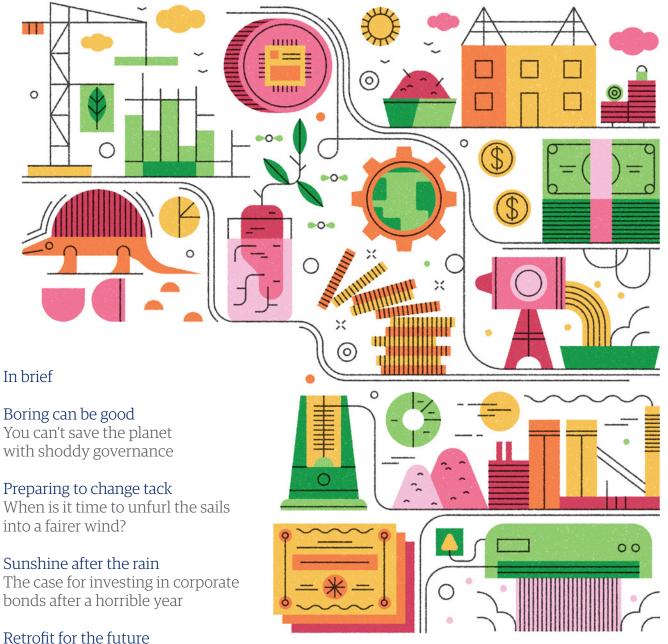
# Investment Insights

Issue 35 – First quarter 2023

## A balancing act

Investors often think of value and growth as opposite ends of the spectrum, but in reality they are complementary styles that can work well together in a balanced portfolio



Huge investment in buildings is needed to meet climate goals



### Foreword





As we head into a new year, our lead article explores some of the misconceptions that often cloud the debate about the relative merits of 'value' and 'growth' investment styles, and how each can complement the other in a balanced portfolio with a focus on quality.

Our next feature on page 5 looks into how and why governance often gets neglected in environmental, social and governance (ESG) investing, with some socalled ESG ratings wildly missing the mark. We explain why our Stewardship team's unglamorous work in analysing corporate governance is so vital.

With the outlook for global growth and investment returns still heavily clouded, how can we tell when it's time to change tack into a fairer wind? On page 6 we explore what leading indicators could tell us that a lasting end to the recent economic and market weakness might be on the way.

After what was undoubtedly a terrible year for bond markets, we look at the potential for attractive returns from corporate bonds in the months ahead on page 8 – will there be sunshine after the rain?

Finally on page 9, we think about a long-term thematic investment opportunity. If net zero targets for reducing carbon emissions by 2050 are to be met, existing building stock will need to be retrofitted to higher energy efficiency standards. The scale of this task is daunting and that presents an interesting investment case.

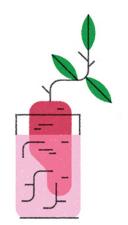
We hope you and your family remain healthy and safe during this uncertain period. Please visit rathbones.com to find out more about our latest views on issues affecting the global economy and investments.

Liz Savage and Ed Smith Co-chief investment officers



## There are many misconceptions about value and growth investing

The debate on the relative merits of value and growth investing – the former means targeting stocks that look "cheap" on various measure of valuation, the latter buying stocks with rapid actual or expected growth in sales/profits – has been raging for a number of decades.



For most of the 2010s and during the early stages of the pandemic, prioritising growth over value stocks was a winning strategy, as growth outperformed year after year. However, things have clearly changed recently. The MSCI World Value Index comfortably beat its growth counterpart during 2022, while US value stocks posted their best performance compared with growth in the past 20 years. We've been arguing for a while that it now makes more sense to balance exposure to growth and value – avoiding large above-benchmark weights to either factor - with a return to the relentless growth dominance of the 2010s unlikely.

In this article, we address some of the common misconceptions that often cloud the value/growth debate, setting out our rationale for taking a more balanced approach along the way.

#### Misconception 1: Expect growth to outperform value over the long term

The argument that growth should outperform value in the long run is rooted in the 2010s. But looking further back demonstrates that what happened then was unusual. We shouldn't assume this represents a normal situation that will necessarily resurface once the volatility from the pandemic, the war in Ukraine and the associated surge in inflation and interest rates fades.

As figure 1 shows, the MSCI Value Index underperformed its growth counterpart significantly in each major region through the 2010s and in the early stages of the pandemic. But this has by no means been the norm. Further back in time, value dominated for long periods.

Although MSCI data is available only

from the mid-1970s, we can extend our analysis of the US much further back in time using data published by Ken French, one of the founding fathers of what is known in the industry as factor investing (figure 2).

On this basis too, the 2010s look like an exception rather than the rule. One of the few other decades of significant value underperformance, the 1990s, was the period of the dotcom bubble in US growth stocks. Figure 1 suggests the relative performance of value in the UK and Europe was much better then.

Furthermore, indices like the ones used in figures 1 and 2 somewhat overstate the dominance of the growth factor in the 2010s. As they're weighted by market capitalisation (the value of the company's publicly listed shares), their performance may be driven by a handful of large stocks rather than the behaviour of a factor (such as 'growth') more broadly. These indices also have no limits on sectoral composition either, so performance can sometimes reflect sectoral patterns as well as the performance of fundamental factors. Once we correct for these things, the outperformance of growth in the 2010s looks less consistent.

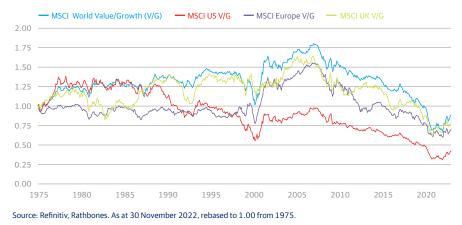
All of this suggests reason for caution about investment strategies that have a significant emphasis on growth over value. Their previous strong performance could be due to a specific set of circumstances aligning in their favour at the same time, rather than a structural trend that will inevitably reassert itself.

### Misconception 2: Value versus growth is all about bond yields

There's a widely held view that the relative performance of the value and growth factors mostly depends on bond yields, and that as soon as yields peak

#### Figure 1: Ratio of MSCI Value and Growth total return indices

Value has underperformed growth significantly in each major region through the 2010s and in the early stages of the pandemic, but this pattern has by no means been the norm.



#### A balancing act



the dial will turn decisively back in favour of growth. This view rests on a rather technical argument, related to the idea that growth stocks should deliver greater cash flows far in the future. In theory, the price investors today will pay for cash flows many years from now should be highly sensitive to the rate at which those future cashflows are discounted to their present value. This, in turn, depends on yields. So, the theory goes, the prices of growth stocks should also be particularly sensitive to changes in yields.

We can't dismiss this argument entirely. There has been a strong correlation between factor performance and changes in yields in the US over the past 10 years or so, with value typically outperforming when yields rise and growth when yields fall.

Yet several significant caveats are in order. First, the relationship has been weaker outside the US. Second, even in the US there has been little or no such relationship other than in the last decade or so. For large parts of the 1960s, 70s and 80s, the relationship with bond yields was the precise opposite of the one seen recently. Notably, the median historical correlation between value performance and changes in bonds yields has been very close to zero.

This all suggests the possibility that the recent relationship in the US between the relative performance of value and growth and changes in yields may have been at least partly coincidental.

At times, there seems to have been an element of post-hoc rationalisation behind arguments that falling yields justify the strong relative performance of growth stocks.

Taking this all into account, we should be cautious about assuming a renewed decline in bond yields would cause another sustained period of growth beating value. Many other factors may also influence the relative performance of value and growth, including momentum and valuations.

#### Misconception 3: Value no longer trades at a big discount or growth at a big premium

Although the value factor has staged a strong comeback since late 2020, that hasn't come close to unwinding its prior underperformance, and value stocks still trade at an unusually large discount by past standards.

Regardless of which valuation metric we use, the premium attached to the most highly valued stocks over the least highly valued ones is still large by historical standards, having ballooned since about the mid-2010s. In fact, the gap between these highest and lowest valued stocks has rarely been much larger than it is now.

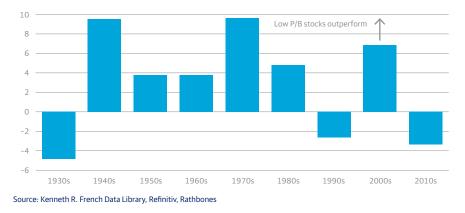
The only time when the gap has been substantially wider was the peak of the dotcom bubble (and not even then on some measures), a period that was followed by years of value outperformance. Though valuations are usually a poor short-term timing tool, the size of this gap is a strong reason to question the idea that a 2010s-style overweight to growth and underweight to value will work on a sustained basis over the next few years.

**Misconception 4: Growth equals quality** We often hear growth and quality stocks talked about in the same breath, but it's worth emphasising the differences between the two. While there's no single standard definition of quality, we typically use it to refer to firms that deploy capital efficiently, have a strong competitive position and can easily service their debts. This means that not all growth stocks are high quality – think of a 'speculative tech' firm that has borrowed heavily to finance a risky expansion. Likewise, some high-quality stocks have more value than growth characteristics.

Admittedly, the performance of the growth and quality 'factors' have tracked each other closely in the US recently. But that hasn't always been the case, and further back in time the two have sometimes moved in opposite directions. Meanwhile in some other equity markets there has rarely been much of a relationship at all. In the UK, for example, the average correlation between quality and growth factor performance has been close to zero over the past 20 years.

Given the difficult outlook for the global economy, we think it currently makes sense to focus on quality, which often performs well in this kind of environment. We aim to do this by balancing high-quality growth and value exposure – not simply by using growth stocks generally as an imperfect proxy.

**Figure 2: Relative performance of US shares with low vs high price/book ratios** If we look back over a longer period then we can see that the 2010s look like an exception rather than the rule.



#### Boring can be good





## You can't save the planet with shoddy governance

Over the past few years, responsible investing – summed up by the acronym ESG, referring to a focus on environmental, social and governance factors – has taken the world by storm. Of these three factors, the last has been around the longest and is the least apt to set your pulse racing. That may help explain why some so-called ESG ratings have wildly missed the mark, and some ESG investing has gone awry. Maybe old and boring isn't so bad after all.

As noted by James Grant, a financial writer and founder of Grant's Interest Rate Observer who's been around for long enough to know: "Progress is cumulative in science and engineering, but cyclical in finance." As night follows day, so speculative boom follows collapse in uninterrupted rhythm as successive generations experience collective amnesia. Things like due diligence, robust governance and sound regulation are sometimes seen as obsolete barriers to progress.

We can see this playing out in the crypto world. Following the invasion of Ukraine, Binance CEO Changpeng Zhao was asked on Radio 4's Today programme whether the cryptocurrency exchange had any Russian customers, to which he replied "I don't know".

The sudden collapse of FTX, the once-leading cryptocurrency exchange, is another recent example of shoddy governance (a generous description in this case) to escape the notice of those who should have been paying much closer attention. (For our views on cryptocurrencies, see our 2021 report *A bit risky*.)

Consider the words of John Ray III, appointed as CEO for FTX in its bankruptcy – a man whose CV includes similar roles in some of the biggest bankruptcies in modern times, including Enron: "Never before in my career have I seen such a complete failure of corporate controls."

Yet according to the *Wall Street Journal*, despite having only three corporate directors – founder Sam Bankman-Fried, another FTX executive and an outside attorney – ESG ratings company Truvalue Labs gave FTX a higher score on "leadership and governance" than Exxon Mobil.

The application of the tech-era mantra of "move fast and break things", first coined by Facebook founder Mark Zuckerberg, clearly went way beyond what was originally intended. Will investors now see more clearly how disastrous it can be to turn a blind eye to bad G, no matter how good the E and S (which in hindsight also appear to have been heavily overegged at FTX)?

#### Unexciting doesn't mean unimportant

We believe the role of good governance in capitalism is vital: it's the foundation on which responsible investment thrives or fails. It may not be a page turner, but the fifth edition of *Corporate governance* by Monks and Minow is foundational to our analytical framework. Our stewardship analysts can't do their job without it.

As we noted in one of our Investment*Insights* articles on ESG last year, at its heart, good governance solves a crucial issue – what social scientists would call an agency problem: how do you get someone to act in your best interests when they are controlling an asset you own? That's what investment



is – putting your capital in the hands of company management, over whom you have influence but no control, and whose interests may differ from yours.

#### **Encouraging good behaviour**

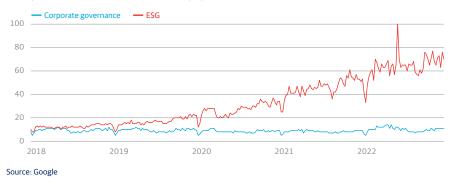
Imagine I give you a crisp £20 note, ask you to buy us lunch and say you can keep the change. What's stopping you from getting the cheapest deal possible from the discount aisle and pocketing the difference? Our interests aren't aligned. To make them align, we must have an ongoing relationship and there needs to be accountability. In other words, aligning our interests is costly and time consuming, but necessary.

This is not to say that good governance is a vaccine against ESG failure. But it didn't matter how ambitious FTX's plans for carbon neutrality were, because the corporate culture was deeply flawed and controls were almost non-existent.

That's why we take great care to investigate governance and culture as well as social and environmental policies. We take third-party ratings only as a starting point (we don't use Truvalue's ratings!); conducting our own reviews is key. It may be old and worn, and it will never make the best-seller list, but our copy of Monks and Minow has proved its worth many, many times over.

#### Figure 3: Worldwide Google searches for corporate governance vs ESG

Numbers represent search interest relative to the highest point on the chart for the given region and time (a value of 100 is the peak popularity for the term, and a value of 50, for example, means that the term is half as popular).



## When is it time to unfurl the sails into a fairer wind?

We're concerned that the bounce in global equities since mid-October is built on shaky foundations, and think the headwinds are still strong enough to keep our sails furled. The outlook for global growth is poor, with recessions underway or likely soon in many of the largest economies. This doesn't seem to be fully reflected in equity prices or earnings forecasts yet.

The economic winds can change very quickly – that's been a defining feature of post-pandemic markets and economies. Therefore, it makes sense to plan ahead, identifying the key factors that could prompt a change in our stance.

While it's important to always remain flexible in our thinking, here are four potential triggers for altering our current defensive positioning, things that could signal a lasting end to the recent weakness in equity markets. We wouldn't need all four conditions to be fulfilled – a couple should be enough – but it would be hard to justify changing course while none of them are met. So, we'll be keeping a close eye on them over the coming months.

#### Leading indicators

Arguably the most important trigger to relinquish our defensive stance would be evidence that the global economic cycle is turning. For context, the global economy has swiftly gone from boom in mid-2021 via slowdown into a downturn now, as illustrated by the path of our leading indicator of global growth in figure 4.

Leading indicators of the global economy more generally are currently weak and are still falling. These include things like measures of new orders and the exports of countries that are high up the global value chains. In the past, this weak and still-falling phase of the global economic cycle has typically been the worst one for returns from equities, but defensive companies, often in sectors such as consumer staples, utilities and healthcare, tend to do relatively well. Signs that the global economy is moving into the next part of the cycle – recovery – would give us more confidence that any recovery in equities could be sustained. In terms of figure 4, that would be a move from the bottom left to the bottom right. Growth may still be weak, but we need to see the direction of travel changing.

In the past, there has been a strong relationship between troughs in leading economic indicators and global equities finding a floor (figure 5). The same relationship is true for the relative performance of cyclical versus defensive sectors within the stock market.

We've been focusing on defensive parts of the market recently and sustained outperformance from cyclical sectors seems unlikely until leading indicators are rising once again.

To anticipate when this might happen, we need to understand why global growth is slowing in the first place. Arguably there are three main reasons: the aggressive tightening of monetary policy in most major economies; the energy shock associated with the invasion of Ukraine and Russia's subsequent decision to cut gas exports to Europe; and the problems in China driven by COVID alongside its deep housing market downturn.

For leading indicators of growth to turn, at least some of these factors would

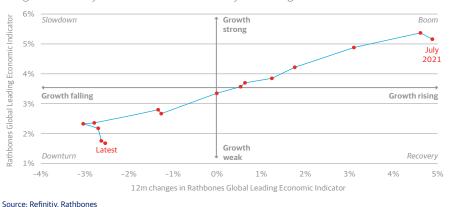
need to abate. A combination of the end of monetary tightening in the US and Europe, plus European gas prices falling sharply (if the region makes it through winter with ample gas supplies remaining), might be enough even if China's exit from zero-COVID restrictions is hampered by low vaccine coverage and hospital capacity.



We've been focusing on defensive parts of the market – areas like health care, consumer staples and utilities with limited sensitivity to the economic cycle.

#### Figure 4: From boom to downturn

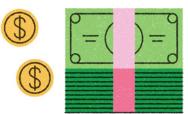
The global economy since mid-2021 illustrated by our leading indicator measure.



#### Preparing to change tack







#### Earnings realism

It's rare for equities to perform well when expectations for earnings are falling, so it's concerning that there still seems to be a major disparity between consensus earnings forecasts and the tough economic outlook.

In both the US and the eurozone, analysts' consensus forecasts are for earnings growth rates in the low singledigits next year. They are stronger still if you strip out commodities sectors, where a fall in earnings is all but baked in with commodity prices already well below the peaks they hit earlier in 2022.

In contrast, our modelling of earnings suggests that a fall of about 10% in 2023 is a realistic possibility, particularly given the weakness in the business surveys that we've seen already. Declines of at least that magnitude are par for the course during recessions.

The UK and eurozone are almost certainly entering recession already, while our analysis suggests that the US is more likely than not to do so in 2023. We would feel a lot more comfortable about changing our defensive stance if earnings expectations better reflected this outlook and were consistent with earnings falling by close to 10% in the coming year.

#### **Investor capitulation**

Another possible trigger for buying back into equities would be evidence of 'peak pessimism', signs that investor positioning and sentiment in equity markets have capitulated. Again, this is something that hasn't happened yet.

Admittedly, institutional investors have become more downbeat. That's evident in Bank of America's Global Fund Manager Survey, for example, in which participants report being significantly underweight equities. We also see that pessimism in the latest data on hedge funds' positioning in US equities too, which has become extremely negative since mid-2022.

Yet flows into US equities overall have been resilient, and retail investors'

allocation to equities hasn't collapsed in the way it did before strong rebounds in equities in the past. According to survey data from the American Association of Individual Investors, retail investors currently allocate around 62% of their portfolios to equities.

In March 2020, at the pandemic lows, that proportion dropped to 55%. In March 2009, which marked the lows after the global financial crisis, and after the dotcom collapse in October 2002, it reached 41% and 43% respectively. Absent evidence of capitulation from retail investors, it's hard to argue we've seen peak pessimism.

#### **Historically low valuations**

A final trigger would be equity valuations, as measured by ratios of prices to earnings, falling well below their current levels. Most of the time valuations tell us little about likely shortterm returns from the stock market. But when they're close to historical extremes, very low valuations could potentially signal a buying opportunity.

What does this mean in practical terms? In the US stock market, we're talking about the ratio of the price of the index to its earnings over the last twelve months falling below about 15, and the ratio of prices to expected earnings over the next 12 months dropping below about 12.5. Returns over the next year have typically been very strong after these thresholds have been breached. In both cases, though, we're still a long way from these levels – these ratios are currently about 21 and 18, respectively.

Therefore, this condition is not likely to be met imminently, and it seems more likely that other conditions will be fulfilled first. We're closer to levels where valuations would provide a strong signal to buy equities in markets outside the US (where valuations are typically in the bottom half of their historical distributions, compared to the top half in the US), but again there's still a way to go.

Another condition that may be necessary although not sufficient is an end to interest rate rises. Data since the 1960s shows that the US equity market has never bottomed ahead of the final rate hike. Again, we're not there yet. If a recession is at hand by the time the last hike of a cycle is pushed through, the pause may be a bearish signal, not a bullish one. For sure, waiting for rate cuts usually meant missing out on the early and largest stages of the equity market recovery. But there is usually a long gap between the final hike and the first cut that enables investors to reposition.

#### Figure 5: Looking forward

US equity performance in the months around troughs in the ISM new orders index.



## The case for investing in corporate bonds after a horrible year

Beyond any shadow of doubt, 2022 has been a year to forget for bond markets. But that very fact could well mean that they present an attractive opportunity for the year ahead and beyond.

As a reminder, bond prices move in the opposite direction to yields. And this year yields have risen substantially as it became clear that higher inflation would be far stickier than had been widely expected. In addition, we have seen a key metric for corporate bonds - credit spreads (the additional return investors receive relative to government bonds for taking on the default risk of the corporate issuer) - widen significantly as expectations for the economic outlook deteriorated. This was in no small part due to the significant and rapid increases in interest rates in response to this elevated inflation.

The net result of these two moves – rising yields in general and widening spreads for corporate bond (credit) yields in particular – is that yields for investment grade corporate bonds (those with higher credit quality) recently reached their highest level in over a decade. Even with the slight retracement of these moves since then, this means that there is potential for positive returns from these bonds over the coming year, barring a significant further rise in yields (drop in prices) from here.

#### Pick and mix

We don't expect all bonds to perform well from here. Given the tough economic backdrop we are anticipating a period of earnings downgrades during which we think high yield bonds (i.e., bonds with lower credit quality that are more likely to default) could suffer given their higher sensitivity to earnings downgrades. We don't think investment grade bonds will be immune to these earnings downgrades, but credit spreads are already above the 80th percentile of their historical distribution in the UK and eurozone (figure 6), so some economic weakness is clearly already being discounted. And investment grade debt

issuers by nature are already starting from a stronger position and are thus more likely to be able to endure a period of economic weakness without debt affordability becoming a significant issue.

Furthermore, when compared with equities, we think investment grade corporate bonds are relatively attractive. One way to assess the relative value of investment grade bonds versus equities is to compare the yield from the former to the 'forward earnings yield' of the latter - the expected earnings per share over the next 12 months divided by the share price. Investment grade bond yields have risen more sharply than forward earnings yields, increasing their relative attraction. Two years ago, around two-thirds of America's 500 largest listed companies had a dividend yield greater than the average corporate bond yield. Today just a couple of percent do. In Europe, that statistic was at 90% three years ago, and has fallen to around 30% today.

#### **Smoother returns**

Another factor in favour of investment grade corporate bonds is that their returns tend to be much less volatile than equity returns. This stands to reason, given that bonds are higher up the capital structure – in other words, you are taking less risk. Corporate bonds delivered much higher risk-adjusted returns than equities

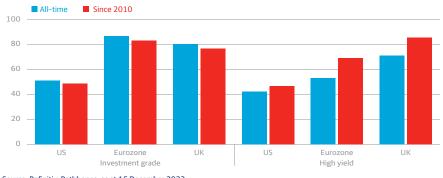


in the ten year period to the end of the 1980s, 1990s, 2000s and 2010s.

Looking back, investment grade corporate bonds have historically performed well at the end of interest-rate tightening cycles. While the gap between the last rate hike and trough in equity markets has been variable, dependent on the outlook for growth, high quality investment grade bonds tend to start doing relatively well straight away as they are much less sensitive to the profit cycle. For equities, there is a trade-off between "slower growth is bad" and the "end of rate rises is good", but this tension matters much less to high quality bonds, which are driven more by central bank action. We don't think we are there yet, but we have clearly seen a very significant number of interest-rate increases so far this year and our analysis suggests that we are likely to reach the end of the cycle at some point in the first half of 2023. Against a challenging economic backdrop, with yields and credit spreads at what we consider attractive levels, we think it makes sense to increase allocations to investment grade corporate bonds. While it is certainly possible that yields could continue to move higher, at current yields we believe you are being attractively compensated for that risk. And that comes with the added benefit of dampening the volatility of your portfolio.

#### Figure 6: Credit spreads (percentile rankings) vs past distribution

Credit spreads are already above the 80<sup>th</sup> percentile of their historical distribution in the UK and eurozone, so some economic weakness is already being discounted.



## Huge investment in buildings is needed to meet climate goals

We're always on the lookout for long-term investment themes. Companies geared into long-term spending patterns may be less susceptible to the vicissitudes of the business cycle. As some governments and their electorates are rethinking their attitudes to the supply of fossil fuels and energy security following the Ukraine war, there will likely be an even greater imperative to meet carbon emission goals by ensuring the demand for energy is as efficient as it can be.

Buildings are the world's largest source of carbon emissions, through the energy used to build and power them. Newer, more energy efficient and sustainable homes and offices could make a huge difference in combating climate change by cutting both energy consumption and carbon emissions. But existing building stock will still represent the majority of floor space in much of the developed world in 2050.

If net zero targets for reducing carbon emissions by 2050 are to be met, existing building stock will need to be retrofitted to higher energy efficiency standards.

The scale of this task is daunting. The UK has some of the oldest and leakiest housing stock in Europe, ensuring that heat quickly escapes through walls, windows and doors. Just under 30% of UK homes meet the Energy Performance Certificate (EPC) band-C standard (A is the most energy efficient standard and G the least).

The government wants to retrofit all homes to band-C standard by 2035. But this will be expensive. In fact, doing the required renovations using traditional approaches can often cost as much as demolishing the old building and putting up a new one. To make renovations a more attractive solution, retrofitting needs to be tackled on an industrialised scale, rather than through current piecemeal approaches. Adopting a 'fabric-first' approach, improving the energy performance of the building envelope as an initial step, means that the potential contribution from subsequently installed energy efficiency measures will be significantly enhanced.

#### A giant leap for retrofitting?

In the Netherlands, the *Energiesprong* (energy leap) movement is responding to this challenge by insulating homes with offsite-manufactured wall and roof panels alongside pre-assembled 'energy pod' packages that include heat pump-based heating, cooling and ventilation equipment. Around 5,000 Dutch homes have already been retrofitted using this low cost, fast turnaround approach.

The model makes mass renovation financially viable. Early results show it could allow for retrofitting that's potentially nearly 50% cheaper than conventional alternatives. The model is being launched in the UK through work with the social housing sector, with the aim of extending it to the private sector.

We believe both conventional and industrialised retrofitting have good potential for growth in the decades ahead, along with the ancillary products and services that support both approaches. We see three areas in particular that are in the early stages of a long-term growth trend: environmental building audit services; window coverings for energy conservation; and building fabric insulation. The retrofit applications of each make up only a small part of the total operations of the



publicly listed companies providing these goods and services.

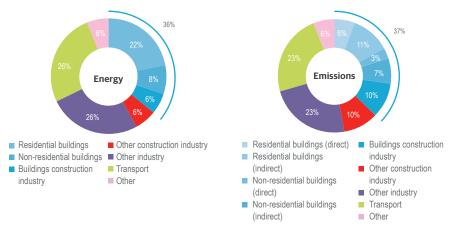
The quest for all homes and offices to be more energy efficient is bound to be a long-term process that involves the practical challenge of retrofitting existing stock and higher costs than most people can currently afford without public subsidy. Nevertheless, there are clearly some interesting developments on the horizon, giving hope for a world of more energy efficient zero-carbon buildings.

A key question will be: who pays, and how, for all of the change and transformation that will be needed? For investors, the crucial thing to consider is that without a dramatic contribution to emissions reductions from the buildings and construction industries, it is clear that net-zero targets won't be met. The risks to the companies in these sectors over the coming decades are significant. But so are the opportunities for good investment returns for those that embrace the right solutions.

You can read more about some of the opportunities that could be generated by greener construction and building practices in our latest investment report *Building a more sustainable future*.

#### Figure 7: Building, construction and the environment





Source: International Energy Agency. Values may not sum to 100 due to rounding.

### Financial markets

The economic outlook is getting gloomier with a steady worsening in purchasing manager surveys of business activity. Global growth has been hit by a unique set of headwinds, including Russia's invasion of Ukraine, interest rate hikes to contain inflation, and lingering pandemic effects such as China's lockdowns and ongoing supply chain disruptions.

The September 2022 mini budget had a huge impact on UK markets, with sterling falling to a 37-year low against the dollar and yields on gilts spiking higher on the prospect of a big surge in government borrowing. Things calmed down after the replacement PM backed down on most of his predecessor's measures. The gilt market has stabilised following the BoE's intervention, while sterling recovered some ground against the dollar and the euro.

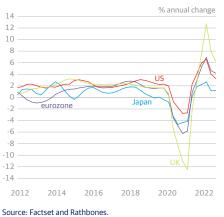
#### Inflation and interest rates

Lower than expected inflation figures for October and November and a slowing of the pace of US interest rate hikes have provided some relief to markets over the last three months. But we expect a volatile start to 2023.

The fall in US inflation raised hopes of a shallower global recession in 2023 and also increased the demand for government debt. Bond vields also fell across Europe, though both the US and Eurozone central banks emphasised the need to continue combating inflation. European stocks had also hit a six-month high in anticipation of the size of US rate hikes being reduced from December.

Hong Kong and Chinese markets surged after the government announced it would extend loans for distressed developers. Although the government is also relaxing COVID-related restrictions, low vaccination and hospital capacity rates present an ongoing challenge.

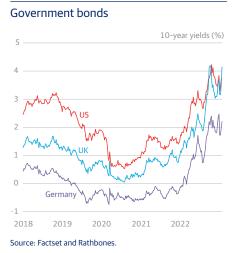
#### GDP growth





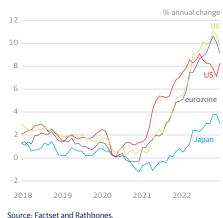






Past performance is not a reliable indicator of future performance.

#### Inflation



#### Equities



Source: Factset and Rathbones

Gold



### Important information

Information valid at 31 December 2022, unless otherwise indicated.

This document and the information within it does not constitute investment research or a research recommendation.

The value of investments and the income generated by them can go down as well as up.

Rathbones Investment Management International is the Registered Business Name of Rathbones Investment Management International Limited, which is regulated by the Jersey Financial Services Commission. Registered office: 26 Esplanade, St. Helier, Jersey JE1 2RB. Company Registration No. 50503.

Rathbones Investment Management International Limited is not authorised or regulated by the Prudential Regulation Authority or the Financial Conduct Authority in the UK. Rathbones Investment Management International Limited is not subject to the provisions of the UK Financial Services and Markets Act 2000 and the Financial Services Act 2012; and, investors entering into investment agreements with Rathbones Investment Management International Limited will not have the protections afforded by those Acts or the rules and regulations made under them, including the UK Financial Services Compensation Scheme.

This document is not intended as an offer or solicitation for the purchase or sale of any financial instrument by Rathbones Investment Management International Limited. The information and opinions expressed herein are considered valid at publication, but are subject to change without notice and their accuracy and completeness cannot be guaranteed. Not for distribution in the United States. Copyright ©2023 Rathbones Group Plc. All rights reserved. No part of this document may be reproduced in whole or in part without express prior permission.

Rathbones and Rathbone Greenbank Investments are trading names of Rathbones Investment Management Limited, which is authorised by the PRA and regulated by the FCA and the PRA. Registered Office: Port of Liverpool Building, Pier Head, Liverpool L3 1NW. Registered in England No. 01448919. Rathbones Investment Management Limited is a wholly owned subsidiary of Rathbones Group Plc.

If you no longer wish to receive this publication, please call 020 7399 0000 or speak to your regular Rathbones contact.

Investments can go down as well as up and you could get back less than you invested. Past performance is not a reliable indicator of future performance.

### Contacts

Call: 020 7399 0000

Visit: rathbones.com

Email: enquiries@rathbones.com

For specialist ethical, sustainable and impact investment services: Rathbone Greenbank Investments 0117 930 3000 rathbonegreenbank.com

For offshore investment management services: Rathbones Investment Management International 01534 740 500 rathboneimi.com

@Rathbones1742Rathbones Group PlcRathbones Group Plc