

QUARTERLY COMMENTARY

2020 was a good year for the Fund, which delivered 17.4% vs the Benchmark's 5.9%. There was no one single bet that drove the performance, but rather the continued dogged application of our long-term strategy.

While we can't know in advance how our strategy will perform in any single year, we have a high degree of confidence that it will perform well over the long term. Over the past five years, the Strategy² has delivered a total return of 70.9% (11.3% p.a.) with a volatility of 9.0% p.a. These outcomes compare favourably with the Benchmark's 68.1% total return (10.9% p.a.) with a volatility of 10.5%. We have not done everything perfectly, but we have always stuck to our process, learned from our mistakes and we are pleased with the outcome.

In simple terms, we seek to create a diversified portfolio of highly cash flow positive companies that are well-positioned to grow, reasonably valued, and unlikely to blow up. This involves bottom-up and top-down considerations and, as we have regularly commented on in these pages, the interest rate environment is one of the thorniest considerations.

Abnormally low-interest rates have been the most important factor governing financial markets for over ten years. Initially, these rates rescued debt markets. Subsequently, they fuelled a massive rise in traditional asset classes, which spilled over into non-traditional asset classes. This has been a once in a lifetime boom for asset owners, but has it been a massive boom for society and the economy at large?

We think the interest rate environment has been a bust for society and the economy and is fuelling material risks. Our primary concerns include: (i) the yawning gap between the haves and have nots; (ii) less productive economies; (iii) excessive risk-taking.

Our 2Q20 quarterly ([available here < https://report.pengana.com/international-fund-ethical-opportunity/monthly-30-06-2020-penget/>](https://report.pengana.com/international-fund-ethical-opportunity/monthly-30-06-2020-penget/)) discussed the growing wealth divide caused by low-interest rates. In summary, low-interest rates have fuelled asset prices, increasing the wealth of asset owners. However, there are relatively few asset owners and most of society has not participated in this wealth impact. The rich got richer and the rest of society has been left behind, which has contributed to global social unrest.

Reinforcing the wealth gap is stagnant wages in developed countries. This is partly explained by weak corporate productivity, which we believe can also be partly traced to the low-interest rate environment. In an environment where capital is almost free, unprofitable companies can survive. Some of these businesses are exciting start-ups, which is a positive, but in many cases, they have established businesses that are manifestly uneconomic but survive on the graciousness of low-interest rates.

The uneconomic companies do not generate sufficient economic profit to warrant survival. However, with interest rates so low, they can fund their day-to-day operations and interest expenses but are unable to invest in growth or repay their debt. They are sometimes described as 'Zombie' companies and just like their horror story brethren, they suck the life out of an economy.

Before discussing the impact of Zombie companies, we should scale the issue. According to a Bloomberg analysis[1] as at Nov-20, roughly 25% (739 companies) of the US's 3000 largest publicly listed companies were Zombie companies, and they were sitting on an unprecedented \$2 trillion of debt (Figure 1). Many of these companies are the walking wounded, rather than the walking dead, but the figures are so staggering that the punchline remains unchanged. The conclusion is even starker when we consider that the analysis doesn't include smaller companies,

which are typically more thinly capitalized than their larger peers. There is clearly a proliferation of Zombie firms in the US, and (we can safely assume) in most other economies that have similarly low-interest rates.

Figure 1 – Obligations of Zombie firms; US\$2T in 2020

Source – Bloomberg

Zombie companies are a wet blanket on economic growth. These companies are unable to reinvest in their business, which translates into lethargic productivity growth and wages. The latter contributes to the growing rich-poor divide and the former contributes to anaemic GDP growth (GDP growth is broadly equal to productivity growth plus labour market growth). Furthermore, Zombie companies are a constraint on banks' loan books and inhibit their ability to lend capital to other companies, further hindering GDP growth.

Without the benefit of GDP growth, companies must be reliant on generating their own growth. This focuses the proverbial Market's attention on companies with material competitive advantages and disruptors. The danger with this arises when the Market commences paying too much for that growth.

Across numerous letters, we explained our concern about FAANG valuations, and we fully exited those stocks mid-2020. A new, and arguably far more extreme poster child for extreme valuations, is Tesla.

Over the past 12 months, Tesla's market capitalisation has risen 8-fold (from \$100bn to \$800bn), making it the 5th largest company in the US. During that period consensus earnings forecasts rose by 50-100%, meaning over three-quarters of the price increase was driven by factors other than earnings. We think that the most important factor is the interest rate environment, which encourages risk-taking and increases the discounted value of future cash flows. In other words, it plays right into the hands of high-growth companies such as Tesla.

In the addendum to this letter, we outline our thinking regarding Tesla's valuation. In summary, we can justify the current valuation using a series of optimistic assumptions (and if we are willing to accept a low return on capital). Over the next ten years, the company would need to increase its production and sales 10x, maintain market-leading margins, and continue to trade on high-growth multiples. If all those ducks fall into line, our expected return on investment would be a relatively meager 6% and, if just one factor fails, we would lose money (in many scenarios, a lot of it). This does not seem like an attractive investment to us.

Tesla's valuation does not stand on its own and there are several other meaningful examples of increased risk-taking spawned by the low-interest rate environment. One of the most topical examples is the explosion in Special Purpose Acquisition Companies (SPACs).

SPACs are a Wall Street invention that is designed to sidestep the regulatory burden of a traditional IPO. This regulatory process is designed to protect investors and you would rightly question how much investor demand there would be to invest in a vehicle expressly designed to reduce their protection. The answer, in recent times: a lot.

In the US, in 2020, \$82Bn was raised for SPACs, accounting for 50% of all capital raised in IPOs. The demand continued into 2021 with \$20Bn raised YTD, accounting for 70% of all IPO capital raised. This means that over the past year \$102Bn has been raised for SPACs, which is >50% of total US IPO proceeds. To hammer home the point, this means that there has been more investment in regulatory-lite IPOs than for IPOs with the full suite of regulations expressly designed to protect investors. Surely this is another example of the mispricing of risk, which can again be traced back to the low-interest rate environment.

There are other examples of excessive risk-taking that we could point out. Among them include the strong performance by loss-making business (Goldman Sachs' index of non-profitable tech companies[2] is up 380% since Mar-20 – refer to Figure 2), billions raised for businesses that don't even have a prototype product (e.g., Nikola), Gamestop's share price increasing 1,326% over the past year for no explicable reason while the company faces (at best) a questionable future. The bottom line is that there are numerous examples of people taking (and currently being rewarded for taking) excessive risks and we cannot help but think that many of these activities will end in financial ruin when markets reprice risk.

Figure 2 – Goldman Sachs Non-Profitable Technology Index

We are acutely aware that it's easy to list risks, fears, and sources of potential loss. In this note, we identified widening wealth gaps, a squeeze on economic productivity, and an explosion in risk-taking. However, we are paid to make money and not to philosophise. So how do we make money given the cards dealt?

Some of the themes that we have acted upon (given the interest rate environment) include:

- Investing in discount retailers (e.g. Dollar Tree) to make money from the growing wealth divide.
- Targeting (reasonably valued) companies in the developed market that can grow without the aid of local economic growth, either due to a disruptive/leading technology (e.g. Lumentum), or a social zeitgeist (e.g. computer games companies like EA and Nexon), or the shift to a greener economy (e.g. SMA Solar, Sig Combibloc), or the ageing population.
- Targeting markets that are not distorted by Zombie companies (e.g. the US health insurance market, via United Health and Cigna, and the cable market via Charter Communications).
- Increasingly focusing on emerging markets that have the benefit of underlying economic growth (e.g., Alibaba, Tencent, Autohome, Bharti Airtel, Indus Towers).

In addition, we have taken actions to benefit from a potential change in the interest rate environment. Our thinking is that rate complacency has become so entrenched that even a minor change will be of huge benefit to certain companies' profitability. Examples of these investments include derivative exchanges (Deutsche Borse, CME), market makers (Flow Traders), and debt restructuring advisers (Houlihan Lokey).

In aggregate, we remain highly comfortable with the portfolio. As promised, it is well diversified and consists of companies that are cash flow generative, growing, and unlikely to blow up. On an aggregate basis, the portfolio's free cash flow yield is almost 5%, with 10% revenue growth, and has zero net debt (aggregate balance sheet is net cash), all of which are good in absolute terms and relative to the Market. This provides us with confidence that the portfolio is well-positioned to continue to perform over the next five years, and beyond, regardless of how the market performs.

TESLA: WHY WE DON'T OWN IT

We regularly conclude our quarterly updates with an overview of one of the stocks that we recently added to the fund. However, in keeping with the themes outlined above, we've decided to take a different approach this time and focus on a stock that we do not own, but one that has become the poster child for extravagant valuations: Tesla.

Over the past 12 months, Tesla's market capitalisation has risen 8-fold (from \$100bn to \$800bn), making it the 5th largest company in the US and rocketing Elon Musk past Jeff Bezos as the wealthiest person in the world.

When we analyse what has driven such a staggering (and rapid) rise in Tesla's share price, the thing that's immediately apparent is that only a fraction of the increase has been driven by changes in the company's underlying fundamentals.

During the 12 months in question, analyst revenue forecasts for the company have risen by around 25%, and analyst earnings forecasts by more like 50-100%. Those sorts of upgrades are impressive (and would, on their own, have justified a very nice increase in the share price). However, this still leaves well over three-quarters of the actual increase in the share price to be explained by other factors.

We are effectively talking about \$500bn (half a trillion dollars!) of new market capitalisation being created by factors other than higher earnings expectations. To put this \$500bn figure into perspective: it's greater than the total market value of companies such as J&J, JP Morgan, and Walmart.

Several factors have combined to drive a large part of Tesla's amazing rally, including:

- **The rise in prominence of "thematic" investing (and the surge in popularity of thematic ETFs).** Tesla falls into two of the hottest thematic buckets: (1) ESG Champions and (2) Disrupters. Investor money flooding into those thematic funds resulted in consistent demand for Tesla stock. Within one of the greatest momentum-based bull markets that we've ever seen, this process has become self-fuelling. It works like this: strong inflows into a collection of thematic funds generate price appreciation in all of the stocks held by those funds (each fund is forced to buy more of those same stocks with the new money, at literally any price); this drives positive performance and generates additional momentum-based demand for the funds themselves (as well as for the individual stocks that the funds are purchasing); which results in further inflows, additional buying, and additional performance; and on it goes (until, at some undefined point in the future, the thematic/momentum music finally stops).
- **The even more spectacular rise in prominence of the so-called "Robinhood" crowd.** Essentially newer/younger participants in the market who have been using their post-COVID spare time and disposable income to buy shares in those companies whose products they most support and admire. It's easy to see why Tesla would be a strong favourite amongst this crowd.
- **The dramatic shift in the interest rate environment.** Not only the sudden return to a zero cash rate, but also the belief that rates will remain low for a long time, which has increased risk tolerance and dampened the focus on "the time value of money". This has played into the hands of high-growth companies (whose cash-flows are skewed further out into the future); companies whose profitability is negative/negligible today, but whose "some-time-down-the-track" profitability is expected to be substantial; and companies with longer-dated speculative ("what if one day...?") appeal. Tesla falls into all three of these categories.

The above factors do not mean that Tesla's resultant market capitalisation, as enormous as it may be, is "impossible to rationalise". The issue with Tesla is simply that its current valuation is predicated on several positive outcomes all eventuating, with little allowance for (1) the inherent conflict between (and double-counting of) some of the assumptions made within that bull-case scenario; (2) the various risks to those positive outcomes; and (3) the true time value of money.

To illustrate this, let's look at the high-level thesis that is commonly used to support the stock's valuation:

- Assume that, in 2030, electric vehicles (EVs) will make up 25% of all auto sales and that Tesla will have a 30% market share of those EV sales. This would equate to around 8.3m sales of Tesla vehicles in 2030 (vs. the 0.5m sales made in 2020 and the company's total production capacity entering 2021 of around 0.8m).
- Assume that the average sale price of those Tesla vehicles will be around \$40,000 (vs. closer to \$60,000 in 2020).
- Assume that Tesla will be able to maintain its current margin structure (which is far superior to the incumbent auto-makers).
- All of which would give a profit-per-vehicle-sold of around \$6,400, which would, in turn, equate to around \$53bn of total profit in 2030 (on the 8.3m vehicles assumed to be sold).
- Continue to apply a high-growth multiple (say 25-30x) to this notional 2030 profit figure, even though mature auto-makers tend to trade on very modest multiples.
- Rationalise the continued application of a high-growth valuation multiple by arguing that: EVs will still be growing faster than the overall auto-market; Tesla's other business opportunities (such as batteries, software subscriptions, robo-taxis, and insurance) should add to the overall value of the group; and there is potential for value-adding acquisitions.

None of these assumptions are irrational. As outlined above, the problem really arises from:

(1) The inherent conflict between some of the individual assumptions. For example, it seems feasible that, by adding a cheaper "mass-market" vehicle to its product range, Tesla should be able to reach >8m sales in less than a decade's time (compared with the 0.5m of premium-only sales made during 2020). However, if we're assuming that the company's shift into the mass-market will be that successful, shouldn't its margin structure begin to shift towards that of a mass-market car manufacturer (lower margin business) and away from that of a premium car manufacturer? Another example is the often-cited opportunity in robo-taxis, which could well be a massive market (in which Tesla would be a major player). However, we can't value that new market in isolation and simply add a chunk of it to Tesla's valuation, because we need to consider the negative impact that the proliferation of robo-taxis would have on sales to consumers.

(2) Insufficient allowance for the aggregate risks to the bull-case outcome. While each individual assumption used in the Tesla investment case might not be irrational, each of them carries a level of risk and the investment case falls away if some or all of them don't come to fruition. By way of example, there is clearly risk associated with the expectation of Tesla expanding production and sales roughly 10x over the next ten years. Scaling up glitches, increasing competition, trade wars, regulation, and new technology are just some of the challenges that Tesla could face. There is also a clear risk that Tesla won't be able to maintain its market-leading margin profile and, finally, there is a risk that the stock won't continue to trade on a premium multiple. For purely illustrative purposes, if we assume that there is an 80% chance of each of these three risks being successfully navigated by Tesla, the implied probability of all three being navigated is just 51% (80% x 80% x 80%). Using a more sanguine probability of success for each of, say, 60% (still effectively giving Tesla the benefit of the doubt), results in a just 20% probability of all three coming to fruition. Given the very high probability of across-the-board success that is currently built into the share price, we don't like those odds.

(3) Insufficient allowance for the time value of money. Based on the optimistic assumptions outlined above, we arrived at a notional profit in 2030 of \$53bn. If we then apply a relatively high multiple to that profit figure (say 25x), we can arrive at a 2030 valuation of \$1.3trn. At face value, this makes today's market capitalisation of "only" \$800bn looks skinny. However, when we translate that number into a compound annual investment return over the next 10 years, the answer is under-whelming: not much more than 5% per annum (assuming everything goes to plan). Noting that, even if we stretch the 2030 multiple even further (to say 30x), this annualised return will only increase to 7%.

In summary:

- Tesla has built a superb franchise and the original skeptics have clearly been proven wrong.
- However, at today's valuation of \$800bn, the company is really going to need to live up to all the hype (and then some).
- We estimate it offers a 5-7% annual return if everything goes to plan. However, for the reasons outlined above, there is still a significant chance of a less-than-ideal outcome, meaning the probability-weighted return is even lower than this.
- Based on the above we can confirm that Tesla is truly a leader in EVs (Extravagant Valuations).

[1] [Bloomberg, America's Zombie Companies Rack Up \\$2 Trillion of Debt, 17 Nov-20 < https://www.bloomberg.com/news/articles/2020-11-17/america-s-zombie-companies-have-racked-up-1-4-trillion-of-debt>](https://www.bloomberg.com/news/articles/2020-11-17/america-s-zombie-companies-have-racked-up-1-4-trillion-of-debt)

[2] Goldman Sachs Non-Profitable Technology Index

TOP HOLDINGS (ALPHABETICALLY)



Bharti Infratel

India

Communication Services



Charter Communications Inc

United States

Communication Services



Cigna Corp

United States

Health Care



Electronic Arts

United States

Communication Services



Houlihan Lokey Inc

United States

Financials



Lumentum

United States

Information Technology



Pinterest Inc

United States

Communication Services



SIG Combibloc Group AG

Switzerland

Materials



Tencent Holdings

China

Communication Services

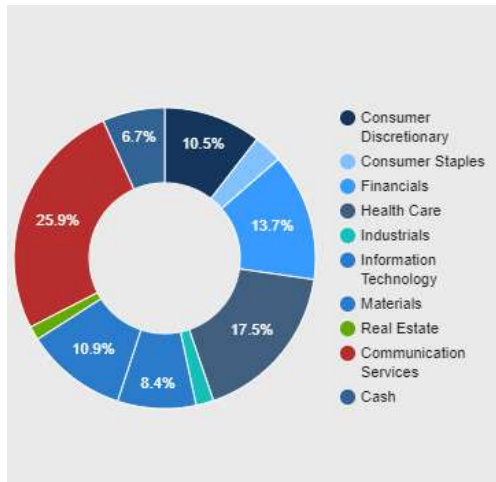


UnitedHealth Group Inc

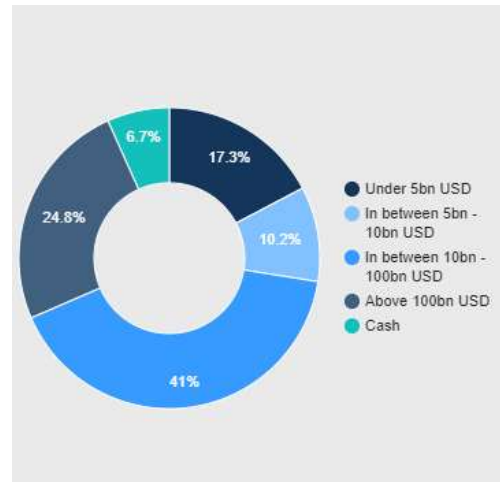
United States

Health Care

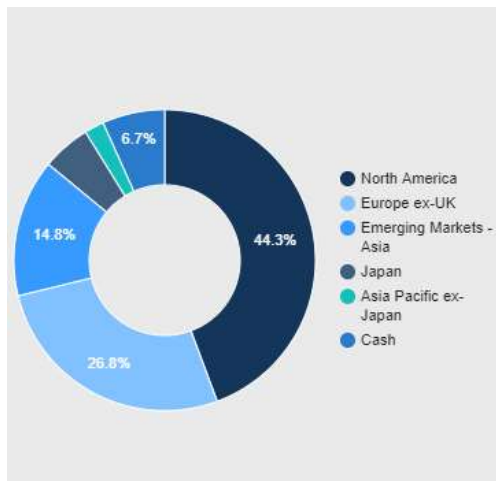
SECTOR BREAKDOWN



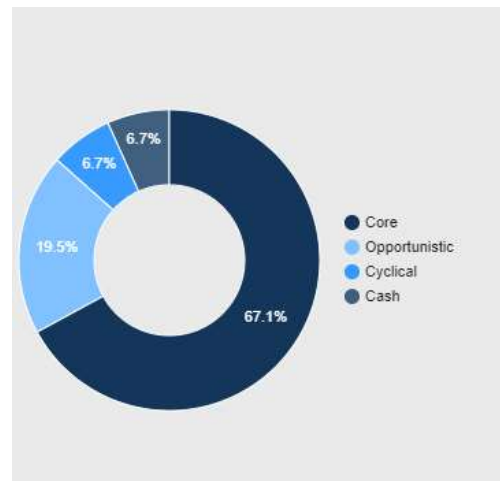
CAPITALISATION BREAKDOWN



REGION BREAKDOWN



SEGMENT



FUND PERFORMANCE

NET PERFORMANCE FOR PERIODS ENDING 31 DEC 2020¹

	1 MONTH	1 YEAR	3 YEARS P.A.	5 YEARS P.A.	SINCE INCEPTION
Fund	1.0%	17.4%	12.6%	11.3%	11.3%
Benchmark	-0.1%	5.9%	10.6%	10.9%	10.0%

FUND PERFORMANCE

NET PERFORMANCE SINCE INCEPTION²



VOLATILITY ³	9.6%	NUMBER OF STOCKS	35
BETA (USING DAILY RETURNS) ⁴	0.76	MAXIMUM DRAW DOWN	-9.6%

FUND MANAGERS



Jordan Cvetanovski
Portfolio Manager



Steven Glass
Deputy Portfolio Manager and Analyst

FEATURES

PORTFOLIO MANAGERS	Jordan Cvetanovski Steven Glass
APIR CODE	HHA0002AU
REDEMPTION PRICE	A\$ 2.7788
FEES *	Management Fee: 1.05%
MINIMUM INITIAL INVESTMENT	Closed to new investors (existing investors may make additional investments)
FUM AT MONTH END	A\$ 62.41m
STRATEGY INCEPTION DATE	1 July 2015
BENCHMARK	MSCI All Country World Total Return Index in AUD**

DESCRIPTION

"The Pengana International Fund – Ethical Opportunity (the Fund) is a long only fund that holds 30-50 companies across developed and developing markets, large and small companies. The Fund predominantly invests in companies that deliver stable yet growing free cash flow throughout cycles (which we classify as 'Core' holdings) whilst also taking positions in more cyclical companies ('Cyclical') and those whose valuation has been materially misconstrued by the market ('Opportunistic'). We avoid investment in companies that, in our opinion, are harmful to people, animals or the environment. Important Note: There are significant accumulated tax losses contained within the Fund which may benefit existing investors. We have accordingly closed the Fund to new investors in order to maintain the interests of existing investors. We strongly urge you to seek tax advice if you are an investor in the Fund, to understand how this may benefit you.

1.2. A new strategy was implemented for the Pengana International Fund – Ethical Opportunity from 1 July 2017 by the Pengana team. The financial information below refers to the strategy currently employed by the Fund. For full performance history of the Fund, please refer to the Pengana website. From July 2017, performance figures are those of the Hunter Hall Pengana International Fund – Ethical Opportunity's class A units (net of fees). Between July 2015 and June 2017, performance figures have been recalculated by adjusting the Pengana International Fund's (ARSN 610 351 641) net returns to reflect the management fee of the Pengana International Fund – Ethical Opportunity. From July 2017, the Pengana International Fund – Ethical Opportunity has been managed by the same team and with the same strategy as the Pengana International Fund. The Pengana International Fund's net track record data is historical. Past performance is not a reliable indicator of future performance. The value of the investment can go up or down.

3. Annualised standard deviation since inception. 4. Relative to the MSCI All Country World Total Return Index in AUD.

* For further information regarding fees please see the PDS available on our website.

**The benchmark was changed from MSCI World Total Return Index (net, AUD) effective 6 June 2017.

Important Note: There are significant accumulated tax losses contained within the Fund which may benefit existing investors.

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Pengana Capital Limited (ABN 30 103 800 568, AFSL 226566) ("Pengana") is the issuer of units in the Pengana International Fund – Ethical Opportunity (ARSN 098 586 282) (the "Fund"). A product disclosure statement for the Fund is available and can be obtained from our distribution team or website. A person should obtain a copy of the product disclosure statement and should consider the product disclosure statement carefully before deciding whether to acquire, or to continue to hold, or making any other decision in respect of, the units in the Fund. This report was prepared by Pengana and does not contain any investment recommendation or investment advice. This report has been prepared without taking account of any person's objectives, financial situation or needs. Therefore, before acting on any information contained within this report a person should consider the appropriateness of the information, having regard to their objectives, financial situation and needs. Neither Pengana nor its related entities, directors or officers guarantees the performance of, or the repayment of capital or income invested in, the Fund.

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