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# A DECADE OF DISCOVERY

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The Global Discovery mission to capture opportunities in the enduring cycle of innovation has made for a fascinating ten years. But the team believes that the next decade looks even more exciting.

*All investment strategies have the potential for profit and loss, capital is at risk.*

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**Douglas Brodie (DB):** Ten years ago, we, on the Global Discovery team, challenged ourselves to develop a fundamentally different approach to smaller company investing. A way that focused on the global opportunity and immature growth companies, not small caps.

Why? Because the new technologies were creating opportunities and changing what was possible for these high-potential smaller businesses, and we really wanted to capitalise on what was happening around us.

Namely, a structural shift in how technology, in all its different guises, was being used to improve capabilities, drive efficiency, and generate innovative solutions.

And that was a pattern that applied in areas as diverse as healthcare, in energy, in transportation, indeed, in how people actually work.

And we built our investment philosophy around identifying these immature companies early in their lifecycle, and crucially, we structured our portfolios to have the potential to retain ownership of its successful holdings as they delivered, maximising the value that could be unlocked over the long term.

And there's a real longevity to our investment approach being based on structural growth and deeply resonating patterns of human ingenuity and innovation.

And that requires us to navigate periods of volatility and really stay the course as investors, and it can, undoubtedly, make for a bumpy ride in the short term, but we think that the rewards to long-term, patient shareholders can be significant.

## **What we look for in companies and how this has evolved**

**Luke Ward (LW):** The framework we use for finding promising companies focuses on four key traits. These have been shaped by our growth philosophy and reflections on the successes and failures, which have driven the fund over the last decade.

### **Trait 1: Solving problems through innovation**

**Zaki Sabir (ZS):** We seek companies that we believe are solving large, pre-existing problems within our global industrial and societal landscape.



These problems are typically directed at endpoints that address effectiveness and efficiency. In pursuit of problem solving, we are in pursuit of entrepreneurial-led innovation.

When problems are at their most significant and most unmet, the opportunity for thoughtfully applied innovation is at its greatest. We try to research and identify these problems and their pre-eminent solvers early in their lifecycle.

Ocado have been working for two decades on solving one complex problem. That is how to build a scalable solution to enable consumers to be delighted to buy and receive their full-service grocery needs through ordering online.

This challenge has involved deep iteration with a vast array of digital and automation technologies. Increasingly, this problem has been solved by Ocado and scaled to shoppers globally, in concert with its leading supermarket partners, such as Kroger in the US.

## **Trait 2: Emerging competitive advantage**

**Svetlana Viteva (SV):** As long-term investors, we need to obsess about competitive edge, as it is the essence of sustainable growth.

The companies we look for are at their more formative stages, so we focus on understanding whether the ingredients are in place for a competitive advantage to emerge and solidify over time.

And we believe the most exciting investment opportunities have been those where the edge continuously builds on itself and evolves, making it difficult for potential competitors to catch up.

We have lived through this with Tesla, since we originally invested in 2013, as the first cars were rolling off the production line.

The hint of technical edge and product differentiation, which excited us at the time, have since led to scale advantages in manufacturing electric cars, defining Tesla as one of the leading car companies globally.

## **Trait 3: Quality and ambition of management**

**ZS:** The ambition and the requisite capability of management is crucial in shaping the long-term performance of an innovation-driven growth business.

We are looking for managers who are inspirational and purposeful in the problems that they are seeking to progressively solve, and who truly act according to a long-term time horizon, which aligns with our own investment horizon.

We often, though not exclusively, find these qualities exhibited in founder-led businesses.

The greater the complexity of the problem, the greater does the courage and dedication of management matter, as well as does both their and our long-term investment horizon.

Rick Smith is an archetypal example of a vision-driven founder. He founded Axon Enterprises with one ambition: this was to replace the use of lethal weaponry from policing via replacing guns with a taser electronic device that he invented.



Today, Axon has developed a range of technology-based solutions for law enforcement agencies globally, including tasers, cameras, and evidence management software.

#### **Trait 4: Scalability**

**SV:** Scalable are those companies able to increase their returns as they grow. The growth becomes easier with scale, rather than the law of large numbers or diseconomies of scale taking hold.

The importance of scalability is actually one of our key learnings over the last decade. Companies, which haven't scaled well are those with disappointing outcomes. And scalability has been that X factor that separates great companies from great investment opportunities.

In some ways, it is the hardest trait to pin down. When we get it right, it has the potential to unlock significant rewards.

So we look for business models with practical scaling advantages in terms of management, distribution, and pricing. Healthcare is an area, which is typically not associated with network effects or scalability.

But Alnylam is a classic example of a platform company with its core ability to interfere precisely with genes, applicable across multiple diseases.

We are intrigued by the potential for this drug development platform, which can be pointed in multiple directions and can improve the odds of clinical success.

#### **Where these traits are leading us for the coming decade**

**LW:** While the traits we look for in businesses remain constant, the new opportunities we consider are always evolving.

Young entrepreneurial businesses are prolific innovators, and we're encouraged by the potential we think those in the portfolio have to change the world over the decade ahead.

**DB:** DNA sequencing has made significant progress in recent decades. And while the technology has found some use cases in medicine, it has largely remained a tool for researchers and academics.

The founding management team at UK-based Oxford Nanopore have pioneered an exquisitely sensitive way of interrogating DNA.

And with their sequencing devices benefiting from both being low cost and modular, we think the technology offers a path to very attractive scalability, and one which shifts DNA sequencing towards being about generating biologically relevant answers, not just genetic code.

We followed the company for around a decade; first invested when it was still private back in 2015.

Now it's listed, we believe the clear commercial traction being achieved hints at the increasing utility and accessibility of its approach, factors that we think will really help unlock some of the impasse that has held back DNA sequencing to date.

**ZS:** The need to transition our global society to an energy usage devoid of carbon is abundantly clear. This will take great political and social will, as well as considerable time.



It is also an abundant opportunity for the innovators' will. We expect that a combination of solutions and patience will be required for this pressing challenge.

Indeed, some key solutions may not yet even have been invented, such is the scale and multifaceted scope of this problem.

We are encountering differentiated high-potential businesses in this area. Examples of two such companies are ITM Power, producing electrolysers to convert electricity into the carbon-free hydrogen molecule for industrial and long-range transportation uses.

And QuantumScope, which is developing next generation solid state batteries, aimed at delivering a step change in battery performance in electrical vehicles.

**SV:** Software is a must have for the success of most businesses today. The ability to build and release robust and secure software quickly and with minimal effort has become critical.

The shortage of software developers exacerbates this challenge further. There is a new generation of companies, which are automating tedious and time-consuming processes, allowing companies and their developers to focus on creative higher value-added activities.

Two such examples in the portfolio are JFrog and Appian. JFrog automates the software release process, and Appian removes the need for developers to write code from scratch and allows them to build applications from preassembled components, much like Lego pieces.

**LW:** Large companies need to be built on highly scalable platforms. Historically, these have been easier to find in software, but we're now seeing an increasing number of hardware businesses, which buck this trend.

SpaceX is a good example of this, opening up a brand new frontier with its reusable rockets. These have turned a government dominated industry into one which businesses and consumers can now take the lead.

Cheaper access to space is enabling the creation of new products and services, all of which can benefit big markets back here on Earth.

Importantly, many of these applications have unit costs which get even cheaper as they scale. Further into the future, we also see huge potential for quantum computers to accelerate progress across a wide range of industries.

PsiQuantum is one of the few companies that have developed a scalable and manufacturable approach to building the necessary hardware.

Using the immense power of these devices, businesses will be able to develop better medicines, materials, clean energy sources, all for a fraction of the cost and time that it takes today.

### **In summary**

**DB:** Having been actively positioned on the frontiers of innovation for the past decade, we are excited by the companies that we've discovered to date. But are as equally intrigued by the problems that still persist and the new technologies being refined to tackle them.



The discovery strategy was established to capture the opportunity in the enduring super cycle of innovation, and this mission has made for a fascinating ten years prior. But, if anything, we believe the next decade looks even more exciting.

### Annual Past Performance to 30 June Each Year (Net %)

	2018	2019	2020	2021	2022
Global Discovery Composite	37.1	6.4	31.9	46.4	-53.1
S&P Global Small Cap Index	13.8	-1.9	-5.6	52.9	-22.0

### Annualised returns to 30 June 2022 (Net %)

	1 Year	5 Years	10 Years
Global Discovery Composite	-53.1	5.7	11.2
S&P Global Small Cap Index	-22.0	4.7	8.5

Source: Baillie Gifford & Co and underlying index provider(s). Total return in USD.

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