



Economic and political roundup

Investment companies | Monthly | September 2022

A collation of recent insights on markets and economies taken from the comments made by chairs and investment managers of investment companies – have a read and make your own minds up. Please remember that nothing in this note is designed to encourage you to buy or sell any of the companies mentioned.

“We have got to get inflation behind us. I wish there were a painless way to do that, there isn’t”
Jerome Powell, chair of the Federal Reserve, 21 September 2022

September was a month of quite savage moves in markets. The wider context remains the same: central banks in most major markets are raising interest rates in an effort to choke off inflation. In the US, the Federal Reserve increased its policy rate by 0.75%, the third time it has done so. Its chair left investors in no doubt that a US recession was possible, but the bank would hold its nerve in the face of market weakness and keep tightening until it judged that inflation was under control. Yields on US government bonds rose, the dollar continued to strengthen, and the threat of recession weighed on the oil price.

Against that unnerving backdrop, the new UK government’s ‘mini’ budget promised huge unfunded tax cuts. The political implications of that are being worked through as we write this. However, the financial implications were an immediate collapse in the pound and a spike in the government’s borrowing costs as gilt yields soared. We found out that a large number of pension funds were caught out by the move, but fortunately the Bank of England stepped in with emergency purchases of gilts to prevent some from becoming insolvent. We are not sure what happens when the 13-day intervention period ends. The Bank of England was supposed to be shrinking its balance sheet rather than growing it.



...economic and political uncertainty is probably greater than at any other time during our careers



Russia's invasion of the Ukraine.... We could not understand, before it happened, how it could possibly work out positively from any perspective, including Russia's.



Demand for renewable projects, at all stages of their lifecycle, remains strong; as both power prices and inflation have surged.





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At a glance

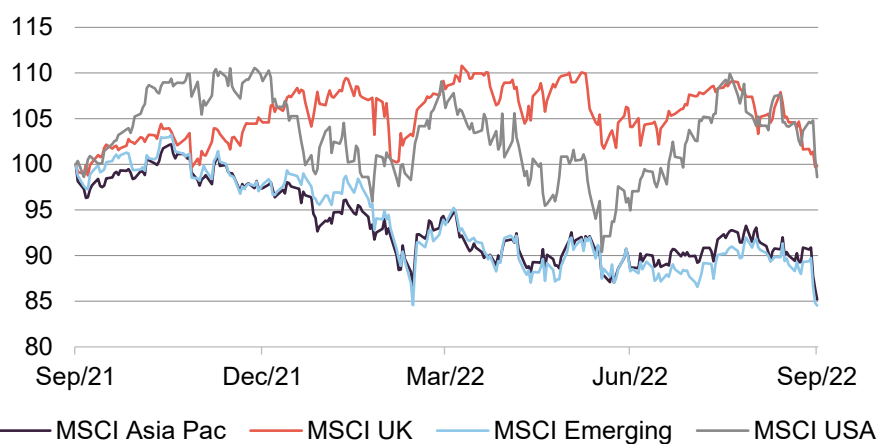
| Exchange rate | | 30/09/22 | Change on month % |
|--------------------------------|-----------|----------|-------------------|
| Pound to US dollars | GBP / USD | 1.1170 | (3.9) |
| US dollars to Euros | USD / EUR | 1.0202 | 2.6 |
| US dollars to Japanese yen | USD / JPY | 144.74 | 4.2 |
| US dollars to Swiss francs | USD / CHF | 0.9870 | 1.0 |
| US dollars to Chinese renminbi | USD / CNY | 7.1159 | 3.3 |

Source: Bloomberg, QuotedData

MSCI Indices (rebased to 100)

Each of our four selected MSCI equity indices fell over the course of September. Worst hit were Asia Pacific and Emerging Markets. The UK index has held up reasonably well. However, its returns are skewed by a handful of large 'value' stocks, including the energy companies.

Time period 1 October 2021 to 30 September 2022



Source: Morningstar, QuotedData. Converted to pounds to give returns for a UK-based investor.

| Indicator | 30/09/22 | Change on month % |
|---|----------|-------------------|
| Oil (Brent) | 87.96 | (8.8) |
| Gold | 1660.61 | (2.9) |
| US Treasuries 10-year yield | 3.829 | 19.9 |
| UK Gilts 10-year yield | 4.093 | 46.1 |
| German government bonds (Bunds) 10-year yield | 2.105 | 37.0 |

Source: Morningstar, QuotedData

Global

(compare global funds [here](#))

Tristan Hillgarth, chairman, JPMorgan Global Growth and Income – 28 September, 2022

After a strong 2021, 2022 has been a difficult year to date for equity markets with rising concerns about elevated inflation, central bank tightening and the terrible devastation of Russia's invasion of Ukraine, causing significant volatility.

Concerns over rising inflation have led to increased bond yields and a severe de-rating in the valuation of growth companies, despite often strong underlying operational and financial performance. The direction of monetary policy is invariably a key determinant of the outlook for markets.

Central banks continue to deliver further interest rate rises, as anticipated given inflationary pressures. Global equity and fixed income markets rebounded in July as weaker activity data tempered expectations for further central bank tightening and Q2 earnings releases were better than feared. This said, the going is likely to get tougher for companies, faced with rising costs on the one hand and the removal of government support measures on the other, and hence we expect profit warnings and corporate failures to increase in the next 12 months.

In the shorter term we could well see increasing market volatility in a deteriorating global growth backdrop, with elevated inflation and risks to energy supply in Europe. However, we are inclined to view this prospect as a period of turbulence likely to provide attractive opportunities.

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Helge Skibeli, Rajesh Tanna, and Tim Woodhouse, managers, JPMorgan Global Growth and Income – 28 September, 2022

At present, economic and political uncertainty is probably greater than at any other time during our careers. Persistent, historically high inflation is being compounded by the war in Ukraine. Central banks are responding with unusually aggressive interest rate increases, which risk driving major economies into recession. Investors are also increasingly nervous about escalating tensions between China and the west, over China's ambitions to reclaim Taiwan.

At times like these, it is important to remember lessons from previous crises, while at the same time understanding the limitations of historical comparisons. As Mark Twain said, "History never repeats itself, but it does often rhyme". The similarities thus far between the current situation and previous episodes of extreme economic and financial market uncertainty appear to include the elevated valuations of 'defensive' companies, that can maintain earnings and dividends in challenging times, combined with a pullback in more economically sensitive cyclical companies. However, unlike in previous periods, we have not yet seen any easing in current, historically tight labour markets. Nor have we seen the negative earnings revisions we would typically expect given the current climate.

One example of our efforts to balance the portfolio is the recent change to our positioning in Japan. In the past few years we have struggled to find many

compelling Japanese investments. More recently though, we have moved to a neutral weighting. This decision was motivated in part by the fact that the valuations of high-quality Japanese cyclicals reached attractive levels, compared to their global peers. Historically, higher quality Japanese stocks have tended to trade at a significant premium to their foreign counterparts and competitors, but this premium almost completely eroded in the first months of 2022. The yen's recent weakness has also increased the appeal of Japanese equities. The yen has depreciated by around 30% from its pre-pandemic levels, but we expect this weakness to be a short-term phenomenon. If we are correct, the yen's revaluation will generate a sizeable tailwind for UK investors in coming years.

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Zehrid Osmani, manager, Martin Currie Global Portfolio Trust – 26 September, 2022

As we look forward, we believe that there are risks that inflation stays at elevated levels for a prolonged period, with the potential risk of accelerating wage inflation that could turn the frictional inflation that we have been seeing into a more structural inflation issue. As a result, we believe that central banks might have to continue to be aggressive and faster at hiking interest rates, which could continue to fuel the elevated volatility in equity markets.

Central banks being significantly more hawkish comes at a time of rapidly decelerating leading indicators globally, which creates an unhelpful cocktail of interest rate hikes whilst economies are rapidly losing momentum. This has brought to the forefront of the market an additional risk - global recession.

We continue to believe that we have entered into a sharp slowdown phase of the economic cycle for 2022, but the risk of a bleaker scenario for 2023 has risen. With ongoing deterioration in leading indicators and a further upward shift in interest rate expectations since our last report, we have amended our outlook downwards. For the remainder of 2022, our assessment of the probability of a sharp slowdown is 70-75%, whilst we recently increased the probability of stagflation to 25-30%. For 2023, we estimate the probability of stagflation at the global level to be 25-30%, whilst the probability of stagflation for Europe is closer to 60-70%. This is because of the energy supply shortage risks, leading to potential rationing which would impact European economic activity negatively, whilst maintaining upward pressure on inflation. The probability of an ongoing sharp slowdown in 2023 remains our core scenario at the global level, with a probability of this at 65-70%.

As the probability of a recession has grown bond yields have been volatile, with the US 10 year yield hitting c.3.5% in June, before dropping to below 2.7% by the end of July. As a result of these bond yield gyrations, style leadership in equity markets has recently shifted away from value towards quality growth.

As a result of the rapidly deteriorating leading indicators in the world's major economies and given our view of a sharp slowdown phase in the economic cycle, we believe that earnings growth expectations are likely to continue to be revised down. Current market expectations remain too high in our view. Our top down expectation is for no growth both at the global level and - most specifically - in Europe.

Because of this view, we expect ongoing disappointments during the next few quarters of earnings reports. Investors will however need to be highly selective and discerning, as there will be contrasting fortunes in momentum across different industries.

Against this background, continued volatility in share prices is perhaps inevitable. It is important to look beyond this noise.

Based on cyclically adjusted PE ratios, we remain of the view that European and Asian equities are attractively valued versus history, and versus US equities. US equities, despite the pullback seen this year, are generally relatively less attractive.

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Peter Burrows AO, chairman, UIL – 21 September, 2022

Three themes continue to dominate global events: Covid-19, heightened geopolitical tensions and the outlook for inflation and interest rates.

While Covid-19 continues to disrupt, the impact on most economies is very reduced. We now expect it to recede and not be an issue going forward. But the exception is China. As we noted before, their zero policy to Covid-19 sets them apart from every other significant economy, and nearly every country in the world. The economic damage being inflicted on the Chinese economy as a result of this approach is very significant and sad to see. The Chinese consumer confidence has deteriorated to the point where housing is facing very severe challenges. Given that China is the world's second biggest economy, and that housing is some 35% of economic activity this is a significant headwind and of deep concern. It is hard to judge when this dogmatic policy changes.

In the half-yearly report, we referred to heightened geopolitical events and risk of war with devastating consequences for its global economy. Clearly Russia going to war reflects the worst outcome and the question now is what is next. Our view is that it will take time for both sides to exhaust their ambitions, but once they reach a neutral position a negotiated outcome would be expected. Russia's maximum leverage is likely to be early next year, at which point Europe will be facing the worst of the energy crisis they now certainly face.

We also noted at the interim stage the ongoing friction between China and the USA is again a clash of ideologies and will likely lead to ongoing resistance between the two nations and their allies. The tensions over Taiwan are symptomatic of two ideologies facing each other across the economic, political and social divide. This is concerning over the longer term.

Inflation moved markedly higher follow the Russian invasion of the Ukraine. Coupled with surprising low unemployment globally this has driven inflation markedly higher. Central Banks have had to respond much more firmly in combating the very high inflation expectations. This in turn is slowing economic growth. We see this headwind continuing for the rest of the year. However, once the Russian/Ukraine conflict is resolved we expect inflation to subside.

The one unknown in our view is the response of the labour force. The labour market remains tight and the number of unemployed are at record lows in many economies. If this continues, then the shortage of the work force will drive up wages and in turn feed inflation.

The outlook for global economies is inextricably linked to Covid-19 in China, to resolving geopolitical differences and to central banks navigating inflation and interest rate responses. We remain optimistic that solutions can be found and that policy makers can navigate through the challenges. We expect inflation to be elevated for much of 2022, assets valuations to increase, technology to continue to gain market share and commodities to rise in value.

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Russell Napier, chairman, Mid Wynd – 9 September, 2022

'There are decades when nothing happens; and there are weeks where decades happen'. This quotation, attributed to a range of authors, seems to summarise the way we live now. The price of financial securities reflect the future and therefore they are likely to be particularly volatile when decades are happening in weeks. The return of inflation, higher interest rates, a hot and bloody war in Europe and a cold war with China are just some of the major changes that the price of financial securities are currently trying to digest. It would be peculiar if investors accurately discounted such profound shifts in how the world works at their first attempt. I was a young fund manager in 1989 and remember the initial reaction to the fall of The Berlin Wall in which investors proclaimed that the demand for capital to 'rebuild the east' would result in higher inflation and higher interest rates. The profound structural change that followed, in Europe and in China, unleashed disinflationary forces and, as a result, falling interest rates. Back then decades also happened in weeks, but markets took years to discount the consequences.

In such periods investors are even more interested than usual in what these rapid changes mean for the two powerful currents; being the future path of corporate profits and also the likely future level of interest rates, which are both key in determining equity prices. Rising interest rates tend to be negative for equity prices but rising corporate profits tend to be good for equity prices. Forecasting the net impact on share prices from these competing forces is particularly difficult in a period of structural change. It is the gap between the interest rate/discount rate and the growth rate of earnings that is particularly important in establishing the correct valuation for equities. When both variables are subject to considerable volatility the gap between them is even more volatile. This greater uncertainty brings greater volatility in share prices and greater opportunities for those focusing on longer-term trends during this choppy period.

The aim of the investor, seeking to preserve and grow the purchasing power of capital through such turbulence, should be to focus on the long-term prospects and attempt to create an equity portfolio suited to the dominant current when it finally prevails. The cross-currents that prevail until that new current dominates create opportunities for investors.

Can an investment in equities alone defend investors from the ravages of inflation? As ever in the investment field there is no clear-cut answer to that question but there is evidence that a well-selected portfolio of equities can provide such protection. An era of higher inflation has had a dramatic impact on equity markets before. The valuation of the S&P 500, a broad index of US equities, declined, not of course in a straight line, from January 1966 to July 1982. However, with dividends re-invested the total return from large capitalisation US equities was still positive. The problem was that the total return of 126%, from 1966 to 1982, was significantly less than the

rise in the inflation index of 206% over the same period. For those who invested in small capitalisation stocks there was much better news as they produced a total return of 643% far outstripping the rise in inflation. There were sectors of the US equity market that also produced positive real returns at a time when investors who had bought the stock market index witnessed a major decline in the purchasing power of their savings.

The point of these reflections is not that the inflationary winners of that era will be the inflationary winners of our new era. The point is that it has been possible to find a portfolio of equities that can produce positive real returns in a prolonged period of high inflation. That portfolio is unlikely to be biased towards the stocks in the S&P 500 or other key global equity indices. The companies now included in these indices, due entirely to their large market capitalisations, represent the companies that have prospered and have been awarded higher valuations in the old regime. To preserve and grow the purchasing power of savings via equity investment, it is now important to find the winners of a new and very different regime.

Our Managers have the flexibility to invest our capital in tens of thousands of different companies that are listed on the global exchanges. The management of each company has significant flexibility to adapt their business to change. The world is changing but so is our portfolio as are the companies that we invest in. Having started with a somewhat alarming quotation, let us end with something more upbeat from Socrates - 'The secret of change is to focus all of your energy not on fighting the old, but on building the new.'

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Richard Horlick, chair, BH Macro

Unfortunately, when looking at the outlook for markets from here, I find that there is little that I can say to shareholders on a positive note. Geopolitical tensions remain at a very high level. The outcome of the invasion of Ukraine remains uncertain. The zero-COVID policy in China appears to be continuing to create severe supply chain disruption. Inflationary pressures remain strong across the globe though certain component data will start to decline on a year-on-year basis. Interest rates seem set to rise even further with significant consequences for the UK and European economies and will only exacerbate the tensions within the EU. There has been very significant tightening of money supply as Central Banks move from Quantitative Easing ("QE") to Quantitative Tightening ("QT") and a huge wealth effect from the evaporation of over \$2 trillion of cryptocurrency in a very short space of time. Energy prices have risen sharply in the past 12 months, caused by increased demand as countries eased COVID lockdown restrictions; international travel returning to levels similar to 2019; supply chain slowdowns; and the supply of oil and natural gas tightening due to sanctions imposed on Russia over the invasion of Ukraine.

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UK

(compare UK funds here)

Colin Clark, chairman, The Merchants Trust – 29 September, 2022

Regretfully the terrible conflict stemming from Russia's invasion of Ukraine is still raging. The conflict passed a six-month landmark at the time of writing this report. Some days there may be less in the news, but that does not diminish the scale of what is occurring and our thoughts remain with those affected. We can only hope that peace may return to the region in the coming months.

As I have written in previous reports the Russian invasion of Ukraine was a shock to the global economic system. It exacerbated inflationary pressures across the world, primarily of energy supply constraints, economic sanctions against Russia and the disruption of certain crop supplies from Ukraine.

To some degree the world has also been caught somewhat off guard with the foundations for a higher inflationary environment quietly cementing in the background over many years.

Central banks are now acting more decisively and consistently in their efforts to control inflation, pushing interest rates higher. This is creating an environment in contrast to that of recent decades, where quantitative easing by central banks around the world led to a loose money environment where growth stocks flourished. We now have a very different new world, where both equity and bond markets have been weak and investors are showing nervousness. However, indiscriminate pressure on all stock prices resulting from macroeconomic concerns, largely irrespective of company fundamentals, can provide an environment where active management should prevail and for skilled stock pickers numerous opportunities can arise. Many stock prices have become depressed below the fundamental worth of a company.

The UK market - value investing in vogue

The UK market has been a relative bright spot amongst global peers. The market includes a greater proportion of value stocks compared to growth stocks when viewed in a global context. The general move by investors spurred by rising inflation and interest rates, has impacted many of the largest global markets such as the US where high growth stocks predominate and in return favoured the UK market. In sector terms the UK market also has a relatively high exposure to energy firms that also benefited from the energy crisis unfolding across Europe.

It hasn't been a totally easy ride for the whole UK market though. Returns have seen a wide dispersion by sector and market capitalisation. Whilst the largest (mainly multinational) companies in the index provided good returns, the picture was worse for smaller capitalisation companies with greater exposure to the UK economy. Defensive companies perhaps unsurprisingly were better performers than more cyclical stocks which were shunned by investors concerned about the economic backdrop.

The UK as an investment

Whilst the UK has become more attractive over recent months and, indeed, we have seen overseas investor interest including takeover offers, in terms of an asset class the UK remained on a somewhat shaky footing with money flowing out of many subsectors, most notably from domestically focused small cap funds. UK equity income was more neutral and broadly flat as investors continued to find an income

stream attractive amid the uncertain environment. It has been pleasing therefore to see Merchants continue to perform well with steady, positive investor demand.

Outlook

What the near future will bring is extremely hard to predict. We can only hope that it is a world with less conflict and geopolitical tension. From an economic perspective there are many factors at play and the possible outcomes range anywhere from a moderation of inflation and return to more 'normal' scenario, to a full-blown recession and spiralling inflation. The UK market seems at the moment to be concerned with something akin to the latter scenario.

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David Barron, chairman, Dunedin Income Growth – 28 September 2022

As I write this interim report, we move into uncharted waters in the United Kingdom. A new King, a new Prime Minister and a new government. Globally too, the challenges are mounting from ongoing events in Ukraine, a slowing Chinese economy, recessionary conditions in Europe and an aggressive monetary tightening in the United States. It is likely to be a tough and challenging period. Yet, building our strategy around a single outcome, given such a wide variance of potential future developments, seems an unwise course of action. The very unpredictability of world and economic events instead makes us concentrate on the companies within the portfolio and their ability to navigate the environment ahead of them.

Whilst the global outlook is uncertain and likely to be volatile, building an actively managed portfolio of UK and European companies, that are leading on sustainability today or taking steps to lead the way in the future, is, we believe, a sound strategy, and particularly so when the outlook is more difficult to foresee.

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Neil Rogan, chairman, Murray Income – 21 September, 2022

We find ourselves in a scarcely credible era of uncertainty and without strong political, economic or social leadership. Domestic politics, geopolitical tensions and war, inflation, labour shortages, recession, strikes, energy shortages; all these factors have the capacity to heavily affect the outlook for the companies in which we invest. Every one of them is impossible to predict with confidence at the moment. So what is the outlook? In truth, we can't be sure.

All the issues are fixable but not without strong leadership. That's the most concerning thing this time around. After similar issues in the 1970s, the 1980s saw Margaret Thatcher, Ronald Reagan, Mikhail Gorbachev and, perhaps most importantly, Paul Volcker (chairman of the US Federal Reserve from 1979 to 1987) provide very strong leadership and guide their countries to recovery. I'm a naturally optimistic person so I scour the TV news and politics programmes for the world's new generation of strong leaders which will take us towards recovery. I'm still looking. Full recovery may take a long time.

What will happen to the companies in our portfolio while we wait? Based on trailing earnings, the PER (price to earnings ratio, the most popular stock valuation measure) of our current portfolio is 13x. That is down from 16x six months ago and

is the lowest I have seen it in the eight years I have been a Director. It has been as high as 20x. To me that means that a lot of the bad news is priced in. If you think about the headlines we've been reading these past six months, it is possible to make a case that much of the bad news is behind us. But note that this is a valuation measure based on the previous 12 months of earnings. If corporate earnings are about to tumble, then stock markets could move down in parallel and still give the same valuation. That's the real danger, so not surprisingly our Investment Manager is analysing our holdings' earnings prospects with extra vigilance. One of the main reasons behind our Investment Manager's quality philosophy is that the companies selected should be sufficiently robust and well managed to withstand turbulent times like these.

In theory, it should be a good moment for quality. In reality, we will have to wait and see.

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Charles Luke, Iain Pyle, managers Murray Income – 21 September, 2022

Looking forward, the outlook is becoming more difficult with a tightening policy backdrop and inflationary challenges coupled with the implications of the Russian invasion of Ukraine, all leading to slower global growth. Despite that there are reasons to be confident in the outlook for the Company. Our focus on quality companies provides protection through a downturn: those companies with pricing power, high margins and strong balance sheets are better placed to navigate a more challenging economic environment and emerge in a strong position. Furthermore, these quality characteristics are helpful in underpinning the portfolio's income generation.

The valuations of UK-listed companies remain attractive on a relative and absolute basis. Moreover, the dividend yield of the UK market remains at an appealing premium both to other regional equity markets and to other asset classes. Indeed, we believe that in many cases the attractiveness of our holdings is not reflected in their share prices, particularly given the underlying strengths of the businesses. This view is reflected in the bids for holdings. We think a fair proportion of the portfolio may be vulnerable to corporate activity and it is noteworthy that private equity purchasers often look for attractive quality characteristics in potential acquisitions that dovetail with our investment criteria. Furthermore, international investors remain underweight the UK; this provides an additional underpin.

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John Evans, chairman, JPMorgan Mid Cap – 20 September, 2022

The Russian invasion of Ukraine occurred at a time when financial markets across the globe were anticipating tighter monetary conditions, as the financial support provided by governments and Central Banks to deal with the economic dislocation caused by COVID-19 was being withdrawn. Higher interest rates were anticipated to deal with already rising rates of inflation caused by, among other factors, supply and labour shortages.

The surge in energy, food and many commodity prices has raised the (current) forecast peak in the CPI in the UK to 13%, which may yet prove to be optimistic.

The Bank of England has raised base lending rates to 1.75%, not a high rate by long term standards, but a very significant increase by recent comparators. The triumvirate of substantial and unforeseen rises in energy costs, rising interest rates and a widespread rise in consumer prices in general, has created an extremely challenging backdrop for the UK Consumer.

Stock markets adjusted rapidly to the deterioration in the economic background that emerged in the first half of this year. As always, the key to future returns will be whether current expectations are subject to revision (in either direction). However, value is now evident in many sectors and constituents of the FTSE 250.

While economic conditions are very difficult for consumers and companies alike, good companies with strong market positions have the attributes to deal with tougher trading conditions and crucially protect themselves and their shareholders from the effects of rising prices.

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Georgina Brittain, Katen Patel, managers, JPMorgan Mid Cap – 20 September, 2022

Some things we know. Inflation is going to worsen in the UK, and remain high, for some time to come, driven in significant part by energy costs. Wage inflation will not keep up. The cost of living pressures will get worse before they get better. Some things we do not know. How long will energy costs remain elevated? When will the Russian war with Ukraine end? Will there be gas shortages in Europe and the UK this winter? Will UK taxes continue to rise, or will they be cut as our new Prime Minister Liz Truss has strongly suggested? The answer to this last question will have a direct impact on the looming recession in the UK - small and short, or long and severe, as suggested by the recent BoE forecast.

Shortly before writing this report, the BoE raised interest rates for the sixth consecutive time to 1.75% and forecast a recession commencing in Q4 2022 and lasting for five quarters, with inflation now being forecast to peak only in Q4 at 13% and remain elevated through 2023. The UK stock market did not react to these shocking forecasts. This is for two reasons. First, stock markets are forward-looking and were already pricing in much of the poor news. And secondly, the BoE uses the current status quo in making its forecasts, so it assumes taxes continue to rise, as per the last Budget, and that both gas and oil prices will remain at their current elevated levels. In one of her very first actions, our new Prime Minister has already announced a two year energy price cap for consumers, which of itself will lower inflation somewhat, and we await news on fiscal policy.

Our current view is that there is likely to be a recession in the UK, but it will be of a short and shallow duration. Currently, key metrics in the UK such as employment levels, PMIs (purchasing manager indices), the housing market and retail sales are all holding up - and indeed that is the message we are receiving when talking to the companies that we hold. We are obviously monitoring the potential recessionary impact on Europe, and then the UK, if gas shortages emerge in the coming winter. But the key metric we are focusing on is inflation, and in particular a fall in core inflation. If this starts to emerge, then we believe stock markets will start to rally. If history provides a reliable guide, markets will rally prior to the GDP data turning more positive.

The long-term drivers that have driven the outperformance of the FTSE 250 arena over the last 50 plus years have not changed. Periods of extreme volatility, and drawdowns (such as we experienced during the Brexit referendum and the initial onset of COVID-19, and now again in 2022 when the domestic UK market has fallen dramatically out of favour) have historically proven to be very advantageous buying opportunities in this area of the market, and we do not believe this is different in this economically challenging time.

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Jeremy Rigg, Chairman, Henderson High Income – 20 September, 2022

The near-term outlook for markets is dictated by the likely path of inflation and therefore global interest rates (as policy makers attempt to bear down on inflation) and the impact on economic activity. The Bank of England is currently forecast to increase the UK base rate to around 4% in 2023, a sharp increase from 0.25% where it started 2022. Undoubtedly the next several months will prove a very challenging time for both consumers and companies. However, UK companies are generally in good financial health having repaired balance sheets during the pandemic and the valuation of the UK market continues to look relatively attractive in a global context.

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Sir Laurie Magnus CBE, chairman, The City of London Trust – 16 September, 2022

The macro economic outlook has darkened since the year end, with inflation expectations increasing to levels last seen in the 1980s. The Bank of England which, this time last year, predicted that elevated inflation would be "transitory", is now forecasting that it could reach 13.3%. It has reacted by increasing its base rate to 1.75%, whilst simultaneously warning of an impending recession. These forecasts are inevitably damaging for consumer and business confidence, with a growing risk that inflationary expectations become embedded as pay settlements "catch up."

The outlook for the UK is particularly unclear as the new Prime Minister steers a course towards increased public borrowing and tax cuts. This uncertainty, which appears already to be unsettling confidence about sterling in the currency markets, is compounded by the prospect of higher interest rates across all major economies as central banks respond to inflation and start to reverse their programmes of quantitative easing. Most worrying, however, are the rising geopolitical risks stemming from Russia's invasion of Ukraine and the tensions with China over Taiwan, with consequences which are already apparent for the sourcing of energy supplies and important manufacturing components.

It remains the case, despite these concerns, that UK equities still offer a better dividend yield than can be obtained from bank deposits or ten-year gilts. Many of our shareholdings are in high quality businesses, with significant foreign revenues, which are well placed to withstand economic turbulence. Furthermore, UK-listed companies continue to attract takeover bids in recognition of their relative value compared with peers traded in other stock markets.

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Liz Airey, chairman, abrdn UK Smaller Companies – 7 September, 2022

Anticipating the future is never easy, but given the severity of the economic and political turmoil that exists, giving guidance to shareholders right now is particularly complex.

The challenges facing Liz Truss as the UK's new Prime Minister are multi-fold and daunting, with inflation running into double digits for the first time in almost 40 years, expectation of a recession and interest rates on a rising trajectory. Action will need to be taken urgently on the cost-of-living crisis, most notably the rapidly rising cost of energy, but at the time of writing the policy decisions, which will impact the whole of the UK economy, are unclear.

The problem for UK policy is that the root causes of these issues are primarily driven by external events; the energy crisis caused by the Russian invasion of Ukraine in February coming on top of existing climate change challenges and the effects of global policy responses to the Covid pandemic. The aftermath of Covid has seen significant global economic disruption and social change which is still unfolding.

Against this backdrop, markets as a whole are likely to remain volatile, responding to economic and geo-political developments as they unfold.

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Asia Pacific

(compare Asia Pacific funds [here](#))

Stewart Investors, manager, Pacific Assets – 28 September, 2022

News headlines tend to provide low value, short shelf-life information. The current headlines are worrisome and must not be trivialised but they are not, as is often claimed, detailing unprecedented events. In the short history of the Trust alone, Asian companies have overcome: war, natural disasters, epidemics, economic crisis and inflation. One of the many attractions of investing in Asia is a large number of high-quality stewards operating excellent franchises with experience of overcoming adverse events. Inflation, or as the UK media calls it, 'the cost of living crisis', is a good example.

Prices in Asia are rising at half the pace of prices in developed markets, broadly speaking¹. These headline figures alone are comforting. But more importantly, from our perspective, is the observation that all our stewards in India, and beyond, can easily recall prices rising at double the rate they are today. Only a decade ago, Indian companies experienced inflation at 12%². In contrast, many western peers are facing the challenge of inflation for the first time in the last 25 years. It is for this reason that we spend more time studying people, franchises and financials rather than speculating on the range of possible outcomes from 'short-term events'. Quality tends to be enduring and provides some insight into how a company will survive and prosper through unknowable short-term economic environments.

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Manager, Pacific Horizon – 15 September, 2022

We remain extremely positive on the long-term outlook for the region. The rise of the Asian middle class, accelerated by technology and innovation, continues to be one of the most powerful investment opportunities of the coming decade. We are enthused by the number of exciting growth companies we can buy that are exposed to these themes, many of which are now trading on historically low valuations.

Against this long-term positive backdrop for Asia, we would however note that shorter term there are many challenges facing global markets and rarely has it been harder to predict outcomes.

We also see reasons for optimism. Many of the inflationary causes effecting the world are likely to subside with the ending of lockdowns and related monetary stimulus. Such a scenario would be extremely beneficial to the global economy and very supportive to growth companies more generally. Asia itself looks well placed, having run far more prudent fiscal and monetary policies over the Covid crisis compared to the profligacy of many developed countries. Over the coming years, the decent growth rates, sensible interest rates and limited balance sheet expansion across much of Asia, is likely to compare very favourably to other markets. The future is to the east.

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Robin Parbrook, Lee King Fuei, managers, Schroder Asia Total Return – 15 September, 2022

It was the technology and export heavy Taiwanese and Korean markets that performed worst, dropping 16% and 20% respectively over the first half (in sterling terms). The falls were led by technology stocks where worries over falling consumer demand and rising inventories caused a large pull back.

Of the other major markets Australia and China fell around 10% in local currency terms in the first half, which meant in GBP terms they were only down slightly given how weak sterling was over the period. Within China we saw quite volatile performances. Technology and internet stocks in particular were initially very weak but then rebounded strongly in May and June on hopes that regulatory pressures were easing and the Chinese economy was set to improve on back of economic stimulus and falling Covid-19 case numbers. We are cautious on the Chinese outlook both for the economy and stockmarket.

The best performing stockmarket over the first half was Indonesia where market sentiment was helped by rising commodity prices given the Indonesian economy remains quite commodity dependant. The Thai and Hong Kong stockmarket indices also performed relatively well as both indices have large weightings in banks and defensive utility stocks which helped their performance.

As we write at mid-year 2022 it is clear macro events are likely to have a big bearing on Asian stockmarkets and most of these events are ones we have no real insight on. Will the "zero-Covid" policy in China lead to new and extensive lockdowns and will the Ukraine-Russia war escalate or remain prolonged? Will the consumer in Europe and USA remain resilient (given tight labour markets), despite high oil prices and rising food costs and will China- US tensions over Taiwan and more generally escalate leading to a full-blown trade/cold war?

We really don't know answers to any of these questions. Predicting "black swan" events and endlessly discussing tail risks is, we believe, pretty futile.

MSCI AC Asia ex Japan index is now back to pre-Covid-19 levels and to similar index levels to five years ago. With broad based foreign investor selling pressure hitting nearly all Asian stockmarkets, a general sense of investor gloom and continuous broker downgrades of many stocks it does feel like we are at a capitulation level in the region. Whether we face a final leg down to the despair level probably depends on the maelstrom of unpredictable events mentioned above. What we can say however is there is a lot of fear in markets so whilst we might not want to be greedy, our appetites are rising - and in particular using another Buffet maxim, we are now seeing opportunities to "buy a wonderful company at a fair price". This was opposed to 18 months ago when we were often looking at buying "a fair company at a wonderful price".

What is interesting is most sectors are now cheap/fair vs history. This contrasts with 18 months ago when nearly all sectors other than the out of favour "value" areas (banks, insurance, property etc...) were expensive. Stocks classified as "growth" and "value" by MSCI have now fully mean reverted back to their pre-Covid levels. At the current time, given the size of the correction, we see the best opportunities in stocks typically classified as more "growth" businesses.

Given the weakness in Chinese stockmarkets over the last 12 months many shareholders have asked why we have not added to our exposure to China. Whilst we would fully accept there is scope for a short-term rebound in Chinese markets given the extent of the sell-off and negative sentiment, we remain structurally cautious on Chinese equities. This is due to multiple factors. These include more short-term cyclical ones like the weak housing market, continued adherence to "zero Covid" policies, slowdown in exports as global demand for manufactured goods slows or more serious structural factors. The latter include the increasing role of the state in the economy, challenging demographics, elevated debt levels and macroeconomic risks, or geopolitical tensions and commercial cold wars.

Interestingly the country models we use in the Company's process for hedging have also turned more cautious on China despite the market falls. This is because of the deterioration in both the earnings outlook and the cyclical business factors the model picks up. A continued adherence to a "zero-Covid" policy will be likely to make any consumer recovery muted and, if we have further lockdowns, very stop-start. We expect significant earnings downgrades to come - Chinese equities are almost certainly not as cheap as they optically appear.

But surely China can just pump things up and get the economy moving again? We would caution on this thesis. Chinese property may be slowing but it is from a very elevated level (property sales and starts are double pre-GFC levels). This is happening at a time when Chinese demographics have turned much less favourable with the workforce now shrinking. Indeed, Goldman Sachs' Jon Ennis is now forecasting a 15% decline in births in China in 2021, which follows an 18% decline in 2020 overall, he expects new births in China in 2023 will be 40% below the level of 2016. A recent study published by the Lancet predicts that China's population could half by 2100. None of this looks structurally good for a sector that comprises c.20-25% of Chinese GDP.

Given the weak domestic picture we want to buy stocks when they are genuinely cheap and once the more difficult earnings outlook is fully discounted. In light of the current backdrop we are still not convinced we are there. The better managed consumer, industrial and domestic stocks in China have actually held up reasonably well as fund managers hide in the increasingly small pockets of the market that aren't officially state-owned enterprises (SOEs). The same applies to those companies being regulated such that they become quasi SOEs, which is what we worry is happening in the technology and internet space in China as founders get replaced and Chinese Communist Party Committees play a more prominent role in decision making at companies.

The Company does not invest in official SOEs or quasi SOEs (stocks heavily state "influenced") given our views on state owned capitalism. We also don't invest in stocks in sectors facing structural challenges (disruption, regulation, demographics) or ESG headwinds - this removes a significant part of the MSCI China index (by market cap) from our investment universe. Instead, we have a relatively short list of Chinese stocks which we believe still have good long term growth options - some of which we currently own, and others which we have on a watchlist to add to if they fall to levels which offer enough upside to our fair values.

In general, we would like to add more to India whether that be consumer stocks, Indian private sector banks or potentially some of the internet names. Whilst we have qualms about Mr Modi, some of his policies and reforms should raise the potential growth rate of the country. India is also likely to benefit both at a foreign direct investment level (FDI) as capacity moves out of China and potentially at a portfolio level as Asian and emerging market funds look to reduce China exposure. Our caution to add to date to Indian exposure has primarily been based on high valuations combined with unrealistic earnings expectations - if we do however see corrections we would expect to add to our Indian weightings.

The other market where we have added to in the current weakness is Australia. Whilst the overall market has held up reasonably well this has masked some very divergent performances. Resources and financials which comprise around 60% of the MSCI Australian index have done relatively well - whilst some of the internet, healthcare and overseas (mostly US) exposed names have come off sharply.

And what of the ASEAN 4? Thailand, Malaysia, Indonesia and the Philippines have been markets that have serially disappointed for 25 years. Why have the 'ASEAN 4' disappointed? This is mostly due to institutional failure - or the fact they are perhaps suffering from the middle-income trap. All are now struggling to grow faster per capita than the USA. Building roads and basic infrastructure only gets you so far. The ASEAN countries suffer from poor educational attainment, low levels of corporate investment due perhaps to corruption and crony capitalism - meaning we tend to have neither a vibrant economy or stockmarket.

Having provided all this negative commentary, we should highlight all is not bad in ASEAN stockmarkets. The ASEAN countries look much less vulnerable to macroeconomic headwinds than they have historically, with relatively low debt levels (especially short-term US\$ debt) and they run current account surpluses. There are also some good, well-run business in ASEAN. Our problem has always been valuations as investors have tended to view the region as high growth when it clearly is not (also scarcity value in ASEAN has meant good business are often pricey). We have several ASEAN consumer names we would like to add to the

portfolio, and we will monitor for opportunities to pick up the best names in ASEAN if falls continue.

Overall, we now see some good opportunities in Asian stockmarkets and we are optimistic the Company should make money over the next 12 months - assuming we avoid black swan events and global recession. Valuations are increasingly attractive and reflect in many cases a fairly pessimistic outlook for earnings. China, whilst we are structurally cautious, clearly has the possibility for a short term rebound if Covid policies are relaxed, reformed or successful. However, we believe the best opportunities in Asia in the current sell-off are to pick up best in class businesses/global leaders in Taiwan, Korea and Australia. We also hope further corrections will provide an opportunity to add to Indian and perhaps ASEAN consumer stocks where valuations have, we believe, historically been set too high on unrealistic earnings expectations.

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Europe

(compare Europe funds [here](#))

Alexander Darwall, manager, European Opportunities – 21 September, 2022

The index's modest advance belies a turbulent period. Cheap money and undue optimism carried the index 10% higher until inflation and the prospect of higher interest rates caused a 15% drop, peak to trough. The war in Ukraine has led to food and fuel shortages, cementing inflation into the mid-term outlook. The US Federal Reserve is showing the way in raising interest rates to tackle inflation. The European Central Bank (ECB), however, is a reluctant, 'slow follower'. As at 31 May 2022 the ECB's main refinancing rate remained at 0%, as it had been for the last six years; the 3-month Euribor interest rate had risen slightly to -0.34% at the end of May 2022. In June 2022 the Governing Council decided to discontinue net asset purchases under the Asset Purchase Programme as of 1 July 2022, thereby signalling its intention to raise interest rates. The ECB, apparently, still does not accept the need for aggressive tightening as it thinks that inflation is a transitory phenomenon. Its own projections foresee annual inflation at 6.8% in 2022, before it is projected to decline to 3.5% in 2023 and 2.1% in 2024. I believe this is likely to be optimistic.

For once, the different regional indices tell a clear story about economic performance. The MSCI World index advanced 7.7% in sterling. The S&P 500 was up 12.1% in sterling. Compared with Europe, the US is much better placed in terms of fuel and food supplies. The Nasdaq Composite index was down 0.4% as highly rated technology stock prices started to slide. On the back of much higher soft commodity prices (grain and soy), the Brazilian economy grew, driving a 17.0% increase in the MSCI Latin America index. Lockdowns in China partly explain the 11.5% fall in the MSCI AC Asia ex-Japan.

The macroeconomic outlook is deteriorating. In June 2022, the World Bank reduced its forecasts for world economic growth to 2.9%. It projects 2.5% European growth

in 2022. For 2023, it projects 1.9% growth in Europe compared with global growth of 3%. I believe these forecasts are likely to prove overly optimistic. Inflation is likely to remain persistent and there is a likelihood of a long upcycle in interest rates. Forward interest rates point to 3.5% in the US and 1.3% in Europe by the year end. The World Bank's forecasts suggest that China and other Asian economies will, again, be the growing economies in 2023 with China forecast to grow at 5.2% and India 7.1%. I believe current analysts' corporate earnings expectations are unrealistic. We expect aggregate European corporate earnings to fall in 2023 as cost inflation and higher interest rates impact corporates and consumers.

Our past reports have warned that the ultra-benign conditions associated with the COVID-19 era could not last, that at some point reality would bite, and businesses would be challenged by the enormity of inflation, debt repayments and weaker demand. Indeed, the market environment has dramatically changed: the COVID-19 era, characterised by free money (that is to say, low or negative interest rates) is over. This has given way to a much harsher environment. The change is extraordinary and sudden. Inflation and higher interest rates are back. Although these are global phenomena, Europe is especially vulnerable. The invasion of Ukraine in February 2022 has exacerbated the 'food and fuel' challenges in Europe. Europe's dependence on Russian oil and gas sets it apart from other regions of the world. Moreover, Europe's commitment to the 'Green Economy', not matched elsewhere, puts further pressure on the energy crisis. These are all the ingredients for a severe and prolonged recession.

Our investments, overall, have strong cashflows and relatively low debt. This is important not just for companies to survive the rigours of a recession but because it will be easier with a strong balance sheet to take advantage of acquisition opportunities; notwithstanding this severe and deteriorating economic backdrop. A solely defensive mindset will not capitalise on the great opportunities which undoubtedly exist.

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Japan

(compare Japan funds [here](#))

Joe Bauernfreund, manager, AVI Japan Opportunity Trust – 27 September, 2022

With core inflation holding steady at 2% in both April and May 2022, the Bank of Japan ("BOJ") stuck with its expansionary monetary policy. In contrast with the direction of rising global rates, the BOJ is defending a 10-year Japanese Government Bond ("JGB") yield below 25bps and repurchased a record amount of JGBs in May 2022. It is this diverging policy that has been weighing on the Yen, which on an effective real exchange rate basis is at the cheapest since 1971. If a Big Mac in the UK costs £3.50, it only costs £2.32 in Japan.

Although Japan isn't suffering from the same surging inflation as other countries, rising raw material costs, amplified by the weak Yen, are weighing on corporate margins. While we remain sanguine about our companies' ability to pass on cost increases, this won't happen overnight.

After the end of the period, it was with great sadness that the world learned that former Prime Minister Shinzo Abe passed away. His death was a shocking tragedy. While it has taken several years for companies/management to buy into corporate governance reforms, there is now clear evidence of a shift in attitudes amongst corporate Japan, and that is just one of the many important legacies of Shinzo Abe.

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North America

(compare north American funds [here](#))

Dame Susan Rice, chair, The North American Income Trust – 26 September, 2022

Major North American equity market indices experienced significant volatility and lost ground during the six-month period ended 31 July 2022. For most of the period, investors grew concerned over the pace of the US Federal Reserve's monetary tightening. Economists warned that hiking interest rates too much, too quickly could push the US economy into recession. These worries were exacerbated by increasing lockdowns in China due to COVID-19, which further stressed an already challenged global supply chain. However, major US equity market indices rallied sharply in July 2022, buoyed in part by a positive start to the second-quarter corporate earnings season. The Russell 1000 Value Index, the Company's reference index, returned 4.9% over the review period. The energy, utilities and healthcare sectors garnered positive returns and were the top performers for the period. Conversely, the communication services, financials and technology sectors posted losses and were the primary market laggards.

Inflation in the US remained elevated during the reporting period. The US Consumer Price Index (CPI) rose by an annual rate of 8.5% in July. The year-over-year increases in the CPI ranged from 7.9% in February to 9.1% rate in June. The continued upturn in inflation during the review period was attributable mainly to sharp increases in energy costs, particularly fuel oil and gasoline, which rose at annual rates of 44% and 76%, respectively, in July. Additionally, food prices saw double-digit, year-over-year increases for five consecutive months between March and July. Rising inflation led the US Federal Reserve (Fed) to raise the federal funds rate by 25 basis points (bps) to a range of 0.25%-0.50% following its meeting in mid-March - the central bank's first rate hike since 2018. The Fed subsequently implemented additional rate hikes totalling 200 bps, lifting its benchmark interest rate to a range of 2.25% to 2.50%.

The US economy contracted by 0.6% in the second quarter of 2022. This marked the second consecutive quarterly decline in GDP - which fell 1.6% in the first quarter - meeting the definition of a 'technical recession'. The decrease in GDP resulted mainly from reductions in inventory investment (a measurement of the change in inventory levels in the economy) and residential fixed investment, which more than offset increases in exports and consumer spending.

The investment environment has become more challenging given the recession "warning signs" that are flashing, as well as the fact that a period of aggressive interest-rate tightening is well underway. However, periods of positive returns are

possible during recessions particularly when companies become undervalued. Although July was overall a very positive month for the US equity market, there are still several headwinds, including the ongoing Russia-Ukraine conflict and questions over the ability of central banks globally to strike the right balance between bringing inflation under control and stymying economic growth.

The value of the portfolio and the strength of the revenue account were enhanced by the continuing strength of the US dollar relative to sterling, which approached parity in late September. The factors that drive relative exchange rate movements, including the ongoing structural impact of Brexit and the recent budget changes announced by the Chancellor of the Exchequer, could lead to an environment where the US dollar will maintain its relative strength against sterling in the near term.

For now, we have been comforted by the strength of the second-quarter earnings season in the US and the fact that the management teams with whom the Manager has recently spoken remain reasonably confident in their forecasts for the current year.

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Stephen White, chairman, Brown Advisory US Smaller Companies – 20 September, 2022

Equity markets are likely to remain unsettled for the time being, and US smaller companies are no exception. How long the war in Ukraine will last and what direction it will take, how far the Federal Reserve will raise interest rates in an effort to rein in inflation without causing a recession, how resilient the consumer will remain as purchasing power declines and how corporate profits will hold up given the rise in input costs including labour are all questions weighing on markets and which will take time to resolve. However, once the fundamentals do start to improve, we see the US again at the forefront of any recovery.

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Michael Phair, chairman, Middlefield Canadian income – 13 September, 2022

The Investment Manager remains optimistic that North American inflation will trend lower in the coming months and market conditions will improve. The global and Canadian economies are evolving broadly in line with the Bank of Canada's recent predictions. Canadian inflation decreased in July 2022 to 7.6% from 8.1% because of moderating commodity prices. This development supports the Investment Manager's view that the pace of interest rate hikes will soon begin to slow and market volatility will subside. The Canadian economy continues to operate in excess demand and labour markets remain tight. Canada's GDP grew by 3.3% in Q2 2022 bolstered by both consumption and business investment. Due to the strength in household and corporate balance sheets, the Investment Manager does not anticipate a material economic slowdown in either Canada or the U.S. in the latter half of the year. Their investment conviction remains in cyclical sectors such as real estate, financials and energy.

Canada is a secure net exporter of oil and natural gas and should benefit from Europe's growing focus on energy independence over the coming years. Its rate of inflation remains below that of the United States and Europe, supporting the

purchasing power of Canadian consumers. Cyclical sectors such as energy, financials and real estate also serve as effective hedges against inflation for U.K. investors.

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South Korea

(compare country specialist funds [here](#))

Weiss Asset Management, manager, Weiss Korea Opportunity – 9 September, 2022

Challenging global macroeconomic conditions have led to weaker South Korean market performance over the last two quarters. According to figures released by Bank of Korea (“BoK”), South Korea experienced a 3.1% drop in exports between the first and second quarter of 2022. Data published for June 2022 indicate a 5.4% year-over-year increase in exports, led by demand for semiconductors and petrochemicals; however, this figure also represents the slowest monthly growth in exports since November 2020. The decrease in export activity comes as a result of lower global demand while the economies of South Korea’s largest export partners continue to be impacted by the economic toll stemming from the Russia-Ukraine war, uncertainty in the Chinese economy, and recovery from COVID-19. In contrast to the single digit increase in exports, South Korea experienced a year-over-year increase of 19% in imports at the end of Q2 2022 as energy and commodity prices increased, resulting in a growing trade deficit that had begun to take effect in early 2022.

Despite the slowdown in exports between the first and second quarter, the South Korean economy continued to grow between April and June 2022, outpacing inflation for a 0.7% increase in real GDP. An increase in household spending was the main contributor to this growth, spurred by the loosening of COVID-19 restrictions. This increase in consumption, however, contributed further to inflationary pressure experienced by both consumers and producers with South Korea’s consumer price index (“CPI”) up 6.0% year-over-year and producer price index (“PPI”) up 9.9% over the same period.

With the growth in CPI reaching its fastest pace since the Asian Financial Crisis of 1997, the South Korean government implemented a number of initiatives to control this rising inflation. Elected in March 2022, new BoK governor Rhee Chang-yong has taken a stance to focus on combating inflation. BoK delivered four rate hikes throughout the first half of the year, raising the country’s policy rate from 1.00% at the beginning of 2022 to 2.50% as of the date of this report. In addition, South Korea’s newly elected president Yoon Suk-yeol has attempted to enact his own set of economic policies to combat inflation and shift the government to a more pro-business and market-friendly stance. After assuming office in May, President Yoon’s conservative government expanded its list of tariff-free import items to include more than 25 major imported products and floated the idea of a corporate-friendly tax reform to encourage private sector investments. The new administration’s attempts to usher in more shareholder-friendly practices in South Korea while fostering a

deregulated business environment for private-led growth, have received mixed levels of responses. For instance, the four largest conglomerates in South Korea have pledged capital investments of more than 860 trillion KRW (550 billion GBP) in the next five years following the entrance of the new administration. Nevertheless, President Yoon's approval ratings have deteriorated from 52% when he was sworn in to 28% as of the last week of July.²⁶ It is likely too early to predict whether the new administration will successfully achieve its stated goals to stimulate the economy while improving corporate governance.

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Global emerging markets

(compare global emerging markets funds [here](#))

Sarah Arkle, chair, JPMorgan Emerging – 29 September, 2022

A global environment of higher inflation and interest rates together with geopolitical concerns will continue to pose challenges for world stockmarkets. However, it is encouraging that inflationary pressures are less extreme in many emerging economies than in a number of Western countries and preemptive interest rate rises have meant that further rises are likely to be more subdued than in the developed world. Economic activity in many of the emerging market economies where your Company invests remains stronger than in the developed world and their debt to GDP levels are less stretched. Lower debt levels will also make emerging market economies more resilient to the impact of a stronger US dollar than in past cycles. Over the longer term, emerging economies should continue to show superior growth underpinned by several positive structural trends such as generally favourable demographics which support growing working-age populations and rising incomes.

Valuations have now returned to more reasonable levels following the recent falls in stock markets and a period of underperformance for the Manager's investment strategy, which focuses on high-quality companies that can sustain earnings growth over the longer term. Strong franchises and healthy balance sheets should support the earnings of these companies in a period of rising interest rates and slower global growth. Any further stockmarket volatility will create a number of interesting investment opportunities for stock pickers.

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Austin Forey, John Citron, managers, JPMorgan Emerging Markets – 29 September, 2022

This has been a very political year for investors, and geopolitical events and decisions have had a large effect on markets. The clearest example of this is Russia's invasion of the Ukraine, a military intervention which has produced many negative consequences. We could not understand, before it happened, how it could possibly work out positively from any perspective, including Russia's. Yet not for the first time, political actions were taken whose logic and purpose escaped us. International isolation, sanctions, and the acceleration of a strategic shift in European energy policy which ultimately will threaten Russia's only strategic export;

that does not seem like a set of choices which will look good when seen through the lens of history. But we are, as they say, where we are, ...and Russia is no longer an investable market for us.

If Russia and the Ukraine came as a sudden shock to markets, political risk in China is something we have worked with for years. Political risks in China are endemic; far more than in most countries, the government and the economy cannot be separated. Last year this risk found its clearest expression in regulatory interventions in various industries; this year, it has been the government's "zero Covid" policy which has had the biggest effect on the economy and on the corporate sector. Some aspects of this policy, especially the desire to protect the healthcare system, seem familiar from other countries' experience of the pandemic; what is different is the lack of public policy debate, and the consequent difficulty of judging how policy may evolve. The probability that China will change its approach must be high; eventually the economic costs of maintaining it will prove too burdensome, and the need to do so will fade too. But how long that change takes seems hard to judge.

One could say much the same of the other big political issues that involve China - its relations with the USA, and its actions regarding Taiwan. Nobody should expect a return to the previous norms here: for the USA in particular, China is a strategic rival that will be treated as such. Given the economic interdependency that exists, including China's importance for major American companies, this is not a simple thing to do. We should expect tensions to continue, and we need to factor that into our assessment of every stock we own in China. The companies that are probably least affected are those which operate domestically within China, and are listed, regulated and owned in China. It is not a coincidence that our recent new investments in China, in companies in the consumer and software industries, conform to this pattern.

Markets are forward-looking, and are anticipating a cycle in corporate profits; if western economies slide into recession, which appears possible, then companies exposed to global demand will not be immune.

Given that, what is the outlook for growth now? The major exposures in the portfolio are in three sectors: technology, financial services and consumer. Of these three, technology is the most sensitive to global economic conditions. The technology companies held in the portfolio are export businesses whose primary markets are the USA and Europe. They are bound to reflect cycles in demand to some extent in their revenues in the short term, though there is little sign of this in their latest results. In the past these companies have grown partly because global demand for technology rises over time, but mostly because they have been able to grow their share of that growing pie. If both persist in the future, which we expect they will, we should see good returns in the future as well.

The second category, financial services, is a far more localised industry; macroeconomic conditions at the national level are important, and it's more difficult to generalise about prospects. Growth rates for our largest financial holdings have slowed in the last year, but also remain positive. Looking ahead, we should expect some cycle in credit quality, but our holdings are in companies with very strong capital ratios and a history of prudent risk management, which should stand them in good stead.

Finally, the consumer sector; companies in this sector cater mostly to everyday demand for everyday products, including staples like food and beverages. They are intrinsically less cyclical than many other industries, and tend to be strongly financed because they generate cash continually. Here too, growth has been solid in the last year.

We should add one last comment about the outlook for growth. It's much easier to assess a company's relative strengths than it is to make specific and accurate forecasts about its financial performance in any one period. When times are more challenging, advantage accrues faster to the strongest companies than it does in times when all are prospering. We cannot be certain about the growth that will be achieved as the world goes through an economic cycle, but we can be confident about the competitive position of the companies in the portfolio, and about their ability to come through a cycle in good shape. With the exception of the financial companies, for whom leverage is an inherent part of their business, the companies held in your portfolio have unleveraged balance sheets; which is to say that in aggregate they have a net cash position with no net debt. So in addition to their operational strengths as businesses, they are well-placed to withstand higher interest rates too.

Inflation and then what?

It seems that central banks have awoken from a trance and remembered that their primary function is to prevent inflation. That is not going to be a comfortable experience for economies or for capital markets. In the near term, most risk assets face some headwinds, as interest rises affect bonds, equity, real estate and most other assets as well. We are currently carrying a little more cash in the portfolio than usual. But for those with long memories, current conditions will seem more like a throwback to the eighties and nineties: this looks like an inflationary cycle rather than a systemic financial crisis, and even though cycles are never comfortable times to be investing, they do bring opportunities and they do eventually pass. When markets are most negative, the risk/reward is actually at its most attractive.

In emerging markets, central banks have been tackling inflation with sharper rate rises than we have seen in the developed world, and mostly without the same challenges involved in changing energy supplies. Macroeconomic fundamentals actually look much better in some countries than they have in previous periods of monetary tightening, and the long-term economic growth rate achievable by emerging markets should continue to outpace that of the developed world. The scope for productivity gains remains significant, and other macro-economic factors like demographics are also look relatively favourable. But much more important than that will be economic results achieved by companies, especially the returns they make on the capital they invest in their businesses.

Sources of return again

What do our forecasts tell us about the future now? One of the most striking things is that the dollar looks very expensive, having appreciated strongly against many other currencies. For sterling-based investors, this is less of a factor: developed world currencies like sterling, the euro and the Japanese yen have weakened against the dollar just as much as many emerging market currencies. But historically a strong dollar has not been a good thing for emerging equity markets: if that trend

of dollar strength fades or reverses, it could lead to a more propitious environment for the asset class.

It's also logical to feel more relaxed about valuations now than a year ago; as we wrote above, the portfolio looks reasonably valued to us for the quality of the businesses it owns.

So a lot will come down to growth rates, and here we should reiterate that we try to think about all the factors which determine any business's ability to generate returns on the capital it invests, and thereby create value over the long term. If we hold a collection of highly competitive, strongly financed companies on reasonable aggregate valuations, which we believe we do, it is not hard to believe that they will in the long run continue to grow their intrinsic value, which will in turn translate into good returns for their shareholders.

Closing thoughts

As Warren Buffett is reputed to have said, investment is simple, but not easy. This past year stands as a good illustration of that maxim. We will keep investing in strong businesses with the ability to compound their intrinsic value, mindful of two other comments attributed to Buffett: "time is the friend of the wonderful business, the enemy of the mediocre", and "the stock market is a device for transferring money from the active to the patient".

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Manager, Gulf Investment Fund – 13 September, 2022

Saudi Arabia aims to raise US\$100 million to establish the Tourism Support Fund in collaboration with the World Bank to further advance the sustainable tourism by increasing job opportunities and preserving natural heritage. The target is to receive as much as 100 million visits per year from both domestic and international tourists by 2030.

The National Development Fund (NDF) will inject US\$151.9 billion into the economy by 2030, under the new strategy revealed by the Saudi Crown Prince. Furthermore, as a part of its new strategy NDF aims to triple the kingdom's non-oil GDP to US\$161.25 billion by 2030, while generating new job opportunities in the kingdom. The IMF expects the kingdom's economy to grow by 7.6 per cent in 2022.

The UAE government announced new initiatives to provide entrepreneurs and Small and Medium Enterprises (SMEs) with several integrated services aimed at enhancing their growth possibilities and market share. These include the Government Procurement Program, the Business Support Program, and the Financing Solutions Program. These new services represent a continuation and expansion of the National SME Program's efforts. The IMF sees growth accelerating in the Emirate on the back of structural reform efforts, increased foreign investment, and rising oil production

Qatar is partnering with international companies in the first and largest phase of the nearly \$30 billion expansion that will boost Qatar's position as the world's top LNG exporter. The first phase of the expansion project, called North Field East, is expected to increase Qatar's LNG production capacity to 110 mtpa from 77 mtpa. The second phase of expansion plan will involve six LNG trains, which are anticipated to boost Qatar's liquefaction capacity to 126 mtpa by 2027.

The Kuwait government announced a draft budget for FY2022/23 projecting a narrower budget deficit of KWD3.1 billion, down 74.2 per cent amid higher oil prices and reduced spending. Total revenues are projected at KWD18.8 billion, a rise of 72.2 per cent, on the back of higher oil revenues. Total Spending to fall 4.8 per cent to KWD21.9 billion, with capital expenditure accounting for 13.2 per cent of total expenditure. The IMF projects real GDP to accelerate to 8.2 per cent in 2022, on the back of higher oil output and strengthening domestic demand.

Oman's stock exchange plans to allow full foreign ownership in listed companies to attract more investments to its market. The move is expected to make the bourse more attractive for international investors as it seeks inclusion within global emerging market indices. Furthermore, Oman plans to list 35 state owned companies in the next five years.

Oman has allocated an additional 200 million rials for the 2022 budget to bring total expenditure this year to 1.1 billion rials. Additionally, country has also directed to allocate an additional 650 million rials for development projects for a five-year plan that ends in 2025. Oman posted a budget surplus of US\$545m in the first two months of this year, helped by higher oil prices and tax collection. Oman also announced expansion of free zones to boost the economy and attract foreign investments in the country. The free zones in Muscat, Salalah, Sohar and Duqm are expected to bring in economic benefits by diversifying the state income and bringing prospective trading partners. The move is aimed to align Oman with international standards and create a global investment scenario. Growth is projected by the IMF to be 5.6 per cent in 2022.

GCC banks should benefit from higher interest rates. This, coupled with attractive valuations post the recent correction should provide better value to shareholders. Hence, we continue to remain overweight on financials.

Inflation is still running at below 2 per cent so far in 2022. We expect some increase over the second half of this year, but we see inflation remaining well below international levels. HSBC forecasts GCC inflation at around 3.8 per cent for 2022 and 3 per cent for 2023.

While global investors generally are underweight Qatar, Kuwait, and Saudi, the GCC weighting in EM indexes should increase as IPOs join the market and governments carry out stake sales, as well as higher foreign ownership limits in Qatar. Qatar is witnessing a significant increase in foreign direct investments recording more than US\$3bn of inflows since January. We expect foreign inflows to the GCC to continue, attracted by currencies pegged to the dollar, dividend yields, high oil prices and market reforms.



India

(compare India funds [here](#))

Ocean Dial Asset Management, manager, India Capital Growth – 23 September, 2022

Since the onset of Covid in January 2020, India's equity markets have been highly correlated to global indices, further exacerbated by Russia's invasion of Ukraine. This, alongside uncertainty over stagflation (rising inflation as economic growth slows) have been the dominant themes driving market sentiment. This manifested itself in US\$29bn of net outflows by foreign institutional investors (FIIs) from the Indian equity markets in the period under review.

These constant selling pressures led to India's main board index (BSE Sensex TR) falling 4.1% (in GBP) over the six months to 30 June 2022 whilst the portfolio's notional benchmark (BSE Midcap TR Index) fell 8.5% over the same period. Investment returns in Sterling were supported by the stronger Rupee which rose 4.3% in value against Sterling over the period.

Although markets fell, India has held up convincingly by comparison to both Emerging and Developed market peers, which reinforces our conviction that the economy is more robust as a consequence of the reforms undertaken by PM Modi's government since 2014. And as such our belief that that India will become the "stand-out" economy over the next few years remains firmly intact. The following three factors fuel our conviction.

The first is the improving performance of India's Rupee (INR). In previous periods of global volatility, the country's high dependence on crude oil imports has invariably led to a sharp depreciation in the INR, often between 20% and 30%.

The past 6 months has seen the Rupee appreciate against Sterling and depreciate by 6.2% against a strengthening US Dollar. This is in spite of international crude oil prices hitting US\$ 120/barrel and the aforementioned FII selling pressure. Lower currency volatility is predominantly a consequence of India's much improved external account.

There are two structural factors behind this;

- India's Information Technology (IT) Service exports have been growing rapidly, rising in value from \$76bn in 2013 to \$178bn over the last fiscal year. IT service exports now exceed the cost of crude oil imports (which reached \$164bn in the last financial year) and are expected to grow further from here.
- India is becoming a compelling investment destination for foreign capital. Long term Foreign Direct Investment previously running at less than \$50bn annually is now reaching US\$ 70-80bn every year. In the last financial year, the figure crossed \$84bn.

As a consequence, India is now running a balance of payments surplus and accumulating hard currency (US Dollar) reserves. India enjoys the fourth highest US Dollar reserves globally.

The second is inflation. Consumer Price Inflation in India peaked at 7.8% in April and has been on a downward trend subsequently. Food is the biggest component of inflation (48% weight) and though food prices have increased, India is not only self-sufficient but now a net exporter. Another key component is energy (15% weight), but in this case the Government has cushioned the consumer partially by proactively adjusting the level of tax paid at the pump and forcing the downstream oil companies to bear a part of the incremental price rise.

It is important to recognise that inflation in India has been structurally reduced following a change in the Reserve Bank of India's (RBI) mandate (to inflation targeting), in 2015. Admittedly at the current level of 6.7%, inflation is still above the 2-6% range as set by the RBI, but as yet there is little evidence of any meaningful impact on consumer spending. Corporate India has successfully passed through cost increases to the final consumer (in the form of higher prices) without any significant impact on demand. Barring a few industry pockets (IT and Financial Services in particular), there is no immediate pressure on wages. Inflation is less of a concern in India than in Western economies.

The third factor is a shift in the behaviour pattern of the domestic retail investors. The past four years has seen a steady flow of household savings switch from investing in physical assets (such as Real Estate and gold), to financial assets particularly equities. In spite of recent market volatility, appetite for equities has held up well, reinforcing this shift away from physical assets. Flows are predominately made up of small "ticket size" investments mostly originating in smaller towns and cities and invested through systematic investment plans (SIPs), on a monthly basis via a standing order equivalent.

Indeed, since June 2018, monthly SIP inflows have exceeded US\$1bn, with the trend accelerating in the last six months. This was able to more than offset the foreign selling pressure, but now leaves FII exposure to listed Indian equities at 17.4%, multi decadal lows.

These improvements have provided more flexibility to both the Government and the Central Bank to set policy suitable for the current environment. In this regard economic growth continues to be the main priority working in tandem with the Reserve Bank which continues to "cushion" currency volatility in order to reduce the inflationary impact of a weaker currency. The Government has also been proactive in addressing challenges on inflation and currency by introducing adjustments to duties on some key export and import items.

To further support this view, several high frequency data points are pointing to healthy economic momentum, supported by positive commentary from the corporate sector. Recent financial results indicate strong demand, with export related weakness partially offset by incremental market share gains coming from a shift away from China centric manufacturing.

Our confidence in the health of the India economic model is replicated in the conversations we have with investee companies and other similar channel checks. Domestic demand is holding up well although our export facing investments are sounding more cautious. Input cost pressures are abating, and analysis indicates that operating margins will recover some lost ground in the second half of the year.

For the current year the portfolio earnings in aggregate are expected to expand by 34% and by a further 24% in the year to follow.

The key issue remains valuations. Since India has outperformed its emerging market peers it has become even more expensive on a relative basis. However, when considered in absolute terms index valuations in aggregate appear to be in line with long term averages, suggesting the market is fairly priced. On a stock by stock basis however, market volatility continues to provide decent buying opportunities which we continue to exploit, confident in the belief that the long term risk reward balance remains favourable.

Outlook

We forecast that the high levels of economic growth in India will be sustained for the following reasons;

- The reform initiatives introduced by the Modi administration are complete, in the main. Although necessary, the process of implementation has been disruptive to growth and profitability these last years exacerbated by Covid and then war in Europe. But India's economy is healthier for it. Corporate India has de-leveraged its balance sheet and the banking system has cleaned up its asset quality issues. We expect an investment cycle to follow.
- Government is prioritising a growth agenda, leading the way with increased investment in infrastructure. The expectation is that the private sector will follow in due course.
- To abet this, the government is offering financial incentives to the private sector to capitalise on the opportunities thrown up by de-risking supply chain dependency on China.
- A revival in the real estate and property sectors is underway after seven lean years. This can be a substantial driver of growth in employment, construction, building materials and other related sectors.

Although not insulated from the risk of slower growth globally India has domestic catalysts in abundance to drive growth in a way not experienced for many years.

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Latin America

(compare Latin American funds [here](#))

Sam Vecht, manager, BlackRock Latin American – 14 September, 2022

Over the past two-plus years, global equities have transitioned from one unimaginable health crisis to a period of escalating inflation driven by supply constraints from geopolitical conflict caused by the war in Ukraine. Latin America has also gone through a heavy political cycle over this time with most countries in Latin America facing changes in leadership creating additional uncertainties. We

look forward to some of the external noise potentially going back to “normal” levels as the dramatic whipsaws seen in monetary, fiscal, political, inflationary and productivity variables return to pre-COVID-19 trends. Despite the many factors generating volatility for equity markets, in our opinion Latin American markets have the potential to prove resilient in many ways to global stresses. Rising commodity prices have been supportive for external current accounts and fiscal accounts. High gaps in interest rate differentials between Latin American central banks and developed market peers have emerged and this combined with strong terms of trade have started to push currencies towards appreciation from depressed levels in the recent past. Core inflation has moved sharply higher, and the expectations are for an easing in terms of this spike but the run-rate for inflation should (in our view) remain elevated with a struggle to return to target ranges any time soon. We would argue that the concern regarding global inflation is more an issue for developed markets where consumers and central banks have become accustomed to low levels of inflation. Latin America has a strong history of dealing with inflation and we believe the strong proactive measures taken by the region’s central banks allow for greater comfort on a relative basis.

We remain overweight in Brazilian equities. While the Company’s asset allocation in Brazil looks to gain strategic exposure to the current commodity cycle, there are some positive signs emerging on the domestic side (growth, fiscal and labour market). Inflation has the potential to come down faster than expected due to reduction in taxation for consumers and interest rate cuts in 2021, which we expect should support Brazilian stocks. Uncertainty regarding the upcoming presidential election is priced-in, in our view, as valuations are at an unprecedented low.

We have grown more cautious on Chilean equities as the strong performance year-to-date has been mostly concentrated in commodity related stocks. This leaves the vast majority of the index constituents trading at a significant discount to historical levels. We are cautious on earnings momentum as the economy faces a tough backdrop and subdued business confidence related to changes to the regulatory environment and higher taxation.

We enter the second half of 2022 overweight in Mexican equities but have reduced our exposure relative to the start of the year given less compelling valuations compared to the rest of Latin American markets and lack of catalysts. Inflationary pressure is a concern in the near term which implies additional monetary tightening by the central banks in the coming months. Also, higher commodity prices have a net negative impact on the external current accounts and fiscal accounts.

We remain underweight in Colombia as policy risk continues to weigh on equities, on top of weak fundamentals stemming from Colombia’s twin deficits. We expect the policy uncertainty, tightening monetary policy and inflationary pressure to weigh down the benefits of higher oil prices, increased consumer spending, and attractive valuations.

Finally, we are neutral on Peru as further downside risks related to Castillo’s administration currently look limited: the proposal for a Constitutional Assembly was defeated in Congress, and there is no support with which the unpopular President can enact structural reforms to the economic model. The country has also maintained fiscal discipline and an independent monetary policy (possibly the only two positive highlights from this administration). Peru continues to have one of the lowest debt/gross domestic product (GDP) ratios in the region, at 36%, relatively

small fiscal and current deficits, and, despite the political volatility, its real GDP is expected to grow by above the region's average in 2022.

In summary, we remain optimistic on the prospects for Latin American equities despite the impact of external risks (possible US recession, weak growth in China) as well as domestic risks (presidential elections in Brazil, persistent high inflation/high interest rates).

Given the level of valuations, we believe risks are more than reflected in current prices.

Furthermore, earnings expectations have consistently risen for 2022 on higher commodity prices and better than expected economic activity. For 2023, we anticipate that earnings growth expectations excluding Materials and Energy should remain robust. We have argued that companies in Latin America are well-versed in dealing with inflationary pressures and the pre-emptive hiking measures in the region should provide a buffer to start stimulating for growth from a point of high interest rates. Geopolitical and governance tensions in Russia and China have amplified the interest in Latin America as an investment destination in an emerging market context. The region's productive, skilled and low-cost labour base with close proximity to the United States provides ample opportunities for direct investment as current supply chain configurations are being reconsidered with nearshoring in mind. Given the balance of risks, light positioning and appealing valuations, we continue to believe investors can benefit from improving fundamentals in the region.

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Biotech and healthcare

(compare biotech and healthcare funds [here](#))

Manager, RTW Venture – 14 September, 2022

The Russell 2000 Biotech Index declined -39.1% in the first half of 2022, bringing the total decline to c. -70% from the peak in February 2021. This bear market now significantly surpasses all prior falls, in both depth and duration, except for the bursting of the genomics bubble in 2000-2002. Stage one of the bear market was almost entirely related to sector specific issues in 2021 (i.e. a lack of a permanent commissioner at the FDA, which was still consumed by COVID-19; and a risk of a detrimental drug pricing reform package at that time proposed in the Build Back Better Bill). Stage two of the bear market in 2022 has been largely driven by broader macro factors including inflation, interest rates and general risk aversion brought on by the war in Ukraine.

We thought sector valuations presented a very attractive opportunity at the start of the year; now they look even more attractive at crisis-like levels. Price-to-Sales (for the Nasdaq Biotechnology Index, the broadest sector index) has fallen to 4.5x, which is equal to the spring of 2009, the trough of the Global Financial Crisis. What is more, the smaller companies, where we generally invest, have been marked down furthest. Given the lack of revenues in this space, we use cash multiples to assess valuations. As of 30 June 2022, 65% of the sub-US\$10bn market cap

companies are trading at less than 2x their net cash and a record 34% are trading at less than the net cash on their balance sheets.

The main cause behind the distress in smaller companies are newly public companies after a record 108 IPOs in the sector last year. Most of these companies are now trading at significantly below their IPO prices and many are trading below their net cash. New issuances in the sector have plummeted in number this year with just thirteen IPOs so far. This sounds terrible, but it is much better than the Global Financial Crisis when there were just three IPOs in 2008 and four in 2009. Despite the significant drop, there are still 82% more public biopharma companies than there were in 2015. However, the sector is relatively well funded. Average cash balances currently stand at about US\$235m, which is roughly double the level in 2015, just before the last significant sector fall. That said, burn rates have also doubled, so the runways are the same at about 2.9 years. Private financings are also down and the mix within it has changed significantly as large new vintages are supporting early-stage rounds, but there is a significant lack of funding activity beyond that.

The key question is, will the number of challenged small companies prevent a recovery for the sector as participants deal with the clean-up? We do not think so because the sum of negative enterprise value companies amounts to only 3% of the total market cap of sub-US\$25bn companies. In other words, from a financial perspective, the bad ideas have been written down and are no longer financially material. However, whilst it may not matter for the sector as a whole, it may well matter for some healthcare funds. In theory, the firms that should be better positioned through this period are ones that are selective stock-pickers with a focus on mid cap post proof of concept opportunities (i.e. those that are not weighed down by the challenges of supporting young, struggling companies), with sufficient capital to finance and bandwidth to selectively invest more in their high conviction names. In addition, we believe that syndicate partners and positioning on a company's cap table will be increasingly important in the new environment.

Before returning to the positives, it is important to highlight the impact of the recent US drug pricing reform that formed part of the recently passed Inflation Reduction Act. The overall deal is palatable and is largely similar to that negotiated last year. However, in the Investment Manager's opinion, the proposal for a reduced pricing window before government negotiation starts for small molecules is too short. Over the long term, this will act as a significant disincentive for small molecule development, similar to the situation in antibiotics about ten years ago. That is why there are so few new antibiotics on the market now. Unfortunately, some disease areas can only be addressed by small molecules and that will be a significant loss for those patient populations, especially given how productive targeted oncology has become. However, the reality is that no one will notice the drugs that they do not have. In the short and medium term, the impact will likely be limited to a handful of pharma and large cap biotech companies which have very large, successful products that are sold into the Medicare population. For smaller biotech companies, the impact will only be felt in companies that have high expectations for product sales to the Medicare population. Crucially, though, the reform bites in 2026, just as the patent cliffs for large cap pharma companies also appear, adding further to their revenue challenges. This can only be addressed by M&A. So, while the Inflation Reduction Act will likely have a small hit to sector sentiment, it will also likely accelerate M&A.

The good news is that we have already started to see a significant acceleration of M&A activity. In fact, the second quarter saw the highest number of M&A deals in a quarter since Q2 2018 with fourteen deals in total (nine public, five private). Furthermore, it has been heavily rumored, that Seagen may be acquired by a major pharma company. If the deal happens, then over 15% of the total market cap of companies smaller than US\$25bn (i.e. the likely sellers to large pharma) will have been acquired in just a few months. This is very significant, and we think it can re-catalyze the start of the virtuous cycle (especially seen in the context of the c. 3% of distressed small caps that might be written off).

The risk-reward asymmetry on a sector level and most importantly for our portfolio and opportunities we are diligencing keeps us optimistic and team morale remains strong. With our leadership team having lived through several such periods in the past we are reminded that this bear market too shall pass. We believe that the greatest opportunities are born in corrections like this one.

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Commodities & natural resources

(compare commodities & natural resources funds [here](#))

Howard Myles, chairman, Baker Steel Resources Trust – 15 September, 2022

Commodity prices were particularly volatile during the period, as Covid continued to affect demand from the key market of China where the draconian policy of zero-tolerance significantly disrupted industry. Additionally, the Russian invasion of Ukraine sent oil and energy prices spiralling. Such a background has left market participants trying to evaluate how long the current high level of inflation will continue into the future or whether these economic shocks and rising interest rates will trigger a global recession and potentially deflation. However, in the short term at least, one result has been increased wage demands from workers seeking to keep up with the cost of living.

The markets for metals associated with electric vehicles, such as Copper, Cobalt, Nickel, Aluminum and Tin, were extremely volatile reaching all-time highs in some cases by March and then falling back to more normal levels by the summer. For example, tin, one of the key metals in the move towards electrification, reached a price of US\$58,000 /tonne in March and had fallen to US\$26,774/tonne three months later. Moves in some metal prices such as copper have been exacerbated by reversals in financial flows into the various paper instruments available to track the physical metals.

Historically inflation has been positive for precious metals and commodities, at least in nominal terms since they are real assets, but in the short-term markets have been more concerned about the implications for demand. Mining equities have clearly been affected by this background, with lower commodity prices hitting revenues whilst the increased cost of energy and numerous other inputs is severely impacting margins. Development companies have been particularly impacted by this as they also have to contend with higher capital costs of construction and a less conducive

environment for raising capital in which investors have decidedly moved into "risk off" mode.

The outlook for the remainder of this year is expected to remain uncertain owing to the macro-economic situation.

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Debt

(compare debt funds [here](#), [here](#) and [here](#))

Jack Perry, chairman, ICG Longbow Senior Secured UK Property Debt – 22 September, 2022

Economic and market conditions during the first half of the year were dramatically different from 2021, with sharp falls across global equity and bond markets. In addition to the geopolitical challenges caused by the Russian invasion of Ukraine, investors saw and continue to be concerned by high levels of inflation, rising interest rates, increasing volatility and a slowing economy. In the UK, CPI inflation reached 10.1% in July, a 40-year high, with rising energy and food prices the key contributors.

Global central banks have belatedly responded to inflationary pressures with sustained increases in interest rates, albeit it remains uncertain how effective these will be given the significant time lag between rate movements and pricing adjustments. It is also worth highlighting that, despite the increases, the Bank Rate of 1.75% as at the end of August 2022 remains extremely low by historical standards. Some shareholders may recall that when inflation reached double digits in 1979 and 1980, Bank Rate was at 14% and didn't fall to single digit levels on a sustained basis until the early 1990s.

The economic outlook for the coming winter looks to be challenging. The UK energy price cap rose by 80% in October, with some estimates forecasting that the average household energy bill could exceed £5,000 in 2023. In response, the new Prime Minister has announced an unprecedented support package, with a two year price cap equivalent to £2,500 for the average household, along with short term support for businesses. Nonetheless, mortgage bills and rents are rising, and food prices look to continue to trend higher as a second order effect of input price rises and supply chain disruptions.

The number of full-time employees continues to be close to record highs and job vacancies remain well above pre-pandemic levels, but showed the first signs of falling in June 2022. Nominal earnings growth was 5.1% in the three months to June 2022 although real earnings are falling. As a result industrial and labour relations have become strained, particularly in the public sector, with strike ballots and action becoming more widespread.

GDP fell modestly (by 0.1%) in Q2 2022, according to preliminary estimates, albeit showed growth of 0.2% in July. In August 2022, consensus forecasts predicted 2022 GDP growth of 3.6%, but growth for 2023 of only 0.5%. The Bank of England is more conservative, predicting that the UK will fall into recession in Q4 2022 with five quarters of contraction before a return to sluggish growth. Illustrating the

challenge faced by policymakers, in this flat growth environment one forecaster (Citi) predicts inflation rates peaking at 18.6% in early 2023.

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ICG Real Estate, manager, ICG-Longbow Senior Secured UK Property Debt – 22 September, 2022

The economic story of the reporting period has been the rapid and sustained rise in inflation rates. While the problem is global, the UK has been particularly hard hit with headline CPI reaching 10.1% in July, a 40-year high, and forecasters predicting further increases. In the UK there is increasing alarm at the impact the expected material rises in the energy price cap will have on households. We are equally alert to the effect on businesses, where there is no such cap albeit where some Government support is expected.

Inflation means consumers are also suffering real wage cuts and, in many sectors, industrial action has become more widespread in the hope of securing improved pay settlements. With mortgage rates, rents, food and energy costs all increasing there is a real risk of a significant impact on consumer confidence. The ONS notes that households already appear to be cutting back on non-essential spending.

As a result, the latest Bank of England forecasts for the UK economy make for bleak reading, with five quarters of economic contraction from Q4 2022 before a period of stagnant to weak growth in the medium term. Rate setters are thus having to weigh the need to get inflation down with the impact on wider economic conditions. While the Bank has come under criticism from some quarters for acting too late on inflation, rates are now rising in a sustained way with the expectation of significant further rises to come. Markets are currently implying that Bank Rate will reach 4% in 2023, and the benchmark 5-year swap rate rose 100bp between late July and late August, standing at around 3.5% at the time of writing.

The new Prime Minister, Liz Truss, faces a challenging in-tray. A significant package of measures to support consumer and business energy costs has already been announced. Further measures are expected in an emergency budget in the coming weeks. It remains to be seen whether this will have a positive economic impact, but the overall outlook remains gloomy in the near term.

Occupational Demand/Supply

According to recent data from CoStar, vacancy in London offices has risen by over 50% since the onset of the Covid pandemic, with 31 million sq ft of currently available space according to the research, compared to 20 million sq ft in Q1 2020. This points to weaker market conditions, yet data from Savills show that first half office take up was 13% above the 10 year average, at 5.2 million sq ft, and 70% of those occupiers looking for space are seeking to maintain or expand their footprints, with only 13% looking to downsize.

In the regional markets, Jones Lang LaSalle reports steady leasing activity in the 'Big Six' markets in H1 2022, slightly ahead of H1 2021 levels. Vacancy rates declined modestly, to 5.9% from 6.2% in the prior year, with upward pressure on rents remaining, led by Bristol which saw prime rents reach £42.50 per sq ft, a 13% increase on the prior year.

The industrial occupational markets continue to show strength. Take up for the first half of larger (100,000 sq ft+) units was 16.8 million square feet, 25% above the 5-year average, with a further 6.4 million sq ft under offer at the end of June. By comparison 35.4 million sq ft was leased in FY 2021, which was the second highest year on record. According to Jones Lang LaSalle, UK vacancy rates are only 1.6%, and still only 5.3% if speculative construction is included. Given the ongoing supply/demand dynamics, upward pressure on rents remains, with prime rents increasing by 19% on average in the 12 months to June 2022.

There have been some signs of market conditions improving. Vacancy rates in both shopping centres and on high streets fell modestly in Q2 2022, to 18.9% and 14.0% respectively, albeit these are well above the levels in other core property sectors. The picture is somewhat better in retail warehouse parks, where demand from discounters and foodstores continues and Allsops report a vacancy rate of 7.8% (and falling) as at May 2022. These vacancy rates are critical as, ultimately, until more than one occupier is competing for the same store, rental growth is unlikely to be realised. In many markets there is still a meaningful level of absorption required before growth can return.

Property Investment Market

Industrial market conditions changed dramatically during the period. Amazon's announcement in late April of a scaling back of its take up in the sector led to an immediate correction in the share prices of public market landlords, with SEGRO's share price falling from £13.42 at the end of April to £10.73 by 9th May. This sentiment fed into private markets relatively quickly, with buyers seeking discounts of 10% - 20% on previous asking prices. In many cases this has been accepted by vendors, noting that the buyer pool is also facing rising interest rate costs as well as a more challenging macro outlook. While substantial, these discounts only partially reverse the relentless pricing growth seen in the sector over the past few years. According to Knight Frank, industrial yields in August 2022 have returned to the levels seen in August 2021.

Office transaction volumes softened in Q2, with quarterly trades of £4.4bn (according to Lambert Smith Hampton) below the £5.2bn in Q1 and 10% below the five-year average. Market sentiment has softened, according to Knight Frank, with yields reported to have moved outwards by 25bp in August, although anecdotally we are hearing that depth of bidding is thinning and pricing levels are less certain. What is noticeable is that sales processes are taking longer to conclude, with the traditional summer slowdown contributing to the relative inertia. The sector does continue to show appeal however, driven by strong occupational market conditions in many markets.

What has been remarkable during the period is the slowdown in monthly volumes. While May 2022 showed all-time high investment sales of £9.0bn (skewed by Brookfield's £3.3bn acquisition of the Student Roost platform), June levels fell to £2.2bn, according to Lambert Smith Hampton, the lowest level since the height of the pandemic. We anticipate that volumes will remain sluggish while both property and finance markets remain in a period of price discovery.

Finance Markets

The relatively buoyant financing market conditions seen in Q1 2022 adjusted significantly towards the end of the period, driven by both geopolitical and macro

concerns. According to Bank of England data, overall lending to property rose by £2.2bn, to £172.3bn, in the six months to June 2022. However, this will reflect deals originally agreed in 2021 and Q1 2022, and likely masks the most recent changes.

In particular, the key challenge has been the significant and sustained increase in funding costs, with the benchmark 5-year swap rate rising markedly, from around 1.25% at the end of January to around 3.5% at the time of writing. Moreover, the rate has shown significant volatility, with intra-day movements of over 25bp seen on several occasions.

The above leads to uncertainty for borrowers in what their financing costs (and thus projected equity returns) will look like, as well as challenges for lenders in forecasting interest coverage ratios. When allied to a 'wait and see' approach from more cautious lenders, the result is a slowdown in volumes and processes taking longer (and in some cases becoming abortive).

Notably, we are seeing increasing evidence of finance processes becoming fractured, particularly for larger transactions. HSBC was reported to have pulled a potential £380m CMBS issuance in May as a result of market conditions; the recovery in CMBS seen in 2021 appears largely to have stalled. The interest rate environment and ongoing price discovery of credit spreads means large institutions are disincentivised from originating loans to distribute. Anecdotally we are hearing that many bank balance sheets are near full for 2022 lending.

Notwithstanding the undoubted challenges in the market, there is by no means a credit crunch and debt still remains widely available, particularly for smaller and mid-market transactions. The annual financing property presentation by Savills, in June 2022, identified over 400 active lenders to the market, against 240 in 2018, with a continued evolution in the diversity of funding sources.

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Charlotte Valeur, chair, Blackstone Loan Financing – 22 September, 2022

Following on from 2021, financial markets experienced some volatility over the first six months of 2022, despite a relatively strong start to the year. Equity markets sold-off and credit spreads began to widen, with concerns over persistent inflation, led by rising energy prices, and hawkish monetary policy from central banks. Markets priced in the potential risk for a policy misstep to trigger a recession, concurrent with the IMF's downward revisions to global growth forecasts. Supply side disruptions also continued, stemming from existing pandemic-related challenges, the Russia-Ukraine conflict, and Chinese COVID-19 related lockdowns in the first half of 2022.

Against this backdrop, the loan market started the year off strongly, outperforming high yield and investment grade markets, despite being impacted by retail outflows and rising credit concerns. In addition, credit metrics showed that below investment grade companies remained healthy over the first six months of 2022 but highlighted a slight dip in profit margins amid inflationary pressures. Looking ahead, we expect floating rate credit, a natural interest rate and inflation hedge, to outperform and anticipate a promising environment for investors within leveraged loans and CLOs. Macroeconomic data for the first half of 2022 has been mixed so far. Although reported GDP figures point toward the view of a recession, a trend of generally

positive corporate earnings surprises so far this year, coupled with a strong labour market could provide a foundation for economic stability.

Recent macroeconomic data continues to provide contradicting signals, with wavering consumer confidence and GDP rates suggesting a possibility of recession, whereas corporate earnings prevail in exceeding estimates. Market sentiment will continue to be influenced by higher interest rates and rising inflation, an environment from which loans and CLOs will derive benefit. This is expected to be aided by productive market technicals, with loan and CLO spreads beginning to tighten in August 2022 and expected to narrow further, barring any adverse macroeconomic events.

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Manager, Blackstone Loan Financing- - 22 September, 2022

Bank Loan Market Overview

Leveraged loans started the year in resilient fashion, significantly outperforming other credit markets against a volatile backdrop, as investors sought floating rate assets to hedge against rising rates and soaring inflation. Collateralised loan obligation ("CLO") issuance, albeit at a slower pace from the prior year, and fund flows also provided a tailwind to the asset class.

Loan pricing remained relatively stable in the €/\$97-98 context before succumbing to weakness as the US Federal Reserve's increasingly hawkish stance contributed to the risk-off sentiment. Macro headwinds mounted as the second quarter of 2022 progressed, as lower growth and recession risk joined inflation, rising rates, supply chain issues, Chinese COVID-19 related lockdowns, geopolitical risk, and the escalating energy crisis in Europe on the list of concerns troubling markets. Higher-quality issuers outperformed lower-rated credits in a reversal of the broader trend over the past two years.

Investors took stock of coordinated central bank action, but interest-rate risk morphed into credit risk as investors worried about a policy misstep that might push the economy into recession. Credit fundamentals remained robust in the first half of 2022, supported by interest coverage ratios standing at a healthy 3.9x across both Europe and the US. Since pre-pandemic levels, these ratios represent a slight decrease in Europe from 4.4x in 2019, as opposed to an increase from 3.5x in the US. From a ratings perspective, the rate of loan upgrades to downgrades slowed in Europe, whilst US downgrades outpaced upgrades in May 2022. Returns for CCC-rated loans of -12.52% and -7.60% in Europe and the US, respectively, materially underperformed their higher quality counterparts, however default rates continue to remain benign. The last twelve-month par weighted default rate was flat at 0.2% in Europe and only rose modestly by 0.1% to 0.6% for US loans YTD. While these are a lagging indicator, both are still well below historic averages.

Liquidity also dried up and the loan market slowed, on the back of already weak primary loan issuance. Issuance in the first half of 2022 of €28.8 billion and \$298.1 billion in Europe and the US remains 66% and 30% back of the same period last year, respectively. Investors also withdrew capital from loans amid deteriorating sentiment and an increasingly attractive high yield market. Looking at US retail fund flows alone, \$3.1 billion was withdrawn from loan funds in the second quarter of 2022 compared to \$18.7 billion in net inflows in the first quarter of 2022.

All told, European and US leveraged loans returned -6.78% and -4.45% by the end of June 2022(3), respectively, though still outperforming high yield. The average price for European and US leveraged loans fell from €98.71 and \$98.39 to €90.26 and \$91.96 at the end of June 2022, and similarly, European and US loan spreads (represented by 3-year discount margin) widened by 312 bp and 219 bp over the same period to 725 bp and 658 bp, respectively.

Following the end of June 2022, the market firmed. A rally across risk assets has pushed loan prices higher, contributing to an improvement in sentiment which may be a catalyst for more balanced loan markets. We expect market technicals to be supportive barring any adverse macro developments but accept credit fundamentals to become a more meaningful driver of loan performance through year end. Second quarter of 2022 corporate earnings have so far remained stable with more companies beating rather than missing estimates, but the market remains focused on how higher prices and potential demand destruction affect both consumers and corporate balance sheets.

CLO Market Overview

The CLO market was not immune from the risk off sentiment across risk assets so far this year. A decrease in risk appetite drove the cost to price a new CLO higher across the capital structure. European CLO new issue spreads on AAA-rated tranches widened by 46 basis points to 140 basis points, whilst the overall weighted cost of capital widened by 99 basis points to 290 basis points. For US CLOs, AAA-rated tranches widened by 54 basis points to 186 basis points and the weighted average cost of capital increased by 70 basis points to 249 basis points. By the end of June 2022, CLO liability spreads were generally at the widest level seen since the onset of the COVID-19 pandemic straining the arbitrage available to CLO equity investors.

Despite wider new issue spreads, managers were able to print new CLOs, in part due to their ability to purchase loans at a discount. In Europe, a relatively active first quarter of 2022 gave way to a slower pace in the second quarter of 2022 amid greater concerns for the European economy and an absence of anchor AAA investors. In the US CLO volume picked up in second quarter of 2022 after a softer start to the year. Despite the different dynamics, CLO issuance in the first half of 2022 finished at €13.7 billion and \$72.8 billion in Europe and the US, though lagging last year's record issuance at the same point by 9% and 14%, respectively. Absent of any material catalyst for CLO new issuance in the second half of 2022, including an increase in loan new issue, we expect this deficit to widen. Opportunities to engage in reset and refinancing activity has been broadly limited year to date due to unattractive economics. This is expected to continue for some time since many managers took advantage of the constructive market in 2021 to lock in lower CLO cost of capital.

In response to the spread widening, some managers took advantage of structures with shorter non-call periods and / or features and alternative methods of asset sourcing to price new deals. This included shorter dated CLOs, so called 'turbo features' which improve the risk profile of lower rated tranches, 'print and sprint' transactions (where CLOs are ramped simultaneously with the CLO pricing in the secondary loan market, used to access cheaper loan prices), and increased use of bond buckets in order to take advantage of discounted high yield bonds.

Since the end of June 2022, CLO activity has maintained pace in the US, but kick-started in Europe in tandem with the improvement in sentiment. CLO new issue spreads have remained at relatively wide levels, but anecdotal evidence points to an improvement in pricing, though we await more transactions to be confident on directionality.

Looking forward, we expect managers to focus on CLO fundamentals to preserve cash flows available to equity investors. On face value, many metrics of portfolio quality were either flat or slightly improved at the end of June 2022 versus the start of the year. We expect this focus to remain on portfolio quality, with particular emphasis of managing downgrade risk, minimising CCC concentration, and avoiding defaults.

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Ian "Franco" Francis, manager, CQS New City High Yield – 15 September, 2022

After a quiet six-month period to the end of December 2021, the second half of our financial year has seen major political and economic upheavals. As the restrictions from the latest COVID-19 Omicron variant began to recede, markets began to focus more on inflation concerns and what central Governments could do to rein in rampant inflation levels. Then came the dreadful Russian invasion of Ukraine in February 2022 which brought the spectre of an all-out war to Europe and caused commodities prices, particularly in energy, to increase substantially and exacerbate the worries over inflation. Equity and Bond markets in the first six months of 2022 have fallen sharply as investors have become concerned about inflation and the potential for economic recessions.

The first half of our financial year saw economists and market commentators begin to realise that the spectre of inflation was more permanent than they had previously thought. At the end of June 2021, the UK CPI reading was an annual increase of 2.4%; by the end of December 2021 this had reached 5.4% and at our year-end in June 2022 consumer inflation was a massive 9.1%. A similar pattern emerged in the US and Europe. Up until the start of December 2021 equity stock markets seemed to shrug off worries over inflation and COVID-19 restrictions and were generally positive with major indices at near all-time highs in many markets. Markets started to come off their highs late in 2021 and fell sharply in January 2022 as economies stalled as supply chains were under pressure from rising inflation and ongoing COVID-19 restrictions.

As we started February, concerns were raised about the developing mobilisation of a considerable Russian force on the border of Ukraine. Despite warnings from western governments, on 24 February 2022 we saw the terrible full-on attack on various areas of Ukraine, from which point western sanctions have been massively increased. The continuing Russian invasion of Ukraine has increased the pressures on supply chains and inflated prices for oil, gas, and many hard and soft commodities. The net effect is the slowing of economic growth and post-pandemic recovery globally. Government largesse is constrained as the concerted stimulus to protect economies during the early COVID-19 era is largely at an end. Generally, the major tool available to central banks to curb inflation is interest rates and we have started to see a wave of interest rate rises around the world.

Markets have fallen sharply in 2022 as investors worry about inflation and slowing growth with the spectre of "stagflation" becoming apparent. In the UK, the FTSE All-Share Index fell by 6.6% over the six months to the end of June 2022 as the high weighting to commodity stocks help mitigate the fall whereas the Euro Stoxx 600 fell by 16% and the S&P 500 fell by 20.6% over the same period. High yield bond markets were also weak falling by around 14%.

The background for the short to medium term is hardly a positive one. There is the prospect of stagflation in the UK, increasing interest rates, double digit inflation, increasing unrest from major unions in the UK promising an autumn and winter of discontent. We have a new prime Minister in the UK and she has an onerous task ahead of her in trying to change existing policies in order to tackle the cost-of-living crisis. There are also a host of external factors out of the control of the UK government such as the ongoing war in Ukraine and continuing lockdowns in China.

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Manager, NB Global Monthly Income – 14 September, 2022

Non-investment grade credit ended the six-month period to 30 June 2022 with negative returns driven by Russia's invasion of Ukraine, markets calibrating how far the Federal Reserve and other central banks need to go on rates to fight persistent inflation, slowing real economic activity and mixed earnings reports so far in 2022. That said, default rates remain well below average and just above all-time lows given that balance sheets are generally in good shape. U.S. Treasury yields-and other bellwether bonds such as Gilts and Bunds-moved sharply higher during the reporting period as inflation hit a four-decade high, central banks turned more hawkish, and the tragic war in Ukraine triggered numerous supply shortages and fuelled spikes in commodity prices. Meanwhile, consumer spending and retail sales were generally resilient backed by strong job and wage growth. While credit spreads widened given the risk aversion, floating rate loans saw lesser drawdowns than longer dated fixed income due to the very low duration of the asset class.

Senior floating rate loans ended the reporting period in negative territory reflecting the risk-off market sentiment despite the fact that loan coupons floated higher on the back of rising interest rates. Moreover, new issuance was very muted over the reporting period hitting the lowest level in more than two years, while demand held in somewhat better, which brought the supply-demand balance to levels that should provide some support for loans.

The global high yield bond market also ended the reporting period in negative territory driven primarily by rising interest rates, concerns over inflation, high commodity prices and input cost pressures on issuer margins. Credit spreads widened over the reporting period and dispersion in returns across credit quality reversed course from the prior risk-on period last year. While the higher credit rating segments of the market held up better in the risk-off environment year to date 2022, they still incurred losses given large outflows in the asset class. That said, we are finding attractive investment opportunities within global high yield, especially at current levels and believe the spread compensation for a still low default rate environment is more than adequate.

CLO debt spreads moved meaningfully wider over the first two quarters of the year in conjunction with the decline in the leveraged loan market, as global recessionary fears emerged which has impacted all risk assets. Secondary non-investment grade

market volumes increased modestly quarter-over-quarter, but monthly volumes still lag trailing 24-month averages.

Defaults continued to remain not far off record lows in non-investment grade credit markets, which is consistent with healthy balance sheets and positive free cash flow growth. The distressed ratios have risen from the recent lows as the share of distressed issuers in the S&P LLI and ELLI went from around 2% each in May to 2.81% for the U.S. and 4.35% for the European loan market. The high yield default rate in June increased 33 basis points from May and was just 53 basis points above the all-time low reached in April. In June, the par weighted LTM U.S. high yield default rate was 0.76%. While the default rate has increased off the lows, we expect defaults to remain below historical averages based on our bottom-up assessment of issuers, and driven by the higher-quality ratings mix in high yield (over 52% of issuers with credit ratings of BB), less aggressive new issuance and fewer near-term maturities, as well as an energy sector that is far healthier than in the past few cycles. For context, the long-term average default rate is 3.1% (based on annual default rates back to 1980 according to JP Morgan).

Non-investment grade credit with its lower duration profile, higher yields relative to other fixed income and healthy credit fundamentals, represents an attractive investment opportunity at current valuations.

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Pedro Gonzalez de Cosio, manager, BioPharma Credit – 14 September, 2022

The life sciences industry is expected to continue to have substantial capital needs during the coming years as the number of products undergoing clinical trials continues to grow. All else being equal, companies seeking to raise capital are generally more receptive to straight debt financing alternatives at times when equity markets are soft, increasing the number and size of fixed-income investment opportunities for the Company, and will be more inclined to issue equity or convertible bonds at times when equity markets are strong.

Acquisition financing is an important driver of capital needs in the life sciences industry in general and a source of investment opportunities. An active M&A market helps drive opportunities for investors such as the Company, as acquiring companies need capital to fund acquisitions.

Global life sciences M&A volume during the first six months of 2022 was \$26 billion, a 72 per cent. decrease from the \$93 billion witnessed during the same period in 2021, driven mainly by the impact of global inflation post Covid-19. We anticipate M&A opportunities to eventually ramp up once the economy stabilizes.

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Manager, Starwood European Real Estate Finance – 5 September, 2022

- Inflation data is delivering month on month records and central banks continue to fight this inflation by raising interest rates
- Unemployment remains very low in major European economies

- Public markets remain volatile with credit markets reflecting a new interest rate environment, with the biggest effect seen in medium to long-term fixed rate credit markets
- Fundamentals for real estate remain healthy
- Hotel market data reports higher average daily rates in May 2022 than May 2019 with 2022 likely to be a strong year in many major European markets.

In our recent factsheets we had highlighted the well-reported global inflationary pressures and the expected impact on interest rates. This theme has continued with higher inflation rates and interest rates across all markets during the quarter reflecting expectations of more persistent inflation and resulting interest rate policy actions from central banks. We have also commented on the inverted interest rate curve in the UK signalling the market's anticipation that interest rate policy might go too far resulting in recessionary pressures. The market is now expecting higher probabilities of technical recessions in many countries and we have seen interest rate expectations coming off recent peaks. However, across major European countries unemployment rates remain very low (UK: 3.8 per cent and Euro Area: 6.6 per cent). This will remain a key focus for central banks as they balance the fight against inflation with other key macro-economic signals.

Inflation data continues to deliver month on month records with July headline inflation for the Eurozone coming in at the highest recorded figure since the inception of the Euro currency at 9.8 per cent (expected). The UK CPI rate was 10.1 per cent and the US CPI level was 8.5 per cent. Inflation numbers continue to be driven by increased energy costs. Energy prices in July were estimated to be up 39.7 per cent compared to a year earlier for the Eurozone, up 57.8 per cent for the UK and up 32.9 per cent for the US. After stripping out energy and food, core inflation was 4.0 per cent for the Eurozone, 6.2 per cent for the UK and 5.9 per cent for the US. Commodity prices are expected to remain volatile while the war in Ukraine causes disruption to energy, agricultural and other exports from Ukraine due to blockades of the ports and from Russia due to sanctions.

Previously we commented on seeing a step change in interest rate expectations in reaction to the persistence of inflationary pressures. These rate expectations were feeding into the SONIA, Euribor and swap rates, to which most of the Group's investments are linked. As at 19 August 2022 the 3 month SONIA (forward-looking) and Euribor stood at 2.12 per cent and 0.43 per cent respectively versus 0.05 per cent and negative 0.55 per cent respectively the same time last year. As at 18 August, the 5 year sterling swap and 5 year Euro swap were at 2.84 per cent and 1.65 per cent respectively versus 0.42 per cent and negative 0.41 per cent respectively the same time last year. Much of this change has occurred since the beginning of 2022. In the case of the 2.42 per cent increase in the 5 year sterling swap, the majority of the move (1.79 per cent) was since the beginning of 2022. These movements have provided a significant yield benefit to lenders with exposure to floating rate loans.

In the public credit capital markets, primary issuance has slowed across asset classes and secondary pricing has increased as investors digest the implications of the rising rate environment and the knock on effects. The most significant impact can be seen in fixed rate credit markets where lenders do not have the benefit of rising rates in the credit instrument they own. The iTraxx Crossover index had more than doubled from 238 basis points at the same time last year to 525 basis points

at week ending 19 August. This is a combination of changing rates being reflected in the credit markets and an increase in the risk premium which investors are seeking. We are seeing similar patterns for real estate in Europe with primary markets for corporate unsecured bonds and CMBS currently taking a pause and a reduced capacity of investment banks to underwrite and distribute. We expect this to persist over the typically quiet European summer period. These markets will create good opportunities for lenders to originate loans with strong risk adjusted returns.

In the underlying real estate markets, we are also seeing dislocation in public equity capital markets. Most public real estate companies are trading at a discount to private market values as investors assess the impact of rising rates on valuations for the asset class. While rising rates will have an impact on the cost of financing real estate, there are many factors that will influence value on an asset specific basis and so stock selection and quality of business plan remain key. Countering a higher cost of debt, inflation helps revenues for many types of real estate where leases are linked to inflation metrics or where operational real estate can benefit from inflation in top line revenues. We continue to see occupiers willing to pay well for product with high environmental accreditation and the right amenities. We are also seeing strong top line inflation across operational asset classes.

Another key effect of inflation in real estate is that speculative development of new real estate is constrained when development costs are higher, helping keep supply and demand in check and benefitting existing stock.

Examples of this inflation in operational real estate can be seen in hotel market data. Despite the fact that corporate travel is still down on pre-pandemic levels, a large majority of the gateway markets in Europe reported higher average daily rates in June 2022 than June 2019. Examples include rates 46 per cent higher in Paris, 24 per cent higher in Rome and 17 per cent higher in London. On the leisure side according to the BBC the average price of all-inclusive package holidays for British holiday makers is up 17 per cent versus 2019. Of the leading European markets, only Prague had a lower average daily rate in June 2022 than 2019. These rises have come without a full return of corporate business, however leading indicators are now showing that corporate business is likely to increase in the coming months. Corporate travel expectations surveys for the resumption of both domestic and business travel over the coming months are hitting new post Covid highs which is likely to put further upward pressure on rates for urban hotels.

The slow summer period for volumes in both credit and equity markets for real estate is unlikely to be broken quickly as market participants take stock on returning from vacations and we expect a cautious resumption in the later part of the year with all eyes remaining on how economies navigate through to a stabilisation in inflation and interest rates expectations. These markets provide a great canvas for company to operate in, allowing it to focus on deal selection and generating strong returns with good downside protections.

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Leasing

(compare leasing funds [here](#))

Tufton Oceanic Assets – 26 September, 2022

The Shipping Market

The Company focuses on three main shipping segments, tankers, bulkers and containerships, which strengthened over the financial year. The Clarksea Index, a broad indicator of weighted average earnings from Clarksons Research across the main commercial vessel types, ended the financial year at US\$41,350/d, 48% higher than the end of June 2021. The IMF estimated that world GDP grew by 6.1% in 2021 after a 3.1% contraction in 2020. As of January 2022, the International Monetary Fund ("IMF") forecast 4.4% world GDP growth in 2022, but this was revised down to 3.2% as of July 2022 due to a combination of tightening financial conditions globally, slowing growth in China, Covid outbreaks and lockdowns, and the negative impact from the war in Ukraine.

The Investment Manager believes the shipping market is in a multi-year upcycle because of the relative lack of investment in new capacity (supply). The combination of commodity price inflation and reduced shipyard capacity is increasing newbuilding prices. This led to higher values for secondhand vessels.

Major world powers including the US, UK and EU have imposed sanctions on key Russian institutions, businesses and individuals in response to the war in Ukraine. Russia is a major exporter of oil, gas, and coal while both Russia and Ukraine are major exporters of grain.

The Investment Manager has formally requested all our charterers and vessel managers to desist from trade with Russia wherever legally possible except for humanitarian purposes. The impact of the war in Ukraine on shipping demand growth will be ameliorated by short-haul demand, especially for tanker and bulker cargoes, being partially replaced by long-haul demand.

Some notable highlights of the shipping market, based on Clarksons Research, include:

- Global seaborne trade is expected to exceed pre-pandemic levels in 2022 and grow by c.2% in 2023. In comparison, seaborne trade grew by c.3.3% CAGR in the two decades leading up to 2021
- Over the financial year, the Clarksons Research Newbuilding Price Index rose c.16% while the Clarksons Price Index for 10-year-old secondhand vessels rose c.38%
- Over the financial year, compared to the previous 12 months:
 - Average 12-month time charter rates for handysize bulkers rose c.97%
 - Average 12-month time charter rates for 2500-TEU containerships rose c.286%
 - Average 12-month time charter rates for handysize product tankers rose c.1%

Tankers

According to the US Energy Information Administration, world petroleum liquids demand is expected to grow by 2.2 mbpd in 2022 and 2.0 mbpd in 2023. We had expected improvement in tanker demand in 2022 along with the recovery in global oil demand but the war in Ukraine has partially replaced some demand for short-haul product tanker cargoes with demand for long-haul: increasing Russian exports to Asia, notably India, and higher European imports from non-Russian suppliers including the Middle East, the US and Asia. This has resulted in improving demand for product tankers from the end of 1Q22.

12-month time charter rates for medium-range product tankers rose to c.US\$20,500/d at the end of the financial year, c.53% higher than at the end of June 2021. The Company will benefit from the current strong market as its latest acquisition, Marvelous, is employed in a pool with current yields >30%. Beyond the current market strength, supply-side dynamics for tankers are supportive especially for product and chemical tankers with the orderbook at only c.5% of fleet.

The Investment Manager believes the product and chemical tanker market will continue to benefit from this combination of demand improvement and slowing supply growth.

The chemical tanker market has benefited from the strength in product tankers. According to Drewry Research, the capacity of vessels trading chemicals reduced by 4.5% over 1H22 as some vessels moved to the improving product tanker market. Tight vessel supply along with short-haul cargoes being partially replaced by long-haul cargoes due to the war in Ukraine and lockdowns in China resulted in an improving chemical tanker market. Both the Company's chemical tankers, employed in a pool, benefit from this improvement.

The Investment Manager expects the product market, well supported by strong supply-side fundamentals, will offer opportunities for longer-term charters at higher rates as well as potential for further capital appreciation.

Bulkers

The effect of strong demand over the financial year was compounded by port congestion in Asia caused by Covid-related restrictions. In October 2021, the benchmark BDI rose to its highest level since 2009. The market remained resilient in the face of several challenges in early 2022 including seasonal weakness around the Chinese New Year period, the war in Ukraine and Covid restrictions in China. Bulker tonne-mile demand growth was aided by short-haul cargoes being partially replaced by long-haul cargoes due to the war in Ukraine.

12-month time charter rates for handysize bulkers rose to c.US\$25,000/d at the end of the financial year, c.20% higher than the end of June 2021. The bulker market remains attractive, with strong supply-side fundamentals. As at the end of the financial year, the bulker orderbook was only c.7% of fleet which will result in slowing fleet growth.

Containerships

The containership market strengthened over the financial year. Consumer demand was strong in 2021 but weakened in 2022 due to the impact of inflationary pressure on consumers, Covid-related lockdowns in China and the war in Ukraine. Container volumes were down 2.4% YoY (YTD as of April 2022). Nevertheless, the

containership market remained resilient with limited fleet growth and the effects of port congestion. 12-month time charter rates for small (2500-TEU) containerships rose to c.US\$75,000/d at the end of the financial year, c.113% higher than the end of June 2021.

The containership orderbook was c.27% of fleet at the end of the financial year as new orders increased. The Investment Manager expects the containership market to slowly weaken from record highs as port congestion eases and the new orders are delivered. Fleet growth is expected to accelerate to c.8% in 2023.

Asset values and time charter rates reflect the Investment Manager's thesis of supply-side adjustment to varying degrees across the main segments. The increase in asset values and rates has been the highest in containerships. In bulkers and tankers, the combination of tightening environmental regulations and lower shipyard capacity results in rising newbuilding prices. This, in turn, increases values for secondhand vessels. In addition, many newbuilding designs incorporate more flexible machinery and storage systems to handle multiple fuel types to reduce emissions. These further increase newbuilding prices. Over the financial year, the Clarksons Research Newbuilding Price Index rose 16% whilst the Clarksons Research Price Index for 10-year-old secondhand vessels rose 38%.

The shipping industry has a history of being resilient during periods of disruption and inflation as recently observed around the Covid pandemic. Despite the negative impact of the war in Ukraine, the tanker and bulker markets have been supported as demand for long-haul cargoes replaced demand for short-haul cargoes and the supply side remains supportive with slowing fleet growth. High oil prices incentivise lower speeds resulting in a reduction of available shipping capacity, aiding the supply-side adjustment. Fuel-efficient vessels such as the Company's recent acquisitions are likely to be favoured.

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Renewable energy infrastructure

(compare renewables funds [here](#))

John Rennocks, chair, Bluefield Solar Income – 29 September, 2022

Demand for renewable projects, at all stages of their lifecycle, remains strong; as both power prices and inflation have surged, valuations of assets have risen in tandem.

Higher interest rates and the inclusion of onshore wind within the portfolio have caused the Board to increase the discount rate for the 30 June valuation to 6.75% (June 2021: 6%).

The Investment Adviser is now observing that pricing for solar portfolios, on £m/MW basis, has moved to c.£1.40m/MW, with the upper range on deals closer to £1.50m/MW. Transactions in previous years have been in the £1.25m/MW - £1.40m/MW range.

Inflation

Over the past year inflation has surged, reflecting higher commodity and energy prices following a recovery in demand from pandemic lows. Since March 2022, Russia's invasion of Ukraine and the continuing conflict there have helped push inflation to levels not seen since the 1980s. The result is current UK inflation, on an RPI basis, close to 12% (CPI 9.4%).

Prevailing opinion among economic forecasters remains that inflation will abate during 2023, but it is possible that price pressures will endure. Since our income grows with inflation, resulting from the indexation provisions in our regulated revenues, increases in RPI boost both our earnings and the valuation of our assets.

Reflecting the latest economic forecasts, as well as the transition from RPI to CPIH post 2030, inflation assumptions supporting the valuation are 10.9% in 2022 (an increase from 6.4% as per the December 21 Interim statements), 3.4% in 2023 and thereafter 3.0% until 2029, before dropping to 2.25%.

Power Prices

Increasing electricity demand, as the world emerged from the Covid 19 pandemic, had seen power prices rising steadily but Russia's invasion of Ukraine sent shockwaves through European energy markets, with concerns around the supply of Russian gas to Europe driving a 45.5% increase in gas prices and sending UK day-ahead power prices surging from c.£78/MWh to highs of c.£593/MWh in August 2022.

The Energy Crisis and Reform

The energy crisis has resulted in power prices reaching unsustainably high levels, putting pressure on every section of the economy. The government is engaging with renewable energy generators to see how our industry can be part of the solution, recognising that the renewable energy sector is well placed to play a major role in creating a long term solution to this crisis. Solar and wind are today the lowest cost generators in the market, their technologies are relatively quick to deploy and they provide indigenous, clean and secure supplies of energy. The Company welcomes the opportunity to discuss an equitable reform of the electricity market that will result in consumers seeing the benefit of the lower generating costs of existing portfolios. In the event that both government and generators find a fair solution that will not impair the future attractiveness of the market and which does not constrain our ability to raise the new capital required to support the investment needed to continue the process of decarbonising the economy, there is an opportunity for a good outcome for all.

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Bluefield Partners LLP, manager, Bluefield Solar – 29 September, 2022

Over the past 12 months, global energy demand grew rapidly in the second half of 2021, propelled by rapid economic recovery as Covid-19 lockdowns eased, leading to increasing gas prices. The UK is particularly exposed to high gas prices due to a reliance on residential gas supplies and a significant portion of UK electricity being generated in gas-fired power stations. Increased demand, coupled with historically low gas storage levels, led to LNG and LPG prices rising significantly, pushing up

wholesale electricity markets. This trend was further compounded by Russia's invasion of Ukraine, enforcing uncertainty around the security of European gas supply and price volatility on the gas markets, in turn leading to record prices and high volatility in the UK power markets.

The price of coal also rose sharply towards the latter end of the Period driven by high demand in Europe, a ban on imported Russian coal and limited supply from Asia. As a result, UK-ETS carbon prices held largely above the £70/tonne of CO₂ equivalent mark throughout the second half of the Period, having closed below the £60/tonne of CO₂ equivalent on most days between July 2021- mid-November 2021. The demand for carbon certificates is likely to remain supported in the coming winter after several coal plants were requested to stay online to safeguard GB system security and reduce its reliance on gas imports.

The impact of sharp commodity price increases was a three-fold year-on-year increase in the UK day-ahead base load power price for the 12 months to 30 June 2022, of £171.25 per MWh from c. £55.25 per MWh, for the 12 months to 30 June 2021.

Day-ahead base load power prices settled at £384.85/MWh on average in March 2022, which was almost 80% above market expectations, whilst UK seasonal forward power prices also rose sharply over the year, with Winter 2022-23 base load reaching highs of £345/MWh in June 2022, almost five times the level seen in July 2021.

UK solar photovoltaic capacity and deployment

According to BEIS, the UK's total installed solar photovoltaic capacity as at June 2022 (the latest statistics available) was 13.99GWp, across just over 1.2 million installations. This compares to 13.66GWp in June 2021. Expansion over the period, of 330MW, has been driven exclusively by the deployment of c. 90,000 small unaccredited installations with capacities below 50kWp.

Capacity accredited nationally under the RO Scheme is 7.3GWp, according to the latest data from BEIS released in March 2022, representing c. 52% of the total solar capacity in the UK, but it constitutes only 2% of the number of installations.

Capacity accredited under the FiT scheme was c. 5.1GWp. This equates to about 36% of total solar capacity and c. 75% of all installations. Subsidy-free capacity stands at 1.5GWp and 23% of installations, although many of these are micro installations.

Secondary market transactions and subsidy-free activity

Transactional activity in the UK secondary solar PV market continued its momentum during July 2021-June 2022 with investor appetite for subsidised assets remaining very high. According to the most recent figures from Bloomberg New Energy Finance (BNEF) and Bluefield internal data, 272MW of subsidised projects changed hands during January-June 2022. For reference, some 732MW of solar PV project deals were reported in 2021.

Activity in the UK subsidy-free market has also continued at pace. Significant development activity is being carried out within the UK, which is being driven by factors such as ambitious decarbonisation targets, increasing preferences by customers for clean energy, demand for ESG investments and the inclusion of solar PV in the recent CfD auction round.

Estimates from Solar Power Media indicate that there are over 41GWp of large-scale solar projects in the development/ready-to-build phase (June 2021: 17GWp) and c. 7.2GWp awaiting or under construction as at the end of May 2022.

Over the past 18 months there have been a small number of larger-scale unsubsidised projects constructed in the UK. Throughout the 2021 financial year, however, there have been indications that solar deployment rates have stagnated somewhat due to increased construction costs and supply chain challenges. The elevated pricing is being driven by a significant increase in solar module prices, together with increases in commodity prices and disruption in global supply chains.

Regulatory Environment

The regulatory environment is under the spotlight for the first time in a number of years as the government looks to manage soaring energy costs and increase energy security. A consultation has been launched to look at whether there needs to be reform of the energy markets. More immediately, the government is looking to see whether the renewable industry and the government can agree a mutually favourable change to the merchant part of the Renewable Obligation Scheme.

Update on Contracts for Differences (CfD)

The CfD scheme, which currently provides a tariff for 100% of an asset's generation over a 15 year period, is now the UK Government's main mechanism for supporting low-carbon electricity generation and operates via an auction process. The latest CfD allocation round (AR4) opened in December 2021 and closed in July 2022. It was the first auction round since AR1 (2015) that allowed solar PV projects to participate.

A total of ninety-three new renewable energy projects won contracts in AR4 across GB, which is more than the number of projects awarded in the previous three auctions combined. A total of 10.8GW renewable projects received CfDs in AR4 (up by 87% from the previous auction in 2019) with the majority going to offshore wind at 7GW and 2.2GW to solar PV projects. These numbers reflect the success the scheme is having with respect to accelerating the deployment of renewable energy in the UK.

In February 2022, the UK government confirmed that it will hold annual CfD auctions from 2023, having previously been scheduled once every two years. The next CfD auction (AR5) is planned for March 2023.

A CfD consultation outcome published in May 2022 announced changes to Supply Chain Plan requirements and a strengthened non-delivery disincentive. The 2020-21 government call for evidence on 'Enabling a high renewable, net zero electricity system' also highlighted several areas in which CfDs could be reformed.

The UK Energy Security Strategy

In April 2022, the UK government published its British Energy Security Supply paper following widespread calls to lower the UK's reliance on Russian gas and reduce the impact of significant wholesale power price rises on UK retail energy consumers. The latest targets largely added to the goals set in the Government Energy White Paper, published in late 2020, with a particular focus on greater nuclear and offshore wind capacity targets.

The Government now plans to reach 50GW offshore wind capacity by 2030 - an increase from the 40GW target in its net zero strategy released in October 2021 - of which floating offshore wind should make up 5GW, up from 1GW previously. No target was set for onshore wind growth targets with former Prime Minister Boris Johnson having been reluctant to ease planning rules to enable more onshore wind developments. A nuclear target of 24GW by 2050 was set, with small modular reactors expected to form a key part of the nuclear project pipeline. The Government estimated a five-fold increase in solar deployment levels by 2035, as well as its intention to consult on amending planning rules for ground-mounted solar to strengthen policy in favour of development on non-protected land.

Future of the UK ETS

A joint consultation of the UK, Scottish, Welsh and North Irish governments on developing the UK Emissions Trading Scheme (UK ETS) was launched in March 2022 and closed in mid-June. The governments sought feedback on a net zero consistent UK ETS cap following advice from the Climate Change Committee's (CCC), with any changes to the policy to align the cap with a net zero trajectory to be implemented by no later than January 2024. The wide-ranging consultation also sought comments on other topics such as the role of Free Allocation policy as a carbon leakage mitigation tool and the incorporation of greenhouse gas removal into the UK ETS, all of which ultimately aim to improve the ambition and operational effectiveness of the scheme.

Balancing Services Use of System (BSUoS) Charges

The UK energy regulator Ofgem approved a measure to move balancing charges away from generators and onto final demand users from 1 April 2023, following several years of consultation processes on the proposal. Successful applicants in the AR4 will have their CfD strike prices adjusted downwards to reflect this regulatory change.

BSUoS charges are how the ESO recovers costs associated with balancing the electricity transmission system, including the costs of constraints, frequency response services, provision of reserve, the costs of actions taken in the Balancing Mechanism and the ESO's internal costs. BSUoS charges are currently recovered from demand customers and generators based on the amount of energy import from or exported into the network in each half-hour period.

Review of Electricity Market Arrangements

The UK Government published its Review of Electricity Market Arrangements (REMA) consultation in mid-July which potentially opens the GB power market to one of the biggest overhauls for a generation. REMA aims to deliver fundamental reform to non-retail electricity market arrangements to facilitate the decarbonisation of the electricity system by 2035, while ensuring security of supply. Topics covered include the revision of the wholesale market structure (potentially decoupling power from gas prices), balancing mechanism, network charging, operability services and related policies such as CfD and capacity market schemes. The consultation closes on 10 October 2022 and a delivery roadmap is expected to be released in 2024.

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Philip Austin MBE, chairman, Octopus Renewables Infrastructure – 27 September, 2022

The energy crisis in Europe, combined with rising inflation and interest rates, has created significant short-term uncertainty. Volatile power markets make forecasting and valuations challenging, and whilst competition for assets remains high, there is potential for upward pressure on discount rates to mitigate the valuation increases which would otherwise arise from the continued uplift in inflation and power prices following the period end.

In the longer term, it remains clear that to help ensure there isn't a repeat of the current energy crisis, accelerated investment in new renewable generation is essential.

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Manager, Octopus Renewables Infrastructure – 27 September, 2022

Russia's invasion of Ukraine has had far-reaching consequences, particularly for the energy sector given Europe's reliance on natural gas imported from Russia. Reduced flows of gas and fears of a total halt in imports, combined with a number of other factors such as low hydro reservoir capacity and French nuclear outages has led to power prices across Europe reaching record levels. Forward prices for winter 2022/23 are extremely high, and forwards remain elevated for several years as continued tightness in gas markets is expected to influence pricing for some time to come.

As a result, the need to accelerate the transition to a renewables-led energy system is now driven by security and affordability concerns alongside decarbonisation. A rapid expansion of renewable generation capacity is key to eliminating European reliance on Russian gas. This will be required not just to cut gas usage in the existing power sector, but also to meet ambitious European and UK targets for green hydrogen production and the electrification of home heating. Both hydrogen production and heating are currently dominated by natural gas, and replacement of this gas by green electricity will drive a significant increase in electricity demand.

The dramatic increase in energy costs has led to record highs in inflation in the UK, and the pattern of high inflation is repeated across Europe. This inflationary pressure has also impacted the renewable sector, with construction costs for solar, wind and battery storage all increasing. However the Investment Manager continues to see opportunities for new-build renewable and storage assets, as the heightened power prices and/or government support provide sufficient return to compensate for the higher construction costs.

The heightened inflation has led to increases in bank base rates across Europe. As at 30 June 2022 the Investment Manager had continued to experience high levels of competition for assets in its target markets. No impact of the increased base rates on discount rates was seen when valuing live transactions in which it has participated.

A particularly unwelcome side-effect of the Russian invasion of Ukraine is a crisis in energy costs for consumers. This has accelerated efforts from governments and regulators to reform market design such that the low costs of renewable generation can be passed onto consumers. It has also raised a call amongst some for windfall

taxes which could affect electricity generators, even though most acknowledge that accelerated investment in renewable generation is essential to resolve the current cost crisis.

Forwards market pricing has continued to increase over the first half of 2022 for all jurisdictions, particularly in the period to 2025. Although captured in our internal price forecasts, the Investment Manager has observed that - during the recent periods of heightened price volatility - the price realised by renewable generators has been lower than that expected by market advisors.

Since 31 December 2021, the key factor influencing movements in power price forecasts has been the Russia-Ukraine war, and its impacts on commodities markets. All of ORIT's market forecasters have revised their gas price forecasts upwards in the short and longer term and there have been a range of views on the impact of the war on carbon price forecasts (ranging from material increases in the short and long-term to moderate increase in the short-term). As a result, in the medium term, the advisors also see increased ambition across Europe to increase renewable energy capacity to help improve each part of the energy trilemma (security, sustainability, affordability).

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Aquila Capital Investmentgesellschaft mbH, manager, Aquila European Renewables Income – 26 September, 2022

Market Prices

During the first half of 2022, the increase in fuel and CO2 prices were the key drivers of the bullish trend experienced in Europe since the middle of the year 2021. The historically high prices in commodity markets, notably for gas and coal were further intensified by the major supply disruptions triggered by the conflict in Ukraine and have led to the continuation of the bullish trend of power prices due to the reliance of the European Union on thermal power generation.

Nord Pool

Although power prices in the Nordic region are generally at a discount when compared to continental Europe, there is an ongoing trend towards increasing convergence between the Nordics and the continental power markets due to a tighter hydrological balance and the impact of the new interconnection link with Germany and the United Kingdom; thus, increasing demand in the region as the demand in continental Europe is expected to increase.

Additionally, due to the different patterns for southern and northern price areas in Norway, the impact of higher commodities differs widely among the zones.

Northern regions (NO3 and NO4) are less affected by fluctuations in power prices due to lower demand and abundant wind resources. By contrast, the southern zones (NO1, NO2 and NO5) undergo a stronger price impact from Continental Europe via existing interconnection.

In 2022, the Norwegian government introduced an onshore wind production tax, applicable to all wind power plants with a capacity of over 1 MW or more than 5 wind turbines on the surface, at a tax rate of NOK 0.01 per generated kWh.

Iberia

Power prices in Iberia experienced a more significant price impact from higher commodity prices due to the high proportion of hours during which gas-fired generation sets the price in the wholesale markets. During the past six months, Spain has introduced several regulatory developments in an attempt to hinder the upside effect of gas prices on wholesale power prices, such as the electricity tax reductions, creation of a 'clawback' on merchant revenues and the introduction of a cap for the gas price to be accounted in bids of electricity generators.

Greece

As in Iberia, power prices in Greece underwent a higher increase from elevated fuel prices due to the higher proportion of hours in which not only gas-fired generation, but also coal, sets the marginal price in the wholesale market.

European Commission

On 14 September 2022, the European Commission presented a proposal for an emergency intervention in Europe's energy markets in order to address the dramatic rise in power prices, largely as a result of gas supply disruptions. The proposal provides a range of measures that, if approved, will be automatically applied on EU Member States, most notably (a) reduction of electricity demand and (b) clawback on revenues on 'inframarginal' electricity producers (including renewables) setting a threshold of EUR 180 MWh of electricity produced, from which "excess" profits could be claimed back by individual Member States. The measures are expected to enter into force as of 1 December 2022 and remain in place until 31 March 2023.

The temporary revenue cap is not intended to be applied to revenue earned below the cap which is derived from PPAs or Government regulated tariffs. Furthermore, the clawback should not apply to producers whose revenues are already capped as a result of State measures, as it is the case of Spain. Importantly, as part of its press release, the European Commission has also reaffirmed its commitment towards renewable energy as a means to achieve its long-term climate and energy targets.

The Investment Adviser is continuing to review the initial announcement from the European Commission and is waiting for further details to be announced, including the measure to be adopted by each Member State to reduce electricity demand and further details of the revenue cap, noting that Europe is not homogenous and different regions exhibit vastly different power prices, largely influenced by differences in power generation mix, interconnectivity and weather conditions. It is also worth noting that Spain already introduced a clawback mechanism which will remain in place until 31 December 2022.

Despite these regulatory changes, expectations for wholesale power prices in AERIF's key markets such as the Nordics and Iberia remain high in the short to medium term. Regulatory developments such as these highlight the importance of AERIF's pan-European strategy targeting geographic diversification and high contracted revenues, maximizing earnings visibility and reducing our reliance on any single power market.

Fuel Prices Evolution

Europe's surging demand for Liquefied Natural Gas ("LNG") to replace the Russian pipeline gas supply and increase in its imports has led to an exceptionally tight global market, pressuring supply. In June 2022, Gazprom's reduction of natural gas supply to several European countries led to a new uplift in gas prices.

The coal market has undergone an upward trend, as coal demand increased in line with the tightening in the gas market.

This trend was further enhanced by the Russian invasion of Ukraine, as markets sought alternatives to Russian fossil fuels and EU planned an embargo on Russian coal imports.

Furthermore, carbon prices have oscillated between EUR 58.3 and EUR 96.0 tCO₂ in the first half of 2022. European Union Allowances ("EUA") prices had risen since 2021 due to the following factors: a) the 'gas-to-coal switching effect' which has increased demand for EUAs from (relatively more emissive) coal units; and (b) generally more pronounced political momentum for decarbonisation across the EU, associated with the 2030 targets and net-zero discussions.

With the start of the conflict in Ukraine, EUAs prices fell from an average of EUR 90.0 MWh to nearly EUR 58.0 MWh in just over a week due to the expectations that funds and speculative buyers would abandon the market as a consequence of the conflict. Following that period, EUA prices started to recover as the market has rebalanced and remained relatively stable at roughly EUR 85.0 tCO₂.

Inflation

Investments in renewable energies represent an effective protection against inflation. Renewable energies benefit from rising electricity prices with no burden on the cost side in relation to the use of resources. Over the last 20 or more years, European electricity prices have typically outperformed European consumer prices indices, as a result inflation is expected to have a positive impact on the earnings potential of renewable electricity generation plants.

Conclusion

Russia's invasion of Ukraine has led to higher volatility in electricity prices, driven by the increased energy and non-energy commodity related costs, inflation is expected to continue to rise. In this regard, energy and power markets will receive higher levels of scrutiny and future interventions in markets. Energy independence will become an important driver and local support for renewables and non-fossil fuel energy sources will most likely increase.

Furthermore, the battle against climate change remains at the forefront of the world agenda with COP27 due to take place in November 2022 in Egypt, with the revision of current targets and with promises of revised action plans to steepen the rate of decarbonisation.

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Ben Guest, manager, Gresham House Energy Storage – 26 September, 2022

GB needs at least 20GW of [battery energy storage systems (BESS)] by 2030, demonstrating its critical importance to the energy transition. We are working on additional pipeline both in GB and Overseas, and we look forward to providing updates as this work progresses.

The rate of deployment of BESS continues to lag the deployment of renewables in GB and this will continue to underpin revenues for the sector for years to come. However, while this backdrop is positive it is important for the industry to

acknowledge the need for the rate of deployment of BESS to accelerate. While lockdowns and supply chain issues caused constraints in recent times, the main bottleneck today is in the slow rate of grid connection activity, impacting the industrywide deployment of BESS. We invite Ofgem, grid companies and other stakeholders to act to solve this issue. It is not in anyone's interest to see the unnecessary curtailment of incremental renewable generation and for associated balancing costs to increase exponentially due to a lack of flexible generation.

Frequency Response services

Frequency Response has been dominated by Dynamic Containment since its launch in October 2020; however, additional services have been launched during 2022 completing the suite of services known as Dynamic Frequency Response services first anticipated in National Grid ESO SNAPS plans established in 2017.

These services consist of Dynamic Containment (DC), Dynamic Moderation (DM) and Dynamic Regulation (DR), each of which provides a different power response for a given frequency deviation - see the RH chart. Each of these services is now procured separately for Low (export) and High (import) - each type of service is therefore further denoted by an L or H respectively after the service name.

DCL was the first to launch in October 2020 with DCH arriving in November 2021, DRH and DRL began in April 2022 with DMH and DML completing the set in May 2022. It is expected that Firm Frequency Response (FFR) will eventually be phased out, most likely in early 2023.

Each of the new services has different operating parameters resulting in a different level of battery cycling. DC is the least onerous and DR the most. Longer duration batteries benefit further as they are less stressed in this service. DR actually has a longer duration design requirement due to the high level of cycling required of the batteries and as such is not feasible for <1 hour BESS. Due to the relatively low volume requirement from National Grid ESO for DM and DR to date (each c.10% of DC) DC has remained the primary service of interest.

Demand has been greatest in DCL. The higher requirement for the Low service reflects the fact that the primary need from National Grid ESO is on the export side i.e. for protection from "loss of load" such as the unplanned outage of a generator at which time the frequency collapses if not mitigated.

The DCL service has evolved in three key phases since launch in October 2020 (as depicted in the charts below). The first of these represented the initial design of the service, procured in 24 hour blocks day ahead with a price cap of c.£17/MWh and flat volume requirement of 1,100MW each day. During this time, the market participants all enjoyed consistent revenues at £17/MWh due to the market being undersaturated.

Phase 2 began in November 2021 when procurement was changed to 4-hourly blocks (EFA blocks) on a day ahead basis. Along with this came varied intraday volume requirements by EFA blocks. This drove greater volatility in DC revenues with volume requirements generally falling in many EFA blocks leaving some periods saturated, even clearing at £0/MWh in some instances where no volume was required. This also brought greater upside with price caps in some periods moving up to £48/MWh. These changes generally resulted in marginally lower average pricing than in Phase 1 but if combined successfully with FFR, it could lead

to an increase in revenues overall as we proved in February 2022 when the portfolio had a new record month.

Phase 3 began in April 2022 when National Grid ESO announced procurement of MWs against a continually changing "buy curve", driven by volume requirements from National Grid ESO's modelling. The result of this was to add volatility of price caps (now changing dependent on volume available) alongside the previously added procurement volume volatility. This period saw National Grid ESO's DCL volume requirements begin to increase as the UK headed towards spring and summer and, with it, higher solar renewable generation. Higher solar generation results in less gas generation which makes frequency prone to dropping more quickly if a power station comes offline unexpectedly, hence requiring more batteries to respond.

The net result of all the above is a much more merchant Frequency Response market. Prices have been able to reach >£100/MWh during this phase, and on occasion have also fallen as low as £0.5/MWh. The increased volatility can be seen by the frequency and magnitude of the spikes occurring from April 2022 in the charts. Through the six months to June 2022, overall National Grid ESO has procured higher volumes in DC than forecast at the start of the year, and this allowed pricing to remain extremely high on most days as the service remained undersaturated for longer despite a growing number of MWs competing for the service.

The Manager analyses "headroom", the difference between maximum volume required versus volume actually procured, as the best indicator for how close to saturation the market is. This data is from National Grid ESO. In June 2022, headroom was 122MW in DCL with EFA 5 highest at 254MW. This has fallen in July 2022 to 72MW on average, with EFA 5 highest at 138MW of headroom.

As more BESS projects commission across the industry, the headroom will continue to shrink until it disappears and the market is oversubscribed the majority of the time. The Fund's own pipeline is likely to cause this market to become oversubscribed in 2022 given the volumes set to commission.

Once the DC market is saturated, contract prices will be influenced by the next best revenue opportunity which is likely to be trading i.e. batteries will step away from offering DC and just trade once pricing falls.

This will support DC prices as supply comes out but alternative revenues from trading will primarily vary with battery duration. Longer duration assets can generate much greater revenues from trading. For example, a half hour battery looking to trade may need to position itself at half its MW-capacity to emulate a 1-hour battery, to overcome potential overheating when operating as a 30 minute battery, limiting its trading revenues materially.

As we get closer to the point of saturation in Frequency Response markets, we will begin to see greater emphasis on trading either through setting of Frequency Response prices or by moving to trading in the wholesale market and Balancing Market (BM) instead. This is why understanding, and being ready for trading, is key to any investment.

Trading/Merchant markets

There have been continuing developments which have contributed to a strengthening trading environment for BESS.

Gas prices reached record levels in December 2021, on the back of high demand, low storage levels and fears around disruptions of Russian gas supplies before Russia invaded Ukraine in February 2022. After the invasion gas prices rose further reaching a record high.

Gas prices have remained high and are having a direct impact on electricity prices and volatility, with the price of gas generation often setting the electricity price - a topic capturing the public's and politicians' attention due to high cost of electricity, as the uncertainty of gas supply across Europe remains.

In the longer term we expect for this to return to more 'normal' levels as higher levels of renewables and alternative supplies bring supply and demand back into balance at lower price levels, but in the short term we may experience more extreme pricing, particularly over the winter during higher demand periods.

This, in part, has led the UK Government to launch the Review of Electricity Market Arrangements (REMA) looking to reduce the cost of electricity to consumers, with further information provided later in this report. The wider political response to the rising gas costs has been to focus efforts on the rollout of renewable energy which supports the case for increased demand for BESS.

However, while BESS is a much cheaper alternative power to fossil fuel generation in providing flexibility to manage intermittency, there is simply insufficient BESS capacity to manage current levels of renewable generation and so to meaningfully reduce our reliance on gas. It is therefore likely that, no matter where gas prices head, volatility from renewable generation will continue.

Availability of Russian gas across Europe has driven concerns over energy security, particularly looking forward to the winter. To make matters worse, France has an increasingly unreliable Nuclear fleet. Given the reliance on Nuclear in France the loss of generation has led to the need to import power from other countries. This resulted in April 2022 being the first month of net export through interconnectors in Great Britain (GB) since 2017. Average interconnector imports in GB were 2.9GW in February 2022 and have since fallen to 2.5GW export in June 2022 effectively creating a c.5GW additional demand requirement to be covered by National Grid ESO.

The combination of high gas prices with increased demand has led to high peak energy prices, whilst high renewable output through the summer has also created negative prices at times, resulting in much greater daily energy price spreads than typically seen during a summer.

The system price chart demonstrates the growing spread between low and high prices with the current spreads in July and August 2022 significantly above previous norms for that time of year and more aligned with the high winter volatility we have seen in the last two winters.

All taken together this presents a favourable trading environment for BESS assets. As system demand increases, and as we head closer to winter, the current market drivers of gas prices and interconnector exports are likely to open up the potential for extreme pricing on particularly high demand days. With prices for Frequency

Response services (ignoring any uplift from trading opportunity) expected to begin falling, trading is likely to become the main area of focus for the portfolio.

International markets

Consistent with the investment methodology used for UK and Ireland assets, the core focus for international investments will be on the evaluation of each market's underlying wholesale market dynamics. We will also be looking for markets with high renewable penetration and/or growth with present or expected wholesale volatility which offers returns in line with stated ranges. Any ancillary services, subsidies or 'locational' opportunities at different locations within any given market will be treated as an additional but short-term benefit, aligning how we think about investments abroad with how we think about them in the UK.

Our team are working hard to evaluate new opportunities overseas and review the available markets to focus on the right areas for investment. There are a number of deals in progress already and we hope to notify shareholders in due course of additional pipeline sites to be added. The scale of opportunity overseas is significantly bigger than the UK market and whilst we remain committed to investment in the UK, and indeed have a considerable pipeline of assets in the UK already, now is the right time to be looking for opportunities to enter international markets, relatively early, in the same way we did in the UK.

Construction update

The Manager has experienced challenges energising new BESS projects, in common with other BESS players. A summary of the most significant issues and their current status is shown below:

High overall demand for renewables and BESS: Impact is ongoing

There continues to be huge demand for new projects as a function of the investment appetite of both institutional investors and major corporations (such as the oil majors who are increasingly involved). In the context of BESS, this is creating tight supply chains for inverters, lithium-ion batteries and other electrical components as well as longer lead times. This means contractors are worried about potential higher prices during construction and are increasing their "risk" margins (essentially charging a higher profit margin to protect against unexpected cost increases). Our key mitigation is scale which ensures we have access to equipment and a stronger negotiating position than our competitors which allows us to manage price increases. We are also increasingly procuring components directly, which reduces the impact of "margins being charged on margins" by contractors.

General inflation and weakening sterling: Impact is ongoing

Higher general inflation and a weak pound is leading to higher labour costs and costs of components sourced abroad. This is also driving higher 'risk' margins from suppliers. Here, our mitigation is to increasingly source works on an EPCm basis to split out costs in controllable and transparent work packages and proactively manage each of these to minimise risks.

Commodity prices: Negative impact turning positive

While we have yet to see significant benefits from this, various commodities and other costs have fallen sharply in recent months. This includes prices for iron-based products, concrete and copper as well as shipping costs. Debottlenecking of ports,

all time high investment in new containers and other shipping and a sharp slowdown in China's housing market are likely to be among the drivers.

Grid connection challenges: Impact is ongoing

The large number of new grid connections is creating challenges for the grid companies which feeds into our portfolio projects. Capacity is now tight and therefore new capacity has to wait for reinforcements elsewhere in the network. This does not affect projects already in construction as the ability of a new project to connect is studied carefully before a grid connection offer is made.

The challenge for projects in construction is more practically linked to a lack of adequately experienced engineers at the Distribution Network Operators (DNOs) and in all likelihood impacting National Grid as well. Mitigation here is challenging: engaging positively with the counterparty on the one hand or making complaints (including to Ofgem) are limited remedies for late construction programmes. Further, regulations do not help much: DNOs and National Grid have next to no liability for delays to connections and have a huge amount of time to turn around grid connection offers (pre-construction) or design submissions (during construction). This, combined with the intrinsically intricate nature of the work, the need for safety and a workforce which has retired many of their best staffers and recruited too few over the COVID-19 lockdowns is leaving the industry in a challenging position. Fortunately, some pragmatism is rising to the surface unlocking some delays.

We are factoring in these delays, which are affecting all participants in the market, into new construction programmes and are hopeful that further significant delays at most projects can be avoided.

Regulatory update

On 18 July 2022 we saw the release of two significant energy market reports, the first being the launch of the government's Review of Electricity Market Arrangements (REMA) and the second being National Grid's Future Energy Scenarios (FES) Report for 2022.

REMA is a major review into the GB electricity market design with the aim to ensure cost benefits to customers in the long term. There are several proposals being considered in the review with the key areas of focus for BESS being:

Wholesale Markets: first, the introduction of Locational Marginal Pricing (LMP) or 'Nodal' pricing; second, the potential decoupling of the cost of electricity from fossil fuels; and third, changes to the design of the Balancing Mechanism

Reforms to the Capacity Market to support low-carbon, flexible technologies which contribute to energy security

Review of Contracts for Difference (CfD) and how to incentivise the deployment of renewable generation

REMA is likely to take several years to be fully completed. The deadline for consultation submissions is 10 October 2022 and we are in communication with the relevant parties to get further clarity and feedback on the proposals including ongoing conversations with National Grid ESO on more specific topics coming from REMA.

Given that the build-out of cheap renewables and batteries is a key target for the UK Government and National Grid ESO, and the acknowledgement for the need to

encourage more low carbon flexibility to cope with this, we anticipate the net impact of changes to be neutral to positive for the BESS industry. The move to Nodal pricing (which will in any case be at least five years) may present opportunities for greater locational volatility and pricing opportunities for well positioned assets and any changes to CM auctions aimed to encourage BESS, should also be positive.

The Future Energy Scenarios (FES) report for 2022 released by National Grid ESO, was released in tandem with the REMA report. FES 2022 aimed to provide a roadmap for decarbonising energy usage in GB. In each scenario there is a heavy reliance on the further rollout of renewable generation. In all scenarios the ESO significantly increased the amount of storage they expect to see and how early it is deployed. BESS is expected to become the largest share of storage capacity in all scenarios by 2050. The ESO forecasts growth in BESS requirements from 1.6GW in 2021 to 20GW in 2030 and 35GW by 2050 under their 'Leading the way' scenario. In addition to this they also note the need for policy, regulatory and market environments to change for storage assets in order to bring forward the levels of energy storage expected to be needed on the system with particular consideration for developing revenue streams and stacking of services to support business cases for storage projects.

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Gill Nott, chair, US Solar Fund – 23 September, 2022

Energy prices rose as a result of the economic recovery from the COVID-19 pandemic; this was followed by the invasion of Ukraine by Russia. The Ukrainian crisis has resulted in severe disruption of Russian oil and gas supplies to Europe causing a dramatic price increase in all forms of energy. The average wholesale electricity price in the UK 2017 to 2019 was £50/MWh and increased over five-fold in late 2021 and early 2022 to the highest levels since the wholesale electricity market was established in 1990. It remained over £150/MWh at half year-end, but is currently £260/MWh as of July 2022. Over the long-term, UK power price forecast curves are showing a substantial decline from current levels despite recent events and have been revised downwards over the last few periods, indicating that the market assumes that the current elevated prices will not persist beyond the next few years.

Meanwhile in the US, abundant natural gas has historically kept energy prices low on an absolute level; this also means the market is less volatile. While recent global events have pushed short-term electricity prices up almost double over the last year, this is off a much lower base than in the UK, and the impact is not as dramatic. Further, during H1 2022, after a few periods of downward revision (though still escalating trends), independent forecasts of US merchant prices were generally revised upwards.

After a record year in 2021, the US Solar Market slowed in early 2022 due to supply chain constraints, high commodity prices and complex trade policy. In Q1, over 2.2GW of solar came online; while this is a significant amount of capacity, it was the lowest first quarter since 2019. Despite the near-term slowdown, the US utility-scale market is expected to add 112GW between 2022 and 2027 as growth is expected to return in 2023. In addition to a strong forecast for recovery, recent political events are expected to provide meaningful tailwind to the industry.

In early June, President Biden removed tariffs on solar panels for at least 24 months. The tariff exemption is an important move as the concern that taxes would be levied after the completion of projects, would have been likely to have a significant softening impact on the industry. The pause allows projects to go ahead for at least two years. Concurrently, the US government is working to bring more solar panel production online in the US, to help mitigate concerns around human rights violations that are connected to some solar panels produced in China.

The growth of the US market received another boost in early August. After a year of negotiations and stalled efforts, landmark climate legislation was passed through Congress and signed by President Biden as part of the Inflation Reduction Act. The measures could result in reducing annual emissions by as much as 44 percent by the end of this decade. The key initiative in achieving this huge shift is replacing existing fossil fuel generation with new, cheaper clean energy to increase its share of energy production in the US. The measures include lifting (to 30%) and extending (through the end of 2024) the Investment Tax Credit and adds a production tax credit which starts in 2022 at \$0.026 /kWh and rises with inflation. After 2024, tax credits become emissions-based, technology-neutral tax credits available to any facility with zero or net-negative carbon emissions and the facilities can choose either a production tax credit or an investment tax credit. Standalone battery storage is now also eligible for the Investment Tax Credit.

The focus on Environmental, Social and Governance (ESG) investments continues - both with significant demand and with increased scrutiny. Large financial institutions have come under criticism for greenwashing, and we expect that this will continue. The ESG and Sustainable investing space is still relatively young, and as the market matures, scrutiny will help improve standards and integrity.

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Richard Hulf, Dr JJ Traynor, managers, HydrogenOne Capital Growth – 20 September, 2022

Policy makers and industry are converging on clean hydrogen as a core technology to deliver net zero, improved air quality and enhanced energy security.

The Paris Agreement in 2015 has led at least 39 countries to set out hydrogen policies and US\$70 billion of funding as part of net zero targets to deliver the energy transition.

According to the World Health Organisation ("WHO"), some 4.2 million deaths per year are caused by poor ambient air quality, and 91% of the world's population live in places exceeding the WHO's air quality guidelines. Much of this pollution is a result of emissions from internal combustion engines and fossil fuel power plants.

The 2022 Russian invasion of Ukraine has compelled decision makers across the world to focus on the importance of sustained investment and policy support for domestic energy production and, crucially, less reliance on energy imports from overseas. This new drive is further amplifying the demand pull for clean hydrogen from energy transition and air quality needs. As a result, governments and industries have responded with new initiatives in 2022 to deliver affordable, secure, and sustainable low-carbon energy, with clean hydrogen set to play a vital role.

Many countries are now focusing on developing energy supplies that are not reliant on imports from Russia, and at the same time an acceleration of the transition to low carbon energy, from renewable power and clean hydrogen.

Alongside this, 2022 has seen a significant increase in fossil fuels prices, with Brent oil prices for example increasing from a range of US\$60-\$80 per barrel to a range of US\$100-120 per barrel. This change, combined with substantial increases in regional natural gas prices, has improved the relative economics of clean hydrogen compared to grey hydrogen, which is currently the lowest cost and most polluting form of hydrogen supply. Whereas the cost of fossil fuel feedstocks used to make grey hydrogen has increased, the cost outlook for clean hydrogen continues to improve, with larger scale and more efficient electrolyzers coming to the market.

In 2022, the EU reshaped its energy policy to the REPowerEU 2030 plan, which calls for over 300GW of clean hydrogen by 2030, compared to 80GW in previous plans. Some EUR5.4 billion in hydrogen subsidies have recently been approved under Important Projects of Common European Interest ("IPCEI"), which are expected to unlock a further EUR8.8 billion of private investment. The Hy2Tech scheme, also announced in 2022, links 41 projects and 35 companies building out the hydrogen sector, and has qualified for IPCEI funding.

In the United States, the Department of Energy has announced a US\$8 billion programme to develop clean regional hydrogen hubs across the country, as part of net zero ambitions by 2050. The 2022 Inflation Reduction Act set aside US\$369 billion for climate and energy proposals. Within this Act, there is a tax credit for clean hydrogen of US\$0.6-\$3/kg, depending on life cycle emissions. This is expected to make green hydrogen cost competitive with grey hydrogen, and make US clean hydrogen amongst the lowest cost in the world.

In the UK, 2030 clean hydrogen targets have been doubled this year to 10GW. The UK Government has recently announced a national clean hydrogen subsidy scheme called Hydrogen Business Model ("HBM"), which will use a contracts-for-difference style set-up to help fund an initial 1GW of clean hydrogen projects in 2023, as part of the target to reach 10GW of low-carbon hydrogen by 2030, in a potentially £9 billion sector. This is in addition to the Net Zero Hydrogen Fund ("NZHF") with up to £240 million of grant funding to support the upfront costs of developing and building low carbon hydrogen production projects.

In Denmark, a Hydrogen and Power-to-X strategy was announced in March 2022, calling for 4-6GW of installed hydrogen electrolysis by 2030, using wind and solar power, putting DKK 1.25 billion of subsidy funding in place, and the policy and regulatory frameworks that are required for this.

As a further example, in 2019 the Netherlands set targets for 3-4GW of electrolysis by 2030 with multi-billion-euro funding support announced by the Netherlands government. The government is providing EUR750 million of funding support for a 'hydrogen backbone', retrofitting existing natural gas pipelines to transport hydrogen between five industrial clusters in the Netherlands, and at cross-border connection points.

Burning fossil fuels for energy releases green-house gas and poisonous particulates. More than 20 countries have announced sales bans on internal combustion engine vehicles before 2035, and over 25 cities have pledged to buy only zero-emission buses from 2025 onwards. This is driven by net zero agendas,

plus the imperative to reduce poisonous emissions from diesel in urban environments.

Access to clean hydrogen is a priority for refiners and steel and ammonia producers as they address GHG emissions. These heavy industries are under tremendous pressure to reduce or eliminate grey hydrogen from processes, to reduce the GHG emissions that result from this.

Most of today's demand for clean hydrogen is a clean-up of grey hydrogen. In the future, clean hydrogen can displace fossil fuels in hard to decarbonise sectors, either by burning it in power plants to replace natural gas, coal, and oil, or by converting it to electricity through hydrogen fuel cells.

Water vapour is the only by-product of using hydrogen as a fuel. Hydrogen can store and transport intermittent renewable power at a grid scale. As wind and solar become a large percentage of electricity supply over time, the electric grid will need large scale electricity storage to offset periods of low wind and low light. By converting electricity to hydrogen, the energy can be stored over long periods of time either in pipelines and tanks, or in underground salt caverns.

The hydrogen sector has US\$1 trillion market potential by 2040. A 200x increase in clean hydrogen supply is anticipated from 2019 to 2030, in order to achieve net zero, as the scale-up of renewable power alongside the phase-out of fossil fuels, improves the economics of established hydrogen technologies. Clean hydrogen could be 20% of the energy mix by 2050.

Today, we see some 50+ clean hydrogen projects on stream around the world with a total capacity of c. 330MW, along with in excess of 110 further projects under construction, totaling at least 7GW. In addition, we note that there are some 10GW of offshore hydrogen projects in design, in tandem with rapid growth in offshore wind.

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Patrick O'D Bourke, chair, Ecofin US Renewables – 15 September, 2022

The U.S. renewable energy sector continues to offer strong prospects for ongoing investment and growth, even while facing near-term challenges of supply chain constraints, inflation, and potential trade policy risks on certain imported solar components. In the first half of 2022, the American Clean Power ("ACP") association reported that 9.8 GW of wind, utility-scale solar and battery storage capacity had been installed in the U.S., representing more than \$10.0 billion in capital investment. Looking to the near future, the ACP reports that the U.S. renewable energy pipeline totalled 128.9 GW as of 30 June 2022, providing a robust opportunity set for future investment. The passage of the Inflation Reduction Act ("IRA") in August represents an unprecedented long term policy boost for U.S. renewable energy with approximately \$369 billion allocated towards climate infrastructure and energy security. The IRA includes provisions for extending tax credits for solar and wind through 2035 and introduces a new tax credit for standalone battery storage.

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Manager, Ecofin US Renewables – 15 September, 2022

During the first half of 2022, the U.S. renewable energy market continued to grow despite several challenges most notably including trade policy, supply chain issues, and inflation. U.S. renewable energy, comprising wind, solar, and battery storage, had installations of 9.8 GW in the first half of this year, which is estimated to represent over \$10 billion of capital investments. With these additions, there is now 211.1 GW of operating U.S. renewable energy assets covering all 50 states, enough to power 58 million American homes.

The U.S. renewable energy pipeline of projects in construction and advanced development totals a further 128.9 GW (as of 30 June 2022), which represents year-to-date growth of approximately 4% compared to 12% in 2021 and represents a \$360 billion growth opportunity over the next decade. International trade policy and supply chain constraints have dampened the near-term growth prospects of U.S. renewable energy with more than 32 GW of capacity delayed from achieving commercial operations. While these near-term challenges persist, the underlying resiliency of the U.S. renewable energy industry continues to be driven by strong corporate demand with 14.8 GW of new PPAs from corporates and utilities announced in the first half of 2022.

In a historic development, Senators Chuck Schumer and Joe Manchin reached agreement in July 2022 on a \$430 billion bill covering climate, healthcare, and taxes called the Inflation Reduction Act ("IRA"). With \$369 billion allocated towards climate infrastructure and energy security it represents the largest ever government investment in U.S. renewable energy. The IRA passed the U.S. Senate in August and it was approved by Congress and signed by President Biden on 16 August 2022. The IRA provides an unprecedented level of long-term policy certainty to directly benefit the growth of the U.S. renewable energy industry. Notably, it extends the term for claiming investment tax credits ("ITC") and production tax credits ("PTC") for solar, wind and certain other renewable energy projects for facilities that begin construction before 1 January 2035. It also qualifies interconnection costs for projects less than 5 MWac as ITC-eligible, even if the interconnection facilities are owned by the utility, so long as they were paid for by the taxpayer. The tax credits are designed to stimulate growth of U.S. manufacturing and related industries through increased credit values for projects using domestic content and paying prevailing wages.

The IRA offers a new tax credit for standalone battery storage. Additionally, the IRA provides various tax credits for new and used electric vehicles ("EVs") which are expected to stimulate demand for EVs and their supportive infrastructure, and lead to a resulting increase in electricity demand. As a result of the IRA, we believe that the growth of the U.S. renewable energy industry is going to continue for many years to come and this will provide a robust set of opportunities for RNEW on a long-term basis.

Solar

The U.S. solar industry had more than 5.5 GW of installations during the first half of 2022. Utility scale solar installations in the second quarter of 2022 totalled 1.6 GW, which was down materially from prior periods principally due to the uncertainty caused by the U.S. Commerce Department's initiation in late March 2022 of an antidumping and countervailing duty investigation relating to solar cells and

modules imported from Vietnam, Cambodia, Thailand and Malaysia. These four countries combined account for approximately 80% of U.S. imported solar modules. On 6 July 2022, the Biden administration initiated an executive action that directs the Commerce Secretary to implement regulations that would preclude imposing any new tariffs on imported solar cells and modules from those four countries for 24 months. If the Commerce Department determines that tariffs on imported solar products from those four countries are warranted, no duties will be due over the 24 month period covered in the executive action. While a legal challenge cannot be ruled out, President Biden's executive action is widely being viewed as providing a safe harbour to U.S. solar installers and developers to procure modules from a reliable source and resume sustained industry growth.

Another trade policy development impacting the U.S. solar industry is the Uyghur Forced Labor Prevention Act ("UFLPA"), which took effect on 21 June 2022. The UFLPA requires the U.S. government to rapidly develop a new enforcement strategy to strengthen the prohibition of imported goods made through forced labour into the U.S. Specifically, it creates a rebuttable presumption that any goods mined, produced, or manufactured wholly or in part in the Xinjiang Uyghur Autonomous Region (XUAR) of China, are produced with forced labour and therefore prohibited from importation. Importers and U.S. solar industry participants will be adapting their procurement practices to mitigate risks associated with the UFLPA.

Looking ahead, the U.S. solar pipeline remains robust with 22.8 GW under construction and 50.9 GW in advanced development as of 30 June 2022. Ecofin observes that the vast majority of solar projects stalled by the Commerce Department investigation will take several months to resume as contracts are renegotiated and construction crews are mobilised. These delays can be expected to have a dampening effect on asset level acquisitions of construction ready projects through at least the third quarter of 2022. Notwithstanding the policy and supply chain related impacts on the first half of 2022 U.S. solar industry investment activity, we believe the underlying growth potential of addressable U.S. solar projects for RNEW to invest remains substantial for years to come.

Wind

U.S. wind represents the largest source of operating U.S. renewable energy generating capacity totalling 139.2 GW as of 30 June 2022. In the first half of 2022, 3.5 GW of wind power was installed. Year to date installations declined relative to 2021 due to the expiration of the PTC and supply chain related delays. Despite the decline in installations, the outlook for U.S. wind power remains bright with 23.2 GW of onshore wind and 17.5 GW of offshore wind in either construction or advanced development.

Texas, where RNEW's Whirlwind project is located, continues to see growing demand for electricity driven by its business-friendly environment attracting people and businesses to relocate from other states. Texas also hosts the most wind capacity in development, with 3,478 MW in advanced development and 3,655 MW under construction. Texas had the largest amount of land-based wind capacity enter the pipeline in Q2 at 531 MW. Wyoming has the second most land-based wind capacity in the pipeline at 3,000 MW, followed by Illinois (2,247 MW), and New York (1,538 MW). Additionally, power prices in Texas are heavily influenced by the cost of natural gas given that natural gas power plants comprise 44% of power generating capacity. Since January 2020, prices of natural gas have more than

quadrupled, rising from \$2.12 per million British thermal units (MMBtu) to \$8.70 per MMBtu as of 1 June 2022. Not only are the market fundamentals contributing to rising prices, climate change is contributing to record summer heat which triggered the Texas power market regulator in July 2022 to issue a request for consumers to conserve energy amid record energy demand.

In summary, we see a vastly improving growth outlook for the U.S. renewable energy industry driven by the passage of the IRA and broad based energy consumer demand for renewable energy.

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Hugh W M Little, chair, Downing Renewables & Infrastructure Trust - 14 September, 2022

The first half of 2022 has been dominated by the ongoing conflict in Ukraine and rising inflation. The Ukraine crisis has forced governments, companies, and citizens across the world to take a hard look at how energy is sourced and utilised. Over recent years renewables have been a key growth sector for investment companies, however, since the crisis began there have been accelerated commitments to renewables and Governments have now realised that the energy transition is not only important for the planet, but also for energy security.

As we emerged from COVID lockdowns, supply chain bottlenecks and higher energy prices as a result of the ongoing conflict in Ukraine have contributed to rising inflation in many markets. This has a modest impact on operating costs for the renewable energy sector which generally has relatively low operating costs and high EBITDA margins. The impact has been considerable on revenues however, particularly in the UK. These installations benefit from long term subsidies which are directly linked to RPI and have experienced significant NAV increases as a result.

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Alexander Ohlsson, chairman, Foresight Solar Fund – 14 September, 2022

As this report is published, the energy industry is digesting initial policy announcements from the new UK Government on how it intends to reduce surging energy costs for consumers and businesses.

The Company remains optimistic that the new administration will adopt a practical and progressive approach to existing commitments and towards encouraging the necessary investment in clean energy production that will ultimately reduce wholesale energy prices and improve energy security.

As the UK and the EU seek to lessen the impact of soaring gas prices on energy bills, expectations are for wholesale power prices to remain high in the short to medium term, compared to pre-pandemic levels, due to high commodity prices. This is evident in the forward rates observed by the Investment Manager out to the second half of 2027. Improving domestic energy security and reducing reliance on volatile gas prices can be achieved through the deployment at scale of clean energy generation in conjunction with flexible storage capacity. Solar power has an integral part to play in a well-balanced future energy mix. Solar PV generation enjoys the lowest levelised cost of grid scale energy production, it can be deployed quickly, and it is the perfect complement to wind power, especially as wind resource is often

low in the summer months when solar is at peak production. Coupling solar with battery storage also helps to balance the inherently intermittent nature of production.

In the UK, large-scale ground-mounted solar is poised to be deployed rapidly and at scale. A pipeline of over 40GW of new solar sites are currently in development, according to the UK solar industry. Current forecasts are that around 1GW of ground-mounted solar could be added in 2023, with 1-2GW per annum added thereafter for 2024 and 2025.

For utility scale battery storage, a pipeline of more than 20GW (over 800 projects) is on the near-term horizon. The Investment Manager notes that there is robust demand from investors to fund the construction of these low carbon technologies, even on a subsidy-free basis. The Company therefore believes it is logical for the UK Government to create an environment that is supportive of the development of low-cost domestic renewable generation and the balancing of resource. This provides a clear path to energy security and reduces the UK's reliance on uncontrollable and unpredictable international gas prices.

Climate change commitments will return to the spotlight in November as COP27 takes place in Egypt. Alongside the pledges to combat global warming, governments across Europe are also rapidly seeking to distance themselves from a reliance on Russian oil and gas following the invasion of Ukraine. Whilst large-scale solar is already an integral part of the energy transition away from fossil fuels, it is reasonable to assume that it will also benefit from a drive to improve the security of energy supply. The Company continues to view Spain as a highly attractive market given clarity around the auction process and the Spanish Government's stated target of delivering an 60GW of renewable capacity by 2030.

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Manager, Foresight Solar Fund – 14 September, 2022

United Kingdom

At the time of writing, the energy industry is awaiting further details on the initial policy announcements put forward by the new Government regarding how it intends to intervene in energy markets to reduce spiralling energy costs for consumers and businesses.

The Company's immediate focus is on any subsequent implications for the renewable generation sector, which may be both near term and involve a future wider reform of the electricity markets. An expansion of the "windfall tax" on oil and gas companies has been firmly ruled out by the new Prime Minister. Such an approach would have proved challenging as most generators typically forward sell power production up to several years in advance, making it difficult to unpick where the benefits of higher power prices were received.

The new administration's favoured approach to the renewable energy market, now announced, is to encourage generators to move onto long-term fixed-price scheme contracts that are significantly lower than current prices, which appears to be based on the successful Contracts for Difference ("CfD") system. The intention would be for those generators on legacy Renewable Obligation ("RO") projects to voluntarily forgo the right to sell capacity at wholesale prices in return for lower fixed rate prices for up to 15 years. Whilst further details are required, this may present a progressive

option allowing renewable generators to 'trade-in' the right to sell at high near-term power on the wholesale market in return for a long-term stable income stream.

The new Government must also balance moves to rein in high energy prices, and other potential market reforms, whilst creating an environment that encourages the significant investment required to build out clean and flexible energy provision to meet its legally binding target of "net-zero" carbon emissions by 2050. A prolonged period of regulatory uncertainty is not conducive to encouraging the investment in renewable energy required to ultimately improve domestic energy security and produce significant volumes of electricity at a low marginal cost.

Under supportive conditions, capital is readily available for investment in the significant development pipelines of large ground-mounted solar projects and flexible generation, poised to deploy rapidly and at scale in the UK. The Investment Manager observes robust demand from specialised energy investors to fund subsidy-free assets. However, a well-considered regulatory support mechanism will provide confidence for more generalist institutional investors to also allocate capital to the sector and support the construction volumes required.

Regarding the CfD scheme, it was positive to see the results of the fourth-round allocation of the programme in July 2022 that awarded approximately 10GW of capacity across offshore wind, onshore wind and solar PV. Solar PV accounted for 2,209MW of future allocation at a strike price equivalent to around £55/MWh in 2021 prices. The fact that the CfD price is significantly below levels at which UK wholesale energy prices are expected to remain over the medium term demonstrates that renewable energy investors are willing to pass up significant value upside during times of high prices, to benefit from greater revenue certainty over a longer period.

Australia

The Australian market experienced unprecedented volatility in power prices during the first half of the year, which contributed to higher than budgeted revenues for the projects. The other key development during the period was the suspension of the National Electricity Market ("NEM") by the Australian Energy Market Operator ("AEMO") between 15 and 22 June due to rolling seven-day spot prices breaching the regulatory cumulative price threshold of A\$1.36 million. At the same time, however, Australia has continued to experience high volatility in its power prices, which have been skewed to the upside.

In May 2022 Australia elected its first Labor Government in almost a decade with the new Prime Minister, Anthony Albanese, promising to transform Australia into a "renewable energy superpower". The new Labor Government has so far not proposed a replacement for the Large-scale Renewable Energy Target ("LRET"), although it has endorsed a domestic emissions reduction target of 43% by 2030, which is higher than the 26-28% target set by the previous Coalition Government. The new Government has also been supportive of the local carbon offset market, reflected in the return of positive sentiment to the Carbon Credits (ACCU) spot markets. In response to the election outcome, the carbon credit spot price grew 18% in late May, closing at A\$35.50/t. ACCU prices ranged from A\$16-A\$18 in the period 2019-2021.

At state level, the New South Wales Government is in the development phase of the state's first Renewable Energy Zone ("REZ") in the Central-West Orana region. The REZ promises 10GW of renewables by 2030 and 1GW of pumped hydroelectric

power by 2036 that is expected to encourage up to A\$5 billion in private investment in the region.

The upgrade of the Queensland-New South Wales interconnector was successfully completed in April, allowing the transmission line to recommence full service. This has reduced the oversupply of production in the Queensland market that had been causing prices to fall in the prior period. Alongside this, the Callide coal power station has been out of service since the first quarter of 2021 and is scheduled to remain out of service until the first quarter of 2023. These two factors exacerbated the supply-demand imbalance in Queensland and New South Wales, resulting in upward price pressure during the period.

Spain

In June 2022, the Governments of Spain and Portugal received European Commission approval to introduce a temporary measure to cap the price of gas used to generate electricity. Both Governments predict that the measure, due to be in effect until 31 May 2023, will on average lead to a 20% reduction in household energy prices. In addition, the suspension of the 7% tax on power generation has been extended until the year end.

The Spanish Government has recently proposed a new bill that would implement an extraordinary new sales tax of 1.2% on domestic sales energy firms. This is not expected to impact the Company's Spanish portfolio as it is currently only expected to apply to companies with an annual turnover above €1 billion.

The Spanish Government has also announced details of the next "pay-as-you-bid" renewable energy auction for a total capacity of 520MW due to take place on 25 October 2022. This auction will have a specific focus on biomass, concentrated solar-thermal power ("CSP") and distributed solar PV. The Government also published the criteria for the upcoming "capacity auctions" that will award grid capacity for the development of new renewable energy projects. Whilst the authorities have tightened the criteria for submissions into the auctions, this is expected to favour projects that are better advanced in their stage of development in order to deliver on Spain's ambitious renewable energy deployment targets.

In terms of market activity, appetite for renewable energy projects remains high and multiple acquisitions and financings have been announced during the period.

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Tony Coveney, manager, Thomas Lloyd Energy Impact – 7 September, 2022

Electricity demand in the Philippines has continued to increase throughout 2022 across the residential, commercial, and utility sectors. We continue to expect the renewable energy segment to witness significant growth during the next five years as significant opportunities will be provided by the Philippines' National Renewable Energy Program 2020-2040, which has set a target to achieve a 35% share of renewable energy in the renewable energy generation mix by 2030 and 50% by 2040. The Philippine renewable energy market is expected to register a compound annual growth rate of more than 8.5% in the next five years and we have existing deep existing relationships in the Philippines which will allow us to continue our investment into the country.

Prior to the change in Government in the Philippines in June 2022, the first green energy auction was held. Prices were capped at a rate significantly below the wholesale electricity market price, which minimised industry participation. Following the change of government, Raphael Lotilla, who had previously served as Energy Secretary between 2012 to 2015, was appointed as the new Department of Energy Secretary. Lotilla has been an active supporter of renewable energy providers and has been vocal in his stance against subsidies and price adjustments.

In addition to solar investment in the Philippines, and more specifically the island of Negros, biomass technology is another important provider of local energy resources and remains an important tool as it both contributes to the fight for climate change and the establishment of energy security.

In India, the Government continues to target growth of the renewable energy sector in order to meet their imminent targets of clean renewable generating capability for 2030. The federal and state governments are committed to increasing the ease of land acquisition and other legal permits and are encouraging a significant amount of domestic and international investment flowing into the industry.

Vietnam has one of the fastest growing populations and GDP outlooks in Asia. There are a number of pipeline opportunities of both operational as well as in-construction and construction-ready assets, all of which would benefit from an offtake agreement with the state-owned utility, Electricity of Vietnam. We remain bullish about the outlook for the renewables sector, which is expected to grow by 8% annually for the next five years. With no foreign ownership restrictions, this is one of our most immediate and exciting target markets.

Bangladesh, Indonesia and Sri Lanka remain important focal points of our investment strategy although there will be a longer lead time as they are either less developed or there is political and economic uncertainty at this point. We will continue to monitor and assess developments and opportunities in these countries as they arise.

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Royalties

(compare royalties funds [here](#))

Trevor Bowen, chairman, Round Hill Music – 26 September, 2022

In January 2018, the Copyright Royalty Board (“CRB”) published its decision on the mechanical royalty rates (Phono Mechanical III) that were to be applied in the USA across digital downloads and interactive streams.

Four Digital Service Providers (“DSPs”), excluding Apple, filed an appeal to the US Court of Appeals which led to the above rate structure having to be reopened and reviewed again by the CRB. On 1 July 2022, the CRB reaffirmed its decision to increase the headline rate paid to songwriters in the United States from on-demand streaming services. The rate increase from 10.5% to 15.1% (in incremental, annualised steps) for the five-year period from 2018 to 2022 is the largest rate increase in the history of the CRB. Over the past five years, revenues owed to

copyright owners have been paid at the CRB's Phono Mechanical II rate of 10.5%. A backdated payment in royalties is going to be due from the DSPs and the CRB has established a timeframe of 6 months (i.e., by 31 December 2022) for the payment to be made and related royalty statements to be provided. The DSPs have challenged the 6 months' time frame and have requested an extension. At the time of writing, there is no decision on this request, but the conclusion of backdated royalty payments is positive news for all music rights owners.

Conversations and negotiations regarding Phono Mechanical IV covering the five-year period from 1 January 2023 to 31 December 2027 have been running in parallel with the recent appeal. On 31 August 2022, an announcement was made by the North American Music Publishers' Association ("NMPA"), the National Songwriters' Association of Nashville ("NSAI") and the Digital Media Association ("DiMA") that they have collectively reached a settlement for certain mechanical streaming rates in the United States for Phono Mechanical IV. The agreement will provide higher royalty rates for songwriters and music publishers, and promote sustainability, innovation and continued investment for the entire industry. The headline royalty rate will be set at 15.35%, which will be phased in over the 5-year term.

Looking into the second half of 2022 and beyond, royalty collecting societies and music publishers are expecting to see a positive upswing in royalty collections and distributions as the world continues to reopen post Covid lockdowns. Despite setbacks due to the pandemic in 2021 causing a slower recovery than initially expected, concert goers are eager to attend live shows. The recovery of live music following the pandemic hiatus has been quicker than anticipated and fans are demonstrating a strong demand to attend concerts once again. In their June 2022 publication of "Music in the Air", Goldman Sachs points to improving ticket sales, higher pricing, and a growing sponsorship pipeline as indicators that live music is making a strong comeback. The analysts expect this strong rebound to continue through to the end of the year, with 2022 revenues reaching 94% of pre-pandemic 2019 levels (up from their previous estimate of 90%). It is anticipated that this recovery of concert revenue will be reflected in performance income, although it could take a further 12 months for this type of income to flow through to the Group.

In addition to the resurgence of revenue-generating concerts and tours, analysts remain positive regarding the opportunities for music streaming growth. In their same publication, Goldman Sachs' analysts raised their global music industry revenue forecast for 2022 and 2023 by 7% and 5% respectively, to reflect a more positive view on pricing and revenue from emerging platforms. This forecasted growth potential from new platforms is expected to more than offset the near-term impact of increased inflation and a weaker macro environment. It is also expected that global consumer spend on music will remain resilient despite recent market volatility. Forecasted CAGR of 2021-2030E streaming revenue increased to 12%, up from 11%. With Goldman Sachs forecasting global paid streaming penetration (as a percentage of smartphone users) to rise to 20% in 2030 from 11% in 2021, the market for streaming services is expected to grow simultaneously.

In July 2022, the United States Consumer Confidence Board reported that the Consumer Confidence Index fell in July for the third consecutive month as consumers struggle with the impact of rising inflation. Interest rates remain elevated

with the possibility of further Federal Reserve rate increases in an effort to curb inflation.

As Covid restrictions ease across the world, live music returns, and music streaming revenue continues to grow, we remain confident in the outlook for the music industry as a whole.

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Josh Gruss, manager, Round Hill Music – 26 September, 2022

2022 has proven to be a challenging year so far due to even more instability throughout the world. Despite worsening economic conditions due to inflation and supply chain issues, music industry forecasts still anticipate growth.

While both the Board and the Investment Manager have noted concerns about the rising cost of living causing many to review their expenditures, the Investment Manager has not noted much change in pure music streaming subscriptions. Industry forecasters like Goldman Sachs have noted that music is one of the least monetised forms of entertainment, that paid streaming penetration still has growth potential in developed and emerging markets, and that recorded music spend as a percentage of total entertainment spend continues to be over 40% below peak levels in 1998. Compared to Subscription Video on Demand or SVOD subscription services, music streaming services appear to be in a stronger position to weather a weak macro environment.

Recorded Music

The International Federation of the Phonographic Industry (“IFPI”) noted in its 2022 Global Music Report, published in March 2022, that 2021 was a record year of growth for the global recorded music market, up by 18.5% year-over-year to US\$25.9 billion. This exceeded Goldman Sachs’ prior expectations of 11%. This growth has resulted in Goldman Sachs forecasting global recorded music revenues to double by 2030. BPI notes in a report from July on British music exports that, in the UK alone, recorded music exports rose to £590.8 million in 2021, a nearly 14% increase year-over-year and the highest total recorded. In the US, Luminate reported in its 2022 Mid-Year reports that total album consumption (album sales/song sales / streaming) grew 9.3% in the first half of 2022. Emerging markets are showing exponential growth as well: IFPI reported that, in the Middle East and Africa, their recorded music market revenue grew by 35% in 2021, and was one of the fastest growing regions in the world.

Streaming Continues to Dominate the Market

Streaming continues to dominate the global music market, growing at a great pace in penetration as well as revenue generation. According to Luminate’s Mid-Year period report published in July 2022, global on-demand streaming for audio and video increased by 24.7% and 28.1% year-over-year, respectively. In the US alone, Luminate reported that, in the first half of 2022, on-demand audio and video streaming grew around 12% compared to the first half of 2021.

Outside the US, BPI notes in its All About The Music 2022 report, a large growth in consumption of British music outside the US, driven by a record number of UK artists reaching over 100 million global streams in 2021. These British exports are reaching

non-US markets which are witnessing double-digit growth, notably China with over 61% year-over-year increase.

This continued growth in streaming is expected to continue, although the growth rate is expected to decline to a steadier rate. In its June 2022 report, Goldman Sachs' forecast for the global streaming market is gross revenues in 2023 of just under US\$43 billion, or about 45% of their forecasted global music market gross revenues of US\$94.9 billion.

Catalogue

Catalogue music as defined by Luminate (i.e., music that is older than 18 months) continues to grow at a significant pace, with Luminate (in their Mid-Year report published in July 2022) confirming catalogue music streaming growing 19% year-over-year through the first half of 2022. Their latest report also provides an insight into how catalogue music streaming by decade is occurring: nearly one third of all 2022 catalogue music on-demand audio streaming comes from the most recent three years of releases (i.e., 2017 to 2019). While the top two buckets Luminate noted were the years 2018 and 2019 respectively as expected, the third highest bucket is music from the 1990s, taking up around 10% of 2022 catalogue music streaming. Overall, catalogue music total album consumption in the US has grown 14% year-over-year to US\$344.1 million.

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Property

(compare UK property funds [here](#))

Jason Baggaley, manager of abrdn Property Income Trust:

2022 will likely be categorised as a year of change as the strong performance in the first half of the year is unwound. Real estate has benefited from low gilt yields in recent years, with an attractive yield margin attracting investors. With the rapid rise in gilt yields the attractive income margin that real estate offered has been eroded, and it is reasonable to expect a repricing in real estate as yields move out to re-establish an acceptable margin over the risk free rate.

Pricing in the lower yielding areas of the market, including the industrial and logistics sector, is expected to move first but, as the relative pricing between prime and secondary assets tightens, greater capital value declines are to be expected in the secondary end of the market. As a result, investors are anticipated to take a more risk off approach towards UK real estate in the second half of this year and polarisation of investor focus will deepen as investors target best in class assets which should provide more resilient returns in a weakening environment.

ESG considerations are expected to become even more integral to investor decision making and asset underwriting. This trend was expedited as a result of the Covid-19 pandemic, but with the current energy crisis and pathway to net-zero, the case for integrating ESG considerations across all UK real estate sectors has never been greater. A greater focus on ESG requirements for both acquisitions and

developments is expected to gain further momentum. Initially this will lead to greater pricing impact on secondary offices.

Overall, we expect volumes to decline in the second half of 2022 and in 2023, before stabilising in 2024. The recovery in pricing will come as inflation, then interest rates fall and the yield on real estate again looks attractive.

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Ken McCullagh, chairman of UK Commercial Property REIT:

The underlying pace of the UK economy is clearly slowing whilst inflation is running at multi-year highs. Despite the government's announcement that energy prices will be frozen to help UK households and businesses, short-term inflation is still set to rise above 10% in October. The government's huge fiscal stimulus was always going to cause interest rates to rise further, but the large market moves since the government's economic agenda was announced suggest even higher rates will be necessary to restore confidence in UK assets. We are sceptical on what is currently priced by markets, but a period of high and sustained rates is likely increasing our conviction that the economy will soon be in a recession.

For UK real estate, the environment of rising rates has resulted in a repricing of debt and other asset classes, which has been a catalyst for a change in sentiment towards UK real estate more generally, with prices having started to adjust. Weaker returns are expected for UK real estate over the next 12-18 months, led by the lower yielding industrial and logistics sector although almost all sectors are expected to follow suit. On a positive note the occupational market for the industrial sector remains well balanced, with healthy levels of take-up and a national vacancy at a low 3%. Despite increased development for this sector, build cost inflation and development delays are expected to act as a natural cap on future supply.

Meanwhile, the office market is becoming increasingly polarised between truly best in class space and the rest. ESG is playing an increasingly critical role in this regard, as are changing tenant requirements due to hybrid working arrangements, necessitating greater flexibility of space. With the cost of living crisis likely to weigh on consumer spending, the retail sector is more exposed, but this will be felt most acutely for discretionary led retailers, with high street shops and shopping centres more vulnerable.

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Richard Kirby, manager of Balanced Commercial Property Trust:

The economic context is increasingly challenging as geopolitical tension, continued supply chain disruption and significant inflationary pressures weigh on the UK economy and its consumers. Interest rate increases and the outlook for further increases is impacting the cost of finance and many debt backed purchasers have stepped back from the market. This is having an impact on asset pricing in the sectors where these purchases were motivated and active over the first half of the year. The second half of the year will naturally see investors exercising caution.

While economic pressures may yet precipitate a UK recession, a lower-growth environment is inevitable. The likelihood is that investment yields will see a softening, rather than slowdown in the occupational markets, although rental levels

are likely to remain benign. The coming months will be focused on price discovery amid a pause in investment activity.

Through periods of uncertainty investors will look to drive income. However, the rising cost of capital and increasing gilt yields mean that yields in some sectors of the market are increasingly hard to justify at their current levels. Industrial - where yields reached historic lows over the period - has already been subject to a marginal adjustment with more expected to follow. The wider market will likely come under the same pressures, albeit relative yield premiums in the other sectors will offer some protection.

In challenging market conditions, asset fundamentals come to the fore. The Company's conviction to high quality real estate in enduring prime locations positions the portfolio to perform through the market cycles as robust capital values alongside a yield premium will protect long-term returns. Alongside asset management to extract value from the standing portfolio, there is significant opportunity to further boost returns through the delivery of capital expenditure initiatives.

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Stuart Young, manager of Phoenix Spree Deutschland:

During recent months there has been a significant change in investor and consumer confidence in reaction to inflationary pressures, consequential interest rate rises, expectations for future global central bank monetary policy and economic growth. This has further been impacted by the ongoing conflict in Ukraine. Although PSD's share price has significantly outperformed its listed German residential peers during the first half of the financial year, these circumstances have created a degree of uncertainty across global equity markets from which PSD has not been immune.

Whilst rental values should continue to be supported by industry fundamentals, there has been a material deterioration in buyer sentiment since the beginning of the year. For PSD, this has been evident in condominium sales and, to the extent that the key drivers of weaker buyer sentiment (higher mortgage rates, and a higher cost of living) are unlikely to reverse during the second half of the year, it is anticipated that condominium sales for the full year 2022 will be materially lower than 2021.

Whilst there is now evidence of yields rising in certain segments of the German residential market, supply-demand imbalances within the Berlin PRS market should continue to support rental values. An increase in the cost of home ownership is likely to place further pressure on the significant shortage of housing that already exists in Berlin, as potential buyers remain within the rental system for longer. This shortage has been further exacerbated by the migration of almost one million refugees into Germany from Ukraine.

Additionally, higher funding, labour and construction costs present significant headwinds to large-scale new-build construction, a trend which is likely to further limit the future supply of rental accommodation. Future rent growth should therefore continue to be underpinned, and there remains significant future reversionary rental potential across PSD's portfolio of buildings.

The Company recognises the challenges that its customers are facing as a direct consequence of inflation. Notwithstanding current cost-of-living pressures, year-to-

date rent collection levels have remained stable. The Company has always managed rent-to-income multiples for new tenants conservatively and this customer demographic, combined with recent Federal support initiatives to help mitigate the financial impact of rising fuel costs, should ensure rent collection levels remain resilient.

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Claire Boyle, chairman of Life Science REIT:

There are powerful long-term drivers of demand for life science real estate in the UK. Life science organisations are investing heavily in research and development, to bring forward new technologies and meet challenges such as ageing populations, the associated growth in healthcare costs and the demand for digital health solutions. The Covid-19 pandemic has also been a catalyst for new research. The UK's strong position in life science continues to attract global companies to invest here, while the Government is also increasing investment in the sector.

All of this activity is creating significant demand for suitable real estate, ranging from labs and offices to production facilities. The Golden Triangle ("Golden Triangle") of Oxford, Cambridge and London's Knowledge Quarter is particularly in demand, reflecting the benefits of being part of a cluster of like-minded organisations, which creates opportunities for knowledge sharing and collaboration, and helps to attract the best talent.

This demand has led to very low vacancy rates, particularly for lab space, contributing to rising rents and asset valuations. As many companies look to shorten their supply chains in the wake of Covid-19 and Brexit, they are increasingly looking for flexible space where they can have all their operations in one building, ranging from office space, research and development, to production. In response, we are looking at how we can create flexible space that occupiers can adapt to their needs.

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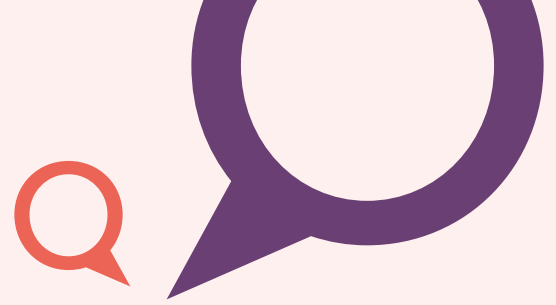
Lynda Shillaw, chief executive of Harworth Group:

Over the past six months, the near-term outlook for the UK economy has weakened considerably. The war in Ukraine has had a dramatic impact on energy prices and food supply chains across Europe and beyond. Globally, inflation and interest rates have been rising and UK inflation stands at a 40-year high with interest rates rising sharply. This is placing huge pressure on household budgets and consumer confidence. We are beginning to see signs that both the residential and industrial & logistics markets are coming off record highs as a number of these factors begin to take hold. Debt markets are tightening as interest rates rise, and supply chains and labour markets remain restricted. Investors still have a substantial amount of capital to deploy into the right product in the right sectors, and Harworth's products are in two of the most resilient real estate asset classes and, fundamentally, both sectors are still undersupplied.

These economic stresses are impacting everyone, and whilst there is little we at Harworth can do to change these factors, we can ensure that we monitor and respond to them. We are confident that Harworth is well-placed to do this, and that we are adapting to the changing risk environment. However, it is our expectation at

this stage that, as a result of this market backdrop, valuation gains during 2022 will be first half-weighted.





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