

UNDER THE RADAR

PART 1 OPPORTUNITY

Charlie Broughton, Investment Manager. Third Quarter 2018.



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UNDER THE RADAR

INTERNATIONAL SMALLER COMPANIES

In this short series Baillie Gifford's International Smaller Companies team explores how their radar framework helps them to uncover the most exciting small businesses from around the world.

OPPORTUNITY

What are the size and dynamics of the company's addressable market?

SUSTAINABILITY

How do the company's activities contribute/impact the broader society?

ALIGNMENT

Are the management and other stakeholders aligned to achieve long-term success?

INSIGHT

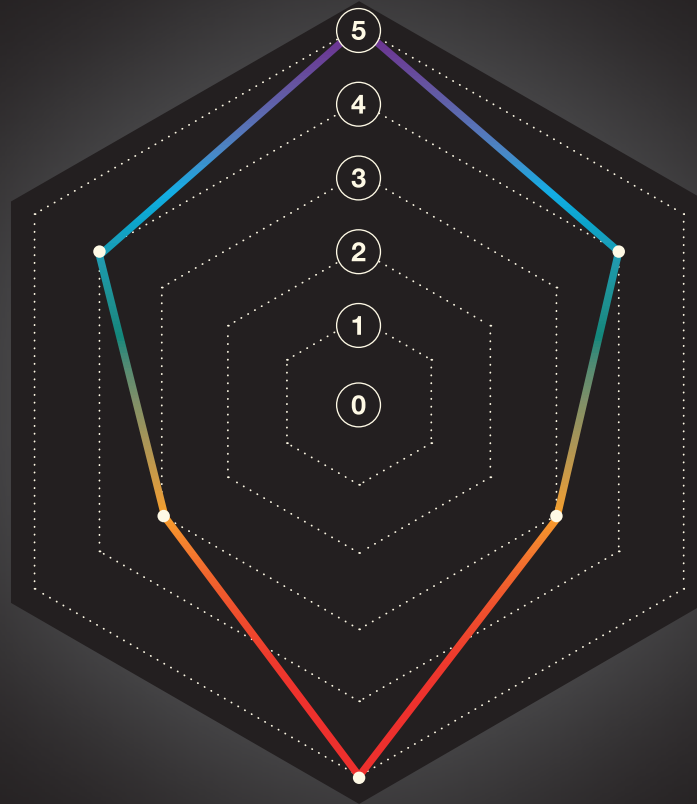
How and why do we have a different perspective to the market?

EDGE

What are the company's competitive advantages?

SCALABILITY

How scalable is the business model and where are the bottlenecks?



PART 1 – OPPORTUNITY

Sweden in the 1970s. A national epidemic looms as it emerges that as many as 80% of Swedes are suffering from chronic back problems, the majority of which originated in childhood. Åke Nordin, a man who 20 years earlier had pioneered attaching frames to hiking backpacks to better distribute weight, sees an opportunity. His company, Fjällräven, quickly designs a new bag for school children. It has two straps to minimise strain on the back, and comes in a wide assortment of colours allowing children to express themselves. The bag is an overnight success. Åke had expected to sell 200 bags in his first year, he doubles that. The next year he sells 30,000. The rest is history. Today the distinctive red fox logo of the Kånken bag, largely unchanged 50 years later, is easily recognised on backpacks across the globe. Fjällräven is still controlled by the Nordin family, and its parent business is currently worth more than one billion euros.

The origins of Fjällräven capture the essence of how we think about opportunity. Almost all great investments begin with a problem. Good companies build solutions that address them.



Opportunities come in many shapes and sizes and often take time to materialise. At first glance there was nothing particularly notable about Japanese manufacturer DaikyoNishikawa, which had come together in 2007 as part of a complex three-way merger. However, later that year its new R&D department developed a unique resin recipe to create a lightweight plastic oil strainer for vehicle engines. Over the subsequent decade, environmental, engineering and cost pressures forced automotive manufacturers to find ways to lower the weight of their cars. Suddenly, DaikyoNishikawa's expertise in making high-quality, light plastic components aligned it with this global challenge, and today it is reaping the rewards.

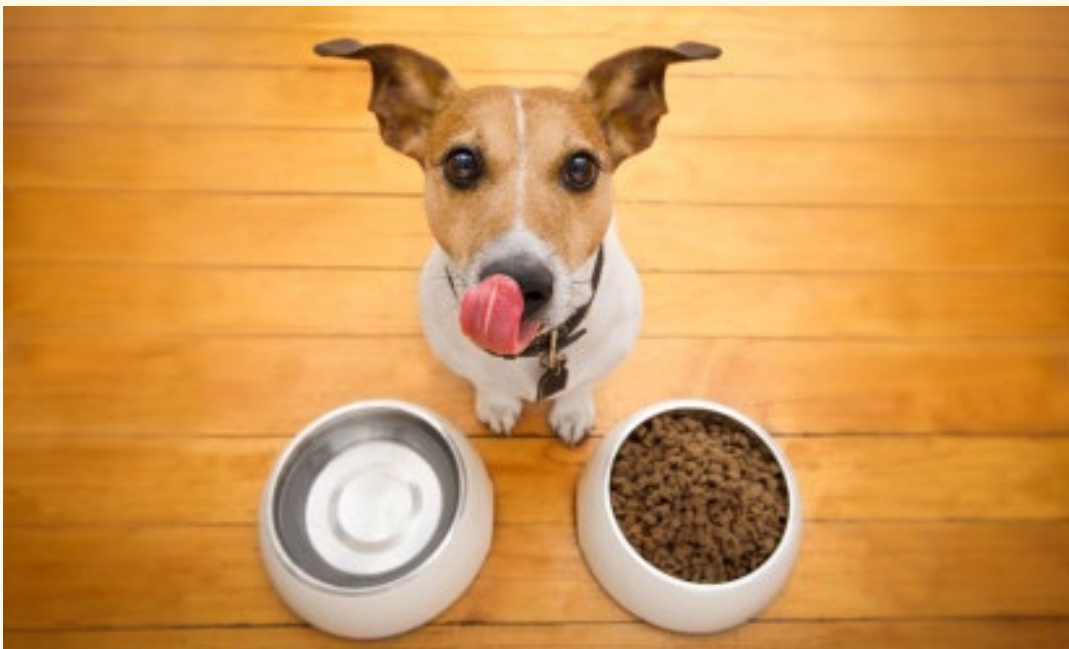
This is where patience comes into play. The greatest opportunities, the ones that can transform a business from a small player into an international leader, don't unfold overnight. Overcoming technological hurdles, battling incumbents and changing mindsets all takes time. An analyst with a one-year time horizon in 2007 would have spent their energy calculating the financial impact of the DaikyoNishikawa merger, hypothesising about margin profiles and synergy potential. Over a decade, however, these traits simply don't register when compared to the evolving demand for plastic substitution in automotives. Patient onlookers have seen DaikyoNishikawa more than triple its earnings in the last five years alone as the business' plastics expertise plays its part in solving a long-term global problem.

This is the challenge we face as long-term investors at Baillie Gifford. Identifying big problems and opportunities is just the first step. For our clients to benefit, we need to find businesses that recognise these opportunities and aren't afraid to chase them, and then we need to weather the ups and downs that go along with investing over long timeframes. This isn't always as easy as it sounds. Over recent history markets have proven themselves less and less patient. The average holding periods of institutional investors has decreased, and a reliance on volatility measures like tracking error has increased. This can create a hostile environment for small businesses trying to capture large opportunities.

Over the summer of 2017, Zooplus, the German online pet food retailer, saw the market react negatively to the news that the business planned on ramping up investment to improve its offering, attract customers and stave off rivals. As a result, management lowered short-term financial guidance. Markets were quick to express their displeasure. It didn't matter that Zooplus remained Europe's largest online pet food retailer, and it didn't matter that the business was still forecast to grow more than 20% that year as it pioneered the shift from

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offline to online in a massive industry. The market still wanted Zooplus to offer smooth short-term results and chose to punish any sign of a struggle or any bold investment into an uncertain future. We believe that this can be both irrational and counter-productive. Focusing on opportunities and supporting the companies addressing them should, over long periods, generate far more value for shareholders than worrying about the bumps along the way. Online sales currently make up less than 10% of the pet food market in Europe. In the context of this striking immaturity, Zooplus' 2017 earnings per share suddenly don't look so important. If their investment helps drive online penetration to a meaningful size, the effect on their business will be transformational.



In any investment the maximum downside is 100%, whereas the maximum upside is theoretically uncapped.

Big opportunities offer the potential for big rewards, however, when thinking about growth over longer timeframes, we often need to go a step further. Good companies address problems facing their customers. Great companies address problems the customers don't even know they have yet. Where we get really excited is when we find a business expanding into an opportunity while continually investing to uncover the next opportunity.

An excellent example here would be database software provider First Derivatives, which hails from Newry, a small city in Northern Ireland. Over the last 20 years the business grew from the founder's spare bedroom into a billion euro company with 2,000 employees in offices around the globe. It did so by helping financial institutions tackle the challenge of processing vast quantities of time-series data for use in financial market analysis and forecasting. It now dominates this market. Rather than resting on their laurels, however, management are already looking at where else they can apply the expertise they have developed, both in helping existing customers with new problems and in attacking markets beyond finance. The company believe that in doing so their target market has already expanded from \$5 billion to \$25 billion. We believe that First Derivatives' vision and ambition mean this may just be the start as increases in computing power and the ability to gather data sets will drive the need for ultra-high performance data analytics in the future, regardless of which area a company operates in. For reference, database giant Oracle's revenue last year was almost 30x larger than First Derivatives' total market capitalisation.

If this business can evolve and discover new uses for its skills the upside could be massive. The exciting part is that many of these new applications remain hypothetical. Industry analysts can't fit them into financial models, and markets can't effectively price them. This then is a fruitful hunting ground for patient, long-term investors comfortable with uncertainty. We are constantly looking for businesses growing their addressable markets in new and imaginative ways, and as long as we have established some faith in management's ambition and competence, we are happy to support efforts to reinvent and reinvigorate growth.

The relationship between uncertainty and opportunity is difficult. Often an opportunity is clear, but the probability of a company successfully seizing it is low, or at very least hard to measure. This is perhaps most explicit in medical science. When developing treatments for cancer no one is questioning that the potential rewards are great (both for the business involved and for humanity). However, the latest studies suggest that the probability of getting an oncology drug from Phase-1 trials through to the marketplace is only around 3.4%. This means that the vast majority of companies developing new cancer treatments will fail. One method we rely on when facing uncertainty like this is to focus on the incredible asymmetry in equity markets. In any investment the maximum downside is 100%, whereas the maximum upside is theoretically uncapped. A large number of oncology businesses can fail, and yet it can still be a fruitful area in which to invest if the occasional winner can emerge and take share in a \$130 billion plus market.

Our process then purposefully focuses on potential upside, and looks for ways to improve our odds of spotting the winners. When the opportunity is big enough, the success of those winners should more than outweigh our inevitable mistakes along the way.

Finding companies that solve big problems for their customers is key in what we do. To be long-term growth investors we need to find management teams brave enough to go after large opportunities, and ambitious enough to keep searching for new ones. In the same way that Åke Nordin was able to take his passion for the outdoors and his expertise in practical, lightweight apparel and use them to build Fjällräven into an international retail empire, we are looking for businesses we think have the potential to use their strengths to seize today's opportunity while investing and adapting to seize the opportunities of the future. Often the odds are stacked against them, but given the potentially vast rewards on offer we believe that, as investors, we should work to cultivate bravery in the face of this uncertainty. Our process is designed with this at its core. Of course, our radar methodology includes a number of additional tools which we believe increase our odds of success, and we look forward to exploring these with you further soon.



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