on universal reporting requirements. These aim to make it easier for companies to report their sustainability metrics while avoiding different regional initiatives that add complexity.

We also joined a roundtable on pay ratio disclosures by UK companies, led by Pensions & Investment Research Consultants, ShareAction and the High Pay Centre. In addition to examining available data, it will explore the ways pay distribution is relevant to investors.

Less formally, we often meet and network with ESG peers and, when appropriate, arrange joint meetings with company representatives. This timeline displays our formal initiatives to date. If you would like more information on any of them or on what's next, please ask your Baillie Gifford representative.

Long-term membership
Pensions and Lifetime Savings Association (previously NAPF)

2000
UK Corporate Governance Forum

2001
International Corporate Governance Network
UK Sustainable Investment and Finance Association

2002
Carbon Disclosure Project
Extractive Industries Transparency Initiative

2005
Asian Corporate Governance Association

2006
UN Global Compact

2007
United Nations Principles of Responsible Investing

2010
UK Stewardship Code signatory

2014
Japan Stewardship Code signatory

2015
Investor Forum
Council of Institutional Investors

2016
Institutional Investors Group on Climate Change

2017
Global Impact Investing Network

2018
Investor Stewardship Group (US Stewardship Code)
Focusing Capital on the Long Term Global
European Fund and Asset Management Association Stewardship Code

2019
Global International Governance Network

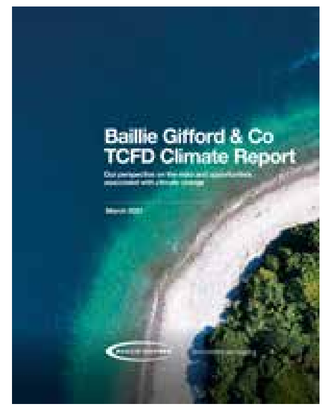
2020
Task Force for Climate-Related Financial Disclosures
Farm Animal Investment Risk and Return

2021
UK Centre for Greening Finance and Investment

These engagements and collaborations allow us to contribute to the development of industry best practice and, where appropriate, bring more pressure to bear on companies. This can help to enhance our clients' long-term investment returns.

Further insights

Use the link below to find out more about Baillie Gifford's ESG-related activities:



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