see money differently

NEDGROUP INVESTMENTS GLOBAL EQUITY FUND

Quarter Two, 2019

For the period ended 30 June 2019

Money for Nothing?
That ain't workin' that's the way you do it, Money for nothin' and your chicks for free - Dire Straits, Money for Nothing (1985)

This song, written in the mid 1980's from the perspective of two working-class men watching music videos encapsulates the height of the recorded music industry and the riches it brought to performers, record labels and a multitude of hangers-on. In 2019 "Money for Nothing" would more likely be written about two working-class men commenting on a YouTube video of a newly minted tech (paper) billionaire at one of the many "unicorns".

The term "unicorn" was first used in 2013 by venture capitalist Aileen Lee to describe a privately held start-up company valued at over $1bn. It was supposed to represent the statistical rarity of such successful ventures hence the analogy of a mythical animal. However, since 2013 there has been a population explosion of unicorns such that there are now over 300 unicorns, about the same number as the critically endangered Sumatran tiger.

The growth in unicorn numbers can be attributed to a highly successful breeding programme by private equity (PE) and venture capitalists (VC). These financiers nurture the dependent start-ups through long periods of losses and capital requirements.

The silent partner to these financiers are the central bankers who have created a perfect breeding environment for unicorns through a feedstock of low-interest rates. With such a low cost of capital, financiers can afford to wait for the anticipated cash flows. In a venture capitalist's excel model, cash flows in 10 years' time are almost indistinguishable from cash flows today given a sufficiently low cost of capital used to discount those future cash flows.

The financiers are critical to the incubation of unicorns. All of them are seeking the rarest species of unicorn, the network effect unicorn. They have seen these creatures in the form of Alphabet (née Google), Facebook and Amazon where scale and networks combine to create a winner-takes-all market. Once a certain scale has been achieved, the barriers to entry become insurmountable. To achieve such scale, huge investment (aka losses) are required as the service being delivered needs to be heavily discounted to generate the critical mass of users and (hopefully) market domination. To the uninitiated it might seem that the barriers to entry for many of these newer unicorns are not as strong as those of the pioneers. While the business model du jour for VCs is clearly based on very large user bases it is not always clear what the competitive advantage is and how the unicorn will ultimately wean itself off its mother's cash flow diet to become independent.

Opendoor Labs is an example of the unicorn genre. The company, started in 2014, operates an online platform (including a mobile app) in the US for people to buy and sell properties direct. To date Opendoor has raised c.$1.3bn of equity and c.$3bn of debt and at the last funding round sported a valuation of c.$3.8bn. The business model is to buy properties (unseen) direct from the seller based on location, condition and other relevant data. Opendoor then does some light cosmetic renovation and resells the house. For this service they charge a higher fee than a traditional real estate broker (typically c.6%-7% of the house value). While no revenue or profitability data is available (as the company is private), funding rounds would imply that consistent injections of cash are required with $325m raised in June 2018, a further $400m in September 2018 and another $300m in March 2019. This is no surprise – buying, "renovating", holding as inventory and selling real estate is capital intensive. Other issues with the business model might include the illiquid nature of real estate; the costs of holding real estate (including maintenance, property taxes etc); the asymmetry of information between the seller and Opendoor (the company buys unseen so full information on defects seems unlikely); and, the labour intensity of the model. While the company aggressively invests to build scale and market share it seems unclear what the benefits of scale are (other than perhaps branding and marketing). Residential real estate tends to be a local business with few operational synergies between distant cities.

Despite these drawbacks the company has had no problem in obtaining funding and is the leader in the nascent iBuyer market with an estimated 7,200 home sales in 2018. Given few competitive advantages they are not alone in the market with number 2, Offerpad selling an estimated 3,500 homes in 2018 and other start-ups including Knock and Perch also competing. More recently the (more) established real estate e-commerce company Zillow has entered the market with Zillow Offer. Zillow is a publicly listed company, so more information is available and Q1 2019 results give an early indication of the nascent Zillow Offer business: 414 homes sold in the quarter for revenue of $128.5m (average sales price $310k) and a pre-tax loss of $45.2m ($109k per home). Even taking out the cost of sales & marketing ($20.9m) and technology & development ($12.3m), Zillow still made a pre-tax loss of $12m ($29k per home sold) due to the costs of buying the home, general & admin costs (including light renovation) and financing costs. Zillow Offer has been enthusiastically endorsed by Wall Street which has led other established real estate companies such as Redfin Corp and Keller Williams Realty to announce their entry into the iBuyer market so there will be even more capital chasing residential real estate. In the words of Keller Williams' CEO, Gary Keller "I feel like I have no choice now … I can't allow Opendoor and Zillow to go out and be the only player in the iBuyer space". All this is good news if you are selling your house but whether it will ever lead to (positive) cash flows for these companies is debatable.

On this point the financiers may not care. Their aim is to sell the business on at a profit. Last year four of every five companies that were listed on the US stock markets were loss making over the previous 12 months. With such a receptive stock market VCs and PE firms are rushing to cash in. As the Chinese proverb goes, "When the ducks quack, feed them."

Opendoor is simply an example of the genre. Loss making unicorns are no longer the rare beast they once were. Recent examples that have come to market include Lyft, Pinterest and Uber with others such as WeWork apparently seeking a stock market listing later in 2019. The wider implication for investors is the context within which we are investing: fuelled by a low cost of capital, investors have bid up the valuation of businesses with attributes currently seen as highly desirable – rapid growth in revenue and user bases or network type business models. Some of these companies may turn out to be the next Amazon, Alphabet, Apple or Facebook but many will not. Lower barriers to entry, limited competitive advantages, greater disruption and unprofitable growth are not typically the long-term attributes of the successful investment. At Veritas we seek companies with strong and durable competitive advantages and where they are largely insulated from the accelerating disruption we see all around us. Current cash flow generation is important to us. In this vein, we recently introduced Intercontinental Exchange (ICE) a US-listed exchange to the fund.

Within financial services we are attracted to companies that are embedded deep into the global financial and market infrastructure. These companies often possess enduring industry positioning – effectively being the 'plumbing' of the financial system they enjoy attractive characteristics and benefit from high barriers to entry, customer congregation and strong network effects.

Among the global exchanges, we most like those covering both trading and post-trading (vertical integration) to get more bites of revenue at each step. We also have a strong preference for derivatives over cash markets and, digging still further, prefer the post-trade clearing and settlement of derivatives best of all. Unlike cash markets, listed derivatives contracts and bespoke OTC agreements resolve over days, months or years and therefore require risk to be managed over a prolonged period. Businesses that house and manage this risk are very scarce and we believe the key asset among global exchanges is the dominant central counterparty clearinghouse (CCP) that houses and manages derivative risk. CCPs manage risk through initial margin as positions are established and subsequently through variation margin as positions move in and out-of-the-money. As such, the dominant CCP benefits from network effects – the more a customer uses a CCP, the more diversification benefits they are likely to gain, reducing their margin (capital) requirements and reinforcing the benefits of pushing more business through the same CCP.

Derivative markets tend to be global and dominated by the US and European exchanges. In fact, there are few dominant derivative exchanges, and these operate in segmented oligopolies or parallel monopolies, each with market power: CME (US interest-rate derivatives) / LSE (Global interest-rate swaps) / Deutsche Boerse (European LT interest rate derivatives) and ICE (Global commodity and European ST interest-rate derivatives). In contrast, Asian exchanges differ in that they dominate their domestic market and tend to focus on cash markets – therefore, while they have strong domestic market power, the scope of this is limited to market size, e.g. the Australian Stock Exchange has the highest margin worldwide but a relatively small revenue pool.

ICE is a leading global exchange of regulated exchanges and clearinghouses (around 50% of revenues), with a strong embedded position in commodity and fixed-income derivatives, as well as a provider of data services (50% revenues) for commodity, financial, fixed income and equity markets. It is a vertical business able to marshal its market power. There is a deep relationship between data and trading. On the trading side, ICE has a broad suite of derivatives used largely by corporates to manage risk.
On the data side, the demand for more information is growing rapidly – corporates seeking more precision on risk management, passive investors needing index data and even from active investors needing reference benchmarks.

ICE is in a particularly strong position as its data is proprietary and so it is not a re-seller of other's data. ICE has large addressable markets, aligned to structural growth. ICE is a beneficiary of capital market development, meaning more cash and derivative instruments issued, traded and cleared on exchanges. Aside from the positive data benefits, trading automation also drives volume onto exchanges. ICE is the prime beneficiary of an expected uplift in volumes given that fixed income and commodities have been slower to automate than other asset classes, such as FX and equities.

ICE has market power. Customers using US derivative exchanges must trade and clear at the same venue and therefore, both ICE and CME enjoy protected bundled pricing. This contrasts with the European model of open access, where customers can choose to use a different CCP. These differences are unlikely to change – the US derivatives regulator (CFTC) sees open access for derivatives as a source of systemic risk. This means US derivatives exchanges have more market power than those in Europe.

ICE benefits from network effects and high barriers to entry. It enjoys high and increasing margins thanks to solid operating leverage, resulting in excellent cash generation because of its asset-light business model. ICE management has shown excellent capital allocation with dominant assets in their chosen markets. This model is protected by revenue resilience with over half of revenue recurring in nature thanks to subscription fees. The transactional trading and clearing revenues are also relatively resilient with derivatives providing a counter-cyclical stabiliser as risk management is largely independent of market direction.

Our industry work shows that historically, liquidity surrounding derivative markets is very sticky with open interest congregating into single key contracts, such as Brent for oil. Market liquidity is the key attribute for attracting and maintaining customers, who seek to minimize overall trading costs, while maximizing the capital efficiency on the margin needed to cover positions. Regulation has been a positive. ICE is aligned with moves requiring more OTC derivatives to be cleared centrally (it is the global leader in the clearing of credit-default swaps) which is a smaller market than interest-rate swaps but one that looks poised to increase in significance when economies slow and demand for credit protection swells.

Its key products include Brent and other commodity futures, which have a stable and enduring base because its customer base is largely institutional, with corporate clients (e.g. BP / Shell) using its risk-management tools for real-world business and commercial needs. Brent does face competition from the WTI derivative complex at the CME. However, WTI has critical shortcomings including WTI being landlocked and priced inland (Cushing) so it is affected by fluctuating transport costs as well as suffering from inconsistent quality of crude. This explains why Brent is the dominant international benchmark for seaborne trade. Partly as a result of market liquidity, we believe that ICE is well placed to benefit from increasing emerging market demand for energy and the increasing evolution of trading flows.

ICE also has new areas of potential growth. It is often adding new products to its existing suite of derivatives; largely as futures contracts get more liquid and extend out in maturity, ICE develops options that straddle those futures. Its CDS clearing business is at the foothills of strong growth as mentioned earlier. ICE is also exposed to the fast-growing and valuable index business – an area we particularly like. ICE is the third-largest fixed-income index provider, with $1trn of mutual funds and ETF assets benchmarked to its indices, which are poised to continue growing rapidly given that fixed income's share of ETF assets remains small at around 15% of total AUM.

Because of its asset-light business and strong cash conversion, ICE has prodigious cash generation. This means it has financial flexibility and strategic dexterity. Its balance sheet is in good shape with net debt to EBITDA standing at just 2x and improving to standing below 1x over our 5-year forecast horizon. In terms of valuation, we invested with a prospective FCF yield of just over 5% and an anticipated compound growth in free cashflow of 11% giving an estimated IRR of around 15%. The opportunity for investment arose because the market had specific concerns surrounding short-term softness in debt issuance and as a result its valuation reached an attractive level in absolute terms.

Portfolio Commentary

The portfolio marginally outperformed the index over the second quarter. After significant falls in world markets in the second half of 2018, there has been a complete reversal in the first half of 2019. As investors know, the strategy focusses on stocks and looks for beneficiaries of enduring growth drivers rather than trying to second guess the macro environment that has been responsible for the wild swings we have seen in indices in the 12 months to end June. As with previous write ups, it is necessary to put the quarterly attribution into context and recap the rationale for holding the positions that have either contributed or detracted over the quarter. Turning first to companies listed within the Communication services sector, which includes Facebook, Alphabet and the two US cable companies, Comcast and Charter. The strategy is overweight this sector as the companies listed benefit from some form of scarce asset that provides an extremely high barrier to entry that prevents cash generation being competed away and enduring growth drivers that will ensure high cash generation continues. During June, it was announced that the FTC and the Department of Justice would between them investigate Facebook, Google (Alphabet), Amazon and Apple on the grounds of hurting competition and consumer choice. Facebook will be investigated by the FTC and Google by the Department of Justice. Facebook has risen strongly year to date including last quarter. It is unlikely that antitrust or privacy legislation are significant threats to Facebook's dominant position in the market.

GDPR has only served to further entrench the dominant digital players with valuable first party data. Additionally, under the Sherman Act, there needs to be proof of anticompetitive behaviour which is causing harm to consumers. The reality is it has never been easier to launch a product on Instagram and then sell direct to consumer without the need of multi million TV advertising budgets. The main risk is Internet companies will be held liable for user content on their services, an area that Facebook is trying to address. It's unclear as to why the task would be made any easier by forcing the company to split. Against this regulatory backdrop, the company operationally has exceeded expectations. Quarterly sales rose to over $15bn and the gains are increasingly being driven by Instagram and advertising in its Stories feature. Facebook recently started testing an e-commerce product called Checkout allowing people to buy products within Instagram. More than 3 million advertisers use Stories currently with both the number and the cost of ads set to rise. Facebook make less than 20% of their revenue from Top 100 advertisers compared to broadcast TV sources which derive 70% from the Top 100. With this in mind the company has made creating Story ads an easy experience. As demand increases so will competition in the auction to drive up prices. The key here is that Facebook suffered a weaker quarter last year as it worked on monetisation of Stories.

This leads to **Alphabet** and the fact it was a detractor during Q2 as advertising revenue only rose 15% versus 24% a year earlier and some investors are concerned that Google is losing ad revenue to both Facebook and Amazon. Google's search engine is usually the first place that consumers go when looking for products, enabling the company to charge premium prices to retailers and advertisers looking to reach customers online. But shoppers have been increasingly going straight to Amazon to hunt for products meaning, some argue, that the company is grabbing a larger share of the digital ad market. However, if you just take the US market, 90% of commerce is still offline and over half the ad budget is spent offline meaning there is substantial opportunity for more than one player. Alphabet has been focussing on improving the monetisation of YouTube and improving the user experience in the same way Facebook has focused on Instagram. It is fair to say Alphabet does not help itself in (so far) refusing to split out the YouTube revenue which is lumped in with Google search. On the regulatory point, it is easier to argue that Google may favour retailers that pay the most in search but there are alternatives. Microsoft has sunk billions in Bing and it has been unable to compete. That said if Alphabet was forced to split it could be beneficial to the company. The 'Other Bets' business is not being valued on the multiples seen in loss making businesses like Uber and Lyft and by splitting the various Alphabet businesses would almost certainly see each part ascribed a higher valuation.

The US Cable companies, **Comcast** and **Charter Communications** both performed well in Q2 extending gains in 2019. Investors in the portfolio are aware of the thesis as it has been discussed many times. As more viewers 'cut the cord' and move away from traditional TV sources to streaming services like Netflix, Prime, YouTube etc, both Comcast and Charter benefit as they provide the fast broadband connection needed to watch these services. Charter is a 'pure play' broadband company whilst Comcast does own content including NBC and the recently purchased Sky. In addition to offering its broadband service, it is aiming at competing with the likes of Netflix by offering its own streaming services. One of the reasons for buying Sky is to amortise the cost of content over a larger subscriber base. Clearly there is a very high barrier to entry in the form of the cable network both companies operate. It's too costly to build out competing networks in the approximately 80% of the US that is served by either Comcast or Charter. The networks they have built have the capability of offering internet speeds of up to 10GBs.

Three years after Charter acquired Time Warner Cable and Bright House Networks, the company serves about 27m residences (of which 24m are internet customers) and two million small and medium sized companies. The internet customer base grew by 5% over the last 12 months whilst pure video business fell by 2%. The company makes very little money from Video as it has to pay for content (programming cost rose 4%) but retains the service as bundling it with internet helps prevents churn.

The broadband business is highly profitable as there is no content to pay for plus there are different tiers depending on speed requirement. Over 80% of subscribers opt for the 100Mb service with 30% opting for greater than 200Mb. The company is seeing strong demand for its 400Mb + service. Comcast is more of a diversified media company with 25% of its business now outside the US. NBC made up approximately $8bn sales out of the $27bn in the last quarter (NBC Universal includes cable television, film entertainment, theme parks and merchandising). High speed internet grew by 10% and generated $4.5bn of sales last quarter. The company, like Charter, also have a growing mobile business aimed purely at customers as an add on service to help lock them in. This part of the business grew by over 20% albeit from a low base. Comcast has also introduced a service called Flex which basically bundles the most popular streaming services and makes them available to Comcast internet customers, so they can switch easily from a programme on one platform to another. In short, they are embracing 'cord cutting'.

The second big overweight area is healthcare which again has been discussed in recent quarterly reports. As of now, the strategy holds no pharmaceutical companies which are more in the firing line of greater drug price pressure. Preference has been to hold companies offering specific medical devices to services with high barriers and largely out of the scope of price control.

One of the contributors over the quarter was **Cooper Companies**, which was bought in Q4 2018. Approximately 75% of the business is contact lenses and 25% is fertility treatment. The company is one of three main contact lens manufacturers with approximately 24% market share. The market has been a constant 4-6%pa grower, even growing 3% in the recessionary period of 2009. Cooper is growing faster (forecasting 7-8%) partly helped by being the only company with a 'key accounts' policy. Unlike Johnson and Johnson and Alcon, which offer branded lenses, Cooper will offer a customised solution to retailers whereby they will put the store brand on the product, sort out packaging, IT support and sales support. The latter includes advice on reducing dropout rates on new users (messaging to ask how the user is getting on with their new lenses with links to videos to help with any issues etc). The company ships the product direct to individuals on behalf of the store which is logistically complex and provides another barrier to entry over traditional white labelling. Given the extent of the product offering and leading position in daily hydrogel soft lenses, the store retains loyalty amongst its customer base, in some instances because they cannot obtain the same product elsewhere. Contact lenses are medical devices with specific manufacturing that needs to offer consistency and accuracy and this together with the customisation provides a significant moat. In return, Cooper benefits from long-term contracts which gives it a subscription based reoccurring revenue profile.

It does offer competitive prices for this certainty but has maintained margins by increasing production in places like Puerto Rico, Costa Rica and more recently Budapest. The company is also benefitting from two other growth drivers. One is the people are increasingly moving to daily disposable lenses which is more profitable and secondly, the cases of myopia (short-sightedness) is reaching epidemic proportions especially in the Far East with up to 80% of the young adult population short-sighted and in need of corrective lenses. Whilst this trend leads to demand, Cooper are also developing a lens for myopia management. Myopia typically starts at about eight years old and generally gets worse between the ages of eight and 14. Usually the child is fitted with glasses and needs to get a stronger prescription as time passes. Coopers have developed a lens that reduces the progression of myopia. It does not totally prevent it, but indications are it prevents severe cases of myopia (for those familiar with the numbering, it means going from a 2 to a 3 rather than a 5). This has long term benefits as individuals with severe cases of myopia have increased risk of developing glaucoma and macular degeneration later in life. In short, there is a new market in the 8-14-year category usually reserved for glasses that may provide future growth.

Dentsply Sirona, the US dental equipment maker and dental consumables producer saw shares continue to perform well following a restructuring of the business in November 2018.

The company designs speciality products including their CEREC (Chair-side Economical Restoration of Aesthetic Ceramics) CAD/CAM machines. CEREC machines use 3D scans to produce ceramic inlays, onlays, and crowns that match the exact shape and size of patient's teeth. The reconstructions (artificial teeth) can be produced on site and fitted in one sitting. The consumables business includes anaesthetics, products for plaque and gum disease prevention, tooth polishers etc. The two parts of the business were brought together by a merger of equals. Despite the obvious tailwinds (ageing populations, improving wealth in emerging markets) and the depth of product offering, the post-merger management of the company was poor, including little earnings improvement from widening out the distribution of product which for the more sophisticated products needed adequate training. The management team was jettisoned after shareholder pressure and the company is undergoing restructuring which includes consolidating some operations, selling underperforming businesses and reducing staff. The company delivered solid financial results in Q1 2019 with internal sales growth of 3.9% and EPS growth of 9% both exceeding expectations. The company witnessed strong performance at the biannual International Dental Show in Cologne where it introduced a variety of new products and received positive feedback for its more advanced Primescan dental CAD CAM digital impression system.

The turnaround at Dentsply Sirona highlights the importance of governance and management capability. One of the detractors to performance over the period was Allergan, the company which manufactures botox. Despite having a strong position in aesthetics, growing therapeutic applications for botox and potentially some strong drugs in the pipeline, the management of the business under Brent Saunders has been extremely poor. The company has demonstrated poor corporate governance over the last 2 years including trying to protect patents by exploiting a loop hole and selling the rights to a North Indian tribe based in New York; carrying out a half-hearted review of the business; executing poorly in buying in drugs and managing expectations of those travelling through the pipeline. We have heavily engaged with the management over this period. Like Dentsply Sirona, the company should be well positioned and benefits from a number of tailwinds. It will be no surprise therefore that we voted with the Appaloosa resolution to split the role of chairman and CEO with immediate effect. Despite the logic of the split, the proxy houses ISS and Glass Lewis recommended shareholders vote with management and against the resolution and the majority duly obliged. The shares fell significantly in the period after the vote. We took the decision to sell at a reduced target price on the basis that predictability under the management that would now not change was reduced. **Allergan** has since attracted a bid by AbbVie at a price seen less than a year ago, substantially undervaluing the company.

The strategy is overweight in industrial stocks largely due to the position in aerospace related companies. These include **Aena** which operates all of Spain’s public airports. The company has seen significant growth in commercial activity especially including the duty-free operations and the speciality retail stores. The growth largely resulted in improved contractual conditions of new tenders, which include higher minimum annual guarantee (MAG) rents. In the last year MAG rents have accounted for over 16% of revenue for business lines that include these clauses, up from 11% a year earlier. Dufry operate the duty-free shops and initiatives have helped performance of this area of the business. They include promotions targeted at British tourists (Spain a popular tourist destination with Brits) designed to offset the effect of sterling depreciation. Aena also benefitted from 22 new specialty shops opening in Adolfo Suarez Madrid- Barajas Airport. There has been an approx. 6% increase in passenger traffic compared to a year earlier with average commercial revenue per passenger up to 4.34 euros from 4.21 euros. The company continues to work with Dufry to optimise performance at 5 airports identified for improvement including increased digitalisation and review of interior design. A number of contracts are up for renewal and will be agreed on more advantageous terms to Aena. The company is making a conscious effort to become more carbon friendly. It is spending €86 million to reduce energy consumption and carbon emissions at its airports in the country.

The project is expected to help boost the energy efficiency of 46 airports and two heliports. Aena is planning an onsite solar power plant in Madrid, generating 12,600MWh of clean energy and cutting nearly 3,000 tonnes of carbon emissions a year, as well as the installation of around 2,700 charging points for electric vehicles at its car parks. In addition, there will be the replacement of lighting systems with low carbon alternatives, optimisation of thermal insulation and renovation of ventilation systems and boilers. All the improvements are expected to help reduce emissions of Aena airports by 30%.

Airbus was also firm during the quarter as the company forecast that demand for new planes should remain robust in the next 20 years. It anticipates the world’s air passenger fleet will more than double to total 48,000 commercial passenger aircraft. The main reason is rising global consumption from consumers in emerging economies. Many of the new routes opening are within these areas with strong demand for planes from Asia. The company under new CEO, Guillaume Faury, reported higher than expected Q1 results which were slightly overshadowed by weaker cash and charges related to the German ban on defence exports to Saudi Arabia. There were higher deliveries of A320neo jets, which sell at a premium to earlier models and progress in reducing costs on the larger A350 which contributed to a sharp rise in profit. It has released a longer range A321 which has started to win orders.

The company has played down any benefit it may achieve due to the grounding of the Boeing 737 MAX. With the A380 being phased out and profitability on the A350 set to improve, Airbus should be able to hit mid-teens margin before adding in the already profitable A320 which is the leader within narrow body (65% market share). **Rolls-Royce** weakened on the back of Singapore Airlines grounding 2 aircraft because of blade issues with the Trent 1000 engine programme. The airline detected blade deterioration during inspections. The Trent programme has been plagued by blade-related technical issues (essentially the blades appear to deteriorate by flying in harsh weather conditions quicker than was anticipated) which has led to an exceptional charge as the company repairs and redesigns the affected engines. Despite this and some negative broker forecasts predicting weakening markets for wide body jets (in which Rolls-Royce largely operate), the company remained confident in meeting underlying operating profit and free cash flow targets. The re-designed high-pressure turbine blades for the Trent 1000 engines will be ready for early 2020. To support the rising demand for air travel at the same time achieving CO2 emissions, means the aviation industry needs to develop increasingly environmentally friendly technologies and practices. Rolls-Royce is working toward the 'third era of aviation' as it boosts its electrification strategy.

The company has agreed to buy the eAircraft business, an electric aerospace propulsion unit, from Siemens that it said would help it develop a range of all-electric and hybrid electric propulsion solutions for the aerospace industry. Rolls-Royce has worked with the eAircraft team on the E-Fan X demonstrator project which is expected to demonstrate hybrid electric propulsion at a scale required to power regional aircraft. The company is adding technology, scale and specialist electrical designers and engineers as it continues to develop its capability. Rolls-Royce believes that pure electric propulsion will power smaller aircraft in the foreseeable future, while larger aircraft will rely upon hybrid electric solutions that combine electrification with evolutions of the gas turbine. Experimental test flights are aimed for 2021. Rolls-Royce is a good example of a company that by virtue of the industry in which they operate have a higher than average carbon footprint but taking a forward rather than a backward view of the company and not simply rating it on its carbon footprint today, illustrates how it is clearly part of the solution and offers future investment potential.

Relative attribution by region: 3 months to 30 June 2019

	Portfolio			Index			Relative Attribution Analysis		
Region	Average Weight	Total Return	Absolute Contribution	Average Weight	Total Return	Absolute Contribution	Allocation Effect	Selection Effect	Total Effect
Africa/Middle East	–	–	–	0.2	-3.6	-0.0	0.0	–	0.0
Asia/Pacific Ex Japan	3.1	9.0	0.3	4.3	5.2	0.2	-0.0	0.1	0.1
Europe ex UK	19.4	6.9	1.4	15.6	5.8	0.9	0.1	0.2	0.3
Japan	–	–	–	8.1	1.0	0.1	0.3	–	0.3
North America	57.9	5.5	3.3	66.0	4.2	2.7	0.1	0.7	0.8
United Kingdom	10.6	-5.7	-0.6	5.8	0.9	0.1	-0.1	-0.7	-0.8
Cash and equivalents	9.1	n/a	-0.1	–	–	–	-0.3	–	-0.3
Total	100.0	4.3	4.3	100.0	4.0	4.0	-0.0	0.3	0.3

Relative attribution by sector: 3 months to 30 June 2019

	Portfolio			Index			Relative Attribution Analysis		
Sector	Average Weight	Total Return	Absolute Contribution	Average Weight	Total Return	Absolute Contribution	Allocation Effect	Selection Effect	Total Effect
Consumer Discretionary	–	–	–	10.5	5.4	0.5	-0.1	–	-0.1
Consumer Staples	13.5	0.4	0.1	8.6	2.8	0.2	-0.0	-0.3	-0.4
Energy	–	–	–	5.8	-1.5	-0.1	0.3	–	0.3
Financials	9.1	6.5	0.7	15.9	6.2	1.0	-0.2	0.0	-0.2
Health Care	28.0	3.9	1.1	12.4	1.5	0.2	-0.4	0.7	0.3
Industrials	17.8	2.7	0.6	11.2	4.7	0.5	0.1	-0.3	-0.2
Information Technology	3.8	13.9	0.5	16.1	5.9	0.9	-0.3	0.3	0.1
Materials	–	–	–	4.5	4.7	0.2	-0.0	–	-0.0
Communication Services	18.7	7.6	1.4	8.4	4.4	0.3	0.1	0.6	0.7
Utilities	–	–	–	3.4	2.4	0.1	0.1	–	0.1
Real Estate	–	–	–	3.3	0.5	0.0	0.1	–	0.1
Cash and equivalents	9.1	n/a	-0.1	–	–	–	-0.3	–	-0.3
Total	100.0	4.3	4.3	100.0	4.0	4.0	-0.7	1.0	0.3

Relative attribution by security: 3 months to 30 June 2019

	Portfolio			Index			Attribution
Holding	Average Weight	Total Return	Absolute Contribution	Average Weight	Total Return	Absolute Contribution	Total Effect
Top 5 relative stock contributors							
Charter Communications	6.9	13.9	0.9	0.1	13.9	0.0	0.7
Dentsply Sirona	3.8	17.8	0.7	0.0	17.8	0.0	0.5
American Express	3.8	13.3	0.5	0.2	13.2	0.0	0.3
Facebook	4.0	15.8	0.6	1.1	15.8	0.1	0.3
Aena SME	3.1	14.0	0.4	0.0	14.0	0.0	0.3
Bottom 5 relative stock contributors							
Philip Morris	2.9	-9.9	-0.3	0.3	-10.2	-0.0	-0.4
Alphabet	4.7	-7.4	-0.4	1.8	-8.0	-0.2	-0.4
Allergan	1.6	-18.3	-0.3	0.1	14.9	0.0	-0.4
Capita	1.6	-16.9	-0.3	–	–	–	-0.4
Rolls-Royce Holdings	2.8	-8.4	-0.2	0.0	-8.4	-0.0	-0.3

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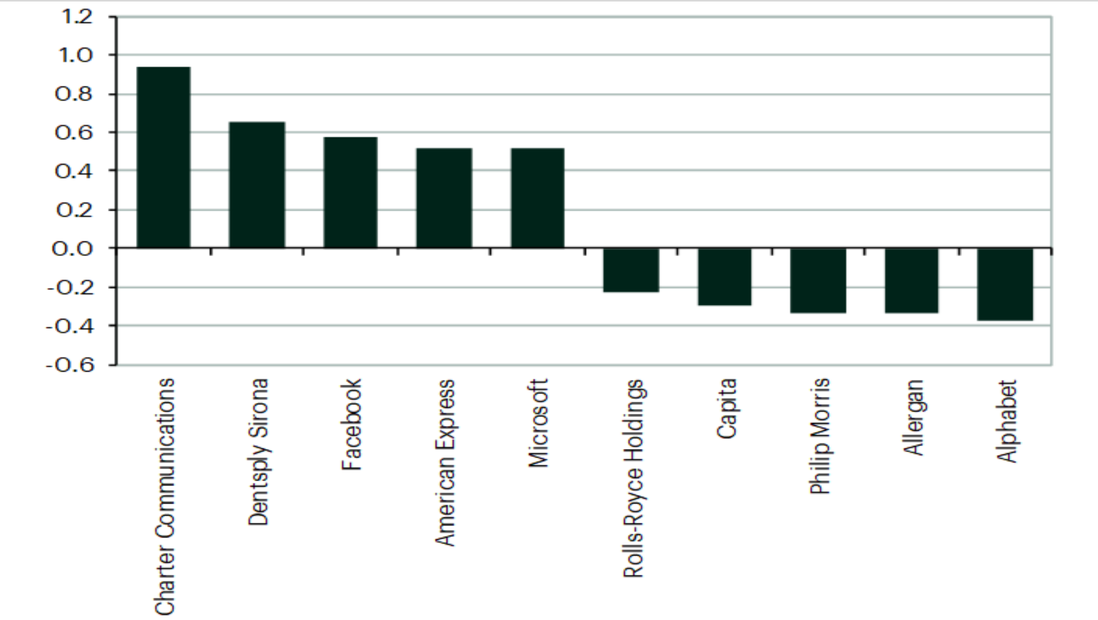
Key stocks driving portfolio results



Commentary on two significant stocks in your portfolio

Charter Communications
13.9% in USD
(Communication Services, United States)

Charter's results continue to reaffirm our thesis that free cash flow growth will accelerate markedly as broadband revenue growth continues but capex declines. This thesis is becoming more widely recognised.

Alphabet
- 7.4% in USD
(Information Technology, United States)

Alphabet had weaker than expected results in the last quarter, which has pressurised the stock. There has also been news flow regarding a potential antitrust investigation by the Department of Justice

Portfolio breakdown: As at 30 June 2019

Region	Portfolio %
North America	57.8
Europe ex UK	15.2
United Kingdom	14.6
Asia Pacific ex Japan	3.2
Cash and equivalents	9.3
Total	100.0

Sector	Portfolio %
Health Care	26.7
Industrials	19.0
Communication Services	18.0
Consumer Staples	12.6
Financials	10.3
Information Technology	4.0
Cash and equivalents	9.3
Total	100.0

Currency	Portfolio %
USD	67.0
EUR	14.6
GBP	10.2
AUD	3.2
SEK	2.9
CHF	2.0
Total	100.0

Top 10 portfolio holdings: As at 30 June 2019

Holding	Sector	Country	Portfolio %
Charter Communications	Communication Services	United States	6.5
Alphabet	Communication Services	United States	5.5
Unilever	Consumer Staples	United Kingdom	4.4
Thermo Fisher Scientific	Health Care	United States	4.3
Facebook	Communication Services	United States	4.1
Microsoft	Information Technology	United States	4.0
Cigna	Health Care	United States	4.0
Dentsply Sirona	Health Care	United States	3.7
Safran	Industrials	France	3.7
Baxter International	Health Care	United States	3.6
Total			43.7

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UK investors should read the Appendix for UK Investors in conjunction with the Fund's Prospectus which are available from the Investment Manager. www.nedgroupinvestments.com

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