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The rose-tinted view versus reality

The first crop of statements this year from the Federal Reserve and Bank of England (BoE) brought a cheer from markets, if only because there were no shock announcements – the US opting for a gentle increase of a quarter of a point and the UK a slightly stronger half point – and because the focus of discussions is now firmly on when this tightening cycle will come to an end.

Pop on our rose-tinted glasses, and everything is heading in the right direction. Inflation is easing – UK consumer price index inflation was 10.5 per cent in December, down from above 11 in October. Next Wednesday's inflation figures are expected to confirm the downward trajectory, and governor Andrew Bailey confirmed that the BoE expects inflation to fall even more rapidly in the second half of the year. If we are past the point of peak inflation, then we must be nearing the point of peak interest rates. The BoE also revised down its two-year recession prediction to five quarters (from eight) and to a contraction rate of just 0.5 per cent. Even UK gross domestic product estimates for the final quarter of 2022 (released after we go to press) are expected to show a tiny rise – which means the start of a technical recession will be deferred. The National Institute of Economic and Social Research (NIESR) now believes that we may avoid a recession entirely.

House prices are reasonably stable. The Halifax HPI check reported this week that although the annual rate of house price growth slowed to 1.9 per cent (from 2.1 per cent in December), the average house price remained largely unchanged in January, despite mortgage affordability pressures. And new, cheaper fixed-rate mortgage deals coming onto the market reflect the expectation that the peak has been and gone.

But take our glasses off, and we start to see a few scuffs and blemishes. If a recession is by some miracle avoided, as NIESR claims, any growth will be all but invisible to the naked eye. Pantheon Economics, meanwhile, points to weak January retail sales data coming through, showing footfall down on January 2019.

Inflation may have fallen, but the US and UK central banks stress there is no certainty that price rises are under control, and that they would hike again and again, if necessary. Strong labour market data in the US this week – with half a million new jobs added to the US economy – has added to concern that interest rates could still rise beyond what investors have pencilled in (which is another two quarter-point rises from the Fed, and one from the BoE). So the extent of future rises still depends on the stickiness of what has become largely domestic inflation. Rate cuts are definitely off the menu as far as Jerome Powell and Bailey are concerned. But if rates do rise unexpectedly, it will go down badly.

Where rates end up matters because the higher they go, the bigger the barrier they are to rising markets (the FTSE 100 excepted it seems) and the greater the risk of recession. And while they are doing their job of slowing price rises, they bring few other benefits. Yes, better savings rates counteract some of the corrosive power of inflation, but cash is still losing value, and anyway savers rarely get the full benefit of the hikes. Meanwhile, the full rises are typically passed on to borrowers. It's estimated that around 1.4mn households will be exposed to rate rises this year as their current fixed deals expire. The impact of 10 consecutive rate rises from the BoE on a mortgage of £100,000 will be an extra £200 or so a month, or roughly £600 on a £300,000 mortgage. On its own, without factoring in any other price rises, that is a real income crunch. It leaves borrowers with a dilemma, too, whether to fix now – and for how long – knowing rates may come down, or switch to a more costly variable rate until the picture is clearer.

On the bright side, higher interest rates at least remain a tonic for London's value stocks, and they also restore an important power to the central bank, which is the ability to stimulate the economy through cuts – something it couldn't do when they were at 0.1 per cent.

ROSIE CARR EDITOR
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MY TOP PICKS

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BARGAIN SHARES 26

Simon Thompson's 2022 portfolio trounced both the Aim and main market indices. Our ace small-cap stockpicker reveals his top picks for 2023

Cover illustration: Paramjit Virdee

Ultimately, free cash is what equity investors want because it is theirs and it's real money

BEARBULL, P68

Investors' Chronicle

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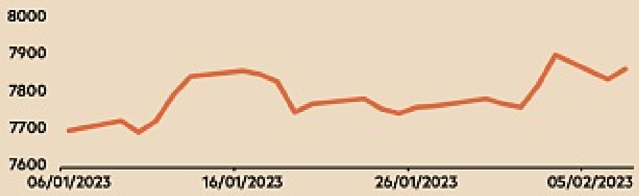
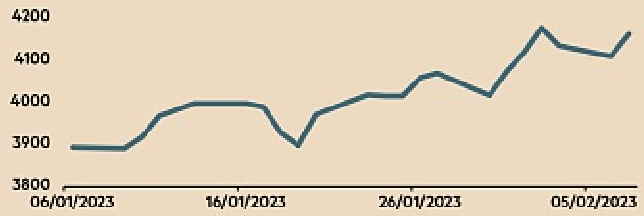
FTSE 100 – PRICE LAST 30 DAYS



S&P 500 – PRICE LAST 30 DAYS



UK STOCK MARKET

Index	Price	1-week change	3-month change	1-year change	52-week high	52-week low	PE	Dividend yield (%)
FTSE 100	7,864.7	1.2	7.7	3.8	7,906.6	6,707.6	16.7	3.5
FTSE 250	20,189.0	1.7	8.8	-7.4	22,305.3	16,520.5	43.9	3.0
FTSE All-Share	4,309.9	1.3	7.9	1.7	4,342.2	3,655.6	19.0	3.4
FTSE Small Cap	6,596.5	1.5	9.9	-7.5	7,272.2	5,644.7	-43.7	3.4
FTSE Fledgling	11,993.9	0.3	6.0	-8.7	13,324.6	10,975.6	-24.0	3.8
FTSE Aim 100	4,233.6	1.6	6.3	-18.8	5,277.4	3,611.6	26.7	1.7
FTSE Aim All-Share	879.1	1.3	6.6	-19.0	1,095.1	767.8	37.0	1.6

MAJOR DEVELOPED MARKETS

Index	Price	1-week change	3-month change	1-year change	52-week high	52-week low	PE	Dividend yield (%)
S&P 500	4,164.0	2.1	9.4	-7.1	4,637.3	3,491.6	19.3	1.6
DJ Industrial Average	34,156.7	0.2	4.1	-2.7	35,824.3	28,660.9	18.2	2.0
Nasdaq Composite Index	12,113.8	4.6	14.7	-13.6	14,646.9	10,088.8	22.7	0.9
Euronext 100	1,337.1	0.7	9.7	1.4	1,356.0	1,091.4	11.2	2.6
France CAC 40	7,132.4	0.7	11.2	1.8	7,233.9	5,628.4	12.3	2.4
Germany DAX (TR)	15,320.9	1.3	13.2	0.8	15,614.5	11,862.8	12.2	2.7
Japan Nikkei 225	27,685.5	1.3	0.6	1.6	29,222.8	24,681.7	15.0	na
Hang Seng Index	21,298.7	-2.5	28.3	-13.3	25,050.6	14,597.3	10.9	2.7
ASX All Ordinaries	7,713.1	0.4	8.2	4.0	7,923.4	6,581.6	13.3	3.9

KEY EMERGING MARKETS

Index	Price	1-week change	3-month change	1-year change	52-week high	52-week low	PE	Dividend yield (%)
China Shenzhen SE/CSI 300 Index	4,094.2	-1.5	8.4	-11.6	4,662.6	3,496.0	na	na
Nifty 50	17,721.5	0.3	-2.6	3.0	18,887.6	15,183.4	na	na
Russia RTS	1,004.4	0.3	-9.4	-30.5	1,547.3	610.3	na	na
Brazil Bovespa Index	107,829.7	-4.9	-6.5	-3.7	121,628.2	95,266.9	5.4	7.2
FTSE South Africa	4,072.2	0.4	8.7	2.6	4,226.2	3,381.7	na	3.8
Thailand SET	1,680.5	0.5	3.5	0.2	1,718.6	1,517.5	14.0	2.7

CRUDE OIL BRENT CRUDE SPOT

Source: FactSet

GOLD NYMEX NEAR TERM

Source: FactSet

UK GOVERNMENT YIELD - 10-YEAR

Source: FactSet

RISERS AND FALLERS – FTSE ALL-SHARE

Source: FactSet, data correct at 7 February 2023

Risers 1 week	Price (p)	Return (%)
International Personal Finance	98.7	17.2
Darktrace	243.7	15.9
Esken	6.4	14.3
Porvair	686.0	14.0
Carnival	874.2	13.9
Funding Circle	66.1	13.8
Hostelworld	143.6	12.4
Currys	72.4	11.8
Ocado	717.6	11.1
Dechra Pharmaceuticals	3,178.0	10.9

Risers 3 months	Price (p)	Return (%)
Card Factory	99.4	96.4
Saga	171.9	92.2
Devro	307.5	72.8
JD Sports Fashion	179.5	71.9
Luceco	144.8	65.5
On The Beach	171.0	59.8
Metro Bank	138.0	55.6
Hostelworld	143.6	51.2
Rank	90.7	50.7
Funding Circle	66.1	46.1

Risers 1 year	Price (p)	Return (%)
ME Group International	131.0	101.1
Bank of Georgia	2,735.0	81.9
Hostelworld	143.6	81.6
Indivior	1,940.0	72.9
Card Factory	99.4	68.8
4imprint	4,595.0	63.6
TBC Bank	2,425.0	62.9
Mediclinic International	496.4	62.4
Pearson	902.0	61.3
BAE Systems	837.0	56.1

Fallers 1 week	Price (p)	Return (%)
Nanoco	27.0	-28.2
Ferrexpo	137.5	-13.2
Chrysalis Investments	79.0	-8.9
QinetiQ	332.0	-8.5
Saga	171.9	-7.7
Hunting	325.5	-6.6
Kin and Carta	207.5	-5.9
James Fisher and Sons	343.5	-5.9
Hyve	69.0	-5.5
AEW UK Reit	100.6	-5.3

Fallers 3 months	Price (p)	Return (%)
Home Reit	38.1	-66.3
Dr Martens	158.6	-44.7
Petrofac	82.0	-29.4
Darktrace	243.7	-34.3
De La Rue	67.5	-45.6
Tullow Oil	34.3	-34.6
EnQuest	20.9	-0.2
888	71.7	-72.5
Pendragon	19.4	-12.6
Petra Diamonds	79.5	-8.6

Fallers 1 year	Price (p)	Return (%)
888	71.7	-72.5
Pod Point	62.9	-69.3
Home Reit	38.1	-66.3
Restaurant Group	36.5	-63.2
Reach	96.4	-61.4
Aston Martin Lagonda	172.9	-58.8
Seraphim Space IT	47.0	-57.5
Moonpig	126.9	-57.2
Sabre Insurance	97.8	-57.1
Chrysalis Investments	79.0	-56.4

RISERS AND FALLERS – S&P 500

Risers 1 week	Price ($)	Return (%)
Catalent	71.6	33.7
Meta	191.6	28.6
Align Technology	345.1	27.9
ON Semiconductor	85.5	16.4
WW Grainger	678.3	15.1
Norwegian Cruise Line	17.5	14.9
Advanced Micro Devices	85.9	14.3
Royal Caribbean	74.0	14.0
Tesla	196.8	13.6
Nvidia	221.7	13.5

Risers 3 months	Price ($)	Return (%)
Meta	191.6	98.1
Align Technology	345.1	90.3
Catalent	71.6	72.6
Nvidia	221.7	55.0
SVB Financial	323.4	51.9
SolarEdge Technologies	319.4	51.2
Pulte	58.1	50.0
MarketAxess	355.8	49.4
Warner Bros. Discovery	15.3	49.3
Etsy	145.0	46.2

Risers 1 year	Price ($)	Return (%)
First Solar	165.9	137.9
Steel Dynamics	123.2	111.2
Constellation Energy	85.9	86.5
Enphase Energy	228.5	62.3
Occidental Petroleum	64.6	57.6
Quanta Services	153.6	55.3
Lamb Weston	99.1	54.1
Marathon Petroleum	122.2	53.1
Nucor	167.2	50.4
Hess	143.3	50.4

Fallers 1 week	Price ($)	Return (%)
WestRock Company	33.4	-14.8
Electronic Arts	114.2	-11.3
Air Products and Chemicals	285.1	-11.1
Match	48.8	-9.8
Cigna	289.0	-8.7
ConocoPhillips	112.0	-8.1
Newmont	48.7	-8.0
VF Corp	28.5	-7.8
Johnson Controls International	64.5	-7.3
AmerisourceBergen	156.8	-7.2

Fallers 3 months	Price ($)	Return (%)
EQT	30.7	-30.6
NRG Energy	35.0	-22.6
CF Industries	84.3	-19.2
Marathon Oil	26.9	-18.6
Coterra Energy	24.3	-17.8
Lumen Technologies	5.0	-17.4
Advance Auto Parts	151.5	-17.3
ConocoPhillips	112.0	-17.0
Northrop Grumman	452.2	-15.4
CVS Health	86.0	-15.0

Fallers 1 year	Price ($)	Return (%)
Lumen Technologies	5.0	-60.2
Signature Bank	138.7	-57.1
Match	48.8	-57.0
Generac	122.6	-56.2
VF Corp	28.5	-54.6
Dish Network	14.6	-52.1
Lincoln National	35.4	-50.5
SVB Financial	323.4	-47.7
Baxter International	45.6	-47.5
Warner Bros. Discovery	15.3	-45.9

Latest results show big tech has lost its aura

Slower demand for advertising and consumer electronics knocked sales and profits at **Apple (US:APPL)**, **Alphabet (US:GOOGL)** and **Amazon (US:AMZN)** in the December quarter. Apple, which had been holding up well compared with the rest of technology industry, saw its revenue fall for the first time in three and a half years.

Analysts had expected Apple's revenue to drop by 2 per cent in the three months to December, but instead it fell 5 per cent. iPhone sales dropped 8 per cent while Mac sales were down nearly 30 per cent. Chief executive Tim Cook blamed Covid disruptions, "which significantly impacted the supply of iPhone 14 Pro and iPhone 14 Pro Max".

As well as supply chain issues, there are signs that demand for luxury consumer products is softening. Earlier in the week, both **Microsoft (US:MSFT)** and **Samsung (KR:005930)** posted disappointing consumer electronics performances, which suggested that Apple's results would be underwhelming. Apple's operating expenses, including an extra $1.4bn (£1.15bn) on research and development, pushed operating profit down by 13 per cent.

These macro headwinds led to broker Jefferies lowering its full-year earnings per share guidance for Apple by 6 per cent to $6.10. It expects a recovery next year, having only lowered its 2024 EPS guidance by half a per cent.

Amazon's consumer business also had a difficult quarter. A strong US economy helped North America sales increase by 13 per cent, but international sales fell by 8 per cent. Rising operating costs pushed international losses up by 38 per cent to $2.2bn, while North American losses stayed flat at $0.2bn.

The company has invested heavily during the quarter, with fulfilment costs up 3 per cent year on year to $23.1bn and technology and content costs up 36 per cent to $20.8bn. At the end of last year, it announced a swathe of redundancies to bring these costs under control.

The $5.2bn of operating profit from Amazon Web Services (AWS) meant group operating profit stood at $2.7bn. However, AWS's revenue growth of 20 per cent was a big step down – from 28 per cent in the last quarter and 40 per cent this time last year. Growth was slower than Microsoft and Google's cloud computing divisions, meaning that although it is the largest cloud computing business in the world, Amazon is losing market share. For its next quarter, Amazon is guiding for between break-even and $4bn in operating profit for AWS.

Google's cloud revenue rose 32 per cent to $7.3bn and promisingly its operating loss narrowed from $890mn to $480mn. Its computing business is going to take on more importance as the advertising business falters. Advertising revenue fell 3.7 per cent to $59bn, with revenue from YouTube dropping by 8 per cent. **AS**

$7.3BN

GOOGLE'S CLOUD REVENUE ROSE 32 PER CENT TO $7.3BN AND ITS OPERATING LOSS NARROWED FROM $890MN TO $480MN

Speedy Hire misplaces £20mn of equipment

Shares in **Speedy Hire (SDY)** dropped by 11 per cent after the tool group revealed that £20mn of equipment had not been found in a "comprehensive count" of its inventories.

In November, Speedy Hire reported that its hire equipment was worth £234mn, and accounted for almost half of total assets on the balance sheet. However, when it was preparing for its end-of-year audit, it was unable to locate £20.4mn of equipment. These assets are "non-itemised", meaning they don't have a unique serial number, and could include scaffolding towers, fencing and non-mechanical plant equipment. Given non-itemised equipment has a total value of £50mn, or 22 per cent of the company's total hire assets, the shortfall represents a serious amount of kit.

The board has launched an external investigation into the disappearance, which will include a review of accounting procedures. The company has also started to count its tools on a weekly basis, and is keeping a closer eye on its purchases and disposals.

Speedy Hire expects the loss to result in a one-off, non-cash write-down of the balance sheet value of non-itemised assets. However, it is not expected to impact the group's cash position and management said revenue for the four months to 31 January 2023 was up by 16 per cent. Excluding the effects of the asset loss, management is confident of hitting underlying profit forecasts for the year to 31 March 2023.

The company's auditor flagged the estimate of net value as a key audit matter in last year's annual report, because of the "high degree of estimation uncertainty" over the value of individual pieces of equipment. In response, the auditor ran its own tests of the valuation of machinery and said it was happy with the £227mn net value applied at the end of 2021. **JS**

Sales growth slows in a gloomy January for retailers

UK retail sales growth slowed in January as shoppers cut back due to inflationary pressures. According to KPMG and the British Retail Consortium (BRC), total UK retail sales rose by 4.2 per cent in January.

This was down from the 11.9 per cent uplift seen a year earlier, although this was against a locked-down period in 2021. It was also down against the 6.9 per cent growth posted in December, but again this had an easy comparator given the Omicron wave at the end of 2021. BRC chief executive Helen Dickinson said that "retailers continue to be hit by lower margins and falling volumes".

She added that: "Own-brand ranges remain popular across food and non-food products, and big-ticket items are seeing customers trade down". CA

4.2%

ACCORDING TO KPMG AND THE BRITISH RETAIL CONSORTIUM, TOTAL UK RETAIL SALES ROSE BY 4.2 PER CENT IN JANUARY, WHICH WAS DOWN FROM THE 11.9 PER CENT UPLIFT SEEN A YEAR EARLIER

13.9%

Average drop in Reit NAV's recorded over the final six months of 2022

Reits' values slump but discounts persist

Real estate investment trusts' (Reits) net asset values (NAVs) plunged in the second half of 2022 as valuers factored in higher interest rates – but their shares continue to trade on sizeable discounts to those values, suggesting opportunities for the brave. According to *Investors' Chronicle* analysis, the Reits that have posted valuation updates so far this year recorded an average drop of 13.9 per cent for the six months to the end of 2022. The bulk of this decline occurred in the final quarter, when values slid by 11 per cent.

Their collective slump is also reflected in the wider market. MSCI's UK property index, which records valuation changes for directly-held property investments, posted a 12.8 per cent drop for the final quarter, the worst quarterly performance since 2008. However, Reits continue to trade at an average discount to NAV of 16.4 per cent, a slight improvement from the end of last year, but still below historical levels.

Even though the downward swing in NAVs is an industry-wide trend, there were big differences between individual Reits. The worst performers were **UK Commercial Property Reit (UKCM)** and **Tritax Big Box (BBOX)**. What the pair have in common is an overexposure to warehouse assets – a sub-sector that has suffered disproportionately in recent months because of its prior strong performance. Greater liquidity in the sector's underlying assets – for which demand remains relatively healthy – means valuers can more easily look to recent transaction activity when pricing NAVs, according to analysts at Numis. That suggests price discovery in this sector may be quicker to materialise than elsewhere.

By contrast, West End retail and leisure landlords **Shaftesbury (SHB)** and **Capital & Counties (CAPC)**, which are midway through a multi-billion pound merger, have experienced much smaller valuation declines. As online shopping pumped up warehouse values, it in turn depressed physical store values as retailers across the country fell into administration. The relatively minor valuation drops from retail landlords in recent weeks are evidence that the wider retail rout could finally be bottoming out. The bullishness of retailers expanding their physical footprint in recent months after nearly a decade of shrinking it supports this prospect.

The best-performing Reit was residential landlord **PRS Reit (PRSR)**, which managed to post a small bump in value over the final half of the year. The company benefits from being the only UK Reit to focus solely on residential assets. PRS put its performance down to "strong estimated rental value growth of 5 per cent since 30 June 2022, underpinned by high demand for the company's homes", while it also increased the number of homes in its portfolio by 2.6 per cent.

On a share price relative to NAV basis, **Assura (AGR)** was the only Reit trading at a premium according to our analysis. Last November, in the wake of the market tumult caused by former prime minister Liz Truss's 'mini' Budget, Assura was trading at a small discount, which is a historical rarity for the business.

The worst performers on an NAV basis were those who also suffered some of the largest valuation falls. **Balanced Commercial Property Trust (BCPT)** and UK Commercial Property Reit were two of these. The latter's NAV fell by 29 per cent in the last six months of 2022, yet its shares still trade on a 27 per cent discount to net assets.

This might turn out to be overly pessimistic, particularly if rental growth remains healthy and helps offset a portion of the capital falls. **Custodian Reit (CREI)**, another portfolio focused on industrial assets, saw a much smaller NAV decline on the quarter – which analysts at Winterflood put down to its focus on "higher-yielding, smaller lot sizes, which were less susceptible to the market re-pricing". ML

Central banks are doing the same thing – but their tones are very different

The battle for inflation hasn't been won yet but some bankers are more confident than others. Hermione Taylor reports

Central banks delivered another trio of hikes this week, with the suggestion of more to come.

The Bank of England (BoE) increased the base rate by 50 basis points (bps), taking interest rates to 4 per cent – the highest level in almost 15 years. The Federal Reserve delivered a smaller 25bps hike, taking the Federal Funds target to 4.5-4.75 per cent, while the European Central Bank's (ECB) more hawkish 50bps move increased the main deposit rate to 2.5 per cent.

But the tones of the meetings were very different.

After signalling for months that higher interest rates may be needed to bring inflation back down to target, the BoE suggested that the peak in interest rates could be close. The committee has relaxed its language around future rises, dropping a suggestion that it would respond "forcefully" in the future to inflation, and adding that further rate hikes would "depend on evidence of more persistent" inflationary pressures. Energy prices have come down in recent weeks, taking some of the momentum from across-the-board cost increases for consumers and businesses.

Despite slowing the pace of hikes, the Fed tempered hopes of a major policy shift, stating that "ongoing increases" in interest rates would still be required to return inflation to the 2 per cent target. Markets were nevertheless encouraged by more dovish comments made by chair Jerome Powell in a press conference following the announcement.

The ECB commentary was more hawkish, with the central bank pledging to raise rates by another 50 basis points in the March meeting in light of "underlying inflation pressures". The ECB also gave more details on the operation of its quantitative tightening (QT) programme, due to start next month. The Bank plans to reduce its bond holdings by €15bn (£13bn) a month between March and June, with the subsequent pace of portfolio reduction to be determined over time.

Economic backdrop

All three central banks are facing the unsavoury combination of high inflation, stagnant growth and uncertain policy time lags. The BoE is facing the most difficult backdrop of all: consumer prices index inflation remains elevated at 10.5 per cent, but higher interest rates could hammer an already flagging economy. Governor Andrew Bailey and Co now expect GDP to fall throughout 2023 and the first quarter of next year.

The latest monetary policy committee meeting comes in the wake of gloomy IMF forecasts suggesting that the UK will be the only advanced economy to enter recession this year. At the same time, the US economy will grow 1.4 per cent this year, while the euro area will manage 0.7 per cent, as per IMF forecasts. Inflation remains elevated in both economies, at 6.5 per cent in the US and 8.5 per cent in the EU.

Central banks must walk a difficult tightrope: stopping rate hikes too soon could see inflation surge back, but continued hikes raise the risk of 'over-tightening'.

Suren Thiru, economics director at the Institute of Chartered Accountants in England and Wales, said the combination of higher rates and slower inflation would mean the end of steep rate hikes in the UK. He added that "if we do slide into recession, then policymakers may be forced to reverse policy sooner than many expect".

€15BN

THE ECB PLANS TO REDUCE ITS BOND HOLDINGS BY €15BN A MONTH BETWEEN MARCH AND JUNE

Last week's Fed communication implied at least two further interest rate increases in the pipeline and Wells Fargo economist Jay Bryson said policy would "need to remain restrictive for quite some time" to bring inflation down. He forecast 25bps hikes at the next two FOMC meetings, but expects the Fed to be increasingly data driven as it enters the "fine-tuning" stage of its tightening cycle.

Although US rates may be approaching their peak, the ECB has further to go. Katharine Neiss, chief European economist at PGIM Fixed Income, said more hikes were warranted due to the fact that the ECB was slow out of the gates with rate increases in 2022, in addition to "better-than-expected economic momentum" in the euro area this winter.

Market convictions tested

Even with more rate rises to come, US markets rallied following the dovish tone of chair Powell's press conference. Some investors were encouraged by Powell's relaxed approach to the recent easing in financial conditions, including his insistence that the Fed's focus was not "on short-term moves".

Laura Frost, investment director at M&G Investments, also noted that Powell "didn't push back on the possibility of 50bps cuts toward the end of 2023". These are already priced into the market – along with a lower terminal rate of 4.9 per cent.

The S&P 500 and Nasdaq rose 1 per cent and 2 per cent, respectively, following the FOMC meeting. The two-year Treasury yield dipped to 4.1 per cent, with prices moving inversely to yields as investors bought treasury bonds.

The FTSE 100 beat its 2018 peak and hit an all-time high in the days following the Bank of England meeting, as the index rose on the pound falling, the removal of references to "forceful" moves against the inflation rate and the outsize profits and new growth plans of the oil and gas majors **Shell (SHEL)** and **BP (BP.)**. In contrast to earlier meetings, the Bank made no attempt to suggest that financial markets were misguided in their expectation for the path of rates this year. Sterling dipped to a one-month low of $1.20 against the dollar following the central bank meetings.

Tesla, Ford and the upcoming margin squeeze

The world's largest auto-maker remains unconvinced about an EV pure-play approach. Mark Robinson reports

- Ford joins Tesla on the discounting front
- Toyota calls for a diversified production approach

There can be few stocks that have generated as many column inches as **Tesla (US:TSLA)** over the past couple of years. Increasingly, the focus appears to be on the exploits of its chief executive rather than the company's production rates and shaky debt profile. Elon Musk has become the most prominent figure in the US auto industry since visionary auto executive Lee Iacocca, but his long-term influence is likely to be much greater.

Shareholders in the electric vehicle (EV) manufacturer may have felt aggrieved by the amount of time, money, and effort Musk dedicated to the capture of the Twitter social media platform. The feeling persists that he is spreading himself rather too thinly and that the deal represents an unnecessary distraction from his flagship business, to say nothing of the class-action lawsuits that followed in its wake.

The share price of Tesla has more than halved, hitting its peak in the fourth quarter of 2021, the point at which valuations for a raft of heavyweights in the broader 'tech' space clicked into reverse. Long-term holders of the stock can take solace in the knowledge that its market value has still risen by 809 per cent over the past five years, and that the shares are now in uptrend after an impressive fourth-quarter performance gave Tesla its most profitable year on record.

That would have been welcome news for Musk despite his ongoing legal wrangles. But recent developments in the EV space provide food for thought. Tesla has been the standard bearer for the industry, at least in western economies, but the hurdles faced by automakers are becoming more apparent as the take-up of EVs accelerates.

Tesla's stock has rallied since it announced the decision to cut the price of its Model Y and Model 3 units. The move would have been irritating for anyone who had purchased one of the models prior to the announcement and it seems to have triggered a potential price war. **Ford Motor Company (US:F)** has followed suit, at least in the US, by reducing the cost of its flagship EV – the Mach-E – by an average of 5.85 per cent. Ford also confirmed that it was expanding production capacity for the Mach-E by 67 per cent, meaning that it will produce 130,000 vehicles for customers in North America and Europe throughout 2023.

While all this was happening, **Toyota Motor Corp's (JP:7203)** chief executive Akio Toyoda, the great-grandson of the company's founder, announced that he was stepping down after 13 years at the helm. The reins of the world's largest automaker are being handed over to Lexus chief Koji Sato, who will oversee the development of Toyota's first dedicated EV platform.

Critics of the company have said that it has been slow to respond to market dynamics but bosses at Toyota believe that persistent shortfalls of key EV inputs (primarily lithium) mean that a diversified production approach with a long-term focus on hybrid vehicles provides the most practical means of attaining meaningful carbon emission reductions, while keeping motorists on the road.

THE AUTO INDUSTRY, FOR ONE REASON OR ANOTHER, HAS BEEN IN A STATE OF FLUX FOR FOUR YEARS OR MORE

809%

TESLA'S MARKET VALUE HAS RISEN BY 809 PER CENT OVER THE PAST FIVE YEARS

If you share Toyota's view that supply constraints of critical inputs will worsen as EV adoption accelerates, then industry peers – at least those who have committed to an all-electric future – could find themselves in trouble. And that's without factoring in other practical considerations linked to charging infrastructure and renewable power generation. Unfortunately, politicians still seem content with arbitrary timeframes on electric adoption.

Committed as Musk is to the development of EV technologies, a diversified production approach wouldn't phase him, either. Indeed, he has openly called on governments to support further investment in the oil industry. But Toyota's stance on looming supply constraints underlines why the vertical integration of many of Tesla's production steps, not least of which its in-house software development, holds long-term advantages over the field.

Analysts at UBS believe that Tesla and the leading Chinese EV manufacturers derive significant benefits over legacy automakers in terms of their cost structure, meaning that "it will be difficult for Ford, **GM (US:GM)** and **Volkswagen (DE:VOW)** to make money with their EVs in this highly competitive segment".

Whether Ford and Tesla's recent moves on pricing will prefigure a wider 'price war' remains to be seen, but automakers are bound to scramble for market share if electric adoption gathers pace. So, until there is a shake-out in the market, the combination of rising input prices and the need to stay competitive will put the squeeze on margins.

The auto industry, for one reason or another, has been in a state of flux for four years or more. But a combination of government diktats and resource scarcity could precipitate far greater disruption – and perhaps attrition within the sector – in the years ahead.

Who can dodge the advertising downturn?

Some unlikely winners are starting to emerge in the battle for marketing spend. Jemma Slingo reports

It is a truth universally acknowledged that advertising budgets are the first thing to be cut in a recession. It explains why investors are so nervous about media stocks such as **ITV (ITV)** and **Future (FUTR)**, and why many tech giants are under pressure. **Snap (US:SNAP)** has warned that revenue could fall by as much as 10 per cent in the first quarter of 2023, while advertising sales at **Alphabet's (US:GOOGL)** Google dipped by 4 per cent in the final quarter of last year. YouTube's performance was particularly disappointing.

Yet received wisdom does not always withstand closer scrutiny, and amid the economic gloom demand for certain types of advertising is still strong – as long as you know where to look.

New route for retailers

The struggles of tech titans have been well documented over the last 12 months, and commentators often cite advertising woes. It is important to remember, though, that the likes of Snap and **Meta (US:META)** are facing a very specific problem: Apple's privacy policy. Introduced in 2023, the policy insists that apps ask users for permission before they track their behaviour to serve them personalised ads.

ADVERTISING CAN BE A STRANGE AND UNPREDICTABLE INDUSTRY, AND THERE ARE PLENTY OF OPPORTUNITIES AMID THE GLOOM

"Apple has pulled a masterstroke with its app tracking transparency policy, " said Nick Waters, chief executive of media analytics group Ebiquity. "It has really dented Facebook's efficacy – which is particularly evident for small- and medium-sized enterprises, which are not seeing the same returns as they did before."

Things are expected to get even trickier when Google's Chrome browser phases out third-party cookies next year, which will further limit the ability of companies to track our movements around the web.

However, the plight of social media giants has ushered in a new media superpower: online retailers. "Retail media has been described as the third wave of advertising in the US, after search and social," said Carina Perkins, a senior analyst at Insider Intelligence.

The premise is simple. Retailers promote certain products at the top of their websites in exchange for money from brands. In many ways, it isn't a new concept at all. Supermarkets have always charged more for premium shelf space, with businesses battling for eye-level positions and end-of-aisle spots. In the case of ecommerce, retailers can draw on the data they gather about customers from loyalty cards to serve up personalised ads.

"Our forecasts are that US retail media spend will reach over $60bn (£50bn) by 2024," said Perkins. "To put that in context, our forecasts for search ad spend in 2024 are around $120bn and social ad spending is around $79bn." That retail spend would equate to a 50 per cent rise on 2022 levels, compared with increases of around 20 per cent for search and social spend.

Amazon (US:AMZN) is a clear frontrunner. Advertising services revenue grew by 19 per cent in the fourth quarter of 2022 to $11.6bn, defying the general tech trend of flatlining or falling ad sales.

70%

4IMPRINT'S SHARES HAVE PRODUCED A TOTAL RETURN OF 70 PER CENT OVER THE LAST YEAR

Other US retailers are starting to cotton on, and **Walmart (US:WMT)**, **eBay (US:EBAY)**, Instacart and **Etsy (US:ETSY)** have all launched "retail media networks".

In contrast, UK grocers have been dragging their heels, barely mentioning ad revenue in their annual reports.

This is starting to change. In August, **Tesco (TSCO)** launched a 'media and insights' platform with its data science company Dunnhumby to create the UK's "largest closed-loop grocery media and insight platform". **J Sainsbury's (SBRY)** data arm Nectar 360 announced an 'insight platform' the same month. Meanwhile, both supermarkets are making headway with TV ads, forging partnerships with ITVX and Channel 4.

This could prove to be extremely lucrative. According to Perkins, companies are enjoying profit margins of 60-80 per cent from retail media, compared with 5-7 per cent from core trading. "It's a very attractive form of advertising as you're reaching customers right at the point of purchase. It's much easier to sway a decision at the point of purchase." It also avoids the issue of third-party cookies, as retailers collect their own data from customers, and know exactly what they buy.

"On the other side of the Atlantic there has been a big bang in the last 12 to 18 months, but here it's still very much in its infancy," said Ebiquity's Waters. "It's probably one of those cases where things happen very quickly [in the US] and then roll over here."

A masterclass in merchandise

Digital developments are not the only thing to keep an eye on.

4imprint (FOUR) is one of the wonders of the FTSE 250. Week after week its shares have hit new highs and it has achieved a total return of 70 per cent over the last year. It is increasingly popular with fund managers, and it's easy to see why: the group upgraded its earnings guidance three times over the past nine months.

4imprint has not stumbled across a new lithium mine, or made a breakthrough in quantum computing. Instead it sells t-shirts, tote bags, hoodies and wristbands, emblazoned with company logos, to American businesses.

"I think the thing that people got wrong about 4imprint last year was that they saw it as a Covid recovery play, and that's all they read into it," said Abby Glennie, deputy head of smaller companies at Abrdn. "They thought this thing was just going to have a bounce, as you generally give merchandise out at face-to-face interactions."

However, Glennie said important structural changes had been made at the group – particularly around its own advertising strategy. "This company had never really invested in marketing. This was a business – and I'm not talking 50 years ago, but in 2018 – that sent out a box of free promotional stuff to show companies examples of what they could have. And sales used to be driven by catalogues."

In 2018, the group stepped up its marketing investment and focused more on TV and radio. This meant that its products reached more people, and allowed management to be more flexible with pricing (once a price is printed in a catalogue, it's very hard to fiddle with). It has clearly started to pay off, with revenue per dollar spent on marketing shooting up in the first half of last year.

4imprint's 'drop shipping' model has also saved it from the worst of the pandemic disruption. For the most part, it doesn't touch the products it sells – it simply connects buyers and sellers, and creams a little off the top. It has one distribution centre in Wisconsin and does some of its own embroidery but does not get much involved beyond that.

Underpinning all of this is America's love of merchandise. Earlier this month, the Advertising Specialty Institute published data on the North American promotional products industry, and found that sales across the industry increased by 11.4 per cent to $25.8bn in 2022 – the same level as in 2019. Companies with more than $5mn of sales grew even faster, at 12.5 per cent.

With the benefit of hindsight, we were too hasty putting 4imprint on a 'sell' in March 2022. The allure of branded pens and water bottles has proved more powerful than we thought, and orders are still flooding in.

Cross-road for ad agencies

The success of 4imprint is at odds with wider industry trends. Most companies have been moving away from traditional forms of marketing and are keen to show off their digital prowess. This is certainly the case for advertising agencies, which are warily eyeing a possible UK recession – **WPP (WPP)** was forced to cut over 7,000 jobs in 2009 after the financial crisis crushed ad spending.

Their newly diversified business models should protect agencies from the worst. However, some businesses look significantly better positioned than others. Aim-traded **Next Fifteen Communications (NFC)** has more in common with IT consultancies than with traditional ad agencies. The more traditional side of its business accounts for less than half of group revenue, and 'business transformation' is now its second-biggest division, having grown organic net sales by 157 per cent in the first half of 2022.

In contrast, stock market stalwarts such as WPP are reporting more sluggish organic growth – and some investors are worried that they are being outmanoeuvred by younger rivals. A particular concern about WPP is its data strategy. Competitors such as **Publicis (FR:PUB)** and **IPG (US:IPG)** made big acquisitions in recent years to boost their analytical capabilities but WPP has avoided such moves. Rather than gathering large pools of internally-owned data profiles, it has focused more on contextual targeting.

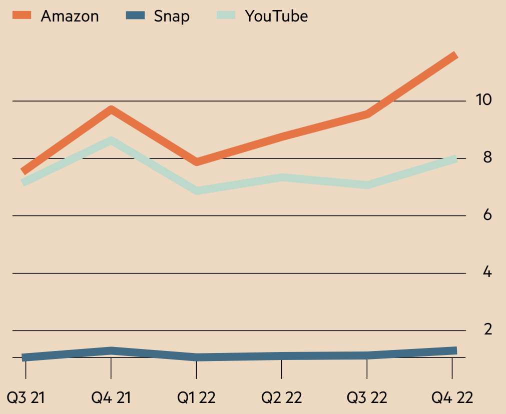
On the one hand, this should mean that WPP stays on the right side of data privacy rules. But it does risk sacrificing its competitive advantage in the meantime.

"The optimistic take is that, by developing areas of targeting and campaign optimisation that aren't reliant on individual profiling, WPP is going where the market is going, because of privacy concerns and the phasing out of third-party cookies," said Bernstein analyst Matti Littunen. "The question is whether WPP has competitive data in this area. Everyone has access to this data. I remain to be convinced it's a genuine differentiator."

Investors are still split on the subject. One thing is certain, though: advertising can be a strange and unpredictable industry, and there are plenty of opportunities amid the gloom.

AMAZON PULLS AWAY FROM THE PACK

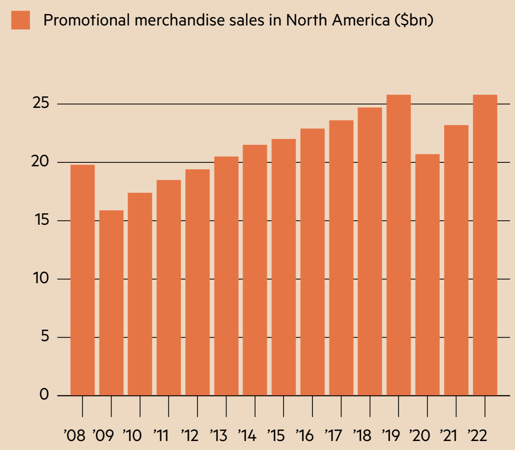
Advertising revenue ($bn)



Source: Quarterly financial reports

STRONG DEMAND FOR BRANDED GOODS

Promotional merchandise sales in North America ($bn)



Source: Advertising Speciality Institute

EU green spending puts pressure on UK to act

The European Commission has outlined its response to the US Inflation Reduction Act. Michael Fahy reports

The European Commission's (EC) new Green Deal Industrial Plan includes proposals to ease state aid rules to make subsidies more freely available to entice green technology firms to the bloc. The move, seen as a direct response to the US Inflation Reduction Act, which last year promised billions of dollars in grants and loans to fund new clean energy projects, risks placing the UK's nascent green technology firms at a competitive disadvantage to its peers, according to analysts.

EC president Ursula von der Leyen said Europe had a "once-in-a-generation opportunity… to secure the EU's lead in the fast-growing net-zero technology sector" through the plan.

Proposals include a previously announced measure to simplify regulations so that green projects can be developed more quickly, faster access to funding, support for skills development and measures for open trade to "support resilient supply chains".

The 'temporary crisis framework' adopted in the wake of the Covid-19 pandemic to support industry across the bloc will morph into the 'temporary state aid crisis and transition framework' (TCTF), which will allow for state aid rules to be circumvented until the end of 2025 to support green projects.

THE BATTERY AND ELECTRIC VEHICLE SECTOR IS THE BIGGEST POINT OF CONTENTION BETWEEN THE EU AND THE US

TCTF-funded schemes will have more flexible ceilings than those operating under current rules, allowing them to "match the aid received for similar projects by competitors located outside of the EU", it said.

The commission will make around €225bn (£200bn) of as-yet unclaimed loans from the EU's €800bn post-pandemic recovery fund available to spend.

It argued that initiatives elsewhere could have "undesired collateral effects" on the bloc's green tech sector. China's subsidies are twice as high as those in the EU, relative to GDP, it said. The US, meanwhile, is mobilising $360bn (£300bn) by 2032 through the Inflation Reduction Act, while Japan is planning to raise ¥20tn (£125bn) in green transition bonds.

In the medium term, the commission plans to set up a European Sovereignty Fund to back projects and will accelerate plans for a European Capital Markets Union, which would facilitate more continent-wide bond issuance and reduce reliance on bank debt.

But loosening state aid rules to allow for bigger subsidies is not without controversy in a bloc that was built around removing trade barriers.

"The idea of jumping to a sort of race to the bottom on state aid is not to our liking, because one of the most successful things in the EU since 1957 is the internal market," Dutch prime minister Mark Rutte told the *Financial Times*.

Need for speed

The EU was already in the process of reviewing the General Block Exemption Regulation (GBER), which allows national governments to lawfully provide state aid without prior permission from the European Commission, with the aim of supporting green projects more effectively.

£1TRN

CHANCELLOR JEREMY HUNT HAS SAID THERE IS A GLOBAL MARKET OPPORTUNITY WORTH £1TN TO PURSUE BETWEEN NOW AND 2030

Yet the billions on offer under the Inflation Reduction Act proved to be "a catalyst" for the bloc to act quickly, said Andrew Finfer, a lawyer at Dentons.

A Net-Zero Industry Act and a Critical Raw Materials Act (aimed at securing the supply of important transitional materials, such as rare earth metals) will both be introduced in the second quarter of this year.

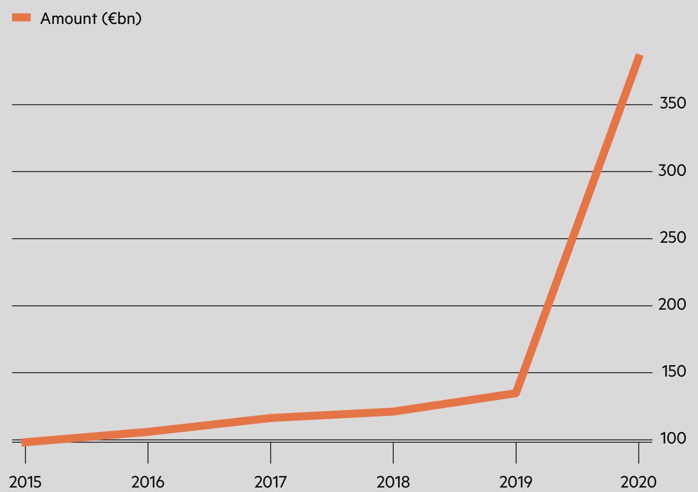
Until then, "we are some way off being able to quantify the upside" for Europe's industrials sector, UBS analysts said in a note.

The Swiss bank nonetheless identified industrial catalyst makers **Clariant (CH:CLN)** and **Johnson Matthey (JMAT)**, batteries chemicals producers **BASF (DE:BAS)** and **Umicore (BE:UMI)**, polysilicon producer **Wacker (DH:WCE)** and hydrogen providers **Air Liquide (FR:AI)** and **Linde (US:LIN)** as likely beneficiaries. More broadly, makers of a raft of green energy technologies including batteries, windmills, heat pumps, electrolysers and carbon capture and storage systems stand to benefit, it said.

The battery and electric vehicle sector is the biggest point of contention between the EU and the US, according to the Rystad Energy consultancy. The Inflation Reduction Act allocated $23bn to transport initiatives, with tax incentives of up to $7,500 per vehicle on offer for cars whose batteries were either made or assembled in North America.

Even with its new raft of measures, the EU "finds itself between

EU/UK STATE AID SPENDING LEVELS, 2015-20



Source: European Commission

China's existing market dominance and the US's fiscal firepower," said Lars Nitter Havro, a clean tech senior analyst at Rystad.

Its main challenges are developing an entire battery supply chain and fending off competition from Chinese competitors. Contemporary Amperex Technology, a Chinese battery maker with a global market share of around 35 per cent, announced plans to open its second European plant last August – a 100 gigawatt (GW), €7.3bn plant in Debrecen, Hungary.

Europe's new industrial plan was welcomed by its carmakers, however. Industry body ACEA said a strong response to the Inflation Reduction Act had been needed to prevent "investment leakage".

The biggest loser from the new deal looks set to be the UK's green tech sector, investment bank Berenberg said.

Odd one out

"Stuck in the middle between two large economies that are planning to subsidise their green sectors, the UK will find its own green industry's relative trade positions weakened in both regions," the bank's analysts said in a note.

"And this is at a time when production levels in its green transformation sectors, such as automotive, have already fallen by more than 50 per cent since 2016."

Mike Hawes, chief executive of the UK's car industry body, the Society of Motor Manufacturers and Traders, said countries should avoid a subsidies "arms race" that distorts markets.

"Recent measures in the US with its Inflation Reduction Act, China and now the EU could put the UK at a disadvantage. We need a framework and pitch that allows us to compete and delivers sustainable projects, long-term economic growth and rapid decarbonisation," he said.

The EU was always likely to engage in some form of policy response to the US's subsidy push, in a bid to prevent research and development investment being siphoned off to the US, said prof Michael Gasiorek, co-director at the Centre for Inclusive Trade and a director of the UK Trade Policy Observatory.

However, he warned of a growing risk of "competitive protectionist subsidy policies by country, which are ultimately going to be welfare-decreasing".

"You're protecting less efficient industries, at the expense of importing more efficient industries," he said.

He acknowledged that the moves by the EU and the US leave the UK "in a difficult situation".

Chancellor Jeremy Hunt highlighted green industry as one of five growth sectors that he expects to use "Brexit freedoms" to support – the others being digital technology, life sciences, financial services and advanced manufacturing.

In a speech setting out his growth plan last month, he described the UK as a "world leader" in green energy and said there was a global market opportunity worth £1tn to pursue between now and 2030. The plan was light on detail, which he said would have to "wait for budgets and autumn statements in the years ahead".

Richard Austin, head of manufacturing at accountancy firm BDO, argued something would need to be done in next month's Budget if the UK is to compete on a level playing field with peers.

The country has already lost ground in the development of electric vehicle battery technology, he said, but it still has some advantages in wind power expertise and has an opportunity to "take a lead" on developing hydrogen as a fuel source.

"Unless we are seen as being a competitive economy... I think we are going to have a bit of a struggle on our hands on that as well."

One challenge will be the limited headroom for giveaways from the chancellor in light of the constrained state of the UK's public finances. Another will be the relatively small size of its end market when compared with the EU or the US. A third, according to Gasiorek, is its reduced standing on the world stage.

The prospect of a reciprocal agreement with the EU, for instance, seems unlikely given relations are "cordial at best" and the UK's stated intention to tread its own path.

"I think the domestic and international relationships, and international policy environment is increasingly challenging for the UK as a sort of mid-sized industrial power," he said.

Hermione Taylor

IC COMMENT

Working from home saves employees an hour a week. But does it make them more productive?

Face masks and social distancing may have almost disappeared, but one feature of the pandemic era has lingered on: working from home. As of September 2022, around one in five of the UK labour force had worked from home in the previous week, and 13 per cent still worked from home exclusively.

At first glance, workers seem pretty happy with the arrangement: 80 per cent of the employees who worked from home in the pandemic prefer a hybrid working model. What's more, they think it makes them more productive. In self-reported surveys, two-thirds of employees think they get as much or more done at home as they did in the workplace before the pandemic hit – a figure that no doubt provokes as many cheers of agreement as it does snorts of derision.

But new research from the US suggests that workers do spend more time on the job when they work from home. A working paper from the NBER finds that workers save an average of 72 minutes a day when their commute is removed, and they use almost half of this extra time to get work done. Across the 27 countries sampled, workers allocated about 40 per cent of the time saved to their job, 10 per cent to caregiving, and a third to leisure activities. There is considerable variation between countries, although the UK proved to be 'average' in almost every respect.

Hours worked are one thing, but what does it mean for productivity – output per hour worked? For a brief period last month, it looked as though the UK had undergone some kind of productivity revolution during the pandemic. The Office for National Statistics published figures that suggested the UK's average output per hour worked had grown by 5 per cent during the pandemic, the fastest of the G7 countries. This seemed unbelievable – and it was. The data was soon corrected to show that the UK's output growth rate was -0.3 per cent over the period, the second slowest of the G7. There was no work-from-home productivity revolution after all.

Several executives at the World Economic Forum were quick to criticise home working, and a recent parliamentary briefing highlighted the challenges that it poses for organisations: reduced mental wellbeing of staff (who worry – perhaps rightly – about taking on unpaid overtime), difficulties collaborating and negative impacts on working culture.

But nuance is easily lost. 'Working from home' and 'hybrid working' can span a huge range of set-ups, from those who are in the office four days a week to those who have never met their colleagues in person. What's more, Lynda Gratton, professor of management practice at London Business School, argues that different roles lend themselves to different hybrid arrangements. A product innovator needs to be in the office at the same time as colleagues, and would benefit from a 'traditional 9-5' arrangement. A strategic planner, on the other hand, needs the chance to work undisturbed. They could perform their job anywhere, but might also benefit from working 'anytime' if it frees them from the scheduled demands of colleagues.

For now, it seems that some degree of working from home is here to stay: the NBER research expects that workers will continue to save around an hour a week as a result. It goes without saying that the impact on the commercial property market could be profound.

Could the same be said for the residential property market? A recent Bank of England paper found that around half of the growth in house prices over the course of the pandemic was due to the 'race for space', which saw buyers favour houses over flats. The researchers argue that whether this reverses will depend in part on whether workers return to the office in a more significant way. ●

The signs investors need to watch to spot a recession

Analysts use a whole range of measures to pin down economic turning points

An economy is in recession when it has seen at least two consecutive quarters of economic contraction – or negative growth – in gross domestic product (GDP). The problem is that waiting for this quarterly data takes many months, meaning that the start and end points of recessions are usually only identified long after the fact.

This is a problem for investors because identifying the beginning and end of a recession matters. According to CIBC Asset Management, markets tend to trough long before economies do, but there hasn't been a case in the past 50 years where markets bottom out before the recession starts. Knowing whether a recession is under way would give us an indication of whether the conditions for a market bottom really have been met. But that is easier said than done.

First to broader macroeconomic indicators. In the US, economists at the NBER use a wide range of macroeconomic indicators to define a recession. These include real personal incomes, employment figures, consumption expenditure, retail sales and industrial production. A deterioration in any of these figures can indicate an economic downturn – and, crucially, they can all be monitored through monthly releases.

Although quicker than waiting for quarterly GDP releases, these macro indicators only tell us what has already happened. Forward-looking survey data can give us a sense of where the economy is heading next.

Purchasing managers' index (PMI) data is a widely used survey measure. Businesses are asked to report on conditions over the past month, plus give an indication of how they expect output to change over the coming year. PMIs are produced for various sectors of the economy, and 'composite' PMIs provide a weighted average of manufacturing and service sector data. 'Flash PMIs' are released early each month, when 85 per cent of responses are in. A figure below 50 indicates a contraction, and is historically consistent with recession risk.

The PMI is not the only survey of business sentiment: other widely noted examples include CBI surveys in the UK, and the Empire State manufacturing survey, Philadelphia Fed manufacturing business outlook survey and the Chicago Fed survey of economic conditions in the US. Consumer surveys also provide a valuable source of real-time information, gauging how consumers see their economic prospects developing. The UK's GfK consumer confidence barometer is closely followed, as are the Michigan consumer sentiment and Conference Board consumer confidence surveys in the US.

It goes without saying that 'hard data' (official macroeconomic releases) and 'soft data' from surveys don't always tally. In this cycle, sentiment has deteriorated faster than macroeconomic data – although the latter will probably catch up.

There are also composite indicators, which collate a range of data points to gauge when an economic turning point is approaching. The OECD publishes a range of country-specific leading indicators, which for the UK includes new car registrations as well as the performance of the FTSE 100. In the US, the Conference Board publishes a leading indicators index (LEI), which covers 10 components, including the performance of the S&P 500. Historically, the LEI tends to peak around 11-12 months ahead of a recession – and the last peak was in February 2022.

Looking at the bond market

So-called yield-curve inversions are also a popular recession indicator. A curve inversion means that investors earn higher returns on short-term bonds than longer-term ones, and is usually seen as a sign of choppy economic waters ahead. The gap between 10 and two-year borrowing costs (the 10-two year yield spread) and the 10-year-three-month yield spread are closely watched by many economists.

The yield curve has a pretty good track record of predicting past downturns, but is less good at indicating when a recession might hit: for the US, research suggests that it could be anywhere between six and 24 months after the curve inverts. It is also worth noting that we might sometimes ascribe it too much predictive power: the US yield curve briefly inverted in 2019, but the pandemic-induced recession that followed was something that no one had foreseen. ●

GLOSSARY

Employment	Tends to peak around the same time as GDP growth. Falling numbers suggest the economy may be shrinking
Consumption expenditure	Measures household spending. Negatively affects an economy if falling. Makes up a significant proportion of GDP.
PMI	Monthly survey indicating business output and expectations. A figure below 50 suggests an economic contraction.
Flash PMI	Early release of the PMI data.
Composite PMI	Weighted average of manufacturing and services PMI data.
Consumer sentiment survey	Survey data, typically asking consumers about finances and economic expectations.
Leading indicator	Any data that might correspond with future movements in the economy. Deterioration is a sign a downturn lies ahead. Includes new car registrations and the performance of the stock market
Composite indicator	Indicators that collate a range of data points to gauge when an economic turning point is approaching. The closely followed US LEI tracks 10 different components.
Yield curve	A line plotting the yields (interest rates) of bonds with the same credit quality, but different maturities. Usually investors earn higher returns on longer-term bonds. A yield curve inversion is when the opposite is true and can be a sign of tough times ahead

Inflation: is the glass half full or half empty?

The Bank of England's (BoE) monetary policy committee (MPC) voted last week to increase the base rate by 50 basis points to 4 per cent.

Only, not all of them did. Of the nine members of the MPC, two voted to keep rates unchanged, arguing that "lags in the effects of monetary policy meant that sizable impacts from past rate increases were still to come through". This split highlights the dilemma facing the BoE: the colossal tightening of the past 14 months has only just started to feed through to the economy. But by how much is anyone's guess.

Conspicuously, the committee signalled that further rate hikes would only be required "if there were to be evidence of more persistent [inflationary] pressures". Berenberg senior economist Kallum Pickering thinks that "the next few policy decisions will be matters of judgment rather than science". Because of the time lags involved, policymakers run the risk of over-tightening if they keep hiking until inflation falls. But the optics of halting hikes while inflation is high are unpalatable. Pickering notes that pausing while inflation remains elevated could "be viewed as reckless".

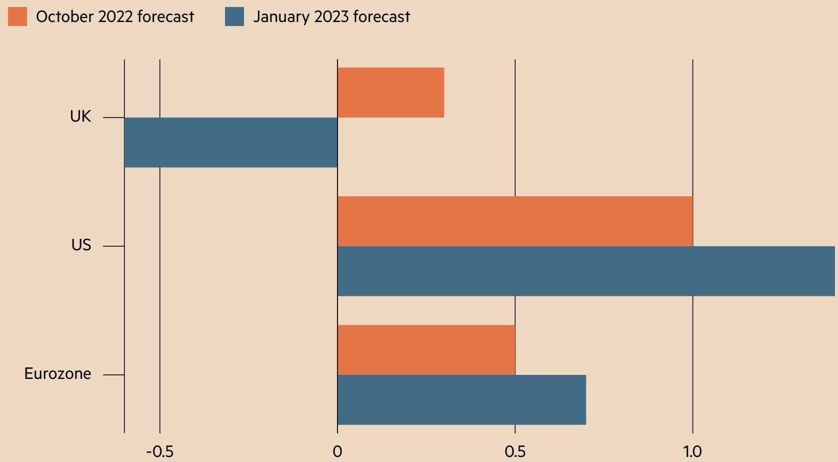
Forecasts revised

Nevertheless, the BoE's monetary policy report released last week suggests some grounds for optimism on inflation. The committee noted that energy price pressures are easing, and that a softening labour market is providing some limited wage-setting slack. The Bank now expects inflation to drop quickly, hitting 3 per cent by the first quarter of next year, then falling below the 2 per cent target by the start of 2025. This will be welcome news for prime minister Rishi Sunak, who has pledged to halve inflation by the end of the year. But the MPC warns that a high degree of uncertainty remains, stressing that "the risks to inflation are skewed significantly to the upside".

The announcement came less than a week after Jeremy Hunt announced a "vision for long-term prosperity in the UK". The chancellor acknowledged that the UK economy had not yet returned to pre-pandemic ►

IMF DOWNGRADES UK GROWTH OUTLOOK

IMF growth projections, real GDP, annual percentage change



Source: IMF

employment or output, but called for optimism. His speech highlighted the government's plans for growth, which hinge on the "four Es" of enterprise, education, employment and everywhere – a reference to the levelling-up agenda.

Hunt stressed that he understood "the importance of low taxes in creating incentives and fostering the animal spirits that spur economic growth", but dashed hopes of any significant tax cuts in March's Budget. The chancellor stressed that risk-taking can only happen when governments provide economic and political stability, adding that "the best tax cut right now is a cut in inflation".

The MPC's latest gross domestic product (GDP) projections suggest that the economy will enter a shallow recession this year, before recovering at the start of 2024. This is more optimistic than November's projections (which forecast the longest UK recession on record), and the MPC noted that the outlook was brighter thanks to falling wholesale energy prices reducing the drag on GDP from the "real income squeeze". Some of the improvement can also be attributed to the lower market-implied interest rate peak used in this month's forecasts: 4.5 per cent, down from the 5.2 per cent used in the November report.

While the chancellor will be heartened by the BoE's upgraded forecasts, the monetary policy report was downbeat about the scale of the challenges facing the UK economy. GDP projections suggest that the UK could suffer seven years of lost growth, with the economy only recovering to its pre-pandemic level by 2026.

IMF warning

The rate hike follows IMF forecasts suggesting that the UK would be the only advanced economy to enter recession this year, as the chart shows. The Fund's chief economist, Pierre-Olivier Gourinchas, argued that UK firms and consumers are unusually exposed to high energy prices, and he expects the pass-through of higher interest rates to hit mortgage holders this year.

Gourinchas argued that although "monetary policy has started to bite", the battle against inflation is "far from won". He urged central banks to raise rates "above the neutral rate and keep them there until underlying inflation is on a decisive declining path". Despite fears of overtightening, he warned that easing too early "risks undoing all the gains achieved so far". If last week's central bank meetings are anything to go by, policymakers are inclined to agree – for now. ●

THE MPC'S LATEST GDP PROJECTIONS ARE MORE OPTIMISTIC THAN THOSE MADE IN NOVEMBER

ECONOMIC OUTLOOK

Last month brought slightly better news on UK and US inflation. In the UK, consumer price index (CPI) inflation dipped for the second month in a row, while the US has seen inflation fall for six months straight. But policymakers do not yet believe their job has been done.

Next week's US and UK CPI data (released on 14 and 15 February, respectively) will, understandably, be pored over. The trajectory for the UK is far less certain: CPI dipped only slightly from 10.7 per cent in November to 10.5 per cent in December. Consensus forecasts from the Treasury suggest that January CPI figures will be flat. This means that alternative measures of inflation could rise to prominence as economists try to gauge the direction of travel.

'Core' inflation figures (released alongside CPI stats) strip out more volatile food and energy prices and will provide a welcome indication of the 'stickiness' of underlying price pressures. Producer price index (PPI) figures, released on 15 February in the UK and the following day in the US, will also tell us more about pipeline price pressure. The latest UK PPI figures showed output PPI (factory gate price growth) slowing from 16.3 to 14.8 per cent.

The Fed and the Bank of England remain concerned about the potential for labour market tightness to fuel inflationary pressures. UK unemployment and earnings figures will be announced on 14 February, as will US hourly earnings data.

US and UK retail sales figures will be released on 15 and 17 February, respectively. December's UK figures were an unwelcome surprise, showing a 1 per cent month-on-month decline in retail volumes. As November's figures were relatively buoyant, it seems that consumers shifted their Christmas spending (rather than increasing it) last year.

In the eurozone, GDP and unemployment figures will be released on 14 February, while industrial production figures follow on the 15th.

How to create new sources of retirement income

If you can't stretch your existing resources further, you may need new sources of income says Leonora Walters

- Working after you have retired provides more income, but there are tax consequences
- Property can generate income in a number of ways
- Changing your asset allocation can increase your income

The rise in the cost of living means many are likely to need more income to maintain a comfortable standard of living in retirement. You could try to stretch your existing resources to provide more income. However, if doing this still doesn't provide enough retirement income and you don't want to make cutbacks, you need to find new sources.

You could go back to work – at least part-time. As well as more income, you might get employer contributions to a pension, boosting your retirement pot for when you fully retire. If you are "an employee over state pension age you will generally not pay National Insurance, keeping more of your hard-earned income", says Bruce Davison, senior wealth planner at atomos. "You might also be entitled to further employer-paid-for benefits."

Self-employment might be better, especially if it's something that you did before you retired and are familiar with. You can dictate your own hours and, depending on the nature of what you do, might be able to work from home. You would not be auto-enrolled into a pension but could make pension contributions at a level you choose – or not make them. However, you would not have the certainty of income that paid employment provides, and with economic conditions deteriorating, attracting regular custom may prove harder and you might not get as much income as you desire.

More income from employment could push you into a higher tax bracket when considered alongside your pension income. "Income tax needs to be considered, especially if you are close to any tax thresholds, as does the impact on any state benefits," adds Davison. So consider if it is financially worth you doing this extra work.

If you have already accessed a defined contribution pension, in many cases you will have triggered the money purchase annual allowance (MPAA), which means you can only contribute £4,000 a year before your tax reliefs disappear. If you breach this limit, you will have to pay a charge, likely to be worth about the value of tax relief you would have received on contributions over £4,000.

But there are exemptions for those taking their 25 per cent tax-free sum, withdrawing money to buy a lifetime annuity, or cashing in pension pots worth less than £10,000. Those contributing to defined benefit pensions are also exempt from the MPAA.

Using property assets

As an alternative, you could downsize your home. By this stage in life you are likely to have paid off your mortgage so will receive most of the sale proceeds. If you have owned your home for a long time you are likely to have benefited from a long period of rising house prices, meaning that the difference between the price of your existing property and new home could be large – even with the recent moderation in price growth.

Living in a smaller home could also mean lower bills and maintenance costs, helping your income go further.

However, downsizing when house prices are falling, as may be the case this year, is in theory not a good idea. If, for example, your £400,000 home has shed 10 per cent of its value and you buy a home that was worth £250,000 but had also fallen 10 per cent, it would only achieve a saving of £25,000. But this doesn't factor in gains made over the course of ownership of your existing property, which could be substantial if you have owned it for decades.

The costs of buying and selling include stamp duty, and estate agents' and solicitors' fees, which can eat into any profit you make from downsizing.

You then need to decide what you do with the capital you realise. High inflation makes it particularly important to invest it appropriately. But you should also be prepared for its value to fall if equity markets prove volatile.

A second property could generate a regular monthly income. Although the rent from buy-to-let property contributes towards your income and could push you into a higher tax band, you can deduct certain expenses from your rental income, including maintenance, insurance and letting agents' fees when working out your taxable profit. You also get 20 per cent tax relief on mortgage interest payments. And if you have a spouse or civil partner with lower or no income you could transfer the property and income to them, reducing the amount lost to tax – or hold it jointly and use both your allowances.

With house prices now falling, you might be able to purchase a suitable property for less than you would have paid for it a few months ago. However, when you purchase buy-to-let property, you pay an additional 3 per cent stamp duty compared with primary homes, and costs such as insurance, ongoing maintenance, mortgage repayments, and utility bills will eat into your rental profit.

Tenants can default on rent, and legal action to remove a tenant who refuses to leave can be costly. If the tenant moves out and you cannot immediately find someone else, you might have void periods when no income is received.

It also takes time and effort to manage a buy-to-let property, which might not be possible or preferable as you get older, so you may have to pay an agent to manage it. And, unlike pensions, the property would fall into your estate for inheritance tax purposes.

If you sell a buy-to-let or second property, you are liable for capital gains tax (CGT) on the proceeds. The annual CGT allowance falls from £12,300 to £6,000 from 6 April, then further to £3,000 in April 2024. Selling can also involve costs such as estate agents' and solicitors' fees. It could take some time to sell and, especially in the current housing market, you might not get as much for it as you want.

Ian Cook, financial planner at Quilter, argues that you should hold buy-to-let property alongside a portfolio of more liquid investments such as funds and shares that could more easily be sold to provide money if necessary, and can be held within tax-efficient wrappers.

Future-proofing is also important: if you are receiving a rental income from the second property, consider what you would replace that income stream with – and if you could do better by, say, investing the money you realise from a sale.

Last-resort options

For those aged over 55, equity release is an option – but it has a lot of downside risk. It involves buying a financial product that provides money as either a lump sum or a series of smaller amounts, secured against some of the value of your home. Typically, the older you are, the more you can release. You may also qualify for an enhanced lifetime mortgage if you have a serious health condition or an unhealthy habit, such as smoking. This can enable you to borrow more or to pay lower interest. Equity release debt is settled when you die, go into care or sell the property.

However, rates of interest for equity release products are typically more expensive than for ordinary mortgages, with an average rate of 6.61 per cent in February 2023, according to Moneyfacts.co.uk – up from 4.22 per cent in February last year. This means that it is particularly expensive if you let the interest roll up. You also have to pay arrangement fees for equity release products, which can be between £1,500 and £3,000. These include valuation, arrangement, solicitors' and advice fees, as you cannot take out equity release without consulting an adviser.

If you release equity from your home, you might not have as much value in your property to meet costs later in your life, such as for care. If you take out an equity release product against the value of your home, when you die your children or other beneficiaries will not receive the property's full value.

Because of high interest rates and the loss of choice over what you do with the property in the future, Atticus Kid, wealth planner at JM Finn, argues that equity release should be the last resort when seeking extra income.

Changing your asset allocation

Changing the allocation of your investments could improve their return profile and represents a more straightforward choice than some of the options above. First, cash: it is generally recommended to hold at least six months' worth of expenses in easily accessible cash – or around two years-worth if investment income forms part of your retirement income. This is so that you can avoid crystallising losses when markets fall, which would make it harder for the remaining assets to get the portfolio's value back to where it was. A cash reserve is also important for covering the costs of emergencies or big-ticket items.

Equity release should be the "last resort when seeking extra income"

With base rates having risen so quickly over the past 12 months, your cash holdings may not be earning the best rate of interest possible – so consider moving these assets to a higher-paying account. If you are part of a couple and one of you is in a lower tax band, that person could hold more of the cash so that they could benefit from more of the personal savings allowance: £1,000 for basic-rate taxpayers, falling to £500 for higher-rate payers.

You should invest cash you have in excess of the reserve unless you need it to cover a known expense in, say, the next three years.

Equity income, bond and some alternative asset funds are good options. But it is important to maintain a balanced portfolio, even if investing for income is your principal requirement. In the equity market, you could do this by adding to both higher-yielding investments, and growth investments from which you could sell shares or units to create an income.

"Having only high-income investments can result in a stylistic bias and loss of balance," says Rob Morgan, chief analyst at Charles Stanley. "In equities, you may end up being concentrated in certain sectors and miss out on the best long-term returns from markets. For instance, a strict yield discipline would have resulted in missing much of the significant outperformance of the US stock market, powered by the technology and ecommerce giants, over the past decade.

"You should be able to support income from the natural yield of your income investments. If growth investments disappoint, you could top them up with income, and if they do well you could rebalance into income-producing ones to grow your income stream and maintain a good stylistic balance."

The exact asset allocation you need will depend on a number of factors including how much income you need, and age, life expectancy and time horizon. You can see suggestions on appropriate asset allocations in our regular articles in the pensions and financial planning sections of the magazine.

Alternately, Kid suggests using some or all of your pension assets to buy an annuity. If you have not yet drawn from them or are struggling to generate income, this would give you a guaranteed payout. If you have a medical condition you may qualify for an enhanced annuity, which offers higher income. And the older you are, the higher the annuity rates you tend to receive.

Annuity income has significantly improved over the past year, to the point where it may now be better than what you get from portions of your investment portfolio. However, while the income is guaranteed, it is likely to be lower than that which you could receive from your investments at times of good dividend growth. And you cannot pass on an annuity to beneficiaries after you die as with a personal or self-invested personal pension (Sipp).

One option is to use just some of your money to buy an annuity, and keep the rest invested to have both a safety net and the potential to capture better investment returns.

How can we generate retirement income of 4 per cent a year?

These investors are using their investments to fund an early retirement

- A close eye should be kept on property fund investments
- Further diversifying the portfolio should reduce risk
- Moving investments into Isas will reduce the amount of capital gains and dividend tax incurred

Mark is age 61 and Hannah is 65, and they have a joint income of £48,000 a year. Their investment portfolio provides around £30,000 of this, Hannah draws £1,500 a month from a personal pension and the remainder comes from the sale proceeds of their business.

They are helping one of their children to buy a home with a cash loan of £200,000. The son will make repayments of £8,000 a year. Mark and Hannah's home is worth about £700,000 and mortgage free.

"In 2020, we were running a small hotel but the Covid-19 pandemic caused it to close," says Mark. "So we have retired early, and spent a year selling our business and large family home, and downsizing to a seaside cottage. We used capital from the business to cover the costs of this disruption.

"I have gone back to university to study history and Hannah may return to working as a counsellor, but we plan to mainly live off our investments and pensions. We have found that we can live on £4,000 a month and aim to keep our incomes under the higher-rate tax threshold. I am due to start receiving the state pension and a personal pension in 2028. I pay £3,000 a year into the personal pension which currently has a value of about £203,000.

"In July, Hannah will start to receive the state pension and £3,000 a year from a personal pension which currently has a value of about £90,000. She has been taking £1,500 a month from this for a year. We will also start getting loan repayments from our child so later this year our income will rise, allowing us to reinvest some of the income from our investments.

"In 2028, when I start to get my pensions, our income could rise again to around £69,000 a year so we will reinvest even more of the investment income. "Our main investment goal is to increase the investment portfolio's resilience to financial shocks and protect its capital value over the next 25 years, and generate income of 4 per cent a year. We hope to do this by rebalancing the portfolio so that it has the asset allocation set out [in the pie chart] and, as our pensions start to provide a greater proportion of our required income, we want to make it easier to manage perhaps by using investment trusts. We also want to improve tax efficiency by moving investments into individual savings accounts (Isas) each year, making full use of both our annual allowances.

The investments comprise my own investments, and three portfolios I have inherited from my parents and uncle. There were a large number of holdings, mainly UK direct equity holdings, but we have tried to rebalance the portfolio to meet our income needs and to build in resilience, by diversifying away from UK equities into international equities, alternative assets and bonds.

"I am happy to take moderate investment risk to get an average annual return of 4 per cent a year, and want to avoid higher risk investments such as Aim and smaller company stocks. But I am interested in overseas listed equities, particularly in Europe and the US, and have invested in what appear to be value companies such as **LVMH Moet-Hennessy Louis Vuitton (FR:MC)** and **Walt Disney (US:DIS)**. We would be prepared for the value of our investments to fall by up to 30 per cent in any one year and would wait for them to recover.

"I like to invest in well-established companies with a decent track record, although am also interested in the development of new sectors such as renewables and seeing established companies moving into new fields. Much of my investing has an ethical component so I will not invest in tobacco companies; arms manufacturers; **Apple (US:AAPL)**, which squirrels its money away overseas, or **Exxon Mobil (XOM)** which failed to convert into a general energy company when it had the chance to do so in the 1980s." ●

MARK AND HANNAH'S PORTFOLIO

Holding	Value (£)	% of portfolio
Cash	255,757	21.26
Mark's pension	203,000	16.88
Hannah's pension	90,000	7.48
Legal & General (LGEN)	38,995	3.24
IG (IGG)	36,524	3.04
Unilever (ULVR)	32,744	2.72
Rio Tinto (RIO)	32,496	2.7
DS Smith (SMDS)	25,874	2.15
Sequoia Economic Infrastructure Income Fund (SEQI)	24,577	2.04
Nichols (NICL)	24,015	2
Schroder Oriental Inc. Fund (SOI)	23,529	1.96
Smurfit Kappa (SKG)	19,241	1.6
M&G (MNG)	16,971	1.41
Int'l Public Partnerships (INPP)	16,711	1.39
National Grid (NG.)	16,578	1.38
Walt Disney (US:DIS)	16,567	1.38
Bankers Inv. Trust (BNKR)	15,715	1.31
Greencoat UK Wind (UKW)	15,644	1.3
City of London Inv. Trust (CTY)	14,968	1.24
JPMorgan Global Growth & Income (JGGI)	14,706	1.22
Invesco Bond Income Plus (BIPS)	14,250	1.18
Phoenix (PHNX)	14,186	1.18
Hapag Lloyd (DE:HLAG)	14,031	1.17
CT UK Capital & Income Investment Trust (CTUK)	13,503	1.12
Siemens (DE:SIEX.N)	13,485	1.12
NextEnergy Solar Fund (NESF)	13,294	1.11
LVMH Moet-Hennessy Louis Vuitton (FR:MC)	12,923	1.07
Investec (INVP)	11,942	0.99
Royal London Short Duration Global High Yield Bond (IE00B979BF49)	11,798	0.98
Primary Health Properties (PHP)	11,231	0.93
Home REIT (HOME)	10,991	0.91
Ecclesiastical Insurance Office 8.625% Non Cum Irrd Prf #1 (ELLA)	10,323	0.86
Newmont (US:NEM)	10,316	0.86
UK 0.25% Treasury Gilt 31/01/2025 (TN25)	10,315	0.86
GSK (GSK)	10,046	0.84
Tritax EuroBox (EBOX)	9,911	0.82
Lloyds Banking (LLOY)	9,802	0.81
Barratt Developments (BDEV)	9,173	0.76
Aviva Investors US Equity Income (GB00BCGD4P92)	8,876	0.74
BlackRock Continental European Income (GB00B3Y7MQ71)	8,783	0.73
Tritax Big Box Reit (BBOX)	8,562	0.71
Koninklijke DSM (NL:DSM)	8,185	0.68
Foresight Sustainable Forestry (FSF)	8,070	0.67
AEW UK Reit (AEWU)	6,587	0.55
GCP Asset Backed Inc. Fund (GABI)	5,470	0.45
Hydro Hotel Eastbourne (HYDP)	2,050	0.17
Total	1,202,715	

POPPY FOX, INVESTMENT MANAGER AT QUILTER CHEVIOT

You are already in a good position to enjoy a long and happy retirement, but with a little tweaking you could make things even more efficient.

I suggest continuing to use your Isa allowances each year to reduce any capital gains and dividend tax that may be due. This is particularly relevant with the reductions in capital gains and dividend allowances in the next two tax years. And it will ensure that your portfolio is as tax efficient as possible and maximise the returns you get from it.

A moderate risk profile is sensible as you are already in retirement. However, as you are still relatively young, and need the portfolio to grow and keep up with inflation over the years, you need to take some risk.

Keep a close eye on the property funds in the portfolio. These high-yielding assets should make a useful to contribution to the income your portfolio generates – especially until 2028 when Mark's pensions start to pay out. However, in the current economic environment this asset class may be volatile.

The number and size of your holdings is certainly something to keep an eye on. You have over 40 holdings which is a large number for one person to keep track of. Consider moving away from direct stock holdings to collective investments such as opened-ended investment companies or investment trusts.

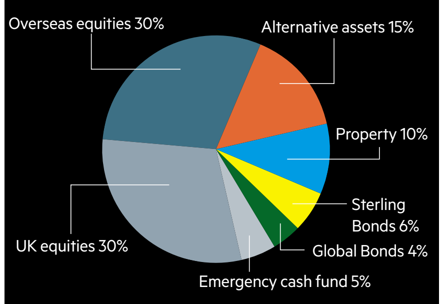
This would reduce the number of holdings and make the portfolio easier to manage. You seem to be aware that it is important to monitor the holding sizes and ensure there isn't too much stock-specific risk in the portfolio.

It is a good idea to diversify the portfolio further, move some of the assets into overseas equities, and increase exposure to bonds and alternative investments. The asset allocation plan that you are working towards looks sensible overall. Doing this should reduce risk over the longer term and increase the resilience of the portfolio. However, in a risk-off scenario such as 2022, even well-diversified portfolios suffered negative returns.

You are very wise to have a cash emergency fund as it should mean that you don't need to draw from the investments at times like this to cover an unexpected cost.

It's also important that the portfolio is actively managed, and changes are made as and when needed.

MARK'S INTENDED ASSET ALLOCATION



Source: Investors' Chronicle

RACHEL WINTER, PARTNER AT KILLIK & CO

Your overall plan looks rational and achievable. You intend to reinvest excess income from 2028, but an alternative would be to reduce income withdrawals from the pensions which would leave more capital inside them where it is exempt from inheritance tax.

Unhelpfully, the term 'medium risk' doesn't have a universal definition, but it is generally used to refer to a portfolio with an equity weighting of between 40 and 80 per cent – quite a wide range. Your target asset allocation is right in the middle of this with an equity weighting of 60 per cent.

You would accept a fall in the value of your investments of up to 30 per cent in any given year which suggests that you could tolerate a higher equity weighting. But you do not need to increase your risk level given that your existing plan should allow you to meet your objectives.

I agree with your plan to further diversify the portfolio and transition the equity element away from the UK. Your target asset allocation is an equal split between the UK and overseas, but I think you should aim for a greater overseas focus. The MSCI World index is a good representation of the global market and this has a UK allocation of less than 5 per cent.

You are interested in using more investment trusts to help consolidate your portfolio. This would result in a very different portfolio, so you should decide whether to do this sooner rather than later – before spending time researching more direct share holdings.

You could have a diverse selection of 30 to 40 individual equities, and use funds to access more niche areas such as smaller companies and emerging markets.

Alternatively, you could have a core of global funds, alongside some smaller holdings in specialist funds or direct share holdings to gain exposure to areas in which you have particular conviction.

You currently have about 20 direct share holdings. If you continue down the direct equity road, make sure that you have exposure to a good mix of sectors as well as geographies. The portfolio currently has a hefty exposure to the financial sector, but mining, healthcare and technology are under represented. Miners can provide good protection against inflation and should profit from the reopening of the Chinese economy.

Healthcare companies should benefit from the globally ageing population and advances that were made in the search for a Covid vaccine.

Technology shares suffered heavily in 2022 as interest rates were raised, but many technology companies continue to grow at healthy rates and now look attractively valued.

Your interest in sustainability is evident in the non-equity element of your portfolio, but you could also incorporate it into the equity element. **Linde (US:LIN)**, a global leader in hydrogen, and **SSE (SSE)**, a pioneer in offshore wind, have both performed well of late. Otherwise, **Royal London Global Sustainable Equity (GB00BL6V0581)** would be a good addition if you opt for a more fund-focused portfolio.

IC PORTFOLIO CLINIC

Want to see your portfolio analysed by our experts? email portfolio.clinic@ft.com. None of the commentary here should be regarded as advice. It is general information based on a snapshot of the reader's circumstances.

Can I make a rental property my principle private residence?

This investor would like to know if she can mitigate potential CGT and IHT following the sale of a second property

Can I make a rental property my principal private residence to escape capital gains tax (CGT) under the principal prime residence rule? We bought the property for £48,000 in 1992, and its value is now about £380,000. We have never lived in the property – it has always been let.

To minimise the inheritance tax (IHT) liability, we are planning to sell the property and gift the proceeds to our daughters. I and my husband, who is 82, hold the property in joint names. If one of us dies within seven years of doing this, I assume it will be subject to both CGT and IHT. So would there be any advantage to changing the ownership basis to tenancy in common? **JK**

CHRIS SPRINGETT, TAX PARTNER AT EVELYN PARTNERS

Private residence relief is an important but often misunderstood relief from CGT. The relief applies to an individual's "only or main residence", but only to the extent that it has qualified as such throughout the individual's "period of ownership". If the property has not been the only or main residence throughout, it is necessary to time-apportion the capital gain and apply private residence relief to the proportion of the period when the property did qualify.

I THINK IT IS SAFE TO SAY THAT BECAUSE YOU HAVE NEVER LIVED IN THE PROPERTY IT WILL NOT QUALIFY FOR THE RELIEF

In terms of what constitutes an individual's main residence, the phrase 'residence' is not defined in the legislation. Rather, there is a raft of case law on the subject that it is necessary to navigate to fully understand when a property does and does not qualify. However, based on your explanation of your situation, I think it is safe to say that because you have never lived in the property it will not qualify for the relief.

So even if you establish the property as your residence going forward, the period from acquisition to now will be subject to CGT. For example, if you are able to establish the property as a residence for a year, only around £10,700 of the total gain of £332,000 would be exempt, with the balance subject to CGT.

But you may face difficulties in establishing that the property is your only or main residence. The case law in the area introduces the concept of 'permanence' of occupation as a key consideration when looking at whether a property qualifies as a residence. It is debatable whether this permanence would be met if the intention is to gift the property in the near future. However, given the somewhat limited impact that this would have on the overall liability for you, this is perhaps somewhat moot. As such, given that private residence relief is likely to offer limited relief at best, you should be prepared for a CGT liability when you have sold the property.

When calculating the taxable gain, you are entitled to deduct any legal costs of sale from the proceeds. You can also increase the original cost figure to encompass the cost of acquiring the property, including conveyancing fees and stamp duty land tax. And when calculating the gain, you can deduct the cost of any improvement works carried out on the property if they are reflected in the property at the time of sale.

Both you and your husband would then be eligible for your annual CGT exemption. For the 2022-23 tax year, this is £12,300 per person. However, this will reduce to £6,000 for the 2023-24 and to £3,000 for the 2024-25 tax years.

The gain after deducting all costs and exemptions is then taxed at 18 per cent at the basic rate, and 28 per cent at the higher and additional rates.

The gain needs to be reported via a 'CGT on UK property' account within 60 days of completion, with the tax payable at the same date.

You are correct in your assessment of the risk of both CGT and IHT being payable. If you sell the property you will crystallise the CGT liability. If you then gift the proceeds, this is a potentially exempt transfer for IHT purposes. If you or your husband died within seven years of making the gift, the potentially exempt transfer would 'fail' and IHT would be due. The exact amount of tax due would depend on other gifts made and the availability of the nil-rate band for IHT. Also, a taper relief that may reduce the rate of IHT applied to the gift is available if the gift is made at least three years prior to death. However, there is a real risk of paying both taxes.

While tenancy in common would not necessarily mitigate the taxes discussed above, it would allow you or your husband to leave your share of the property to your daughters on death. As joint tenants – the alternative way of holding real estate – the share passes to the other joint tenant automatically. CGT is not payable on death, but IHT would need consideration. Ask a tax adviser to undertake a review of your own and your husband's estate position to determine if this would be an appropriate step to take.

Bargain Shares

***Simon Thompson's* 2022 portfolio trounced both the Aim and main market indices. Our ace small-cap stockpicker reveals his top picks for 2023**

The idea behind our annual Bargain Shares Portfolio is simple. It's to invest in companies where the true worth of the assets is not reflected in the share price, and where we can reasonably expect that it will be in due course.

Our portfolios are based on the investment ideas of Benjamin Graham (see box 'Rules of Engagement') and they have certainly withstood the test of time, beating the FTSE All-Share index in 20 out of the 24 years in which we have run them. During that time, they've generated an average return of 21.8 per cent in the first 12-month holding period, compared with an average increase of 4.5 per cent for the FTSE All-Share index.

My 2022 motley crew of Bargain Shares proved no exception, generating a 12-monthly total return of 20 per cent on an offer-to-bid basis and including dividends. By comparison, the FTSE All-Share Total Return index, the index against which we benchmark our annual performance, produced a positive return of 4.4 per cent. It's worth pointing out that the FTSE Aim All-Share index lost 17.7 per cent of its value over the 12-month period. So the portfolio's outperformance was even more striking given that the hidden gems we uncover are found among the stock market's under-researched small- and micro-cap segment.

Targeting smaller-cap companies has reaped handsome rewards over the years, thereby justifying our long-term bias. But it works both ways as companies that disappoint can be punished more heavily given the less liquid nature of these shares. The flipside is the expectation of substantial long-term outperformance when we get it right, as our track record shows.

There is no doubt that this investment strategy has stood the test of time. Of the past six annual portfolios I have selected, all have handsomely outperformed the FTSE All-Share in the first 12-month holding period. Moreover, as the subsequent performance of the 2016, 2017 and 2018 portfolios highlights, our balance sheet-based investment strategy can deliver substantial long-term financial rewards for patient investors, too. Those three portfolios have produced total returns of 107 per cent, 103 per cent and 76 per cent, respectively, since inception.

Interestingly, merger and acquisition (M&A) activity has been a regular feature of all my portfolios, as predators attracted by the asset backing on offer run their slide rule over the numbers. It's understandable, as in some cases valuations are so depressed that we are getting all the fixed assets in the price for free, thus offering the substantial "margin of safety" Benjamin Graham was aiming for. As I highlighted at the start of the year ('Four potential takeover targets', IC, 10 January 2023), there are sound reasons to expect increased M&A activity in the smaller- and micro-cap end of

BARGAIN SHARES PORTFOLIO: 24-YEAR TRACK RECORD

Year	Bargain Portfolio 1-year performance (%)	FTSE All-Share index 1-year performance (%)
1999	59	17.3
2000	28.1	-4.5
2001	2.5	-17.2
2002	-29	-31
2003	146	29
2004	17.1	11
2005	50	16.1
2006	16.9	11.3
2007	-0.9	-6
2008	-60.1	-30.9
2009	53.4	25.6
2010	46.1	18.6
2011	-18.4	-2.7
2012	31.9	8.9
2013	36.4	10.4
2014	-16	6.8
2015	-0.8	-7.4
2016	11	19.4
2017	30.4	10.7
2018	12.5	-4.9
2019	33.1	13.4
2020	30.2	-8.6
2021	24.9	18.7
2022	20	4.4
Av. one-year return	21.8	4.5

Source: Investors' Chronicle

BARGAIN SHARES PERFORMANCE (2016-22)

Portfolio	Portfolio total return to date	FTSE Aim All-Share total return to date	FTSE All-Share total return to date
2016	107.60%	37.80%	69.60%
2017	103.50%	5.30%	35.50%
2018	76.50%	-13.10%	23.90%
2019	28.30%	0.60%	28.20%
2020	28.80%	-6.40%	12.70%
2021	10.70%	-25.70%	23.10%
2022	20.00%	-17.70%	4.40%

Source: London Stock Exchange, FTSE Russell
Bargain Shares Portfolio total return calculated on offer-to-bid basis with dividends uninvested.

MY 2022 BARGAIN SHARES GENERATED A 12-MONTHLY TOTAL RETURN OF 20 PER CENT ON AN OFFER-TO-BID BASIS AND INCLUDING DIVIDENDS

BARGAIN SHARES PORTFOLIO 2023

Company name	TIDM	Market	Activity	Mid-price	Market value	Bargain rating
Logistics Developm't	LDG	Aim	Value focused investment company	14.6p	£82mn	1.24
Arix Bioscience	ARIX	Main	Biotechnology investment company	109.5p	£141.3mn	1.21
Gattaca	GATC	Aim	Specialist engineering technology recruitment agency	72p	£23.3mn	0.98
Netscientific	NSCI	Aim	Life sciences, healthcare and technology investment company	62p	£14.6mn	0.71
Checkit	CKT	Aim	Workflow management software platform	25p	£27mn	0.5
TMT Investments	TMT	Aim	Technology investment company	275¢	$86.5mn	0.43
CML Microsystems	CML	Main	Semiconductor chip designer and manufacturer	490p	£77.4mn	0.37
CleanTech Lithium	CTL	Aim	Lithium exploration and development company	71.5p	£75.3mn	0.23

Source: London Stock Exchange RNS and company accounts

the stock market this year, a potential driver of investment returns.

So, once again, I have run the rule over roughly 1,500 listed companies on Aim and the main market of the London Stock Exchange, to come up with a portfolio of companies where the asset backing should be strong enough to overcome any short-term trading difficulties and, in time, to reward our loyal following of long-term value investors.

LOGISTICS DEVELOPMENT GROUP (LDG)

Aim: Share price: 14.6p
Bid-offer spread: 14.4-14.8p
Market value: £82mn

- **Estimated net cash backs up 82 per cent of share price**
- **Holdings worth £51.9mn in the price for only £14.4mn**
- **Investment adviser making some astute calls**

In November 2021, **Logistics Development Group (LDG)** became cash rich after selling its indirect interest in Greenwhitestar Acquisitions, the holding company of Eddie Stobart, The Pallet Network, iForce, Eddie Stobart Europe and The Logistics People businesses, to Culina Group for £127.5mn.

Shareholders then sanctioned the repurchase of 140mn of the shares in issue in a net asset value (NAV) per share accretive buyback programme to try to reduce the share price discount to NAV. This explains why LDG's NAV declined from £131.9mn in November 2021 to £110.7mn in May 2022. Based on the current 561.7mn shares in issue, NAV was 19.7p a share in May 2022, a figure that has increased since then even if LDG's share price hasn't.

A change of direction

With the benefit of the disposal proceeds to invest, LDG is now an investment company, having appointed DBay, its 32.9 per cent shareholder, as investment adviser. Founded in 2011, DBay is an Isle of Man-based asset management firm owned by its partners with offices in London and Douglas, Isle of Man.

The firm follows a value investing approach and invests in listed equities across Europe, as well as in private-equity-style control investments – wherein the buyer, as the name implies, takes a controlling stake. They are made primarily in undervalued companies, with a focus on those that generate or have the potential to generate significant cash flows, where there is a high degree of revenue visibility and a strong and distinctive market position.

The core DBay team comprises 12 investment professionals who have worked together for 20 years and have developed a diversified set of skills from their financial and operational backgrounds, offering a deep insight into industry sectors. Capital is managed on behalf of institutional investors, trusts, foundations, family offices and pension funds. They have an impressive track record, having previously worked at Laxey Partners, a hedge fund, where they managed an investment portfolio, and at DouglasBay Capital, an investment company that was once Aim traded.

In 2008, under the DBay team's management, DouglasBay Capital took private and successfully restructured TDG, a logistics company. During this period (2006-11), the DBay team generated a gross internal rate of return (IRR) of 36 per cent.

In 2015, DBay launched DBay Fund II, which delivered an estimated 44 per cent gross IRR (if cash returns to co-investors are included) over the next six years. DBay Fund III delivered a 48 per cent gross IRR on a standalone basis from launch in 2019 to 2021, too. The DBay team have been working their magic at LDG.

Hitting pay dirt

The first investment LDG made was the purchase of a 1.74 per cent stake in ►

RULES OF ENGAGEMENT

The bargain portfolio is based on the writings of Benjamin Graham, a US investor and writer, who favoured looking for companies that were "out of favour because of unsatisfactory developments of a temporary nature".

How do we know whether the "unsatisfactory developments" are indeed "temporary"? Mr Graham's approach was to focus on the balance sheet, and specifically the net current assets – stocks, debtors and cash, less any creditors. He believed that a bargain share is one where net current assets less all prior obligations exceed the market value of the company by at least 50 per cent. Mr Graham's theory was that a strong balance sheet will usually see a company through any short-term difficulties; he called it his "margin for safety".

Finding companies that match these strict criteria has become more and more difficult over the years as the link between market capitalisation and asset value has become more tenuous. In practice, when we ran our search we found only a handful of the 1,500 listed UK companies had a bargain ratio of one or above and this included relatively illiquid micro-cap companies with market values below £10mn that are very difficult to trade. So, to widen the net, the cut-off point has been lowered to 0.25, and we only considered companies with a market value above £14mn to avoid liquidity issues.

Finally, market makers could easily raise their offer quotes for smaller companies by 10 per cent plus on publication day. However, prices and spreads have demonstrated a habit of drifting back over subsequent weeks, so please be disciplined in your share buying as these investments are for the long term as the long-term strong outperformance of our portfolios in recent years highlight. It is also important to buy a decent number of our recommendations to diversify risk.

► CareTech, the care home provider for adults and children with special needs. Having invested £13.1mn for a 1.74 per cent stake in March 2022, CareTech was subsequently taken over a few months later in a deal that valued LDG's holding at £14.8mn.

The DBay team then invested £7.8mn to acquire a 7.4 per cent stake in **Finsbury Foods (FIF)**, a speciality bakery manufacturer of cake, bread and morning goods, in August and October 2022. It's proved a smart move as the holding of 10.08mn shares is now worth £10mn, a paper gain of 28 per cent.

These are not the only astute investment calls, either. LDG invested £5.9mn on 22 December 2022 in **Alliance Pharma (APH)**, acquiring 12.85mn shares in the distributor of consumer healthcare and pharmaceutical products. That holding is now worth £8.1mn, a quickfire gain of 37 per cent in less than two months.

The largest investment made by the DBay team was announced in early December last year, when LDG invested €18.5m (£15.9m) in the private holding company, Synsion, of a group of companies formed by DBay Advisors. That was done specifically to invest in **SQLI S.A. (FR:SQI)**, a leading pan-European digital transformation business.

The Synsion Group is controlled by funds discretionally managed by DBay and holds 72.3 per cent of SQLI. LDG's investment has initially been made by way of an €18.5mn loan, which will be converted in due course into an equity interest corresponding to a see-through stake in SQLI of 9 per cent.

Listed on the Euronext Paris and based in Paris, SQLI has leading positions in the fast-growing ecommerce/omni-channel integration space. The group has more than 2,100 employees in 13 countries, including more than 600 in its offshoring delivery centre in Morocco. Blue-chip clients include LVMH, Airbus, Nestlé, L'Oréal, Bridgestone, Adidas and Generali. For the half year ending 30 June 2022, SQLI reported 9.4 per cent higher revenue of €124.5mn and 51 per cent higher cash profit (pre-IFRS16) of €12.1m.

The investment has already delivered as SQLI's share price has risen 10.4 per cent to €42.50 since LDG announced its investment, giving a read-through valuation of €20.4mn (£18mn) for LDG's stake.

ARIX BIOSCIENCE INVESTMENT PORTFOLIO (31 JANUARY 2023 ESTIMATES)

Investee company	Valuation	Value per share
Amplyx	£1.3mn	1.0p
Artios	£24.9mn	19.3p
Aura (NASDAQ:AURA)	£13.1mn	10.2p
Depixus	£8.0mn	6.2p
Disc Medicine (NASDAQ:IRON)	£10.6mn	8.2p
Harpoon Therapeutics (NASDAQ:HARP)	£1.8mn	1.4p
Imara (Nasdaq:IMRA)	£10mn	7.6p
Public Opportunities Listed Portfolio	£15.3mn	11.9p
Sorriso Pharmaceuticals	£6.6mn	5.1p
STipe Therapeutics	£2.4mn	1.9p
Twelve Bio (including £7.2mn investment made in January 2023)	£11.1mn	8.6p
Other interests (at 30 December 2022)	£3.0mn	2.3p
Movements on unquoted investments since 30 June 2022	£1.5mn	1.2p
Portfolio value	£109.6mn	84.8p
Net cash	£123.3mn	95.5p
Total investments	£232.9mn	180.3p

Source: Arix Bioscience 2022 interim accounts, London Stock Exchange and Nasdaq filings. Investors' Chronicle estimates using latest open market prices of listed holdings and book values (30 June 2022) of unquoted private investments adjusted for follow-on investments.

THERE ARE SOUND REASONS TO EXPECT INCREASED M&A ACTIVITY IN THE SMALLER- AND MICRO-CAP END OF THE STOCK MARKET THIS YEAR

Unwarranted share price discount

By my reckoning, at the end of January 2023 – ie, after LDG's annual year-end – the company held investments that are now worth £51.9mn (9.3p a share) across four holdings. These include £15.8mn in a wholly owned company, Fixtaia, which was acquired to purchase the CareTech investment in March 2022.

The basis of the Fixtaia valuation is its 31 May 2022 NAV after stripping out the value of the CareTech holding, which is now in cash and included in LDG's pro-forma net cash estimate of £67.6mn (12p a share). This means that the cash pile backs up 82 per cent of LDG's current share price (14.6p).

After accounting for a small amount of balance sheet liabilities as well as

LOGISTICS DEVELOPMENT GROUP INVESTMENT PORTFOLIO

Portfolio companies	Sector and description	Group interest	Fair value of stake	Fair value per LDG share
Finsbury Foods	Food and cake maker	7.7 per cent equity stake	£10.0mn	1.8p
Alliance Pharma	Distributor of healthcare and pharmaceutical products	2.4 per cent equity stake	£8.1mn	1.4p
Synsion	Pan-European digital transformation business	9 per cent read-through equity stake	£18.0mn	3.2p
Fixtaia Limited	Investment company that held CareTech shareholding	100 per cent equity stake	£15.8mn	2.8p
Pro-forma cash			£67.6mn	12.0p
Total assets			£119.5mn	21.3p
Total liabilities			£0.9mn	0.2p
Estimated admin. expenses (second half of 2022)			£0.6mn	0.1p
Spot NAV estimate			£118mn	21.0p

Source: LDG interim results at 31 May 2022 and subsequent London Stock Exchange RNS filings.

administration costs for the second half of last year, LDG has an estimated spot NAV of £118mn (21p) of which the investments in Finsbury Foods, Alliance Pharma, Synsion and Fixtaia account for £51.9mn (9.3p). Effectively, they are in the price for £14.4mn, or 73 per cent below their market valuations.

A bargain ratio of 1.24 highlights that the shares are deep into bargain basement territory, and so does a 30 per cent unwarranted share price discount to my 21p-a-share spot NAV estimate. It's also reassuring that LDG's investment adviser needs to generate a compound annual return of 8 per cent on the investments made before a 20 per cent profit share arrangement kicks in, thus incentivising the DBay investment team to perform well. They have significant skin in the game, too. Buy.

ARIX BIOSCIENCE (ARIX)

Main: Share price: 109.5p
Bid-offer spread: 109-110p
Market value: £141.3mn

- £123mn cash pile backs up 87 per cent of market capitalisation
- Quoted and unquoted investments in the price for only 13 per cent of their carrying valuations
- Potential for M&A activity to unlock value in investee companies
- Softening 10-year US Treasury yields support improved risk appetite for biotech sector

Arix Bioscience (ARIX), a global venture capital company that holds a diversified portfolio of unlisted and listed investments in early-stage biotechnology businesses, is a classic Ben Graham recovery play that offers minimal downside risk. That's because the group's cash pile of £123.3mn backs 87 per cent of Arix's market capitalisation of £141.3mn, leaving its £106.2mn portfolio of biotech investments effectively in the price for only 13 per cent of their value.

The group's last reported NAV of £232.9mn (180p a share) at 31 January 2023 included a portfolio of Nasdaq-quoted biotech companies and a small trading portfolio of listed public opportunities that had a combined valuation of £50.8mn, an unlisted portfolio of seven investments valued at £55.8mn, £3mn of other assets, and the £123.3mn cash pile.

Admittedly, investors are cautious after last year's blood bath in Nasdaq technology and biotech stocks. An equal-weighted index of US biotechnology stocks declined 21.5 per cent last year, the reversal coinciding with the steep rise in 10-year US Treasury yields, the preferred discount rate used for valuations. Arix's portfolio has not been immune, suffering a £25mn negative fair value portfolio movement in the first half 2022 due to falls in public biotech markets.

ARIX BIOSCIENCE NET ASSET VALUE BREAKDOWN

Date	Listed Portfolio	Unlisted Portfolio	Cash	Other Interests	Total NAV	NAV per share
	NAV Breakdown					
31-Jan-23	£50.8mn	£55.8mn	£123.3mn	£3mn	£232.9mn	180.3p

Source: Arix Bioscience RNS (6 February 2023)

ARIX BIOSCIENCE S&P BIOTECH ETF (XBI USA)

Investor sentiment was not helped either by corporate governance issues at Arix that led to the former chairman resigning last summer, and three well-respected industry experts being appointed as non-executive directors to bring the board into compliance with the UK corporate governance code.

Bearing in mind the hit to the portfolio, it's worth noting that the US 10-year Treasury yield peaked at 4.25 per cent in October 2022 and has since dropped to 3.43 per cent as investor attention turns to the economic downturn and the likelihood that the US Federal Reserve has acted swiftly enough in raising its short-term federal funds rate to see off the inflation threat. Further easing in the US 10-year Treasury yield would be good news for valuations of biotech companies.

It is also reassuring that the board is taking a prudent approach, exiting public positions where the directors no longer have confidence that the companies can deliver the superior returns targeted, and are deliberately being cautious about making new private investments. Instead, they have turned their attention to the value in listed companies, focusing on those businesses developing novel therapeutics that are of interest to large pharmaceutical companies, and which have scope to generate positive clinical data in the medium term.

M&A activity on the increase

There has been a marked increase in corporate activity among Arix's portfolio companies since last summer, another catalyst for higher valuations to help investors recover their mettle and entice them to take advantage of the unwarranted 40 per cent share price discount to NAV.

That's because the merger of biotech companies can de-risk the investment case by targeting investment more efficiently, while also offering the potential to increase cash runways, thus making them a more attractive proposition.

A good example is the recently completed merger of **Disc Medicine (US:IRON)**, a clinical-stage company focused on developing novel therapies to treat serious and debilitating haematologic disorders, and Gemini Therapeutics. The enlarged entity is ▶

▶ now focused on advancing Disc's pipeline of haematology programmes through multiple clinical studies. The enlarged business is well-funded, too. Having completed a $53.3mn concurrent financing from a syndicate of investors including Janus Henderson, Disc Medicine's $175mn cash pile provides a runway to 2025. Arix's stake in Disc was last valued at £9.1mn prior to the recent merger, but the shares have risen 17 per cent since then.

In addition, Arix portfolio company **Imara (US:IMRA)** is merging with Enliven Therapeutics to create a Nasdaq-listed clinical-stage biopharmaceutical company focusing on advancing Enliven's pipeline of precision oncology product candidates. Enliven is raising $165mn in a concurrent private financing co-led by new investors Fairmount and Venrock Healthcare Capital Partners. After the equity raise, the group will have $300mn of cash to advance its pipeline through multiple clinical milestones, providing funding into 2026. The deal has been well received; Imara's stock price has quadrupled since September 2022, increasing the value of Arix's stake to £10mn.

Hidden value in unlisted portfolio

There are more hidden gems in Arix's unlisted portfolio, too. For instance, Arix holds an 8.8 per cent stake (worth £24.9mn) in Artios, a company that is developing precision medicines for the treatment of cancer. Artios has attracted the attention of big pharma, having entered a research collaboration with **Novartis (CH:NOVN)** to discover next-generation DNA damage response targets to enhance its radioligand therapies.

The closest listed comparable to Artios is $525mn market capitalisation **Repare Therapeutics (US:RPTX)**, a Nasdaq-quoted clinical-stage precision oncology company, which has a 44 per cent higher valuation even though Arix's chief executive, Robert Lyne, says Artios has more advanced programmes. Having raised $153mn in an oversubscribed funding round in 2021, Artios is well funded, and expects to announce data from its Phase 1b dose expansion study in the first half of 2023, thus offering scope for positive newsflow.

Priced for a major re-rating

So, with investors showing an improved risk tolerance towards well-funded biotech investments after last year's mauling, the ingredients are in place for an overdue re-rating. True, I previously included Arix in my 2021 Bargain Shares Portfolio, and that call has not turned out well. However, with cash covering 87 per cent of the investment company's market capitalisation, the 39 per cent share price discount to NAV is a bargain basement valuation. Buy.

GATTACA (GATC)

Aim: Share price: 72p
Bid-offer spread: 70-74p
Market value: £23.3mn

- Net cash backs up almost 70 per cent of market capitalisation
- Operational business in the price for 2.9 times current-year pre-tax profits guidance
- Prospective dividend yield of 4.2 per cent (2023) and 6.9 per cent (2024)

Gattaca (GATC), the specialist science, technology, engineering and mathematics (Stem) recruitment business, has undergone a major operational restructuring in the past year. A new management team is in place and it has been making progress, targeting a robust employment market that points to a strong recovery in profits this year.

Chief executive Matthew Wragg and finance director Oliver Whittaker, both of whom took on their new roles in March 2022, are guiding shareholders to expect underlying pre-tax profit to rise 10-fold to £2.5mn in the 12 months to 31 July this year. It could be just the start of a major profit recovery if the ongoing turnaround is well executed – Gattaca's Achilles' heel in the past. That's because the group has the potential to make up material lost ground, having delivered net fee income (NFI) equating to only 71.8 per cent of pre-Covid levels in the 2021-22 financial year, well behind a sector average of 104.8 per cent.

It's not that demand for the specialist staff in Gattaca's key Stem markets is weak: the exact opposite is the case, as management readily admits. In November's outlook statement, the directors noted "there remains a shortage of candidates which plays to our key strength of deep knowledge and understanding of our sectors and niche skills".

Moreover, although mindful of the macroeconomic headwinds, as a Stem-skills-focused business the company "[does] not believe they will have a significant impact on our business model as we continue to see robust demand in our key markets". Indeed, Gattaca's projected NFI growth rate of 8.6 per cent in the 2022-23 financial year compares favourably with its peer group average of 6.2 per cent.

Operational changes lay solid foundations for profit growth

To understand how Gattaca could narrow the performance gap with its rivals, you need to turn the clock back to the errors made in the past and the operational changes that have been made since then.

The acquisitions of Networkers International in 2015 and then Resources Solutions in 2017 proved disastrous and meant that the board had to allocate resources, money and time to address company-specific issues. The £66.8mn combined acquisition costs have been completely written off. Moreover, Gattaca continues to assist the US Department of Justice on a voluntary basis by providing (undisclosed) information specifically relating to events prior to its acquisition of Networkers in 2015. Although the legal costs incurred to date are minimal, there is a risk of legal action. Clearly, this has not helped investor sentiment.

In addition, the previous board played the Covid-19 pandemic all wrong, cutting costs too aggressively by shedding fee earners, meaning the business struggled to take advantage

GATTACA FINANCIAL FORECASTS

Year end 31 Jul	Net fee income	Ebitda	Adjusted operating profit	Adjusted pre-tax profit	Adjusted earnings per share	Dividend per share	Price/earnings ratio	Dividend yield
2020	£52.7mn	£9.4mn	£6.2mn	£4.8mn	11.7p	0.0p	6.2	0.0%
2021	£42.1mn	£4.4mn	£2.2mn	£1.8mn	5.3p	1.5p	13.6	2.1%
2022	£44.1mn	£2.7mn	£0.5mn	£0.3mn	0.3p	0.0p	240	0.0%
2023E	£48.0mn	£5.0mn	£2.7mn	£2.5mn	6.0p	3.0p	12.0	4.2%
2024E	£54.0mn	£8.3mn	£6.0mn	£5.9mn	13.4p	5.0p	5.4	6.9%

Source: Company data. Equity Development estimates (3 November 2022) of the subsequent recovery once client confidence returned quickly. Staff became demoralised and a change in culture was needed to re-energise them. Processes put in place seem to be working, as highlighted by a fall in attrition rates from 45 to 40 per cent last year. The new board has improved staff engagement, increased localised accountability and streamlined decision-making processes by removing layers of management across the global sales business, which employs 386 employees and accounts for 71 per cent of the group's total headcount.

The new strategic focus has led to higher investment in marketing and social media to enhance the group's brand presence, the appointment of a chief sales officer to unite client acquisition and growth across all sectors and geographies, and the appointment of a chief operations officer to concentrate on boosting productivity levels and operational performance. Sensibly, sales resources are being focused on the high-growth areas of advanced engineering, cyber security, defence, renewable energy and multi-year infrastructure projects.

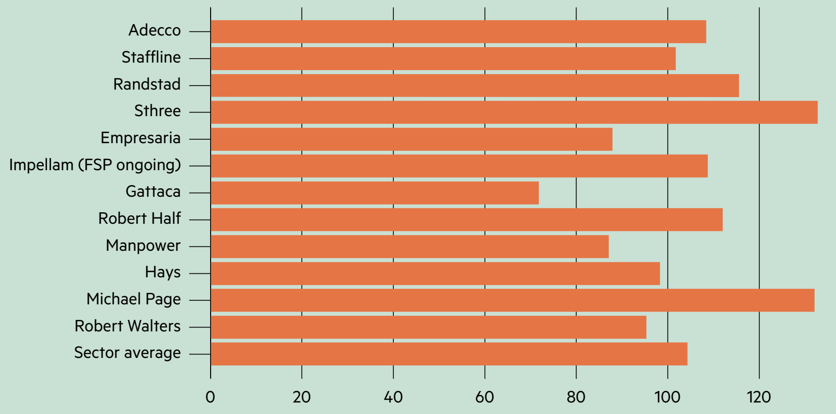
The cost base continues to be addressed and is being rebalanced towards skills, tools and the locations where Gattaca can benefit most, hence why the group exited operations in Mexico, South Africa and Malaysia. Management has also taken advantage of hybrid working and is making more effective use of office space to slim down its property requirements, both at home in the UK (head-office buildings have been reduced from three to one) and internationally, a segment that accounted for 6 per cent of NFI last year.

Recovery potential underpriced

Gattaca is exactly the type of business Ben Graham would be looking for: one with recovery potential and a rock-solid balance sheet that has enabled the business to trade through challenging times. The group's market capitalisation of £23.3mn is 23 per cent below the last reported NAV of £30mn, and 16 per cent below net tangible asset value of £27.9mn. Current assets of £73.8mn are 1.54 times current liabilities, a liquid ratio that highlights the group's ability to pay its bills. Net cash of £16mn (excluding IFRS 16 lease liabilities of £3.6mn) backs up more than 70 per cent of Gattaca's market capitalisation, meaning that the operational business is in the price for £6.3mn, or 2.9 times the forecast pre-tax profit of £2.5mn the directors are guiding investors to expect in the financial year to 31 July 2023.

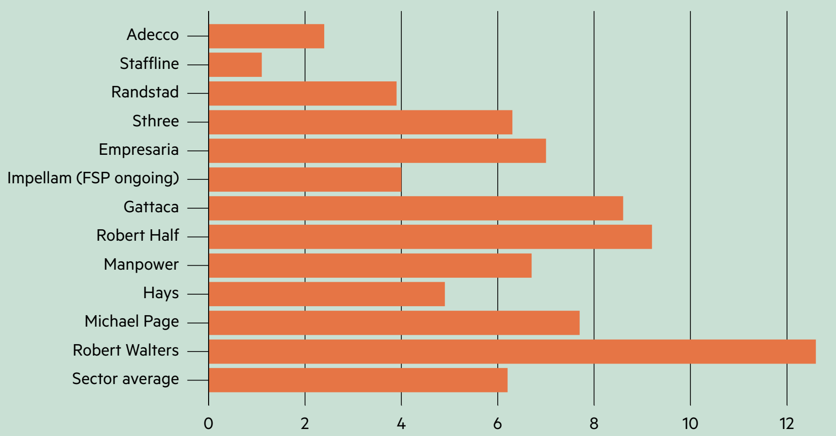
To understand how profits could ratchet up in the coming years, you need to consider the operational leverage of the business. Assuming Gattaca can grow NFI from £44.1mn last year to £48mn in the current year to 31 July, keep central costs relatively flat around £15.1mn, and eliminate last year's £2.2mn cash loss suffered in its international overseas operations, then current-year group cash profit could surge from £2.7mn to £4.9mn. On this basis, operating profit rises from £0.5mn to £2.7mn. Moreover, with interest costs reduced, too, then pre-tax profit balloons from £0.25mn to £2.54mn, as analysts at Equity Development forecast, to increase fully diluted earnings per share (EPS) 20-fold to 6p. The implication being that the shares are priced on a ▶

RECRUITERS: CURRENT YEAR NFI AS A PERCENTAGE OF PRE-COVID LEVELS



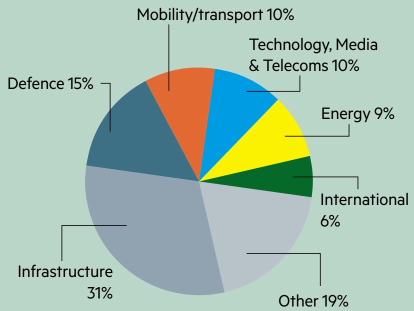
Source: Equity Development (3 November 2022)

EXPECTED CURRENT YEAR NFI GROWTH RATES ACROSS THE RECRUITMENT SECTOR (%)



Source: Equity Development (3 November 2022)

GATTACA: BREAKDOWN OF NET FEE INCOME IN 2022 FINANCIAL YEAR



Source: Equity Development

► current-year forward price/earnings (PE) ratio of 12.

Furthermore, assuming Gattaca can deliver 12 per cent growth in NFI in the 2023-24 financial year, cash profit is forecast to rise 67 per cent to £8.3mn, an outcome that could see operating profit more than double to £6mn. That's because a high proportion of the incremental gross profit earned in a positive sales cycle passes through to operating profit for a company with a relatively fixed cost base. On this basis, pre-tax profit and EPS would more than double to £5.9mn and 13.4p, respectively, implying the shares are priced on a prospective PE ratio of 5.4 for the 2023-24 financial year.

It's worth considering the potential for the board to reinstate the dividend, too. Equity Development forecast dividends per share of 3p (2022-23) and 5p (2023-24), which means that the shares offer forward dividend yields of 4.2 and 6.9 per cent, respectively. Estimated closing net cash of £17mn (July 2023) and £19mn (2024) factors in the payouts.

Upside potential

Admittedly, the financial forecasts are predicated on Gattaca's end markets remaining robust, and management executing the operational turnaround successfully. That is not guaranteed. However, if all goes to plan, then a re-rating to analysts' 160p a share target price, equivalent to a prospective PE ratio of 12 for the 2023-24 financial year, could be on the cards, implying more than 100 per cent share price upside. Buy.

NETSCIENTIFIC (NSCI)

Aim: Share price: 62p
Bid-offer spread: 60-64p
Market value: £14.6mn

- **Listed PDS Biotech stake backs up 62 per cent of market capitalisation**
- **Hidden value in EMV Capital's carried interests**
- **Liquidity events from investee companies to drive returns**

The fact that shareholders who backed the 2013 IPO of Aim-traded investment company **NetScientific (NSCI)** have lost more than 90 per cent of their capital highlights the scale of the underperformance under previous management who adopted a passive approach to investing in early-stage life sciences, healthcare, and technology companies. The cost base was out of sync with this passive approach, too.

However, a boardroom clear-out in 2020 brought in an experienced management team focused on delivering shareholder returns through proactive management of the portfolio. Its strategic review of the business included an analysis of each portfolio company's current position, target market, commercial development options, intellectual property, risk profile, core funding needs, grants and other 'soft' finance available. It also identified value inflection points, exit potential and the actions and resources required to achieve these.

The new management team concluded that NetScientific would benefit from a larger portfolio offering varying time horizons, stages of development and a wider focus beyond its previous healthcare speciality. The major issue was that the company lacked the requisite expertise and resource, below board and chief financial officer level, to fully implement the strategy.

But the £2.3mn all-share acquisition of investment advisory boutique EMV Capital has proved a real game-changer. EMV provides services to companies operating across the industrial high-tech, energy, circular economy, smart city, transportation and healthcare sectors.

EMV capital building a valuable portfolio

EMV's business model is to syndicate investments between financial and corporate investors, and for its management team to take a strong hands-on role post-investment. Monetisation is through a mixture of corporate finance fees, management and incubation services, and carried interests in the investments it syndicates.

In the first half of 2022, EMV increased capital under advisory by 11 per cent to £24.6mn, or 148 per cent higher than at the start of 2020. That's worth noting given that EMV has a carried interest arrangement with investors it has introduced into its portfolio companies and is entitled to a share of profits on realisation of their investments. The carried interests range between 10 and 20 per cent of profits above a minimum return hurdle rate of up to 10 per cent.

One of the portfolio companies is Q-Bot, a London-based robotics and artificial intelligence company that has developed a patented energy-saving robotic system for applying insulation in tight spaces and suspended floors (to reduce heat loss and prevent draughts, damp and mould). Following a £1.62mn funding round, the fair valuation of the company's 23.7 per cent stake more than doubled to £2.1mn (at 30 June 2022). Subsequently, NetScientific realised £0.25mn of cash proceeds and booked a £0.11mn profit selling down part of its holding. It also has exposure to carried interests on a 15.6 per cent indirect stake in Q-Bot through funds managed by EMV.

It's not the only portfolio company that is attracting interest from outside investors. Edinburgh-based Sofant Technologies recently completed a £4.2mn funding round. Sofant's patented technology enables the passive steering of radio signals in wireless systems, using RF MEMS technology, to reduce energy consumption by over 70 per cent. It has applications within satellite communications and 5G network infrastructure and is relevant to national security applications, too.

Led by its EMV, institutional investors Scottish Enterprise, Kelvin Capital and The Future Fund invested in the £4.2mn funding round, which also included £1.6mn of investment from investors introduced by EMV.

Hidden balance sheet value in PDS biotech stake

In the company's 2022 interim accounts, NetScientific had a NAV of £15.8mn (67p a share) including balance sheet investments of £11mn, net cash of £1.9mn and intangible assets of £3.2mn.

However, this massively understates the open-market valuations of the investments, which the directors estimated had a value of £29.2mn, or almost three times their carrying value in the accounts. The value of the investment portfolio has increased since then, too.

For instance, NetScientific's board has made some prescient investments in **PDS Biotechnology Corporation (US:PDSB - $8.33)**, a $240mn market capitalisation clinical-stage immunotherapy company which is developing a pipeline of cancer immunotherapies and infectious disease vaccines based on its proprietary Versamune T-cell activating technology platform.

NetScientific's holding of 1.338m shares in PDS was held around cost at £4mn in its 2022 interim accounts. However, buoyed by positive newsflow, the value of the holding has more than doubled to $11.1mn (£9.1mn), a sum that equates to 65 per cent of NetScientific's own market capitalisation of £14mn.

PDS has ongoing Phase II clinical trials with world-leading organisations **Merck (US:MRK)**, National Cancer Institute, MD Anderson and Mayo Clinic. Bearing this in mind, PDS recently announced an exclusive global licence agreement with Merck for the tumour-targeting

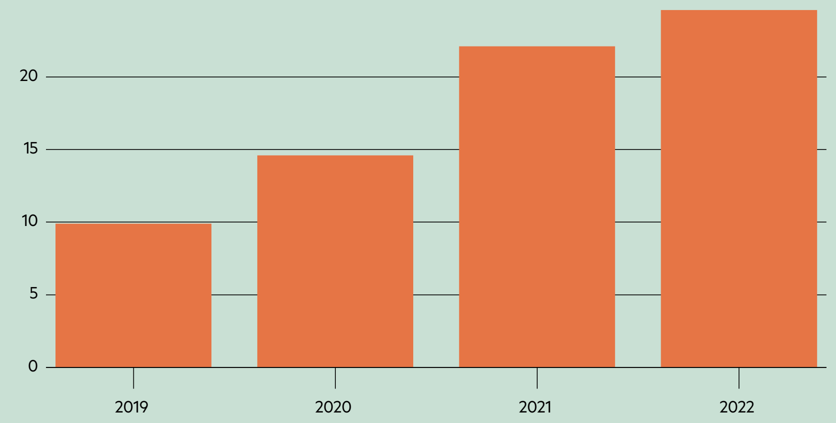
IL-12 fusion protein M9241, which appears to enhance the proliferation, potency and longevity of T-cells in the tumour. The patented technology is designed to overcome tumour immune suppression by utilising a different mechanism from checkpoint inhibitors.

M9241 was studied at the National Cancer Institute in a Phase II trial in combination with PDS0101, a Versamune-based HPV16-targeted immunotherapy, and bintrafusp alfa, a bifunctional fusion protein targeting two independent immunosuppressive pathways. The triple combination was studied in checkpoint inhibitor (CPI) patients with advanced HPV-positive cervical, head and neck, vaginal, and vulvar cancers who had failed prior therapy.

Under the terms of the agreement, PDS will assume responsibility for future development, commercialisation and manufacturing of M9241. Merck will receive milestones and royalties, but it could be a lucrative arrangement for PDS. It's not the only potential blue-sky opportunity.

NETSCIENTIFIC: EMV CAPITAL UNDER ADVISORY

Third-party capital under advisory subject to accrued interests (£mn)



Source: Netscientific annual report and accounts; 2022 figure at 30 June 2022

Upside potential

The £9.1mn listed stake in PDS, NetScientific's net cash of £1.9mn (30 June 2022) and the £3.5mn value of its 100 per cent holding in EMV Capital backs up all the company's market capitalisation of £14.6mn (62p a share).

This means that other investments in 12 portfolio companies, which the directors valued at £20.4mn (87p a share) are in the price for free. You are also getting a free ride on the 'hidden' profit potential of EMV's carried interests in 10 portfolio companies.

Although it is difficult to quantify the exact value of these carried stakes, if we assume an average two times venture capital return on the £24.6mn third-party investment portfolio subject to carried interests, then they could generate £5.2mn (22p a share) of profits for EMV Capital. That's more than a third of NetScientific's own market capitalisation of £14.6mn.

Trading on a 65 per cent discount to my 172p a share sum-of-the-parts valuation, below house broker WH Ireland's fair valuation of 200p a share, there is potential for a material narrowing of the share price discount as further liquidity events from portfolio companies highlight the conservative valuations used in NetScientific's accounts.

Please note that the board is set to ▶

NETSCIENTIFIC INVESTMENT PORTFOLIO

Portfolio companies 30-Jun-22	Sector and description	Fully diluted Group Interest	Fair value of stake
Subsidiaries			
EMV Capital Ltd	Venture Capital Investment Company	100 per cent equity	£3.5mn
ProAxsis Ltd	Respiratory diagnostics - Early stage commercialisation	100 per cent equity	£3.5mn
Glycotest, Inc.	Liver cancer diagnostics - Late stage clinical	64 per cent equity	£11.0mn
Sub Total			£18.0mn
Owned Portfolio 30-Jun-22	**Sector and description**	**Fully diluted Group Interest**	**Fair value of stake**
PDS Biotechnology Corp	Immuuno-oncology (NASDAQ quoted) - Early stage clinical	4.7 per cent equity	£9.1m*
Q-Bot Ltd	Robotics	23.7 per cent equity	£2.1mn
Sage Medical Equipment Ltd	Waste anaesthetic capture/recycle	5.9 per cent equity	£0.9mn
Epibone, Inc	Regenerative medicine - Late stage clinical	0.8 per cent equity	£0.3mn and £0.6mn Convertible Loan
CytoVale, Inc.	Medical biomarker	1 per cent equity	£0.4mn
G - Tech Medical, Inc	Wearable medical diagnostics - Early stage clinical	3.8 per cent equity	£0.4mn
Martlet Capital Ltd	Venture capital	1.5 per cent equity, £75,000 convertible loan note	£0.3mn
Fox Biosystems	Life sciences research equipment	5.1 per cent equity	£0.3mn
Sofant Technologies Ltd.	Semi-conductors, satellite communications	Convertible Loan Note	£0.4mn
Pointgrab, Inc	Smart building automation	0.5 per cent equity	£0.1mn
QuantalX Neuroscience	Medical diagnostics of the brain - Late stage clinical	0.4 per cent equity	£0.1mn
Sub Total			£15.0mn

Source: Valuations in NetScientific 2022 interim accounts. PDS Biotech valuation based on latest stock price of $8.33

▶ appoint a new chairman in the near future, after John Clarkson stepped down last week, having previously signalled its intention to do so last autumn. Buy.

CHECKIT (CKT)

Aim: Share price: 25p
Bid-offer spread: 24-26p
Market value: £27mn

- New contract wins
- Monthly cash burn has peaked, and cash losses set to fall
- High recurring revenue
- Overseas expansion gathering momentum

Cambridge-based technology group **Checkit (CKT)** has been winning some notable contracts in recent months, giving investors confidence that it can accelerate its move to profitability, and markedly reduce cash burn, as the directors believe.

Checkit's workflow management software platform offers customers data-driven remote monitoring and automated systems surveillance to manage their teams of deskless workers. By digitising the scheduling and reporting of workflows, it can boost staff efficiency and deliver better management insight. The inflationary environment and energy crisis places even greater pressure on companies to make operational savings and improve the productivity of workers, so there should be a receptive end market to exploit.

Capitalising on an attractive business opportunity

To capitalise on the opportunity, the directors are creating a valuable annual recurring revenue (ARR) stream across five key verticals (healthcare, retail, facilities management, restaurants and hospitality) by transitioning the business to a software-as-a-service (Saas) model.

The key is to increase the ARR run rate to a level at which the operational gearing of the business can really kick in, whereby the gross margin earned on existing contracts covers the group's fixed cost base. Having hit that inflection point, an increasing amount of incremental gross profit then passes through to ramp up operating profit. Checkit isn't there yet, but it has been making some eye-catching progress and will next update shareholders on 16 February. It should be positive news.

Contract wins drive international expansion

Earlier this year, Checkit landed several new contracts in the US, the country being a key target for overseas expansion given that it is five times larger than the UK, the latter having historically accounted for 80 per cent of group revenue. Three of the new contracts will generate a combined minimum value of $1mn over their three-year term, two are with biopharma companies and the other is with a large resort and casino operator.

Importantly, the US business has been gaining traction. For instance, last year Checkit won a £2.8mn contract with Biomat, a US subsidiary of **Grifols (ES:GRF)**, a global leader in the production of plasma-derived medicine and transfusion medicines across more than 100 countries. The contract has a minimum value of £2.8mn spread evenly over three years and involves providing services to more than 300 sites for five of Grifols' US subsidiaries. There is scope for adding new contracts for Grifols' European operations, too.

Checkit is also looking to leverage a valuable contract with **BP (BP.)**, having developed an artificial intelligence (AI) algorithm to provide BP's Food to Go outlets with cooking recommendations. The plan is to increase revenue by ensuring more of BP's sites have the correct cooked goods at the right times, reduce food wastage by accurately predicting the number of cooked items sold during the day, and provide data insights to improve decision-making.

In the past year, Checkit has rolled out its platform across 441 BP forecourts in Australia and New Zealand, so doubling its footprint within BP's global network of 18,700 service stations. The aim is to ramp up the contract to 4,900 locations within three years.

What's more, Checkit has just renewed an existing contract with an integrated energy company in the UK to provide real-time operations management capability to more than 300 of the company's sites. That contract is worth £2.1mn over a four-year period. Although the name of the customer has not been disclosed by Checkit, analysts believe it is BP, thus highlighting how Checkit is winning repeat business with the customer, a factor that adds weight to the likely scale of the ongoing international rollout.

NHS opportunity a win-win for all parties

Potentially, there is an even bigger opportunity for Checkit to exploit with the NHS. The organisation accounted for £2mn of Checkit's ARR of £8.2mn in the 2021-22 financial year.

In particular, Checkit's sensors and digital insights help the NHS to reduce drug wastage by monitoring storage temperatures, increase retention rates by boosting staff efficiency (so reducing workloads), and improve

EMV CAPITAL'S CARRIED INTERESTS AND PROFIT SHARES

Portfolio company	Sector and description	Carried interest arrangements (CIA) or profits share (PS) with investors	Capital Under Advisory
Sofant Technologies Ltd	Semiconductors – Satellite and 5G wireless communications	17-20% (CIA)	£3mn
Q-Bot Limited	Building automation – Robotics & artificial intelligence	10-20% (CIA)	£2.8mn
SageTech Medical Equipment Limited	Chemistry & medical technology – Halocarbon capture	20% (CIA)	£3.8mn
Nanotech Industrial Solutions, Inc.	Material science and chemistry	15% (CIA)	£0.7mn
PointGrab, Inc.	Building automation – Robotics & AI	15% (CIA)	£4.1mn
Wanda Health, Inc.	AI & medical technology – Digital health platform	20% (PS)	£2.9mn
Vortex Biosciences, Inc.	Medical technology – Oncology diagnostics	20% (PS)	£4.9mn
Insight Photonic Solutions, Inc.	Semiconductors – Akinetic Swept Source Laser	20% (PS)	£0.9m
Martlet Capital	Venture Capital – Deeptech investment	Undisclosed	£1.3mn
Epibone	Regenerative medicine	Undisclosed	£0.2mn

Source: NetScientific 2022 interim accounts compliance through the monitoring of storage temperatures and time logs (so reducing costly failed audits). During the Covid-19 pandemic, Checkit supported the vaccine rollout by supplying technology to ensure safe storage and management of vaccines across immunisation centres and clinics.

The group currently assists 86 NHS trusts, which have more than 350 sites, but mainly works with just one department. If Checkit can expand its roll-out across multiple departments within these NHS trusts, then it should deliver massive savings for UK taxpayers (the ones footing the bill) and create much-needed efficiency savings for the country's cash-strapped and cash-hungry national health system.

Improving financials

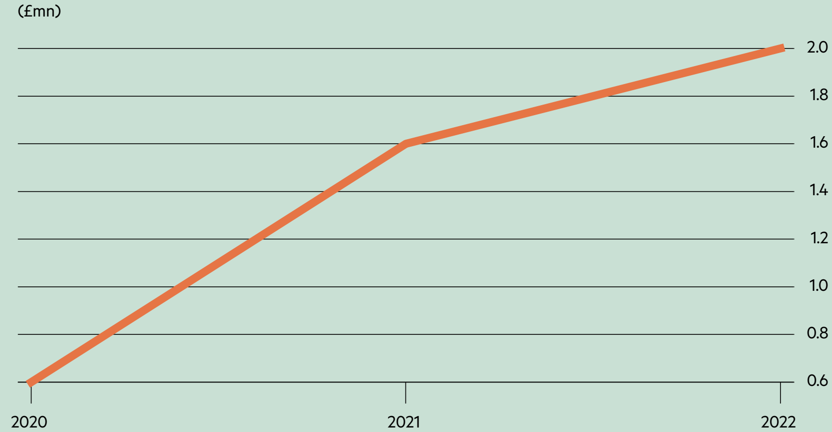
Importantly, Checkit is increasing both its ARR and reducing cash burn. Having raised £20mn from investors in a placing of shares, at 46p, in November 2021, Checkit retained net cash of £19.5mn at its 31 July 2022 half-year end.

At the time, the directors stated that monthly cash burn had peaked (£4.7mn total cash outflow in the six-month trading period) and will reduce in the second half to 31 January 2023. Edison Investment Research pencils in closing net cash of £15.2mn (14p a share), a sensible assumption.

The other point worth considering is that the directors are accelerating the move to profitability. This explains why Edison expects an annual cash loss of £6.5mn on revenue of £10.4mn for the financial year just ended, to narrow to an annual cash loss of £3.7mn on revenue of £12.5mn in the 2023-24 financial year. Factor in capital expenditure of around £1.8mn and net cash outflow should improve from £9mn in 2022-23 to £5.7mn the following year. This assumes ARR will increase 23 per cent to £13.3mn by 31 January 2024.

The upside to the 2023-24 forecasts is if Checkit can gain even further traction internationally, as it appears to be now doing, and specifically among the large enterprise target companies that are piloting its technology – the segment accounting for two-thirds of the group's sales pipeline. That's because with a forecast gross profit margin of 65 per cent in the 2023-24 financial year, the cash loss could fall markedly if Checkit can add a few extra million pounds to annual revenue, cut cash burn and accelerate its move to cash flow break-even and cash profitability.

CHECKIT'S NHS ACCOUNT: ANNUAL RECURRING REVENUE



Source: Checkit

Share buying by insiders

Sophie Wilson, the wife of non-executive director John Wilson, has confidence, having purchased 250,000 shares at around 24p in late January this year to take their combined holding to 1.25mn shares, or 1.16 per cent of the shares in issue. It's not the only recent director purchase as William Maunder-Taylor, vice president of sales, purchased 148,168 shares in mid-December, having purchased 46,000 shares in late September. It's usually a good sign when the insiders are bottom fishing.

Operational outperformance the key to re-rating

Of course, Checkit's management needs to deliver operationally to warrant a decent re-rating. However, with the group's £11.8mn enterprise valuation equating to around 0.9 times forecast ARR of £13.3mn for the 2023-24 financial year, a hefty discount to UK and US SaaS peer group averages of three and six times, respectively, then any operational outperformance is likely to be well received by the market and narrow the ratings' discount to peers. A price/book value of 1.1 times is attractive, too. Buy.

TMT INVESTMENTS (TMT)

Aim: Share price: 275¢
Bid-offer spread: 270-285¢
Market value: $86.5mn

- 61 per cent share price discount to spot NAV estimate
- Combined value of stakes in Bolt and Backlaze worth more than TMT's own market capitalisation

TMT Investments (TMT), a venture capital company with a portfolio of high-growth, internet-based companies, was a major casualty in last year's technology sector sell-off, which also impacted valuations of privately held start-ups.

Investors became so risk averse that the shares are now trading on less than half the last reported NAV per share of 668¢ at 30 June 2022, down from 900¢ at the start of 2022, even though there are solid reasons ▶

CHECKIT FINANCIAL FORECASTS

Year end 31 Jan	Revenue	Annual recurring revenue (ARR)	Ebitda	Adjusted pre-tax profit	Earnings per share	Closing net cash	Enterprise valuation/ARR ratio
2021	£13.2mn	£5.7mn	-£2.5mn	-£3.1mn	-5.2p	£11.5mn	2.7
2022	£13.6mn	£9.1mn	-£4.2mn	-£4.7mn	-7.0p	£24.2mn	0.3
2023E	£10.4mn	£10.6mn	-£6.5mn	-£7.6mn	-7.1p	£15.2mn	1.1
2024E	£12.5mn	£13.3mn	-£3.7mn	-£5.2mn	-4.9p	£9.5mn	1.3

Source: Company data, Edison Investment Research estimates (5 January 2023)

▶ to expect a recovery in portfolio valuations this year. That's a hefty share price discount for a company that has delivered an impressive IRR of 26.5 per cent on its portfolio over the past five years, and an IRR of 18.5 per cent in the 12 years since inception, in the process rewarding shareholders since listing its shares on London's junior market, at 100¢, in 2010.

Since IPO, TMT has invested $101.2mn of capital across 90 investments, realised $100.3mn in full and part-cash realisations from 18 of those holdings, and held a $200mn portfolio of investments across more than 55 investee companies as well as $10.2mn cash in mid-December 2022.

The well-diversified portfolio is invested around high-growth market segments: software-as-a-service, marketplaces, big data/cloud, edtech, fintech, ecommerce and food-tech solutions.

Investment upside to largest holdings

The group's largest holding is a 1.26 per cent stake in international taxi and food delivery company Bolt. The shareholding was worth $103.3mn (£84mn) following a €628mn (£555mn) fundraising round in January 2022, led by Fidelity and Sequoia, that valued the fast-growing company at €7.4bn ($6.8bn). However, TMT's holding in Bolt was marked down 28 per cent in value to $74.3mn (£60.4mn), accounting for 35 per cent of the group's NAV, in its 2022 interim accounts to reflect comparable valuations of listed rivals **Uber Technologies (US:UBER)** and **Lyft (US:LYFT)**. Shares in both rivals had been heavily de-rated in the first half of 2022.

Uber's share price has subsequently bounced back 62 per cent, valuing the group at $66bn, and Lyft's share price has risen 31 per cent, valuing it at $6.3bn, suggesting that TMT's holding in Bolt is now conservatively valued and offers upside potential. It has already proved a fantastic investment; the carrying value is 232 times higher than the $0.32mn TMT originally invested in the company in September 2014.

The decline in TMT's NAV in the first half of 2022 also reflected the sharp fall in the value of its 11.2 per cent stake in Nasdaq-quoted cloud storage group **Backblaze (US:BLZE)**. The value of that listed holding was slashed from $63.1mn to $19.5mn in the first half of 2022, but Backblaze's share price has since recovered from $5.12 to $7.14, valuing TMT's holding at $27.2mn and adding 24.5¢ a share to TMT's last reported NAV per share of 668¢.

Importantly, Backblaze is well funded to reach cash profitability, retaining cash and short-term investments worth $80mn at the end of the third quarter of 2022. In that period, Backblaze reported a small cash loss of $1.9mn on quarterly revenue of $22.1mn and boasted annual recurring revenue (ARR) of $88mn with a customer retention rate north of 90 per cent. Losses should narrow markedly as the business scales up, highlighting the opportunity for further stock price upside given that Backblaze's market capitalisation of $231mn equates to less than three times both book value and ARR.

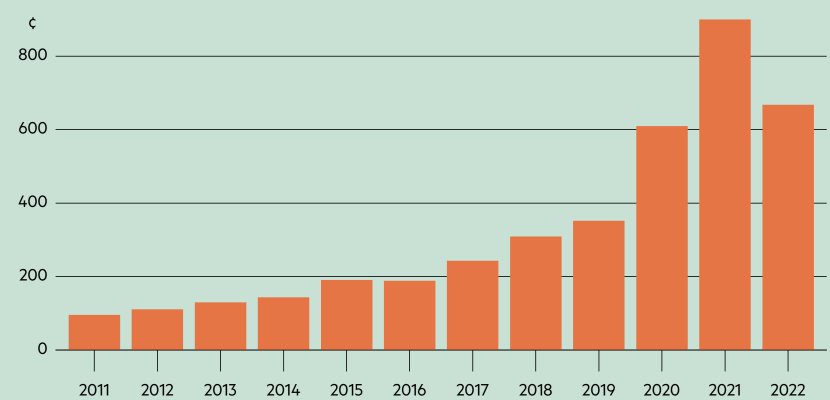
Furthermore, following the 2022 interim results, TMT realised $3.8mn of cash proceeds on the exit from delivery and transportation technology company Hugo. That sum is more than three times the $1.2mn TMT invested in 2019 and 2022, and $2mn (6¢ a share) higher than the $1.8mn carrying value of the holding in the 2022 interim accounts.

Portfolio with defensive characteristics

Admittedly, investors may still be nervous about the technology sector, scarred by last year's rout. So, it's worth noting that TMT's earlier-stage start-ups (late-seed/pre-Series A opportunities), a segment of the venture capital market that has held up remarkably well, represented 95 per cent of its 55-plus portfolio companies and 45 per cent of the total portfolio valuation of $200mn at 30 June 2022. In fact, the valuations of Backblaze and Bolt aside, TMT only booked $4.25mn of write-downs on five other holdings, and half that sum was due to Russian exposure.

Furthermore, new equity funding rounds at five early-stage fast-growing digital technology start-ups contributed $4.8mn of uplifts in the first half of 2022, highlighting

TMT INVESTMENTS' NAV PER SHARE SINCE IPO (¢)



Source: TMT Investments interim results presentation (16 August 2022). *2022 NAV per share at 30 June 2022. All other figures at 31 December.

PROVEN TRACK RECORD IN CREATING VALUE

the investment manager's strategy of investing wisely and structuring funding through convertible loan notes to avoid dilution. The composition of the portfolio also highlights TMT's defensive characteristics in the current investment climate, with investments conservatively valued at cost or the read-through valuation of the last funding round for its investee companies.

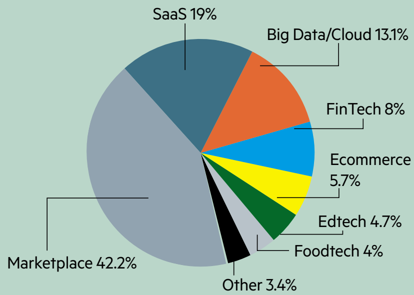
Upside potential for portfolio valuations

Adding weight to the upside potential from the early- and mid-stage component of TMT's portfolio, the recently published State of European Tech 2022 report indicates there is around $44bn-worth of 'dry powder' available in Europe for venture capital investment and an increasing level of private equity funding available for growth companies, taking the total to over $80bn.

Companies with strong business models are continuing to attract competitive attention from investors, which bodes well for a number of TMT's early- and mid-stage portfolio companies. A good example is the recent $27.3mn funding round for Muncher, a cloud kitchen and virtual food brand operator, which led to a 41 per uplift on the $2mn carrying value of TMT's 4.77 per cent stake.

Importantly, TMT has the funds available to make further investments without relying on realisations. Having invested $7.3mn across six new holdings in the first half of 2022, and $2.2mn across four investments in the second half, pro-forma cash is around $10.2mn after factoring in the disposal of the stake in Hugo and estimated second-half operating expenses of $0.8mn.

TMT INVESTMENTS PORTFOLIO WEIGHTING BY SUB-SECTOR



Source: TMT Investments 2022 interim report and accounts

Anomalous valuation worth exploiting

The bottom line is that my spot NAV per share estimate is 700¢, or more than double TMT's current share price, an anomalous valuation for a company with such an impressive track record. In fact, the combined $101.5mn valuation of the holdings in Bolt and Backblaze are worth 17 per cent more than TMT's market capitalisation of $86.5mn, effectively giving you a free ride on $100mn of other holdings in more than 55 investee companies as well as the $10.2mn cash pile.

Please note that the shares are tightly held: 76.5 per cent of the 31.45mn shares in issue are held by 12 shareholders, so price moves can be accentuated. However, with equity market investors regaining their poise, and substantial dry powder available to invest in both private equity and venture capital markets, TMT's share price could benefit from both improved investor sentiment and potentially some large portfolio gains this year.

To put this into perspective, even if the 61 per cent share price discount to my spot NAV per share estimate only narrows to 30 per cent, it implies 80 per cent share price upside. Buy.

TMT INVESTMENTS STATEMENT OF FINANCIAL POSITION

	30/06/2022	31/12/2021	31/12/2020	31/12/2019
Investments	$200.6mn	$265.4mn	$144.8mn	$91.2mn
Cash	$14.0mn	$25.5mn	$39.0mn	$11.7mn
Other assets	$1.8mn	$2.1mn	$0.5mn	$0.7mn
Total assets	$216.3mn	$293.0mn	$184.3mn	$103.6mn
Total liabilities	$6.1mn	$9.9mn	$6.4mn	$0.1mn
Total equity	$210.2mn	$283.1mn	$177.9mn	$103.5mn

Source: TMT Investments corporate presentation, August 2022

CML MICROSYSTEMS (CML)

Main: Share price: 490p
Bid-offer spread: 480-500p
Market value: £77.4mn

- Secular growth drivers support investment case
- Cash-rich balance sheet with material ` hidden property value
- Earnings-accretive complementary acquisition to complete in first half of 2023

Maldon-based semiconductor chip designer and manufacturer **CML Microsystems (CML)** is reaping the benefits of the strong secular drivers in its end markets, so much so that house broker Shore Capital pushed through 43 per cent and 47 per cent earnings per share (EPS) upgrades for the next two financial years at the time of the group's half-year results in late November 2022.

Analysts now expect EPS to rise 69 per cent to 21.6p in the 12 months to 31 March 2023, increasing to 26.7p in the current financial year. However, the 2023-24 forecast excludes the earnings-enhancing contribution from the recently announced $18mn (£14.6mn) complementary acquisition of Silicon Valley-based semiconductor company Microwave Technology. Subject to US regulatory clearance, the transaction is expected to complete in the first half of 2023. Expect earnings upgrades later this year.

Following the strategic disposal of its solid-state storage division, and the payout of a special dividend to shareholders, CML is ►

TMT INVESTMENTS' NOTABLE REVALUATIONS SINCE IPO

Investment	Current status	Activity	Years since first investment	Total Value of stake	Return on TMT's investment
Bolt	Portfolio company	International taxi and food delivery group	7.9	$74.3mn	232 times
Pipedrive	Exit	Cloud-based software as a service (SaaS) company	8	$44.4mn	51 times
PandaDoc	Portfolio company	US software company that provides sales processes software	8.1	$18.2mn	45 times
Wrike	Exit	US project management application service provider	6	$23.4mn	23 times
Workiz	Portfolio company	SaaS CRM for small to medium-sized field service businesses	6.3	$4mn	10 times

Source: TMT Investments corporate presentation (16 August 2022)

▶ now a pure-play on the high-growth industrial communications market. Specifically, the group provides integrated circuits to distributors and system integrators (Cobra, Hytera, Icom, Kenwood, Orbcomm and Sepura are among its clients).

CML's well-respected management team is leveraging the group's standing as a key supplier to many of the world's Tier 1 equipment manufacturers. With a cash pile of £22.7mn (143p a share) prior to the initial £8.9mn cash consideration payable on the acquisition of Microwave Technology, the business is also incredibly well funded to accelerate growth in a market that is exhibiting secular growth megatrends.

Key drivers are increasing demand for data to be transmitted faster and more securely, the upgrading of telecoms infrastructure, and the growing prevalence of private commercial wireless networks for voice and data communications linked to the industrial internet of things (IIoT). In data-centric markets, higher data throughput from terrestrial and satellite communications applications are required to meet the needs of the growing machine-to-machine (M2M) and IIoT market segments.

Growing market opportunity

CML's addressable market is worth more than $1bn (£813mn) and includes several key growth areas: critical infrastructure (public utilities, smart grid, RF identification (RFID)); 5G (repeaters, small/pico cells, fixed wireless access, distributed antenna systems, smart meters); and satellite communications (terminals, broadband access).

To address these multiple growth market opportunities, CML's management has been expanding its semiconductor product portfolio by adding narrowband applications operating at the lower end of the radio spectrum. As opposed to broadband, these applications use short-range fixed-location wireless applications such as RFID, commercial vehicle remote keyless entry devices or narrowband-IoT focused on indoor coverage, low cost, long battery life and high connection density. The acquisition of a third-party design house has been instrumental in widening the product offering and addressable markets.

Importantly, CML's diverse, blue-chip client base includes leading commercial and industrial product manufacturers, while the spread of its customer base and diversity of the product range protects the business from the cyclicality usually associated with the semiconductor industry. Furthermore, CML's proprietary IP, reputation for quality and reliability, and single-source supplier status mean that once its chips are designed in a client's product then it rarely loses a contract given the significant product redesign required for the client to take its business elsewhere.

Organic growth story with momentum

In the six months to 30 September 2022, a strong bounce back in existing markets (public safety, maritime and mission-critical wireless voice and data communications) enabled the operational gearing of the business to kick in. This explains why a high proportion of Shore Capital's cash profit upgrade for the 12 months to 31 March 2023 (analysts raised their estimates from £4.4mn to £5.8mn) passes through to pre-tax profit (forecast raised 40 per cent from £2.5mn to £3.5mn on annual revenue of £20.5mn).

Although a strong US dollar benefited first-half revenue – about 80 per cent of sales are transacted in the currency – it wasn't a key factor behind the 230 per cent growth in first-half operating profit as a high proportion of input costs are non-sterling, too.

In other words, this is an organic growth story that looks set to gain further momentum as CML reaps the upside from investment in new products that are being launched in markets many times larger than CML's established markets within the sub-1GHz radio frequency arena.

The need for data to be transmitted faster and more securely, the upgrading of telecoms infrastructure around the world, and an increasing prevalence of private commercial networks for voice and data communications are all demand drivers. It's worth noting that CML is taking market share from rivals, so accelerating its organic growth rate even more.

CML MICROSYSTEMS FINANCIAL FORECASTS

Year end 31 Mar	Revenue	Ebitda	Adjusted pre-tax profit	Earnings per share	Dividend per share	PE ratio	Enterprise valuation /Ebitda ratio	Free cash flow yield	Dividend yield
2021	£13.1mn	£2.7mn	£1.1mn	11.1p	52.0p	44.1	19.4	9.50%	10.60%
2022	£17.0mn	£4.3mn	£2.1mn	12.8p	9.0p	38.3	12.3	3.40%	1.80%
2023E	£20.5mn	£5.8mn	£3.5mn	21.6p	11.0p	22.7	9.1	6.50%	2.20%
2024E	£23.1mn	£6.8mn	£4.4mn	26.7p	13.2p	18.4	7.8	8.30%	2.70%

Source: Company data, Shore Capital estimates (17 January 2023)

CML MICROSYSTEMS MAJOR SHAREHOLDERS

Name	Percentage
Premier Miton	12.10%
Otus Capital Management	9.90%
M. I. Gurry	8.50%
Liontrust Asset Management	8.40%
C. A. Gurry (managing director)	8.10%
T. M. R. Dean	8.00%
Herald Investment Management	6.80%
Ruffer Investment Management	4.20%
Schroder Investment Management	3.70%
Total	69.65%

Source: CML Microsystems

Strong financials

Having returned a chunk of cash to shareholders following the sale of its storage division, CML still retains a £22.7mn (143p a share) cash pile that equates to almost 30 per cent of its market capitalisation of £77.9mn (490p). Strip this sum out, and the shares are trading on cash-adjusted price/earnings (PE) ratios of 16 (2022-23) and 13 (2023-24), a low rating for a technology business that is expected to grow EPS by 23 per cent in the next financial year, and one that looks to be at the start of an earnings upgrade cycle. Indeed, the acquisition of Microwave will enable CML to internationalise that company's products outside the US, thus creating material sales synergies.

Moreover, the £8.9mn cash consideration – the balance is payable in shares – is likely to be recouped in full later this year as CML has material hidden value in its balance sheet that management is looking to crystallise.

Hidden balance sheet value

The group's Oval Park headquarters in Maldon, Essex, are held in the books at only £2mn and there is a vacant commercial property in Fareham that could be sold for £2mn once let out. CML has a high-quality tenant lined up.

House broker Shore Capital believes CML's property assets have a fair market value of £12mn, and significantly more if planning consent is forthcoming in the first half of this year for the redevelopment of 19 acres of surplus land at the Maldon site. CML has eager companies lined up to develop the land, assuming it gains consent for commercial use, as seems likely, thus releasing even more cash to boost the war chest for earnings-accretive acquisitions.

Assuming the Maldon surplus land is successfully offloaded, and the Hampshire property is sold too, then CML's cash pile could swell to £35mn (excluding the £8.9mn cash consideration for the Microwave Technology acquisition), a sum equating to almost half its market value. The implication being that the shares would be trading on a bargain-basement 2023-24 prospective cash-adjusted PE ratio of 10.

Free cash flow generation

The story gets even better because analysts at Shore Capital expect CML to generate free cash flow of £5mn (31.6p) and £6.5mn (41.2p) in the 2022-23 and 2023-24 financial years, so effectively the board can maintain investment in the business, raise the dividend and consider making share buybacks without denting the cash pile. CML repurchased 0.46 per cent of the shares in issue at an average price of 445p in a recent EPS-accretive buyback programme, which ended last month.

Analysts are pencilling in 20 per cent-plus growth in the dividend per share to 11p (2022-23) and 13.2p (2023-24), respectively, implying the shares offer prospective dividend yields of 2.2 and 2.7 per cent, respectively.

Takeover potential

Frankly, if the shares don't re-rate then CML's shareholders should expect interest from predators given the low-ball rating that is being attributed to a high-growth technology business operating in a sweet spot, and one underpinned by secular growth drivers. Buy.

CLEANTECH LITHIUM (CTL)

Aim: Share price: 71.5p
Bid-offer spread: 71-72p
Market value: £75.3mn

- Lithium deposits being valued on huge discount to peers
- Potential for sixfold investment return over three years
- Lithium-ion market to be in a large deficit by the end of the decade

This could be a pivotal year for **CleanTech Lithium (CTL)**, a below-the-radar exploration and development company that is advancing two sustainable lithium projects in Chile to meet robust end-market demand.

The global move away from fossil fuels is accelerating as policymakers, government bodies and investors are increasingly recognising that electrification is happening on a scale that was simply not envisaged even a decade ago. Accordingly, the evolution is driving demand for key commodities such as lithium, graphite and cobalt, and other technology metals including copper and nickel.

In the third quarter of 2022, over 77,000 tonnes of lithium carbonate equivalent (LCE) were deployed in the cells of new passenger plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs) globally, a 70 per cent increase on the same period in 2021, according to market research consultancy Adamas Intelligence. Globally, China captured 58 per cent of all LCE deployed onto roads, the US rolled out another 13 per cent and Germany 6 per cent – collectively driving 77 per cent of the global market.

The surge in demand for LCE in EVs explains why the price of the commodity has risen fivefold to $66,000 a tonne in the past 18 months. By 2030, analysts at Benchmark Minerals estimate that demand will hit 2.4mn tonnes, or four times last year's estimated global output. Demand from Europe is expected to be the key growth market, rising 20-fold between 2019 and 2029.

This not only highlights the importance of new sources of LCE, but also the strategic value to the car industry of CleanTech's two major projects in Chile: Laguna Verde and Francisco Basin. In total, they have collective deposits of more than 2mn tonnes of LCE.

Laguna scoping study highlights major project potential

Last month, CleanTech released its scoping study on Laguna Verde, a resource that holds 1.51mn tonnes of LCE – of which 0.8mn tonnes are classified in the JORC Measured and Indicated categories, and 0.7mn as Inferred.

The update confirmed the likelihood of the project entering full-scale production in 2025 and supports the potential for Laguna Verde to become a major supplier of battery-grade lithium to European and US markets using sustainable direct lithium extraction (DLE) technology.

Based on annual production of 20,000 tonnes of battery-grade lithium carbonate for an operational life of 30 years, Laguna Verde could produce accumulated net cash flows (post-tax and royalties) of $6.3bn with a low operating cost of $3,875 per tonne of lithium carbonate. Estimated capital expenditure of $384mn (£310mn), based on deploying a DLE plant using SunResin Materials' existing DLE technology, represents a fraction of the forecast net cash flows, highlighting the attractive economics.

In fact, the report estimates a post-tax net present value (NPV) of $1.83bn using a discount rate of 8 per cent and post-tax IRR of 45.1 per cent. This is based on a long-term LCE price of $22,500 per tonne, or two-thirds less than the current spot price of $66,000 per tonne. On this basis, the payback period is only 20 months.

Importantly, the project has industry-leading environmental, social and governance (ESG) credentials, a critical advantage for the EU market, based on utilising DLE, which returns spent brine to the basin aquifers, and renewable energy for processing power via connecting with the Chilean grid and its abundant renewable energy supply.

CleanTech is now proceeding to a pre-feasibility study (PFS) for the project. The next key milestone is the construction of a pilot plant capable of producing a tonne of battery-grade LCE per month. The DLE unit used in the pilot plant is currently being manufactured by SunResin's Belgium facilities and is due to undergo commissioning by the end of the second quarter this year. Using DLE technology has key advantages over salar (salt flat) operations in that it requires neither extensive site construction nor development of evaporation ponds, thus lowering upfront capital expenditure requirements.

It's good for cash flow, too, as the sellable product is produced in a matter of days rather than the 12 to 18-month period needed for sufficient evaporative enrichment to occur in salar and hard rock spodumene sources.

Admittedly, CleanTech will need strategic partners to commercialise the resource, but given the attractive economics and the huge margin of safety on LCE pricing embedded in the NPV calculations, then it shouldn't be short of interested parties. An updated JORC resource estimate is due to be released by the end of March this year, so there could be even more upside potential to tempt strategic partners with. The £75.3mn market capitalisation company is well funded to enter discussions, having raised £12.3mn in an equity raise last autumn to boost its £4.7mn net cash position reported in last September's half-year results. ▶

Francisco basin

CleanTech's other major project, Francisco Basin, produced a maiden JORC Inferred resource estimate of 0.53mn LCE at an average grade of 305mg/Li based on the first of four drilling wells, completed before the Chilean winter break. Drilling on the other three wells will be completed in the current quarter, thus enabling CleanTech to expand and upgrade the resource estimate to the Measured and Indicated categories.

A scoping study commenced in the fourth quarter of 2022 and management expects a base-case production rate of 20,000 tonnes LCE a year, the same as Laguna Verde. If all goes to plan, the company could undertake a PFS as early as the third quarter of this year.

LAGUNA VERDE SCOPING STUDY OUTCOMES

Key operating metrics	Study outcome
Production rate of lithium carbonate	20,000 tonnes per annum
Operational life	30 years
Resource (Measured + Indicated)	802,600 tonnes
Construction period	1.5 years
Recovery rate - Direct Lithium Extraction	90.40%
Recovery rate - Concentration stages & chemical plant	94.20%
Recovery rate - Total	85.2%
Key financial metrics	
Capital cost (including 10% contingency)	$383.6mn
Operating cost	$3,875 per tonne
Lithium price (Lithium Carbonate)	Forecast Curve
Accumulated net cash flows over operational life	$6.3bn
Payback period	20 months
Internal rate of return post-tax	45.1%
Net present value post-tax (discount rate: 8%)	$1.83bn
Net present value post-tax (discount rate: 10%) - Sensitivity Analysis	$1.43bn

Source: CleanTech Lithium (6 January 2023)

Significant undervaluation

To put the undervaluation of CleanTech into perspective, the company has an enterprise valuation of $70mn (£58.3mn), a sum equating to $35 per tonne of LCE it holds across the Laguna Verde and Francisco Basin 100 per cent-owned licence areas.

By comparison, although **Arkansas-based Standard Lithium (US:SLI)** and Australian Stock Exchange-listed **Lake Resources (AU:LKE)** only have 3.9mn and 4.4mn tonnes of lithium deposits, or double that of CleanTech's, their enterprise valuations of $469mn and $681mn value their LCE reserves at $120 and $155 per tonne, respectively. That's around three to four times higher than the valuation of Cleantech's LCE reserves.

Moreover, CleanTech has just been granted new exploration licences, covering a total area of 344 square kilometres (km) at a prospective greenfield project, Llamara, located 600 km to the north of its Laguna Verde and Francisco Basin projects. The company plans to commence drilling there early in the second quarter, providing shareholders with yet another potential share price catalyst.

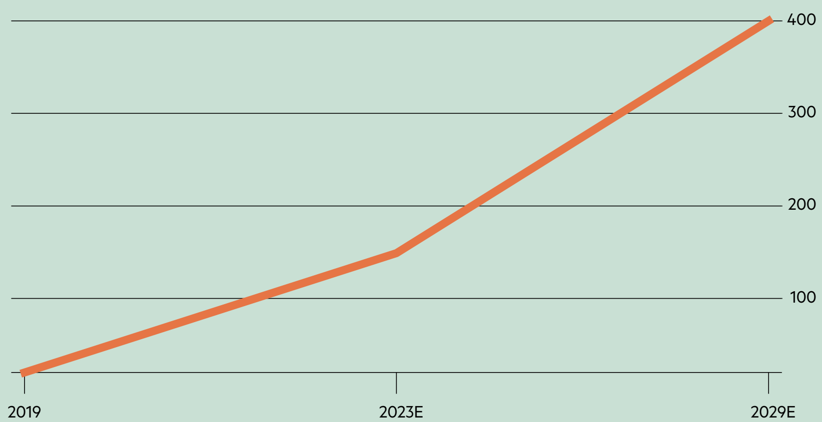
Investors are getting excited about the company's prospects. Hence why the share price has been steadily rising this year. The other driver is news that major carmakers are now splashing the cash to secure lithium deposits. Last week, **General Motors (US:GM)** made a $650mn investment in Lithium Americas' Thacker Pass project in Nevada.

Potential upside

So, with the LCE price significantly higher than the base case used in the financial forecasts for Laguna Verde, positive newsflow expected on multiple fronts this year, and Cleantech rated materially below the valuation multiples attributed to larger peers, a significant re-rating could be on the cards.

Fox Davies' three-year share price target may seem ambitious at 277p, or four times the current share price, but it's easy to see how CleanTech could get there. It's reassuring, too, that the insiders have skin in the game, including chief executive Aldo Boitano (8.9 per cent) and chief commercial officer Luke Jarvis (5.8 per cent). It's worth following their lead. Buy. ●

EUROPEAN BATTERY CELL DEMAND FORECASTS (GWH)



Source: CleanTech Lithium, Benchmark Minerals Global Lithium Forecast (2021)

■ *Simon Thompson's latest book Successful Stock Picking Strategies and his previous book Stock Picking for Profit can be purchased online at www.ypdbooks.com, or by telephoning YPDBooks on 01904 431 213 to place an order. The books are being sold through no other source and are priced at £16.95 each plus postage and packaging of £3.95 [UK].*

Promotion: *Subject to availability, the books can be purchased for the promotional price of £25 plus £5.75 postage and packaging.*

They include case studies of Simon Thompson's market beating Bargain Share Portfolio companies outlining the investment characteristics that made them successful investments. Simon also highlights many other investment approaches and stock screens he uses to identify small-cap companies with investment potential.

Dave Baxter

IC COMMENT

With everything on sale, are investors bothered by trusts' return to market?

Those wishing to tap into new investment trusts over the past year will have been disappointed. Not a single trust launched on the London Stock Exchange in 2022, the first year investors have witnessed such an absence since 1978, according to Winterflood. Fundraising has also fallen well short of the elevated levels of 2021, indicating pretty clearly just how cautious both investors and those looking to issue equity have become.

And yet with valuations recovering for the time being, some trusts are now on the hunt for cash. The mooted Conviction Life Sciences vehicle may have recently ditched its plans for an initial public offering, but the AT85 Global Mid-Market Infrastructure trust was still looking to raise £300mn at the time of writing. What's more, some existing names have once again turned to the market, with **BH Macro (BHMG)** and **3i Infrastructure (3IN)** both tapping investors for cash at the time of writing. Such popular trusts should be able to attract investors to their placings, adding a bit of confidence to a battered part of the market.

This might be a cheap way in. Investec analysts have argued, for example, that 3i Infrastructure is raising equity off an "outdated" net asset value (NAV) calculation struck on 30 September 2022 and "completely ignores the passage of time between [then] and 3 February 2023, the date at which this equity placing was effectively priced". As a result, they say, the issuance is priced more cheaply than it should be – an opportunity for new investors, but a problem for existing ones.

Whatever the pricing, the fact remains that few trusts can now command a premium valuation of any kind. Just a handful of UK-listed funds can now boast a share price premium to NAV and those cases are pretty specific. Think of the infrastructure and renewable energy infrastructure trusts that have maintained investor confidence but in many cases look cheaper than they did a year or so earlier, or defensive names such as BH Macro, **Ruffer (RICA)**, **Capital Gearing (CGT)** or **Personal Assets (PNL)**. Such trusts did especially well in 2022, and continue to look good if challenging markets persist.

A few of the other trusts that held up in 2022 have also recently commanded a share price premium to NAV: they include limited number of equity income trusts including **City of London (CTY)** or the slightly less conventional **Law Debenture Corporation (LWDB)**, which generates additional returns through a professional services business. A few other winners of recent times also traded on premiums as of early February, be it country specialist **Ashoka India Equity (AIE)**, **BlackRock Energy and Resources Income (BERI)**, **CQS New City High Yield (NCYF)** or **Baillie Gifford vehicle Pacific Horizon (PHI)**.

With premiums now rare, the sectors in which share prices do exceed NAVs could arguable be seen as crowded trades such as wealth preservation or renewable energy infrastructure. But trusts that command such premiums and want to issue equity may face their own challenges, given that markets have looked especially fragile and 'bargains' appear to be abundant. With so many trusts on discounts, those still on premiums will really have to earn any support.

The global income funds offering high yields

Dave Baxter looks at funds competing with the domestic market on yield

The UK market has come a long way from the dividend cuts that marked the lockdown era, and income payments continued to roar back to life in 2022. However some caution may now be justified: Link Group's latest report on the state of UK dividends warns that payouts could slow this year, in part due to a looming economic slowdown. Meanwhile, other common bugbears – such as the concentration of dividends among a few major UK companies – have not gone away.

Nonetheless, with Link expecting the UK to yield 3.7 per cent over 12 months, domestic shares certainly still merit consideration among income hunters. But it's worth remembering that the income generation prospects can look pretty good in other major markets, too. Those seeking to diversify their equity income portfolio beyond the domestic market might wish to consider their options carefully.

Income plays challenging the UK

High dividend yields can often offer false promise – the estimated payouts may prove too great for a company to deliver, and the yield itself may just be a reflection of recent price falls for a particular stock or portfolio. But that doesn't mean they should be entirely discounted, and a look at ex-UK income funds throws up some yields of note.

A region that continues to stand out, at least on this basis, is Asia. **Henderson Far East Income (HFEL)** is a portfolio we have flagged before in this regard, and it now has a share price dividend yield of a little more than 8 per cent.

The trust has tended to benefit from some fairly cyclical exposures in recent history, and its biggest sector allocation at the end of 2022 was financials, although this is less of a pure play on the likes of banks than some might assume.

As the investment team noted in the

trust's last annual report: "We retain our exposure to financials, although are increasingly moving towards diversified financials rather than banks. Securities companies in China will take market share in high-margin wealth management away from the policy banks, while regional insurance remains a long-term structural growth story." As such, the team has backed names including **Citic Securities (HK:6030)** and **AIA Group (HK:1299)**, while a focus on banks in South Asia has led to them holding **United Overseas Bank (SG:U11)** in Singapore and **Bank Mandiri (ID:BMRI)** in Indonesia.

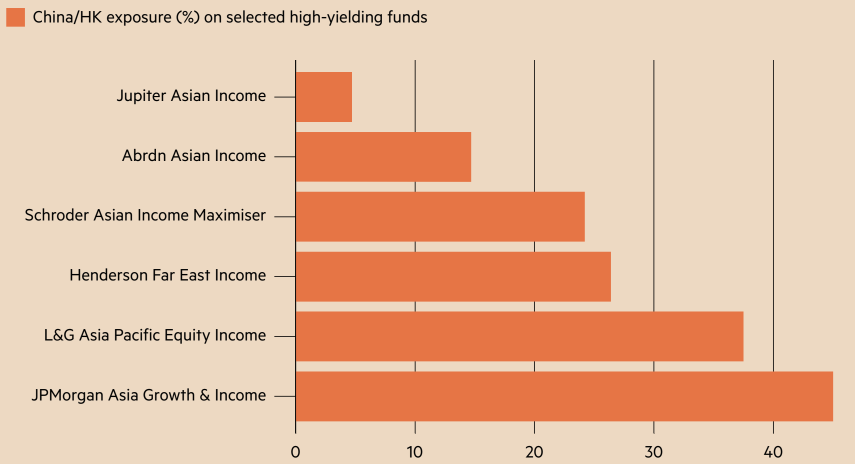
Janus Henderson Asian Dividend Income (GB00B6193536), an open-ended fund run by the same team, recently had an historic yield of 5.7 per cent, and other Asia vehicles also continue to stand out on the income front. **Schroder Asian Income Maximiser (GB00BDD29F14)** comes with an historic yield of 5 per cent, with **Jupiter Asian Income (GB00BZ2YMT70)** on 4.3 per cent.

It's worth noting here that dividends are only one part of the total return puzzle. There's rarely an exact inverse correlation between historic yield and historic performance, but in this case the lower yielders have both outperformed the two Henderson portfolios over one, three and five years.

Along with its financials position, the Henderson Far East Income team has also kept a good level of exposure to energy and materials companies, with a focus on those fuels and materials that are "integral to the energy transition and are seeing existing and new areas of demand which are constrained by supply". It's also notable that the trust had a modest exposure to China and Hong Kong at the end of last year – relative to the MSCI AC Asia ex Japan index weighting of 37 per cent, at least – although this allocation has tended to fluctuate in size.

The extent to which the Chinese reopening rally continues and the region's shares recover is likely to be a big dividing line among Asian and emerging market funds in general in the months ahead. As the chart shows, some funds with higher yields differ notably in their exposure to China and Hong Kong.

CHINA STILL DIVIDES



Source: Fund factsheets, as of 31 December

For those who prefer to avoid the country, there are equity income portfolios available that focus on Asia and emerging markets without any exposure to China. **Invesco Emerging Markets ex China (GB00BJ04JH43)** recently came with a historic yield of around 5 per cent, and has made huge total returns in the past year. However, the fund does still retain some of the other regional concentrations that can be a feature of the sector. More than half of the portfolio was tied up in South Korea, Taiwan and India at the end of 2022, with the top two holdings, emerging market manager favourites **Taiwan Semiconductor Manufacturing (TW:2330)** and **Samsung (KR:005930)**, making up around 16 per cent of assets. The team nevertheless notes that it seeks companies trading at "substantially below" an estimate of fair value, with this value focus designed to take the managers into unloved areas of the market.

Turning to a more unconventional play on developing markets, **BlackRock Frontiers (BRFI)** has performed strongly in the past year and continues to offer something on the dividend front, with a recent yield of a little under 4 per cent. The portfolio has certainly been affected by the events of the past year: exposure to the Middle East has boosted performance, with the region benefiting from higher oil prices on the back of Russia's invasion of Ukraine. However, the fund also suffered what it acknowledged as "outsized losses" as part of its exposure to shares in Eastern Europe such as Hungarian bank **OTP (DE:OTP)**. Frontier markets can be viewed as a diversifier to a broad emerging market allocation, but the fact remains this is quite a niche portfolio with idiosyncratic risks.

Developed market options

A handful of funds in other regions have also boasted some tempting yields in recent times. The US, for one, has not traditionally been viewed as a high-yielding market, but a few names do tick some of the right boxes. **Schroder US Equity Income Maximiser (GB00BYP25698)** came with a trailing 12-month yield of more than 5 per cent at the end of last year, thanks in part to a focus on boosting its income by writing call options. As with some of the other funds mentioned, this portfolio does come concentration issues associated with its underlying market: the fund had a 6.1 per cent weighting to **Apple (US:AAPL)** and 5.4 per cent in **Microsoft (US:MSFT)** at the end of December, presenting a duplication risk for those already using other funds with a US or global remit.

North American Income (NAIT) recently came with a share price dividend yield of around 3.2 per cent – relatively attractive in its own right but also notable given the trust's shares have risen considerably in the last year. The management team follows a value style of investing, and recently listed financials, healthcare and energy as their biggest sector allocations.

Other developed markets do offer interesting yields, too: shares in **CC Japan Income & Growth (CCJI)** recently traded on a yield of around 3 per cent, as did shares in **JPMorgan European Growth & Income (JEGI)**.

But as the recent successes of the FTSE 100 emphasise, it can be worth considering the balance of investment styles in your portfolio. A focus on higher yields (and lower valuations) can lead many income investors into more cyclical sectors, and that does come with risks at a time when energy prices might be peaking and a recession looms.

Mark Robinson

IC COMMENT

Nasdaq's early-year rally might grind up against US Federal Reserve policy

It's been just under a year since the Nasdaq Composite's short-term moving average slipped below its 200-day measure, marking an industry in downtrend. It had actually started to trail off towards the end of November 2021, prefiguring a peak-to-trough fall of 36 per cent, as the gains of the preceding year swiftly evaporated.

Yet the index's decline, unsettling as it may have been, provides another sobering reminder of why it's bad practice to abandon risk assets when fear grips markets. After all, the Nasdaq Composite has still delivered a 65.8 per cent capital return over the past five years, easily outstripping the S&P 500 in the process.

So, where are we now? The index recently closed out its fifth weekly increase in succession - its longest winning streak since the November 2021 high-water mark - leaving it 11 per cent to the good in the year to date. The extent to which this reflects investors 'buying the dips' is anyone's guess, but the rally is hardly justified based on recent earnings updates from US tech heavyweights **Alphabet (US:GOOGL)**, **Apple (US:AAPL)** and **Amazon (US:AMZN)**. Apple fell short of profit expectations for the first time in seven years, after China's strict net-Covid policies stymied iPhone production at its biggest supplier, while Amazon is now recalibrating the scope of its business as the surge in order volumes brought about by the lockdowns has not been sustained.

More tellingly, perhaps, Alphabet reported that a pullback by advertisers continues to constrain revenues. There is some debate as to whether advertising spending represents a leading or lagging economic indicator, although it's argued that the online space provides a more immediate and meaningful picture of where the economy might be headed. Softening advertising revenues certainly chime with the US consumer outlook. The latest Consumer Confidence Survey, published by The Conference Board, a US think tank, certainly highlights a deteriorating consumer outlook for income, business and labour market conditions. But, then again, if leading indicators were as illuminating as some would have us believe, there would be far less volatility in markets, and future sales and cash flows could be predicted with greater accuracy.

Alphabet is one of a growing number of Nasdaq tech stocks that have taken the decision to cut job numbers. Google's parent company is aiming for a 6 per cent reduction in its global workforce. The group's chief executive, Sundar Pichai, explained that hiring policy over the past couple of years reflected a "different economic reality than the one we face today". Cold comfort for anyone about to be shown the door, but the layoffs should support operating margins over the medium term. Without wishing to sound callous, investors in big tech must surely have been questioning labour utilisation rates in light of Elon Musk's experience at Twitter.

US STOCKS REMAIN OVERVALUED WHEN SET AGAINST LONG-TERM MULTIPLES

Perhaps the recent support for the tech complex assumes that the end of the US Federal Reserve's aggressive rate rise programme is within sight, a distinct possibility if the M2 money supply continues to dwindle. But that's only part of the picture. Central banks on both sides of the Atlantic are committed to shrinking their balance sheets by no longer reinvesting proceeds from debt maturities, or, in the case of the Bank of England, selling them in advance of the maturity date. Unfortunately, equity valuations, particularly in relation to growth stocks, are vulnerable to the potential knock-on effects of 'quantitative tightening' because a minimum level of bank reserves is required to keep short-term funding markets operating smoothly. The situation is also complicated by the brewing Congressional spat over the US debt ceiling.

The valuations ascribed to many Nasdaq stocks in the run-up to the bear market came about through excess liquidity in the marketplace, or dirt cheap capital, to put it another way. The average cyclically adjusted price/earnings multiple has shrunk by about a third since the last high point and has fallen below the five-year average. Yet US stocks remain overvalued when set against long-term multiples. It's hard to square index performance when set against the flurry of recent earnings updates and the decline in consumer confidence, but expectations of a lower-than-expected peak Federal funds rate are holding sway. Whether this amounts to little more than a relief rally is unimportant, as the Fed's measures to streamline its securities portfolio will have the most profound impact on market volatility in the coming months.

Boom year for Shell ends with another record

Shell's adjusted profit doubled on last year to $40bn, and its chief executive is focusing on simplification. Alex Hamer reports

Shell SHEL 2,407p **HOLD**

OIL, GAS & COAL

- Higher sales and trading profits contribute to inflated bottom line
- Dividend up 15 per cent and buyback programme continued at $4bn this quarter

Shell's (SHEL) 2022 profits will likely mark a high point for this energy cycle - its full-year adjusted profit of $40bn (£32bn) was large enough to reverberate beyond the energy sphere, ramping up political rhetoric about energy companies capitalising on Russia's invasion of Ukraine, which drove up oil and gas prices.

The US energy giants **Chevron (US:CVX)** and **ExxonMobil (US:XOM)** had already announced their own stellar profits – a combined $91bn for 2022 – although both slipped under analyst forecasts in the December quarter after oil and gas prices fell back.

At the same time, Shell is now facing a scenario where investors have switched focus to energy security rather than calling for the energy giants to add renewables and other transition-friendly assets to their businesses. The company outlined a flat spending outlook for this year compared with 2022, at $23bn-$27bn in capex, and grew its reserves by over 10 per cent in 2022, to 9.6bn barrels of oil equivalent.

New chief executive Wael Sawan said Shell would "invest with discipline" in existing areas of expertise.

The outsize profits in 2022 came largely from the integrated gas unit, which saw its earnings triple to $22bn. The segment did fall back slightly in the December quarter, reporting an 8 per cent drop in earnings, to $5.3bn, although this was largely a paper fall from the revaluation of derivatives.

A strong trading performance and higher realised prices added $2.8bn in earnings. "This caps off a particularly strong year for the LNG business, benefiting from unprecedented volatility," said RBC Capital Markets analyst Biraj Borkhataria, adding that the integrated gas earnings had come in 50 per cent higher than his top-end forecast.

The upstream division brought in $16bn in earnings, although these took a dive in the December quarter thanks to the European 'solidarity contribution' (or windfall tax), which took in $1.4bn, and lower oil and gas prices compared with the third quarter.

Investors will get a taste of all this cash - after being handed $26bn in 2022 - through a 15-per-cent-higher quarterly dividend starting this quarter, at 28.75¢ a share. Another $4bn share buyback programme was confirmed for the March quarter, as expected by analysts.

The energy security argument really has landed with oil and gas management teams: **BP (BP.)** has scaled back green targets (see page 45) and Sawan said he would focus on "performance and simplification" at Shell. With profits like this, it's no wonder they are bullish about their existing business models. Investors with a long horizon may wonder what happens when hydrocarbon demand starts to come off, however. Hold. ●

Ord Price: 2,407p
Market Value: £170bn
Touch: 2,406-2,407p
12-Month High: 2,557p **Low:** 1,833p
Dividend Yield: 3.5%
PE Ratio: 3
Net Asset Value: 2,700¢
Net Debt: 23%

Year to 31 Dec	Turnover ($bn)	Pre-tax profit ($bn)	Earnings per share (¢)	Dividend per share (¢)
2018	396	35.6	282	188
2019	352	25.5	197	188
2020	181	-27.0	-278	65.3
2021	262	29.8	259	89.4
2022	381	64.8	576	103.75
% change	+45	+117	+122	+16

£1=$1.24

Last IC view: Hold, 2,418p, 27 Oct 2022 Ex-div: 16 Feb Payment: 27 Mar

Renishaw RSW 3,900p **BUY**

ELECTRONIC EQUIPMENT: GAUGES & METERS

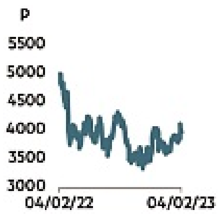
Renishaw (RSW) sells equipment used for precision manufacturing. The semiconductor industry drove demand last year, but now we are nearing the bottom of the cycle the need for Renishaw's equipment has slowed. This has been offset by increased demand for its additive manufacturing (also known as 3D printing) machines, which are being used to make parts across electronic, healthcare, aerospace and defence sectors.

All in all, revenue from manufacturing technologies increased 7.2 per cent to £331mn in the six months to 31 December, although adjusted operating profit fell 18 per cent. Across the group, labour costs increased from £115mn to £133mn, which fed through to a five percentage point decrease in the adjusted pre-tax margin to 21 per cent.

Despite the slowdown in demand, capital expenditure increased from £12.2mn to £20.2mn. This investment in plant and equipment includes £7.8mn spent on a production facility in Wales. This investment sets the business up for when the market picks up again.

Demand for semiconductors is now at a relatively low ebb. Companies overspent last year, and the slowdown in consumer electronics means there are inventory backlogs. Demand for Renishaw's equipment will eventually return and will be boosted by government subsidies, which are encouraging investment in manufacturing nearer to home.

FactSet broker consensus currently has Renishaw trading on a forward price/earnings ratio of 21.8. This isn't cheap, but exposure to the long-term growth trends of 3D printing and semiconductors justifies it. We are near the bottom of the semiconductor cycle; growth will pick up again. Buy. **AS** ●



Ord Price: 3,900p
Market Value: £2.8bn
Touch: 3,900-3,924p
12-Month High: 5,095p **Low:** 3,238p
Dividend Yield: 1.9%
PE Ratio: 25
Net Asset Value: 1,173p
Net Cash: £196mn

Half-year to 31 Dec	Turnover (£mn)	Pre-tax profit (£mn)	Earnings per share (p)	Dividend per share (p)
2021	325	81.4	94.2	16.0
2022	348	77.8	88.1	16.8
% change	+7	-4	-6	+5

Last IC view: Buy, 3,422, 15 Sep 2022 Ex-div: 9 Mar Payment: 11 Apr

BP revises green ambitions as gas trading surges

The energy giant is reassessing its future as gas profits soar. Mark Robinson reports

BP BP. 497p **HOLD**

INTEGRATED OIL & GAS

- Gas trading mitigates Russian exit impairments
- Debt continues to fall and a further $2.75bn buyback introduced

Anyone old enough to recall the failed rebranding of **BP (BP.)** as "Beyond Petroleum" would not have been surprised by recent comments from the current chief executive, Bernard Looney, suggesting that the group would slow its transition to low-carbon energy sources. BP now aims to reduce fossil fuel production by around 25 per cent through to 2030, compared with the previous 40 per cent target rate.

The rethink highlights the folly of aligning group production targets with arbitrary government timeframes, but shareholders won't be overly concerned given the impact of soaring energy prices on profitability. Fourth-quarter underlying replacement-cost profit came up slightly short of consensus at $4.81bn (£4bn), leading to an annual rate of $27.7bn, a year-on-year rise of 116 per cent. Surplus cash flow tripled to $19.3bn, sufficient to justify a further $2.75bn share buyback, while management pointed to an 11th successive quarter of debt reduction.

Geopolitical developments will have played a role in the amended low-carbon timetable. Following the Ukraine invasion, the group abandoned its stake in Russian oil giant Rosneft, leading to a $25.5bn accounting charge in the first quarter. However, the invasion also sent gas prices soaring, which proved hugely advantageous for the group's natural-gas trading operation, virtually cancelling out the Rosneft hit.

There was progress on the environmental front as the group pursued its biogas strategy through the completion of the Archaea Energy acquisition, while its electric vehicle charge points increased in number by 65 per cent. But the feeling is that some institutional investors see more clarity in the strategic objectives of transatlantic rivals such as **Exxon Mobil (US:XOM)**, in that they have been rather less gung-ho on prospects for an accelerated energy transition.

SOME INVESTORS SEE MORE CLARITY IN THE STRATEGIC OBJECTIVES OF TRANSATLANTIC RIVALS

As more capital is given over to renewables investments, shareholders will be justifiably anxious to discover if it will produce commensurate returns. This is the dilemma faced by Looney and other oil industry figures. But the group's early enthusiasm should have been tempered in the knowledge that its first unsuccessful tilt towards a greener future was followed shortly afterwards by the Deepwater Horizon disaster. Practical developments tend to get in the way of wishful thinking.

Gas prices have moderated to a degree, so revenues from the matching of buyers and sellers will trail away in the current quarter, but the supply shock in the market demonstrated the value of this corner of the business. The shares change hands at 5.6 times consensus earnings – hardly expensive relative to the sector – but energy prices aren't quite so favourable, and we would like to get more clarity on governmental windfall tax regimes. Hold. ●

Ord Price: 497p
Market Value: £89.9bn
Touch: 497-498p
12-Month High: 504p **Low:** 342p
Dividend Yield: 4.0%
PE Ratio: na
Net Asset Value: 459¢*
Net Debt: 32%

Year to 31 Dec	Turnover ($bn)	Pre-tax profit ($bn)	Earnings per share (¢)	Dividend per share (¢)
2018	299	16.7	47.0	40.5
2019	278	8.20	19.8	41.0
2020	106	-24.9	-100	26.25
2021	158	15.2	37.6	21.63
2022	241	15.4	-13.1	24.08
% change	+53	+1	–	+11

*Includes intangible assets of $22.2bn, or 122¢ a share £1=$1.2
Last IC view: Hold, 482p, 1 Nov 2022 Ex-div: 16 Feb Payment: 31 Mar

NCC NCC 173p **BUY**

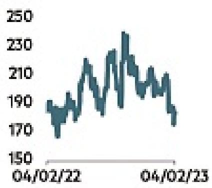
COMPUTER SERVICES

Shares in **NCC (NCC)** pulled back sharply after the cyber security group said that its revenue is now expected to increase year on year by single digits. Customers have been delaying purchase orders, a partial reflection of tightened credit markets and the general business cycle.

It's worth remembering that investments in systems security cannot be put off indefinitely, so demand and utilisation rates will recover at some point. Unfortunately, the nature of NCC's business and the evolving nature of cyber threats compels it to constantly update its escrow, software and cloud capabilities. Funding, therefore, becomes a more pressing issue when orders are being delayed, but the group was able to match the previous half-year's net cash capital expenditure of £3.7mn.

However, with utilisation rates and the gross margin in decline, the group is "accelerating the implementation of [its global growth] strategy and reshaping the business, with a proposed reduction in headcount in the near term". The implementation of the group's strategic initiatives is expected to require additional investment in FY 2023 of c.£5mn. NCC clearly can't afford to stand still.

The sell-off on results day may seem unjustified given the 27.7 per cent increase in profits at the operating level, together with a 60 basis point increase in the underlying margin. But near-term expectations have been tempered in the knowledge that the general 'tech' complex is still suffering from softening demand. Management is looking to limit the draw on working capital, hence the prospective job cuts, but it may be a while before end markets bounce back. A forward rating of 15 times forecast earnings is not extortionate given the accelerated rate of digital adoption in both the public and private sectors. Buy. **MR** ●



Ord Price: 173p
Market Value: £540mn
Touch: 172-173p
12-Month High: 245p **Low:** 147p
Dividend Yield: 2.7%
PE Ratio: 22
Net Asset Value: 97p*
Net Debt: 28%

Half-year to 30 Nov	Turnover (£mn)	Pre-tax profit (£mn)	Earnings per share (p)	Dividend per share (p)
2021	150	8.40	1.90	1.50
2022	177	10.3	2.50	1.50
% change	+18	+23	+32	–

*Includes intangible assets of £292mn, or 126p a share
Last IC view: Buy, 191p, 6 Sep 2022 Ex-div: 16 Feb Payment: 17 Mar

Ashmore rides rising stock markets

The company's long winter started before the rest of the market's, but signs of spring are palpable. Julian Hofmann reports

Ashmore ASHM 275p — BUY

ASSET MANAGERS AND CUSTODIANS

- Outflows continue
- Dollar strength moderating

The general greening up of share indices around the world over the past three months has lifted emerging market specialist **Ashmore (ASHM)** from its long slump – at least as far as its share price is concerned. On the other hand, investor appetite for higher-risk emerging market debt and equities has not quite returned to pre-pandemic levels as the market waits on the immediate impact of China's reopening before placing a definitive stake. This was reflected in the 11 per cent attrition in Ashmore's assets under management (AUM), which stood at $57.2bn (£47.6bn) at the end of the half.

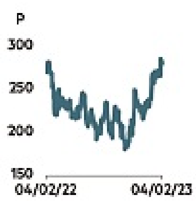
Around $7.6bn of this was due to outflows, which was slightly offset by $800mn of improved investment performance as key assets started to show price rises. A key factor now for Ashmore is that the dollar's strength, which caused investors to dump emerging market assets in favour of the greenback, has started to moderate. This provides an incentive for investors to seek out other assets, and lessens the pain for emerging economies that have borrowings demoninated in the currency.

Ashmore's assets under management fell to £47.6bn

The volatility seen in 2022 affected some asset classes more than others. For instance, corporate bond fund redemptions stayed low, with more subscription and redemption activity on the equities side of the business.

Numis analysts pointed out that Ashmore's investment performance is still 8 per cent below the benchmark for the year and that this would continue to have an impact on client retention and sales. This means the manager might not pick up its fair share of fund flows as sentiment improves. But we think that momentum will do the heavy lifting for Ashmore's shares, geared as they are to market recovery. The forward price/earnings ratio of 18 is priced for this scenario. Buy. ●

ASHMORE'S INVESTMENT PERFORMANCE IS STILL 8 PER CENT BELOW THE BENCHMARK FOR THE YEAR



Ord Price: 275p
Market Value: £1.96bn
Touch: 275-276p
12-Month High: 286p **Low:** 178p
Dividend Yield: 6.1%
PE Ratio: 48
Net Asset Value: 126p
Net Cash: £482mn

Half-year to 31 Dec	Net revenue (£mn)	Pre-tax profit (£mn)	Earnings per share (p)	Dividend per share (p)
2021	139	116	14.2	4.80
2022	110	53.8	6.48	4.80
% change	-20	-54	-54	-

Last IC view: Buy, 204p, 8 Sep 2022
Ex-div: 2 Mar Payment: 29 Mar

Mattioli Woods MTW 627p — BUY

AIM: ASSET MANAGERS & CUSTODIANS

The trials and tribulations in asset management have been well documented over the past 12 months. While the big companies have struggled, smaller players like **Mattioli Woods (MTW)** have held the line against wholesale asset price falls and customer withdrawals, although even MTW recorded a 2 per cent fall in client assets to £14.6bn in the six months to 30 November. In such a difficult market, the key differentiator seems to be whether asset managers also class themselves as general wealth managers, as this market segment has proved to be far more stable.

Mattioli Woods is no different in this regard. The company's main strength is the recurring fees it earns from managing client money stashed in pensions, or discretionary investments. Recurring revenues made up nearly 90 per cent of total sales, up from 88 per cent last year. This was a positive given the half encompassed some of the worst of the market turmoil triggered by last autumn's 'mini' Budget. The rising interest rate environment is also interesting for the company, which has the option of deploying its capital in the money broking market and earning better interest, while doing the same for its Sipp customers.

Recurring revenues stem from the company being able to earn fees from discretionary advice when markets are bad, while still being pulling customers to its platform via referrals. Acquisitions have also played their part, with the company earning £20mn of revenue from businesses acquired since the end of 2021.

Mattioli offers an interesting combination of inherent operational gearing and resilient revenue streams. The shares have eased back since the summer but the forward price/earnings ratio of 13, based on FactSet consensus, is unchanged. Buy. **JH** ●

Ord Price: 627p
Market Value: £321mn
Touch: 620-640p
12-Month High: 833p **Low:** 530p
Dividend Yield: 4.2%
PE Ratio: 59
Net Asset Value: 440p*
Net Cash: £35mn

Half-year to 30 Nov	Turnover (£mn)	Pre-tax profit (£mn)	Earnings per share (p)	Dividend per share (p)
2021	50.0	3.25	3.50	8.30
2022	55.0	4.79	5.90	8.80
% change	+10	+47	+69	+6

*Includes intangible assets of £195mn, 381p a share
Last IC view: Buy, 660p, 13 Sep 2022
Ex-div: 16 Feb Payment: 24 Mar

PZ Cussons PZC 202p **HOLD**

PERSONAL PRODUCTS

PZ Cussons' (PZC) shares were marked down by 6 per cent on the back of a mixed set of results. The consumer goods company, which owns Carex and Imperial Leather, kept its full-year guidance and dividend steady, but this wasn't enough to prevent market jitters around demand pressures and higher net debt.

It was in Africa where the greatest top-line joy was found, despite that market driving the 5 per cent decline in overall volumes in the period (which wasn't a terrible result given the consumer spending environment). Like-for-like (LFL) revenues were up there by 16 per cent, with distribution gains and price increases behind the performance. An adjusted operating margin uplift of 370 basis points outstripped performance in other locales.

Results elsewhere were less impressive. LFL revenues rose by 8 per cent in Asia Pacific and contracted by 6 per cent in Europe and the Americas. The latter market – where profits plunged – was hit by the continuing normalisation of handwash demand. Given that Carex sales are still up by a fifth against the pre-Covid baseline, there is a question here of just how much further they have to fall as the hyper-conscious pandemic attitude towards germs fades.

Management expects an improved margin performance in the second half of the year. And long-term revenue and margin targets were maintained. Promising stuff. But a chunky increase in adjusted net debt from £10mn to £36mn in the half raised some eyebrows.

City analysts value the shares at their five-year average of 17 times forward earnings, according to the consensus position on FactSet. This is undemanding, if not exactly cheap. We think the long-term outlook still looks promising for PZ, as it invests more in key brands and adapts to a changing market. Hold. **CA**

Ord Price: 202p
Market Value: £866mn
Touch: 201-202p
12-Month High: 223p **Low:** 178p
Dividend Yield: 3.2%
PE Ratio: 15
Net Asset Value: 93p*
Net Debt: 12%

Half-year to 3 Dec	Turnover (£mn)	Pre-tax profit (£mn)	Earnings per share (p)	Dividend per share (p)
2021 (restated)	284	23.5	4.23	2.67
2022	337	40.5	5.90	2.67
% change	+19	+72	+39	–

*Includes intangible assets of £331mn, or 77p a share
Last IC view: Hold, 195p, 22 Sep 2022 Ex-div: 9 Mar Payment: 6 Apr

Barratt Developments BDEV 470p **HOLD**

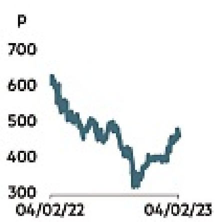
HOME CONSTRUCTION

Barratt Developments (BDEV) ended last year with a bang. In its results for the six months to 31 December, revenues and profits jumped despite another bang rumbling in the distance – the pullback in house prices. They are in their longest period of decline since 2008, with some experts predicting they will have fallen 10 per cent by the end of 2023.

This is already hurting Barratt. Forward sales slumped 31 per cent by volume and 35 per cent by value when compared with the same point last year (end-January), suggesting that the company's next set of results will not be as rosy as its most recent ones. The phased reduction of its dividend coverage from 2.25 last financial year to 1.75 by 2024 as well as its reduced dividend payment for this half-year period is a recognition from Barratt of the rocky road ahead. Bad news for income investors who should expect less going forward.

On fire safety, Barratt insists there will be no more costs to pay "should it sign the proposed contract" which the government unveiled at the end of last month. Developers have been given a deadline of 13 March to sign or face "significant consequences". The company gave some cause for optimism when it said it had seen "early signs of improvement" in January trading. It's net private reservation rate (per active outlet per week) rose ot 0.49 last month, up from 0.3 in the final six weeks of 2022. That uptick helped spark a mini-rally in housebuilder shares, but Barratt's strong results need to be understood in the context of the challenges ahead. Hold. **ML**

HOUSE PRICES ARE IN THEIR LONGEST PERIOD OF DECLINE SINCE 2008



Ord Price: 470p
Market Value: £4.68bn
Touch: 469-470p
12-Month High: 653p **Low:** 313p
Dividend Yield: 7.6%
PE Ratio: 9
Net Asset Value: 568p
Net Cash: £925mn

Half-year to 31 Dec	Turnover (£bn)	Pre-tax profit (£mn)	Earnings per share (p)	Dividend per share (p)
2021	2.25	433	34.5	11.2
2022	2.78	502	37.7	10.2
% change	+24	+16	+9	-9

Last IC view: Hold, 419p, 7 Sep 2022 Ex-div: 10 Apr Payment: 18 May

Smurfit Kappa SKG 3,454p **BUY**

CONTAINERS & PACKAGING

Packaging giant **Smurfit Kappa (SKG)** has grown its profits by almost 40 per cent, despite a fall in demand for cardboard boxes.

In the year to 31 December 2022, the FTSE 100 company reported a 27 per cent rise in revenue and a 38 per cent jump in earnings before interest, tax, depreciation and amortisation. Box volumes dipped by 2 per cent, with the UK and Germany performing below expectations. Growth was driven by "progressive box price increases", which coincided with easing cost pressures.

The big question, though, is whether Smurfit Kappa will soon have to drop its prices. Management noted a slowdown in demand in 2022, "especially in the month of December, where we saw stock reductions and downtime taken by customers". Investors are getting jittery that this slowdown – combined with falling input costs – will mean that the packager is forced to charge less for its products, and that growth will stall.

This is already starting to unfold. Management said the price of testliner paper – having increased by €100 (£89) per tonne in the first half of the year – reduced by €160 per tonne between June and January. Similarly, the price of kraftliner – having risen by €60 per tonne in the first half of the year – fell by €120 per tonne between September and January.

Yet Smurfit Kappa still looks robust. For starters, it has huge scale and serves a diverse range of customers and end markets. Moreover, analysts at Jefferies argue that box prices tend to be stickier on the way down, meaning that packagers could reap the rewards of lower input costs before they are forced to drop their prices. This could see it through the worst of the turbulence. Buy. **JS**

Ord Price: 3,454p
Market Value: £8.95bn
Touch: 3,454-3,459p
12-Month High: 4,150p **Low:** 2,415p
Dividend Yield: 2.8%
PE Ratio: 11
Net Asset Value: 1,940¢*
Net Debt: 60%

Year to 31 Dec	Turnover (€bn)	Pre-tax profit (€bn)	Earnings per share (¢)	Dividend per share (¢)
2018	8.95	-0.40	-274	72.2
2019	9.05	0.68	202	80.9
2020	8.53	0.75	228	87.4
2021	10.1	0.91	264	96.1
2022	12.8	1.29	365	107.6
% change	+27	+42	+38	+12

*Includes intangible assets of €2.67bn, or 1,302¢ a share £1=€1.13
Last IC view: Buy, 2,836p, 27 Jul 2022 Ex-div: 13 Apr Payment: 12 May

THE WEEK AHEAD

MONDAY 13 FEBRUARY

AGMs: Cellular Goods (CBX)

TUESDAY 14 FEBRUARY

Economics: Claimant count rate, unemployment rate
Trading updates: UP Global Sourcing Holdings (UPGS)
Finals: Carrs Group (CARR), Coca-Cola HBC AG (CCH), Plus500 (PLUS)
AGMs: Dewhurst Group (DWHT), TUI AG (TUI)
Companies paying dividends: BlackRock Frontiers Investment Trust (3.455p), Cohort (4.25p), Future (3.4p), Grainger (3.89p), NB Global Monthly Income Fund (0.54p), Unicorn AIM VCT (3.5p)

WEDNESDAY 15 FEBRUARY

Economics: Consumer price index, producer price index, retail price index
Interims: Dunelm Group (DNLM), Hargreaves Lansdown (HL.)
Finals: Barclays (BARC), Standard Chartered (STAN)
AGMs: Blencowe Resources (BRES), GCP Infrastructure Investments (GCP)
Companies paying dividends: Invesco Select Trust Global Equity Shares (1.55p), Invesco Select Trust UK Equity Shares (1.5p), Shaftesbury (2.7p)

THURSDAY 16 FEBRUARY

Trading updates: Supermarket Income REIT (SUPR)
Interims: MJ Gleeson (GLE)
Finals: Centrica (CNA), Harbourvest Global Private Equity (HVPE), Indivior (INDV), Moneysupermarket.com (MONY), Relx (REL)
AGMs: Benchmark Holdings (BMK), Supermarket Income REIT (SUPR), Tertiary Minerals (TYM)
Companies paying dividends: Hansa Investment Company 'A' Non Voting (0.8p), M Winkworth (2.9p), Schroders Oriental Income Fund (2p)

Barclays will release its full-year results next Wednesday

FRIDAY 17 FEBRUARY

Economics: Retail sales
Finals: Allianz Technology Trust (ATT), NatWest Group (NWG), Segro (SGRO)
AGMs: Sunrise Resources (SRES)
Companies paying dividends: Abrdn Asian Income Fund (2.75p), AJ Bell (4.69p), Focusrite (4.15p), ICG-Longbow SSUP (5.5p), JPMorgan Asia Growth & Income (4p), JPMorgan Japan Small Cap Growth & Income (3.6p), Murray International Trust (12p), Solid State (6.5p), Victrex (46.14p)

COMPANIES GOING EX-DIVIDEND ON 16 FEBRUARY 2023

Company	Dividend (p)	Pay date
Henderson Opportunities trust Ord 25p	13	24 Mar 2023
Imperial Brands	49.32	31 Mar 2023
Invesco Perp UK Smaller Co's Inv Ord £1	3.75	14 Mar 2023
Knights Group Holdings	1.53	17 Mar 2023
Mountview Estates Ord 5p	250	27 Mar 2023
Mountview Estates Ord 5p	250	27 Mar 2023
Murray Income Trust Ord 25p	8.25	16 Mar 2023
NCC Group Ord 1p	1.5	17 Mar 2023
Shell	23.33	27 Mar 2023

The ex-dividend day is the first day on which it is no longer possible to buy the shares and qualify for the dividend. Ex-days are almost always a Thursday. The record date is usually one day after the ex-date. The payment day is the day on which the funds are transferred to shareholders.

Although we strive to ensure the information on this page is correct, we compile the data from third-party sources, and it is subject to last-minute alterations, so we cannot guarantee the absolute accuracy of the dates stated.

Wetherspoons founder tops up

JD Wetherspoon's (JDW) sales haven't yet recovered to pre-pandemic levels. Like-for-like sales in the 25 weeks to 22 January were down by 1 per cent against the last equivalent pre-Covid period. The decline worsened in the latter part of this period, down 2 per cent over the last 12 weeks. This compares poorly to peers such as **Mitchells & Butlers (MAB)**. A key issue is JD Wetherspoon's customer base, which is particularly vulnerable to cost of living pressures.

HSBC analysts said the company "is exposed to weak demographics: older age groups and lower incomes". They added that customers are being lost to supermarkets and home drinking, despite the company potentially benefiting from punters trading down from more expensive establishments.

Chair Tim Martin pointed to the threat from supermarkets in last month's trading update: "We estimate that supermarkets have taken about half of the pub industry's beer volumes since Wetherspoon started trading in 1979, a process that has likely accelerated following the pandemic". The biggest threat to hospitality, he said, comes from the tax regime. Supermarkets don't pay VAT on food sales, while pubs and restaurants pay 20 per cent.

The impact of challenging trading conditions was also evident in the company's decision to put 35 pubs up for sale. The majority of these are still waiting for a buyer.

The sale of interest rate swaps in October brought in a chunky £170mn. But Numis analysts think that "leverage remains too high".

The energy bill situation remains a material threat to profitability. And while utility costs have fallen, the company's (pre-pandemic) energy hedge expires at the end of this financial year. The shares have been on the up this year, although they have shed over 40 per cent of their value over the last 12 months. Martin seems to think they will continue to climb. He bought 2.6mn shares on 1 February at 457p a share. CA

BUY

Company	Director/ PDMR	Date	Price (p)	Aggregate value (£)
3i	Jasi Halai (coo)	1 Feb 23	1,570	49,738
Alphawave IP	Sehat Sutardja *	27 Jan-1 Feb 23	95	1,232,056
Bango	Frank Bury *	3 Feb 23	225	225,000
Bytes Technology	Neil Murphy (ce)	1 Feb 23	394	199,951
Darktrace	Poppy Gustafsson (ce)	1 Feb 23	225	108,192
Inspired	Mark Dickinson (ce)	30 Jan 23	10	49,964
Inspired	Richard Logan (ch)	30 Jan 23	10	29,900
Inspired	Sangita Shah *	30 Jan 23	10	30,000
Intercede	Royston Hoggarth (ch)	1 Feb 23	69	34,250
JD Wetherspoon	Tim Martin (ch)	1 Feb 23	457	11,888,508
Motorpoint	John Walden (ch)	1 Feb 23	146	199,650
N Brown	Lady Homa Alliance	27 Jan-2 Feb 23	38	846,187
NFT Investments	Jonathan Bixby (ce) *	31 Jan 23	1	85,500
Ondo InsurTech	Andy Morrison	31 Jan 23	6	24,000
Serica Energy	David Latin	30 Jan 23	247	38,313
TPXimpact	Steve Winters (cfo)	1 Feb 23	21	46,940
TPXimpact	Neal Gandhi	2 Feb 23	22	43,800

SELL

Company	Director/ PDMR	Date	Price (p)	Aggregate value (£)
Bango	Anil Malhotra	2-3 Feb 23	225	3,032,750
DS Smith	Adrian Marsh (cfo)	1 Feb 23	352	144,785
Foresight	Russell Healey	30 Jan 23	450	2,468,515
Foresight	Ricardo Pineiro	30 Jan 23	450	315,060
Foresight	Nigel Aitchison *	30 Jan 23	450	3,324,082
Foresight	Matthew Smith *	30 Jan 23	450	675,128
Foresight	James Livingston *	30 Jan 23	450	450,085
Ilika	John Tinson	27 Jan 23	59	58,781
J Sainsbury	Phil Jordan	27 Jan 23	250	449,100
LendInvest	Christian Faes (ch) *	3 Feb 23	80	1,940,000
Next Fifteen	Tim Dyson (ce)	27 Jan 23	1,050	3,150,000
NWF	Andrew Downie *	1 Feb 23	222	66,600
Ramsdens	Andrew Meehan (ch)	1 Feb 23	228	68,400
Taseko Mines	Russell Hallbauer	31 Jan 23	145 †	72,065 †
Tharisa	Thabang Maluke	27 Jan 23	99 †	32,687 †
Tharisa	Michael Jones (cfo)	31 Jan 23	103 †	90,043 †

*Spouse/family/close associate **Placing/open offer †Converted from C$/ZAR

Next Fifteen chief prunes stake

According to received wisdom, marketing is one of the first things to be cut in a recession. The chief executive of **Next Fifteen Communications (NFC)**, Tim Dyson, did little to debunk this theory when he recently sold 300,000 company shares for a total of £3.15mn.

The group stressed that the sale was for personal financial planning purposes and flagged that there had been few opportunities for directors to trade during its current financial year. This is partly because Next Fifteen made an offer for rival **M&C Saatchi (SAA)** in May, which only fell apart in October.

Investors have been jittery about marketing companies for several months now, but Next Fifteen looks to be in better shape than most. For starters, its sophisticated tech operations mean it has more in common with IT consultancies than the descendants of Madison Avenue. The more traditional side of the business is still performing strongly, with organic net revenue up by 13 per cent at the half-year mark. Yet this was overshadowed by growth of 157 per cent from its 'business transformation' arm, which is now its second-biggest segment.

Operations slowed in the second half, but organic growth for the year to 31 January is still expected to reach 20 per cent. Looking further ahead, analysts think that Next Fifteen's exposure to the US, which represents half of sales, and the size of its clients should protect it from the worst of the economic turbulence. This could backfire, however: the group's top 10 clients contributed over a fifth of revenues in 2021. The loss of any of them, therefore, could seriously dent the group's top line.

After selling 6 per cent of his holding on 27 January, Dyson retains a 4.8 per cent stake in Next Fifteen. JS

SMALL COMPANIES

Simon Thompson

IC COMMENT

An Africa-focused energy group focused on developing and delivering transitional energy projects has released a raft of positive announcements

Chariot (CHAR:16p) has released positive announcements since the autumn, all of which are highly supportive of the investment case.

This week's small acquisition of ENEO Water, an African company focused on delivering clean water solutions using renewable energy, complements Chariot's Transitional Power and Green Hydrogen businesses within the context of increasing water scarcity across Africa. Desalinated water is an essential component of green hydrogen production, so the capacity to implement desalination solutions powered by renewable energy will be critical for the feasibility of green hydrogen projects.

Chariot's aim is to provide affordable access to water for private offtakers and municipalities in Africa to be sold under long-term agreements, as part of its commitment to socially responsible development. ENEO utilises an efficient and scalable reverse osmosis technology that can be 100 per cent powered by solar energy to produce desalinated water. The company has a proof-of-concept project at the largest windfarm in the Republic of Djibouti under construction.

Desalination solutions powered by renewable energy will be critical for Chariot's joint venture with Total Eren to co-develop Project Nour in Mauritania. That project has the potential to deliver 10GW of electrolyser capacity, which would make it one of the most significant green hydrogen projects in Africa, and one of the lowest-cost producers, too.

Chariot CHAR:16p BUY

- Chariot partners on solar project at platinum mine in Zimbabwe
- 25 per cent stake taken in a new South African electricity trading company
- Long-term offtake agreement in principle for low-cost Anchois Gas project

Total Eren and Chariot have also agreed to work together on the development, financing, construction and operation of a solar photovoltaic (PV) project that will provide competitive electricity for the Karo Platinum Project, in Zimbabwe. It is expected to have an initial installed capacity of 30 megawatt peak (MWp) – a unit of measurement for the output of power from a source such as solar or wind where the output may vary according to the strength of sunlight or wind speed – with a potential extension of up to 300 MWp. Construction of the Karo Platinum Mine started in July 2022 and is majority owned by **Tharisa (THS)**, the platinum group metals and chrome producer.

In addition, Chariot has taken a 25 per cent stake in a new South African electricity trading company, Etana Energy, which has been granted an electricity trading licence by the National Energy Regulator of South Africa. The country is the largest electricity market on the continent, but suffers from regular power outages due to insufficient supply. To combat this energy crisis rapid market deregulation is currently taking place, which includes selectively issuing electricity trading licences and facilitating the building of energy projects of up to 100 MW generation capacity.

Etana's objective is to deliver renewable energy solutions at competitive prices to help address the power requirements across South Africa. The trading licence is important. That's because it opens up access to a range of high-volume off-takers (including municipal, industrial and retail customers) and gives Etana the right to buy and sell electricity on the national transmission grid and within some selected municipal areas. Electricity trading is a new revenue stream for Chariot and it should support the group's future participation in large renewable projects in Southern Africa.

An African adventure

The good news doesn't end there as Chariot has announced a long-term offtake agreement in principle for its low-cost flagship Anchois Gas development, offshore of Morocco, in which it has a 75 per cent working interest. Gas sales of up to 60mn standard cubic feet per day will be delivered through the Maghreb-Europe pipeline on a take-or-pay basis for a minimum of 10 years, thus securing direct domestic supply for Morocco's existing and potentially longer-term gas power plant infrastructure. Investment bank Societe Generale is leading the structuring and syndication of the project's debt financing, while Chariot's gas team remain in discussions with commercial partners.

In the near term, newsflow from Anchois is the key share price driver. That's because Chariot's 75 per cent working interest in Anchois' 2C resources accounts for 44p a share of Cenkos Securities' target price of 63p (using a 50 per cent risk weighting and based on a risked value of $507mn (£419mn)). Positive newsflow on debt funding and commercial offtake agreements at Anchois would de-risk the investment case and warrant a material narrowing of the share price discount to Cenkos's target.

Although Chariot's share price has drifted since I last published an update five months ago ('Profit from climate change', 14 September 2022), the holding has still delivered a 428 per cent return in my 2017 Bargain Shares Portfolio. There is scope for significantly more capital upside. Buy.

Kromek KMK:9.6p HOLD

- First-half cash loss widens from £0.6mn to £2.7mn mainly due to currency and inflationary headwinds
- Contract momentum strong and board expects to announce significant OEM orders in medical imaging
- Analysts now predict move to cash profitability in 2023/24

Sedgefield-based **Kromek (KMK:9.6p)**, a radiation detection technology company focused on the medical imaging and nuclear markets, is on track to deliver a step change in revenue in the financial year to April 2023, but not profits.

Ahead of the half-year results, analysts at FinnCap and Equity Development had been predicting a small annual cash profit of £0.3mn on 50 per cent higher revenue of £18mn. The revenue estimate is intact, but a lower gross margin of 40 per cent in the first half, down 6.5 percentage points year on year due to product mix and currency headwinds, and £1.5mn higher operating costs, meant that the first-half cash loss widened from £0.6mn to £2.7mn despite revenue rising

44 per cent to £6.8mn. Analysts at FinnCap expect a second-half cash profit of £0.5mn on revenue of £11.2mn, but it still means an annual cash loss of £2.2mn.

There are positives, though. Since Kromek's half-year end (31 October 2022), sterling has recovered strongly against the US dollar so the £0.5mn hit from currency headwinds in the first half is reversing. The company is also winning contracts, the latest being last month's repeat order worth $0.8mn from a US government customer for its wearable radiation detectors that helps guard against the threat of nuclear terrorism and the illicit movement of nuclear materials. The contract follows on from a £1.5mn order with another (undisclosed) customer in December 2022. An expansion of Kromek's distribution agreement with Smiths Detection in the Middle East, Asia and Australia augurs well, too. Kromek has already delivered 1,400 detectors to Smiths Detection since July 2022 in relation to the North and South American markets.

Kromek's chemical, biological, radiation and nuclear segment accounted for £3.2mn of product sales, or 47 per cent of the company's total revenue. However, the short-term share price catalyst is likely to be in another part of the business.

Medical imaging opportunity

There is no doubt that Kromek has world-leading technology, but commercialising it to the point at which the company can make a sustainable profit has proved elusive. That could be about to change, and not a moment too soon for Kromek's shareholders who have witnessed too many false dawns.

In October 2022, Kromek announced that Spectrum Dynamics Medical had incorporated the company's digital detectors in the world's first SPECT/CT scanner for higher energy imaging. FinnCap points out that the prospect of additional supply contracts with medical imaging original equipment manufacturers (OEMs) is coming closer, perhaps before the end of April, noting that eight tier one and two tier two OEMs are working with Kromek cadmium zinc telluride (CZT) detectors. The directors are also guiding shareholders to expect "significant contract wins in the near term."

The company has strategic scarcity value, being the only independent manufacturer of CZT, so is well placed to land sizeable contracts in the medical imaging segment as large OEMs adopt CZT-based technology in their next-generation x-ray and gamma-ray imaging products.

Based on FinnCap's 2024 forecasts Kromek could be making a cash profit of £0.9mn on revenue of £21mn. However, landing some major OEM medical imaging contracts would be a catalyst for earnings upgrades as well as providing investors with the confidence to consider the upside potential.

Potential upside

Equity Development and FinnCap have fair value estimates of 26p and 27p, respectively, but a re-rating to that level only comes into play in the event of Kromek delivering the ramp up in sales needed to become profitable, or in the event of a predator bidding for the company. That possibility is not far-fetched. Less than 18 months ago, Canon acquired Redlen Technologies, the only independent commercial producer of CZT detectors globally other than Kromek, in a deal that valued its rival at $335m (£272m), or more than five times Kromek's current enterprise valuation.

It's worth noting that the shares can be volatile. After I last suggested buying them, at 8.75p ('A biological detection winner', IC, 18 November 2022), the price peaked a month later at 11.85p, a gain of 35 per cent. There has been profit taking since then, but I believe it's worth holding on, at 9.6p, ahead of likely imminent positive news flow on material OEM orders in the medical imaging space. Hold.

Wynnstay WYN:540p — HOLD

- Record results in 2022 buoyed by one-off factors
- Strong balance sheet provides firepower for organic and acquisitive growth

Specialist agricultural products supplier **Wynnstay (WYN:540p)** upgraded profit guidance five times last year, and still managed to report annual results ahead of analysts' forecasts.

Upward pressure on fertiliser prices, stock gains, better trading margins and significantly higher grain trading volumes were key drivers behind the 42 per cent rise in annual revenue to £713mn and a near-doubling of underlying pre-tax profit to £22.6mn (5 per cent ahead of house broker Shore Capital's upgraded forecasts). On this basis, adjusted earnings per share (EPS) increased 91 per cent to 87.8p and the dividend per share was raised almost 10 per cent to 17p. Net asset value per share rose by a fifth to a record 631p, an indicator of the value the board is creating for shareholders.

THE GOOD NEWS DOESN'T END THERE AS CHARIOT HAS ANNOUNCED A LONG-TERM OFFTAKE AGREEMENT

However, don't expect a repeat of this eye-catching performance as Wynnstay benefited from several one-off factors including elevated and volatile gas prices (a key production ingredient in fertiliser), and globally constrained fertiliser supply following the invasion of Ukraine by Russia. Gas prices have been tumbling – the UK NBP Natural Gas Futures contract has declined 60 per cent since mid-December 2022 and is now more than 80 per cent below last summer's all-time high.

In the grain market, the price increased in the second half of last year, resulting in higher winter feed prices. However, the mild autumn has led to good grass growth, thus enabling farmers to keep their livestock out for longer in the fields and reducing early winter feed demand.

Sensibly, Wynnstay's respected management team is taking a prudent approach to its forward guidance, noting inflationary headwinds are impacting raw material prices and the group's energy, labour and distribution costs. Shore Capital is also forecasting lower current-year pre-tax profit of £12.2mn and EPS of 42p, albeit analysts expect a 5.6 per cent free cash flow yield to support another hike in the dividend per share to 17.9p.

On this basis, the shares are rated on a forward price/earnings (PE) ratio of 12.8, offer a prospective dividend yield of 3.3 per cent and trade on an historic price/book value of 0.85 times. That's a fair rating, and there could be upside to Shore Capital's estimates given that Wynnstay held net cash of £14.15mn (68p a share) at the year-end, so is well funded to continue recycling cash into both organic and acquisitive growth opportunities.

So, having selected the shares, at 424p, in my 2021 Bargain Shares Portfolio, booked dividends of 30.9p, and subsequently recommended top-slicing two-thirds of your holding, at 635p, to recover your initial investment ('Farming a bumper harvest', IC, 14 November 2022), I rate the shares a hold.

Alpha

You can find more fully researched share ideas and unique opportunities from Simon

Mitchell Labiak

IC COMMENT

Tate ruling adds to developers' woes

Real estate development is getting more expensive and more complicated. Debt is pricier, build costs are soaring and the climate crisis raises the question of whether some developments should happen at all, given the immense emissions construction creates. At the same time, councils are demanding higher-quality buildings at affordable prices for commercial and residential tenants and buyers alike.

It doesn't end there. 'Right to light', soil quality, wind tunnels, flight path interference, increased infrastructure strain, heritage concerns, overcrowding – the number of issues facing real estate development grows each yeart.

To this long list of considerations, you can now add one more. Last week, the Supreme Court ruled in favour of the residents of a block of flats who argued that a viewing platform erected by the Tate Modern was a nuisance because it compromised their privacy.

Developers might complain that this pro-privacy ruling makes their job yet more complex, but that's not a bad thing. The job should be hard. Cutting 'red tape' in real estate is what leads to disasters such as Grenfell, which was both an enormous human tragedy and something developers have wound up paying for anyway in the form of cladding removal costs. The Tate ruling will bother developers and may hit their bottom lines in the short term. However, in the long run, better-quality buildings deliver higher returns – for developers but also for everyone else. ●

Housebuilders count the costs of going green

Listed housebuilders have had a mixed history when it comes to embracing climate policy. Mitchell Labiak reports

There are some obvious reasons to be bearish about housebuilders right now. After years of big profits thanks to low interest rates, house price growth and government initiatives aimed at encouraging homeownership, they now need to navigate a housing downturn just as the Help to Buy rug is pulled from under them. But these are cyclical problems; arguably a bigger threat to long-term earnings and the investment case is the one they will need to deal with over the coming decades as well as the coming months: going green.

The UK government has made a legally binding requirement for the whole country to have net zero greenhouse gas emissions by 2050, and has set an interim target of cutting the UK's emissions by 78 per cent (from a 1990 baseline) by 2035. The role oil and gas producers will need to play in this has been well documented, but over the past couple of years climate protests and soaring energy prices have helped turn public attention towards the UK's draughty flats and houses. Energy use in homes makes up 23 per cent of the UK's greenhouse gas emissions – more than double the amount from agriculture, and nearly as much as all transport emissions.

In recognising that housebuilders must contribute not just to reducing the UK's emissions but also to reducing its electricity bills, the government has introduced its Future Homes Standard, a requirement to be introduced in 2025 demanding that new builds are "future-proofed with low carbon heating and world-leading levels of energy efficiency". As part of this, all new homes will need to be gas free by 2025. **Redrow (RDW)** decided to go two years early by announcing last month that all its future developments will be gas free.

It's a positive step, but progress has been far from straightforward. Campaigners complain that the net-zero housing transition has been painfully slow. The path ahead does not look much easier either – with increased costs for housebuilders and more stringent regulation almost guaranteed.

A rocky road to zero

In 2006, the Labour government pledged that all new homes would need to be "zero carbon" by 2016. The requirement would have meant that all housing developed from 2016 would have generated as much energy on-site from renewable sources such as solar panels as they consumed from energy use.

However, the target was scrapped in 2015 and the government's attempts to push the industry towards net zero since then have been met with criticism. When the Future Homes Standard was published in 2021, policymakers said that all homes would need to be "zero-carbon ready" by 2025, but sustainability campaign group the UK Green Building Council argued the target should have been 2023 – a sentiment that a report by parliament's environmental audit committee agreed with.

The move towards gas-free homes by 2025 is a key pillar of this Future Homes Standard, and the pressure to move earlier could explain Redrow's gas-free announcement last month. As Dan Jestico from the sustainability division of Savills puts it, the housebuilder "saw the writing was on the wall for gas boilers" and so decided to jump the gun.

Yet, moving before being pushed has not always been the housebuilders' attitude. **Persimmon (PSN)** acknowledged in a select committee hearing in 2019 that it had lobbied in favour of scrapping Labour's zero-carbon homes policy back in 2015, which the government promptly did. Other housebuilders have also lobbied against the Future Homes Standard as well as regulation mandating electric vehicle charging points in all new homes. The government has pushed forward with this regulation despite those efforts, and there is no suggestion the listed housebuilders do not follow it.

The result of this pushback against greener standards is an industry that is lagging behind in tackling the climate crisis compared with other sectors. Housing greenhouse gas emissions were cut by 1mn tonnes from 2018 to 2019, resulting in a 1 per cent drop, compared with cuts of 8.5mn tonnes (an 8 per cent drop) from energy supply and 2.5mn tonnes (a 3 per cent drop) by businesses. The government is likely to push harder to address this imbalance in future through tougher regulation on housebuilding.

Price is the key reason for housebuilders' resistance to greener homes. Going gas free means installing air source heat pumps, which Savills' Jestico estimates costs around £5,000 per home, rather than installing gas boilers, which he estimates costs around £2,000 each. On an industry-wide level, the Home Builders Federation (HBF) estimates that meeting all of the requirements of the Future Homes Standard will cost the industry an additional £1.9bn a year, while other climate-friendly changes to building standards could cost £1.1bn a year in the short term.

However, that estimate is based on the HBF's current understanding on costs. For heat pumps specifically, Savills' Jestico is optimistic that this price will come down. He says the technology used to cost around £10,000 per home and that the government has a future ambition to make it cost the same as gas boiler installation, which at its current trajectory is not too unreasonable an assumption.

Still, even if costs do come down, another issue housebuilders have is the shrinking budgets of their customers. Where commercial property developers are able to design bespoke, net-zero buildings which are let by multinational companies on long leases with added service charge costs, housebuilders are building thousands of flats and houses and selling them to a populace struggling with a cost of living crisis. In short, housebuilders - for now, at least - cannot pass additional costs onto the end user in the same way commercial developers can.

Scale is a problem, too. Housebuilders cannot modify their designs as easily as commercial developers because doing so means reconfiguring how all of their future homes are designed. For commercial developers, each new development is unique. For housebuilders, the next thousand homes need to be broadly the same for the business model to work. When asked why it hasn't yet followed Redrow's lead and pledged to go gas free early, **Barratt Developments (BDEV)** said it "need[s] to test at scale [...] before we gradually move towards 100 per cent heat pumps".

Then there is timing. Redrow went first on heat pumps, but that was only after the direction of travel from the government was made clear. Jestico says that most housebuilders want a level playing field and clarity from the government before moving forward. While their lobbying indicates hesitancy, the housebuilders are also keen to stress that they are willing to make progress (see boxout). **Vistry (VTY)** and Redrow are both members of the UK Green Building Council, while Barratt and **Berkeley (BKG)** are gold members. Membership - even gold membership - is not a guarantor of action, but it does show acknowledgement of the inevitable additional costs presented by the climate crisis. ●

ENERGY USE IN HOMES MAKES UP 23 PER CENT OF THE UK'S GREENHOUSE GAS EMISSIONS

WHAT THE HOUSEBUILDERS SAY

Barratt said: "We consider ourselves the country's leading national sustainable housebuilder and are generally supportive of climate change legislation. We were the first major housebuilder to set science-based carbon reduction targets, and we were the first to get these ratified by the Science Based Targets Initiative."

Bellway (BWY) said its 'Better with Bellway' strategy "underlines our long-term approach to responsible and sustainable business practices. It includes a commitment to significantly reduce carbon emissions, with ambitious targets aligned to the Paris Agreement, which go beyond the requirements of the Future Homes Standard".

Persimmon said: "Our adoption of targets is consistent with the 1.5 degree warming scenario set out in the Paris Accord and accredited by the blue-ribbon Science Based Targets Initiative shows that we are taking climate change seriously. Our new homes are around 30 per cent more energy efficient than existing stock, helping make them more cost efficient to run."

Redrow said: "While [our] homes are already extremely energy efficient, helping our customers save money as well as reduce their carbon use, we are committed to further improving the energy efficiency of our homes while maintaining our reputation for best-in-class build quality and design."

Taylor Wimpey (TW) said it is "committed to playing our part in creating a greener, healthier future for our customers, colleagues and communities, as evidenced by the launch of our industry-leading Environment Strategy in 2021, the upcoming publication of our net zero transition plan, and our commitment to publishing a Towards Zero Waste strategy."

Vistry said: "We have very ambitious targets that we're committed to delivering and work closely with government as well as collaborative consortiums on the road to reducing carbon. We agree that everyone – not just housebuilders – needs to do more in efforts to tackle the climate crisis."

Crest Nicholson (CRST) and **Berkeley** declined to comment.

FTSE 350 HOUSEBUILDERS RANKED BY ENERGY PERFORMANCE CERTIFICATES (EPC)

Name	Homes built last financial year which were EPC B or above
Redrow	100%
Barratt Developments	99%
Bellway	98%
Vistry	98%
Persimmon	"Almost all"
Taylor Wimpey	"The majority"
Crest Nicholson	Declined to comment
Berkeley Group	Declined to comment

30 US and UK stocks with an intangible edge

What do Amazon, Meta, Sage and GSK have in common?

What would you rather own: shares in a company that makes things you can see, or one that focuses on things you can't?

The dilemma, I admit, is a false one. If you want to run a business that makes toothbrushes, you will still need to train your toothbrush salespeople, market and build your toothbrush brand, and cultivate good relations with your bristle suppliers. You might even want to invest in research and development (R&D) and patents to build the next generation of toothbrushes.

Even in the case of a simple and largely commoditised product, companies need to invest in the things you can't see just to be competitive. Put differently, every business, to some degree, is involved in the production and trading of intangible assets.

Unfortunately, it can be hard to tell how this is done, and who does it well.

That's a problem, because many of the greatest sources of returns in the stock market in recent decades have come from firms that cared a lot about intangible assets. In the shift to a services and digital-led economy, investors who recognised the value of research, technology and human capital have been well rewarded.

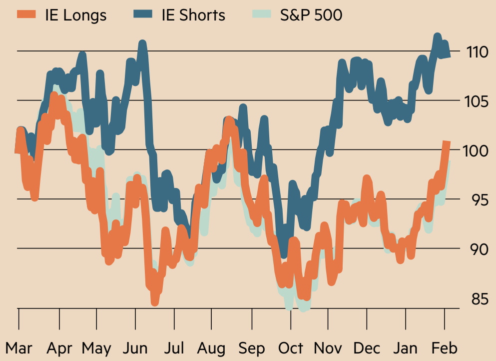
We have some solid evidence to support this, thanks to a 2021 study by researchers at the University of Rotterdam. In an analysis of returns from the Russell 3000 index of US stocks between 1989 and 2020, the researchers showed that firms with higher rates of intangible asset creation outperformed the market by 4.6 per cent a year, making it a greater predictor of stock price performance than size, value or profitability.

Not only did these long-term average returns come with lower volatility

IC ALEX NEWMAN

US LONGS EDGE THE S&P, BUT LOSE TO CAPITAL-INTENSIVE SHORTS

US Intangible Edge screen vs benchmark (total return, 2022 to date)



Source: Refinitiv Eikon Datastream

than the broader market, but similar results were achieved even after removing big technology outfits. To the researchers, this suggested that the intangibles effect is not simply skewed by a handful of highly profitable companies with outsized investments in human and knowledge capital.

Last year, we sought to incorporate this research into a stock screen that gets around the problem of finding which companies prioritise intangible asset creation.

Key to this hunt is the 'intangible intensity' metric, which the researchers defined as the ratio of internally created intangible assets relative to total assets. To calculate intangible assets, the past five years' R&D spending is added to 30 per cent of selling, general and administrative (SG&A) expenses as proxies for knowledge and organisational capital formation, and then subject to five-year straight-line depreciation.

To get the denominator (total assets), the numerator (intangible assets) is added to period-end total assets, less goodwill. Stocks are then ranked based on their intangible asset intensity, and the top 15 stocks in both the FTSE All-Share and S&P 500 are selected for the following year.

Show me your workings

To illustrate how a company's intangible asset creation can be disguised by its balance sheet and conventional accounting, consider **Meta (US:META)** - owner of Facebook, WhatsApp and Instagram.

Few companies have had a better track record of creating and then monetising intangible assets. Meta's founder, Mark Zuckerberg, is one of the wealthiest people on the planet because his social media empire has invested heavily in software development, intellectual property, brand recognition, and human and organisational knowhow.

Since 2021, these investments have come under heavy scrutiny from investors, as the company has gone all-in in its bid to establish a leading position in the development of the metaverse. Despite some heavy cash burn, shareholders have little to show in the way of new intangibles or book value growth, as the table below shows.

But apply the Rotterdam academics' metric to Meta's financial statements, and the result is a rate of intangible asset creation that has few parallels in corporate America.

Whether these intangibles will prove of any use is a separate question, even if four decades of evidence (and Meta's own track record) offer some comfort.

Intangible returns

Our Intangible Edge screen's inaugural picks from the end of February 2022 proved a mixed bag.

In both the US and UK versions, 'short' portfolios of stocks with the lowest intangible asset intensity ratios - and weighted heavily to extractive and industrial sectors - easily outperformed both their benchmarks and the 'long' selections. The cohort of richly valued UK longs fell well short of the

META'S REPORTED INTANGIBLES

$bn	2018	2019	2020	2021	2022
Cash & Short-Term Investments	41.12	54.86	62.20	48.15	41.03
Net Property, Plant & Equipment	24.68	44.78	54.98	69.96	92.19
Intangibles (Goodwill)	18.30	18.72	19.05	19.20	20.31
Other Intangible Assets	1.29	0.89	0.62	0.63	0.90
Total Assets	97.33	133.38	159.32	165.99	185.73
Intangibles/Total Assets	13%	11%	10%	13%	14%

META'S TRUE INTANGIBLE INTENSITY

R&D + 30% SG&A	48.5	52.3	56.2	59.7	59.7
Intangible Intensity*					117.1
5-year Rate*					41%

*Five year cumulative intangibles, including 20 per cent straight line depreciation.

4.6%

RESEARCHERS SHOWED THAT FIRMS WITH HIGHER RATES OF INTANGIBLE ASSET CREATION OUTPERFORMED THE MARKET BY 4.6 PER CENT A YEAR

INTANGIBLE EDGE PICKS FOR 2023
FTSE ALL-SHARE

Company name	TIDM	Mkt cap	Price	Fwd NTM PE	5-year Intangible Intensity
Nanoco Group	NANO	£119mn	37p	-	56%
Spirent Communications	SPT	£1,380mn	226p	15.4	52%
Alfa Financial Software	ALFA	£530mn	179p	23.8	50%
888	888	£329mn	74p	5.5	49%
Spectris	SXS	£3,468mn	3,317p	19.5	42%
Clarkson	CKN	£1,009mn	3,295p	14.9	39%
QinetiQ	QQ	£1,998mn	345p	12.7	38%
Oxford BioMedica	OXB	£433mn	450p	-	35%
AO World	AO	£367mn	64p	28.7	33%
Sage	SGE	£8,197mn	800p	25.6	32%
GSK	GSK	£58,447mn	1,427p	9.7	32%
Bakkavor	BAKK	£678mn	117p	13.4	32%
Videndum	VID	£485mn	1,040p	10.7	32%
Aptitude Software	APTD	£212mn	370p	26.4	31%
Renishaw	RSW	£3,008mn	4,132p	21.9	31%
Average				**17.5**	**39%**

S&P 500

Company name	TIDM	Mkt cap	Price	Fwd NTM PE	5-year Intangible Intensity
Cadence Design Systems	CDNS	$51,906mn	$189	39.8	56%
Incyte	INCY	$18,797mn	$84	29.1	55%
Synopsys	SNPS	$56,179mn	$369	34.1	50%
Autodesk	ADSK	$49,242mn	$228	30.9	50%
Match	MTCH	$14,683mn	$53	25.0	48%
Adobe	ADBE	$179,563mn	$392	25.0	48%
Zebra Technologies	ZBRA	$17,797mn	$345	19.3	47%
F5	FFIV	$9,459mn	$157	13.0	47%
Electronic Arts	EA	$32,023mn	$116	17.3	46%
Juniper Networks	JNPR	$10,207mn	$31	13.5	46%
Trimble	TRMB	$15,219mn	$62	21.1	45%
Amazon.com	AMZN	$1,151,869mn	$113	62.3	42%
Meta Platforms	META	$420,157mn	$189	19.6	41%
PTC	PTC	$15,633mn	$132	28.3	41%
Vertex Pharmaceuticals	VRTX	$77,978mn	$304	19.3	41%
Average				**26.5**	**47%**

market's return, declining 6.1 per cent on a total return basis. The All-Share index, by contrast, grew 8.9 per cent.

The situation was reversed in the US, where intangibles-heavy sectors such as software and pharmaceuticals represent a much bigger slice of the market by value. Our picks beat the benchmark by two percentage points, a decent result in a punishing year for highly-rated growth companies.

Either way, one year isn't likely to tell us much about the relative performance advantage of intangible-rich companies. In 2022, macroeconomic conditions and estimates of the net present value of future cash flows held far greater sway over share prices.

By disregarding these criteria, as well as momentum and forecasts, the screen sticks rigidly to a principle that has worked well over four decades. So I have not added new tests this year.

Despite trying out filters measuring changes in sales, profits and assets per employee, I have failed to work out how these metrics might be usefully and consistently applied to identify companies or sectors that build knowledge or organisational capital more effectively than others. Neither will I continue to highlight the 'short' portfolios of stocks with low intangible asset intensity, as despite their recent success, I am less sure which of these stocks' features are being highlighted.

Eagle-eyed readers will notice that many of last year's Intangible Edge stocks make a return in 2023. Because capital formation is a slow process that highlights spending priorities over several years, my guess is that the screen is likely to keep re-selecting past favourites, which is a plus for hypothetical dealing costs when we reshuffle the portfolios each year.

Another reason to feel positive is that two of last year's selections – UK-listed security software outfit Avast and Nasdaq's health information technology group Cerner – were acquired in 2022. Given M&A was essentially dead last year (in the US, at least), that represents a decent strike rate for our screen's picks and shows blue-chip investment committees see plenty of value in the kind of asset that never appears on a balance sheet. ●

The value of hard assets in a digital world

For decades, digital connectivity has been a defining feature of our world. But knowing which part of this web to invest in at any given time is rarely clear.

Take **Vodafone (VOD)**, or the "world's largest telecommunications company" to quote its corporate website. At the end of 2013, shortly after agreeing to sell its 45 per cent stake in **Verizon (US:VZ)** for $130bn (£108bn), the group was the third-largest name in the FTSE 100 after Shell (SHEL) and HSBC (HSBA).

Eighteen months later, the stock topped out at £2.55 as investors bid up the group's valuation to 45 times forward consensus earnings of 5.7p per share.

Skip forward to February 2023, and analysts' forward earnings forecasts for the coming financial year stand at 9.4p. Had nothing else changed, the shares might be worth £4.23. Instead, and even after the rally in risk assets this year, they change hands for just 92.5p.

This dramatic re-pricing is partly about financial markets. In May 2015, when safe bonds only offered the possibility of higher prices, Vodafone's 4.5 per cent dividend yield was an enticing prospect for income investors. Today, the same yield is on offer, essentially risk-free, from US Treasuries.

To make sense of the rest of the decline, look no further than Vodafone's latest quarterly numbers. Revenues in most core markets are now falling, while the relative bright spot that is the UK looks reliant on above-inflation price rises. The prolific use of non-GAAP performance measures – such as 'adjusted EbitdaaL' and 'adjusted free cash flow' – merely complicate investors' efforts to assess the impact of rising costs and interest payments on the dividend.

Vodafone shares' promise of low-risk equity income growth has soured due to enhanced consumer rights, limited pricing power, and higher capital costs.

The task of profiting from the end users of telecommunications networks is now a struggle. But that doesn't mean there aren't viable rent-seeking opportunities elsewhere in the sector.

Indeed, the decision by private equity group KKR to go halves on Vodafone's majority stake in Vantage Towers – the FTSE 100 group's Europe-wide asset portfolio of towers, masts, rooftop sites and antennae – is testament to this. The deal, struck in November, valued the asset-rich Vantage's equity at three times book value, six times Vodafone's own multiple.

This week, our ideas section looks at two UK-listed plays on the theme. **Cordiant Digital Infrastructure (CORD)**, owner of an array of data centres, fibre optic networks and mobile towers, even counts Vodafone as a network tenant. The other, **Spirent Communications (SPT)**, provides assurance and monitoring services for the largest cellular network providers in the world.

Understanding how such growth stories translate into growing profits is fundamental to successful investing. The world of technology – and much of the world beyond it – is currently abuzz with the potential of AI, following OpenAI's release of the ChatGPT large language model at the end of 2022.

Which of the software giants will emerge victorious in this high-stakes battle is probably impossible to gauge at this moment, although it is hard to ignore that **Nvidia (US:NVDA)** and **Taiwan Semiconductor (US:TSMC)** – two of the pre-eminent chipmakers whose hardware will be needed to power this fight – are up 47 and 46 per cent, respectively, over the past three months. By contrast, **Alphabet (US:GOOGL)** and OpenAI backer **Microsoft (US:MSFT)** – arguably the two Silicon Valley firms best placed to turn AI advances into dominant software applications – are up a mere 16 and 13 per cent over the same period.

Some investors, it seems, are alive to the value of the hard assets that our digital world requires. AN

FUND MANAGER BEST IDEAS: INTERNATIONAL SHARES

Based on top five holdings

	No. of funds		No. of funds
LVMH Moet Henn. Louis Vuitton	5 (+1)	Thermo Fisher Scientific Inc	2 (+1)
Microsoft Corp	5 (-3)	UnitedHealth Group Inc	2
ASML Holding NV	3 (+1)	Adobe Inc	1
Charles Schwab Corp	2	AIA Group	1 (NEW)
DexCom Inc	2	Alphabet Inc Class C	1
Ferrari NV	2 (+1)	Amazon.com Inc	1 (-1)
Hermes International SA	2 (+1)	Ashtead Group	1
Linde	2	Automatic Data Processing Inc	1
London Stock Exchange Group	2	AutoZone Inc	1 (NEW)

Source: Morningstar, 6 February 2023

NEW 52-WEEK LOWS

Name	TIDM	Price	% from low
Schroder BSC Social Impact Trust	SBSI	89p	0.00%
Tullow Oil	TLW	34p	2.20%
Aquila Energy Efficiency Trust	AEET	68p	1.10%
JPMorgan Global Core Real	JARA	82p	1.50%
Ecofin US Renewables	RNEW	66p	1.90%
Serica Energy	SQZ	239p	1.30%

Source: Morningstar, 8 February 2023

NEW 52-WEEK HIGHS

Name	TIDM	Price	% from high
BP	BP	516p	0.00%
Scottish Oriental Smaller	SST	1,230p	0.00%
HSBC Holdings	HSBA	605p	0.20%
Crestchic	LOAD	399p	0.30%
Avacta Group	AVCT	183p	1.10%
JPMorgan Global Growth	JGGI	471p	1.20%
Edinburgh Invt Trust	EDIN	669p	1.20%
AVI Japan Opportunity	AJOT	121p	1.30%
European Opportunities	EOT	770p	1.30%
Law Debenture	LWDB	837p	1.30%
AB Dynamics	ABDP	1,825p	1.40%
Schroder Japan Growth Fd	SJG	213p	1.40%
3i Group Plc	III	1,629p	1.40%
Schroder Oriental Income	SOI	278p	1.40%
Smiths Group	SMIN	1,772p	1.40%
Zotefoams	ZTF	404p	1.50%
International Biotech	IBT	733p	1.50%
Pacif Asset Tru	PAC	372p	1.50%
Merchants Trust	MRCH	592p	1.50%
Schroder Income Growth Fd	SCF	318p	1.50%

Source: Morningstar, 8 February 2023

SHORTS

Company	Short Interest	No Of Shorters	1-Week Change In Short Interest
Abrdn	6.20%	7	0.00%
ITM Power	6.00%	5	-0.40%
Naked Wine	5.40%	4	-0.10%
Asos	5.20%	4	-1.30%
Kingfisher	4.80%	4	-0.90%
Boohoo Group	4.60%	6	0.10%
Hammerson	4.50%	5	0.40%
Victoria	3.80%	2	0.00%
Metro Bank	3.80%	1	-0.20%
FD Technologies	3.70%	4	0.00%
Currys	3.60%	4	-0.10%
Ocado Group	3.50%	5	0.00%
Travis Perkins	3.50%	4	0.00%
Direct Line Insurance	3.40%	4	0.00%
Aston Martin Lagonda Global	3.40%	3	0.00%
Hargreaves Lansdown	3.40%	5	0.00%
Cineworld Group	3.30%	3	0.00%
Moonpig Group	3.30%	4	0.60%
B&M European Value Retail SA	3.10%	4	0.50%
Pennon Group	3.00%	5	0.00%
Halfords Group	3.00%	3	1.80%
Sainsbury (J)	2.90%	2	-0.80%
Fevertree Drinks	2.90%	2	0.50%
Ashmore Group	2.80%	3	-0.20%
Primary Health Properties	2.80%	3	-0.60%
Wetherspoon (JD)	2.70%	4	-0.80%
Renewi	2.70%	2	0.10%
Harbour Energy	2.70%	2	0.00%
Burf Capital	2.70%	3	0.00%
THG	2.50%	3	0.10%
Jupiter Fund Management	2.50%	2	0.00%
Petrofac	2.50%	3	-0.10%
Savills	2.40%	4	0.00%
National Express	2.40%	3	0.00%

Source: Morningstar, 7 February 2023

FIVE BIGGEST SHORT INCREASES

Company	Short Interest	No. Shorters	Chg Wk To 7 Feb
Halfords Group	3.00%	3	1.80%
Severn Trent	1.30%	2	0.60%
Moonpig Group	3.30%	4	0.60%
Deliveroo Class A	0.50%	1	0.50%
Verona Pharma	0.50%	1	0.50%

Source: Morningstar, 7 February 2023

FIVE BIGGEST SHORT DROPS

Company	Short Interest	No. Shorters	Chg Wk To 7 Feb
Asos	5.20%	4	-1.30%
Kingfisher	4.80%	4	-0.90%
Wetherspoon (JD)	2.70%	4	-0.80%
Sainsbury (J)	2.90%	2	-0.80%
Yellow Cake	1.50%	1	-0.60%

Source: Morningstar, 7 February 2023

1-MONTH EPS UPGRADES (TOP 25)

		Forward EPS Change		
Name (Price)	EPS NTM	1 mth ago	1 mth % chg	3 mth ago
XLMedia (21p)	16.2p	3.1p	427%	3.2p
Wizz Air Holdings (2,851p)	93.3p	24.5p	282%	-83.7p
Kistos Holdings (375p)	163p	64.6p	152%	140p
Arrow Exploration (18p)	16.6p	7.9p	109%	9.9p
Saietta Group (49p)	2.3p	1.3p	86%	-0.6p
NIOX Group (39p)	0.9p	0.5p	83%	1.0p
Byotrol (2p)	0.1p	0.0p	72%	-
ASOS (915p)	29.3p	17.2p	70%	19.2p
CAP-XX (3p)	0.2p	0.1p	65%	0.1p
AO World (64p)	2.2p	1.5p	51%	-0.1p
Burford Capital (700p)	130p	92.5p	41%	81.1p
Ferrexpo (153p)	23.8p	17.1p	39%	26.4p
Dillistone Group (20p)	0.4p	0.3p	35%	0.1p
Forward Partners (41p)	3.5p	2.6p	33%	-4.3p
Westminster Group (2p)	0.5p	0.4p	28%	0.3p
Argentex Group (132p)	8.9p	7.1p	26%	-
Hydrogenone Capital Growth (76p)	10.8p	8.6p	25%	-
1Spatial (50p)	2.8p	2.2p	24%	2.6p
Serica Energy (240p)	120p	97.0p	24%	123p
Saga (174p)	31.4p	25.4p	24%	20.6p
McBride (24p)	0.8p	0.6p	23%	-0.6p
Atalaya Mining (378p)	48.9p	39.9p	23%	33.5p
IWG (192p)	4.1p	3.3p	23%	3.0p
Yu Group (690p)	50.0p	40.8p	23%	31.9p
Enquest (21p)	17.8p	14.7p	21%	19.3p

Source: Morningstar, 7 February 2023

1-MONTH EPS DOWNGRADES (TOP 22)

		Forward EPS Change		
Name (Price)	EPS NTM	1 mth ago	1 mth % chg	3 mth ago
Capricorn Energy (240p)	1.0p	10.6p	-91%	12.0p
Motorpoint Group (141p)	0.9p	6.8p	-87%	6.8p
Frontier Developments (481p)	14.4p	50.9p	-72%	53.5p
N Brown Group (43p)	0.7p	1.5p	-51%	1.1p
Dianomi (85p)	3.5p	7.1p	-50%	6.7p
Scotgold Resources (60p)	9.2p	16.9p	-46%	15.0p
DSW Capital (84p)	5.0p	9.1p	-45%	9.0p
Gym Group (135p)	2.2p	3.9p	-44%	5.4p
Virgin Wines (54p)	3.4p	6.0p	-44%	6.0p
Dialight (260p)	10.2p	17.8p	-43%	17.8p
Staffline Group (34p)	3.3p	5.8p	-43%	5.4p
TPXimpact Holdings (24p)	4.3p	7.4p	-42%	7.0p
i3 Energy (20p)	4.7p	8.1p	-42%	7.8p
Trinity Expl & Production (105p)	19.4p	33.2p	-42%	31.3p
Rank Group (91p)	3.2p	5.5p	-41%	7.2p
Carnival (873p)	7.7p	12.8p	-40%	9.8p
Superdry (123p)	8.8p	14.5p	-39%	20.3p
Audioboom Group (480p)	16.8p	27.4p	-39%	27.6p
PetroTal (41p)	14.6p	21.7p	-33%	25.9p
Petra Diamonds (77p)	11.9p	17.6p	-32%	21.0p
EQTEC (p)	0.0p	0.0p	-31%	0.0p
Petro Matad (3p)	0.6p	0.8p	-30%	0.9p

Source: Morningstar, 7 February 2023

An infrastructure trust with a digital future

After some teething issues, Cordiant Digital Infrastructure is finding its feet. Dave Baxter reports

Cordiant Digital Infrastructure
CORD 85p BUY
CLOSED-END INVESTMENTS

- Inflation-linked income play
- Compelling asset base
- Wide discount to NAV
- Fully invested

Infrastructure investment trusts are so popular that they almost managed to avoid becoming cheap in the savage bear market of 2022.

Shares in sector stalwarts such as **BBGI Global Infrastructure (BBGI)** and **HICL Infrastructure (HICL)** continued to trade at a chunky premium to the stated value of underlying assets for most of a year many investors would rather forget. That is, until the disastrous 'mini' Budget caused a spike in gilt yields, leading to a sell-off in the sector both because infrastructure projects can be debt funded and because higher yields can have a negative effect on present value estimates of future cash flows. HICL's shares hit a rare double-digit discount to stated net asset value (NAV) in October, having commanded a premium of similar size not long before. BBGI, which has at points sat on a premium of more than 30 per cent to NAV, saw its shares fleetingly trade at par.

With peak political chaos in the rear-view mirror and the dust largely having settled in bond markets, the infrastructure trusts have staged a decent recovery and premiums are gradually returning (if at lower levels than just a year or two earlier). However, some trusts in the sector continue to look attractively priced, while also offering exposure to a compelling secular growth theme that sets them apart from peers.

The traditional infrastructure trusts invest in assets that are essential and sometimes backed by government funds, if far from glamorous. Think hospitals, prisons and toll roads as a source of income, sometimes with a level of inflation linkage, that carries little sensitivity to the economic ups and downs that lead companies to sink or swim. In this patch, two relatively new names – **Cordiant Digital Infrastructure (CORD)** and **Digital 9 (DGI9)** – instead invest in the hard assets underlying the digital economy. Think data centres, telecoms towers and fibre networks, among other pieces of physical networks.

When they launched in 2021, both trusts captured investors' imagination and went on to raise enormous sums. More recently, both were hit by the fierce sector sell-off of late 2022 but have failed to recover to the same level as their peers, to the extent that Cordiant and Digital now trade on substantial share price discounts. The Cordiant trust has looked especially browbeaten, with its shares lagging the portfolio value by almost 20 per cent on 6 February. And yet investors may be overlooking the fact that Cordiant seems to have resolved an issue holding it back, offering a cheap entry point into an appealing portfolio.

Getting past teething problems

The fact that the digital infrastructure trusts have spent longer on discounts and in calmer times commanded smaller premiums than the more established names might in large part relate to the fact that this is a newer, less familiar subsector. Investors' need to properly assess performance before buying in is therefore understandable.

A separate (if more familiar) issue is cash drag, and one that the Cordiant trust has certainly experienced. In January 2022, the trust announced an agreement to acquire Emitel, a Warsaw-based digital infrastructure business, for an equity consideration of £352mn. At the time, Cordiant said Emitel operated more than 500 mobile towers, the national broadcast network, five digital terrestrial networks, a network of wireless sensors serving utilities and a fibre network "traversing tens of thousands of kilometres".

THE TRUST RAISED ITS HALF-YEAR DIVIDEND FROM 1.5P TO 2P A SHARE

As the trust's latest results argue, Emitel's appeal lies in its consistent year-on-year growth, stable business model and good cash flow visibility. Its broadcast revenue contracts have a weighted average duration of eight years while its mobile contracts average 13 years for anchor tenants, and around three-quarters of its revenues have either full or partial inflation linkage. As an asset, it appears to have the traits investors like so much about infrastructure, be it lengthy contracts or the ability to handle rising prices.

However, the deal would ultimately undergo a lengthy process of regulatory scrutiny. When the acquisition completed in November, the final bill had crept up to £359mn before costs and expenses. A greater concern, for investors, was having to watch the real value of a cash deposit worth around two-fifths of the fund erode during 10 months of high inflation.

Worse, that was a period when Cordiant could have been generating cash for future distributions or asset purchases. The completion of the Emitel deal, however, means the trust is now fully invested, giving it greater potential to generate healthy dividends and total returns.

This was confirmed on the publication of results for the six months to September, which landed a fortnight after the Emitel acquisition. The trust raised its half-year dividend from 1.5p to 2p a share, putting an annual distribution target of 4p for the full year within reach. Considering Cordiant guided investors at the time of its initial public offering to only expect a 4p annual dividend in its fifth full year of existence, events are moving ahead of schedule.

Against the current share price, that puts the trust's dividend yield at 4.7 per cent, meaning it slightly trails most peers in the AIC Infrastructure sector. In the longer run, the trust will seek a total return (including a progressive dividend) equal to at least 9 per cent a year.

Sweating the small stuff

With fundraising proceeds invested and a €200mn (£179mn) eurobond debt facility to hand, the team behind the trust should be free to focus on the next two phases of what

CORDIANT DIGITAL'S SHARES ARE SENSITIVE TO MARKET VOLATILITY AND EQUITY RISK PREMIA

it dubs a "buy, build and grow" approach. Rather than close the NAV discount with buybacks, the priority is to acquire and then improve cash-generative assets through management actions.

As with any private fund, such activity can be hard to quantify, although it ranges from bolt-on deals to putting industry knowledge and strategic insights to good use. One of the trust's investments, CRA, has focused on potential bolt-on acquisitions and an investment in a greenfield datacentre, while Hudson Interxchange, a New York datacentre and the fund's remaining investment, was looking to make greater use of a floor on one of its sites.

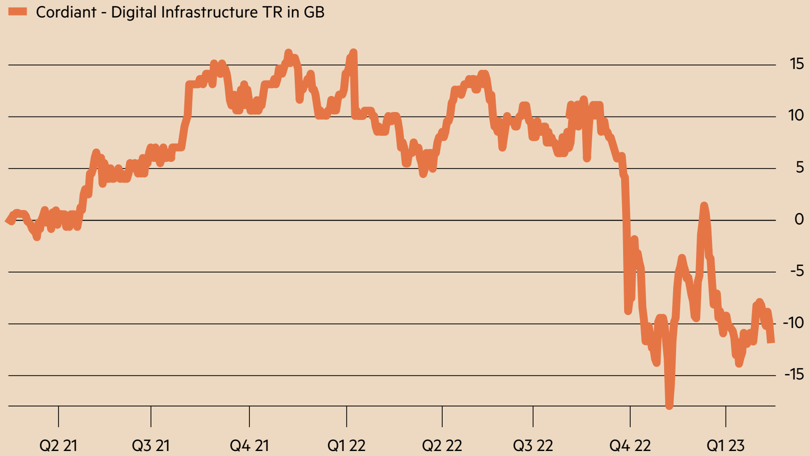
The fund only owns those three portfolio companies, meaning problems at one could have serious negative implications for returns. The flipside to this is good, multi-currency revenue diversification across TV, radio, telecoms, fibre-optic networks and datacentres, and three portfolio companies with a wide range of different clients and assets.

Debt is also a feature at portfolio level, with aggregate net debt divided by Cordiant's gross assets sitting at 30 per cent at the end of September, on a pro-forma basis. However, some 78 per cent of portfolio company borrowings were on a fixed or swapped interest basis, mitigating much of the impact of rising interest rates and debt costs. The trust should also be able to pass certain costs, such as power used in datacentres, on to customers.

Other problems could lurk, be it challenges getting the most out of portfolio companies or the simple fact that, like any income-focused investment trust, Cordiant Digital's shares are sensitive to market volatility and equity risk premia. But with its focus on the assets underpinning an increasingly digital world, this remains a play on a compelling theme at a potentially unfair valuation. ●

BUMPY BEGINNINGS

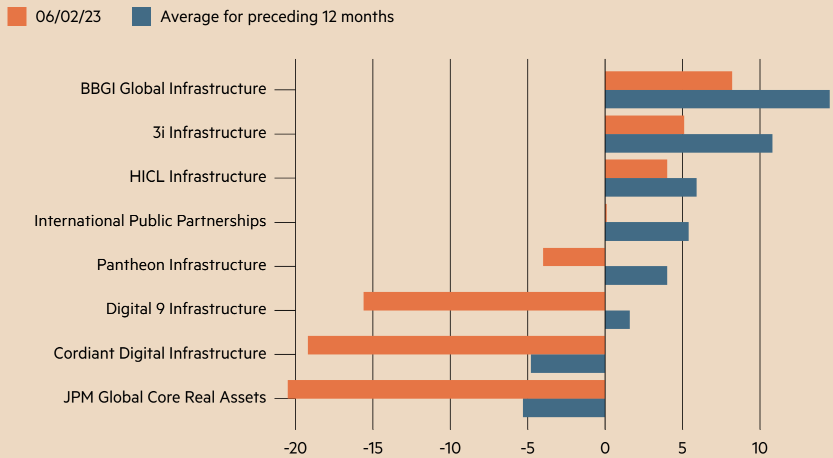
CORD share price total return (%) since its 2021 IPO



Source: FE

CORDIANT DIGITAL INFRASTRUCTURE STAYS CHEAP FOR NOW

Premium/discount to NAV (%)



Source: Winterflood

CORDIANT DIGITAL INFRASTRUCTURE (CORD)

Price: 85p	**Total assets:** £827mn
AIC sector: Infrastructure	**Gearing (at fund level):** 0%
Fund type: Investment trust	**Share price discount to NAV:** -19.70%
Market cap: £657.5mn	**Dividend yield:** 4.7%
Year of launch: 2021	**Ongoing charges:** 0.9%

Source: AIC as at 3/02/23

REVENUE SOURCE

Revenue source	Proportion (%)
TV broadcasting infrastructure	46.4
Radio broadcasting infrastructure	15.3
Telecomms infrastructure	17.5
Fibre-optic networks and transmission services	9.5
Data centres and cloud computing	11.3

Source: Cordiant Digital, as at 30/09/22

A structural growth stock whose sell-off is overdone

Spirent Communications is poised to profit from global 5G infrastructure spending, and its shares' recent drop offers a good entry point. **Arthur Sants** reports

Spirent Comms SPT 228p **BUY**

TELECOMMUNICATIONS EQUIPMENT

- Profiting from growth in 5G
- Cheaper than US peers
- Strong balance sheet
- Excellent track record
- Signs of slowing growth
- Risk of sector consolidation

The rise of 5G was supposed to free **Spirent Communications (SPT)** from the cyclical nature of capital spending. In previous generations of network technology, telecoms companies would invest in infrastructure when all was fine, and pull back during recessions. As a tester of this infrastructure, Spirent was tied to this cycle.

But 5G – shorthand for the fifth-generation technology standard on which broadband cellular networks depend – is different. Complex, hugely data-generative and in need of constant upgrades, the demand for Spirent's services was forecast to be constant, resulting in a decoupling of sales growth from the wider economy.

On 4 January, analysts at Numis published a 23-page note titled "Why Spirent is now a structural growth stock". The brokerage explained that 5G was much more complex, required multiple different vendors to set up and many upgrades over the coming years to reach its full potential. Because of increasing competition, Numis argued, telecoms companies would need to continue investing in 5G through any recession, or risk falling behind.

There was some evidence of this. In October, when economic forecasts were at their gloomiest, John Stankey, the chief executive of Spirent customer **AT&T (US:T)**, said the long-term rationale for the US giant's investments in 5G and fibre remained "fundamentally sound", and committed to continued investments "through this cycle to support future growth".

Weakness creates opportunity

This may have been true, but two weeks after the Numis note landed, Spirent acknowledged that "global market economic conditions have been impacting some of our customers, resulting in delays to their investment decisions". The share price promptly dropped a fifth.

This drop seems like an overreaction. Spirent's management used the same trading update to state that results were in line with market expectations, to reaffirm the strength of the order book and reiterate plans to keep investing in its technology across the portfolio. Given that orders were already at record levels, confirmation that orders climbed 7 per cent in 2022 (from a base of £270mn at the end of 2021) suggests customer momentum didn't exactly evaporate in the final quarter.

Numis downgraded its forecast for Spirent's 2023 earnings per share (EPS) by 10 per cent, but still believes a target price of 350p would better reflect the company's exposure to long-term structural growth trends. Consensus EPS estimates are brighter and are down just 3 per cent in the year to date, meaning Spirent's shares are now priced on 15 times this year's earnings. Meanwhile, **Keysight (US:KEYS)**, one of Spirent's biggest rivals, currently trades on a much pricier forward price/earnings ratio of 22.

5G driving growth

5G networks include the towers that transmit the radio waves, data centres to do the computing and the ethernet cables needed to get the data there. The system has changed a lot since the 2G days when telephone towers just facilitated phone calls. Nowadays, our phones are simultaneously used for complex computing processes and streaming. This increased complexity needs constant monitoring, and this is where Spirent makes its money.

Spirent's business is split between its lifecycle service assurance division on the one hand and network and security on the other. The former tests 5G products' proper functioning both before any network is rolled out and then on a monitoring basis after installation, to create a more constant revenue stream. The latter provides ethernet performance testing; as 5G develops, more data will be produced, which means more stress on the ethernet network.

In the six months to June, assurance revenue rose 10 per cent to $125mn and networks increased 9 per cent to $154.5mn, meaning the divisions are fairly evenly split. Both also boast stable gross margins at just above 70 per cent. The fact Spirent could maintain this level of profitability despite rising costs last year suggests the company has a degree of pricing power. This is expected given the essential nature of the product.

To keep ahead of the competition, Spirent has been investing consistently to keep up with the developing telecoms technology. In the first half of 2022, product development costs hit $57.2mn (£47.9mn), from $52.5mn in the same period in 2021. Although this led to a slip in the assurance division's adjusted operating margin from 19.9 per cent to 17 per cent, the spending enabled the release of a new assurance product called Vantage.

PEER COMPARISON

Company	TIDM	Market cap	Net cash / debt (-)*	Price*	Fwd PE (+12mths)	Fwd DY (+12mths)	FCF yld (+12mths)	EV/ Sales	EV/ EBIT	P/BV	FCF Conv.	FCF Margin	Ebit margin	ROCE	Fwd EPS grth +24 mth
Spirent Communications	SPT-GB	£1.4bn	£134mn	228p	15	2.9%	5.9%	2.8	15	3.7	92%	16.0%	18.5%	22.8%	9%
Keysight Technologies	US:KEYS	$32.0bn	$24mn	$179	22	–	4.2%	6.0	24	7.7	69%	17.4%	24.6%	22.2%	-5%
Viavi Solutions	US:VIAV	$2.1bn	-$208mn	$942	16	–	–	2.3	17	3.7	84%	14.6%	12.6%	12.4%	0%

Source: FactSet

TO KEEP AHEAD OF THE COMPETITION, SPIRENT HAS BEEN INVESTING CONSISTENTLY TO KEEP UP WITH DEVELOPING TELECOMS TECHNOLOGY

With £134mn of net cash on the balance sheet, there are plenty more opportunities for investment.

Prospective investors can be confident that the company has its finger on the pulse on this question: having started life in Crawley, the company's operational headquarters are now in California. Its clients are largely based outside of Europe, with 55 per cent of revenue coming from the Americas and 35 per cent from Asia Pacific.

The lack of exposure to Europe is also a bull point, given European operators and their customers appear to have been hit harder by the cocktail of inflation, high energy prices and pricier debt. **Vodafone (VOD)**, for example, has seen its German revenue falling, resulting in a markdown to free cash flow forecasts. AT&T, meanwhile, expects cash flow to increase by $2bn next year, and it plans to maintain capital expenditure at the same level.

While the promise around 5G has bubbled for years, the rollout has been slow. This is because it is expensive. While 5G can carry more information thanks to its higher radio wave frequency range, this results in a shorter range, meaning more hardware needs to be installed to get complete coverage. Currently, only 30 per cent of all operators globally have deployed initial 5G networks and only 3 per cent have installed the first major upgrades.

Pessimists would say that 5G champions have overpromised and that complete rollout will never happen. The flipside of this argument is that it leaves lots of room for growth. As greater numbers of phone applications incorporate artificial intelligence models, and cars become increasingly connected, consumers and businesses are likely to seek and then demand faster communication speeds. Electric vehicle maker **Tesla (US:TSLA)** is already capable of rolling out software updates to its vehicles, but doing so requires super-fast connectivity.

According to Grandview Research, the 5G market was worth $60.6bn in 2022, and is expected to grow at a compound annual growth rate of 59 per cent until 2030. The research cited virtual reality, augmented reality and gaming as strong drivers. If Spirent can grow at half the speed of the wider market, then its current valuation is likely to prove cheap.

Risk of consolidation

There is a chance this growth doesn't materialise. Telecoms businesses are struggling to maintain margins given rising costs and increased competition. Vodafone has been trying to consolidate its business by selling off subsidiaries in less profitable geographies, while pursuing a merger with Three in the UK. Meanwhile, on the fibre-optic side, **BT (BT.A)** is lowering prices to try to drive alternative providers out of the business.

If the future of the industry is one with a few big players, then they may have greater negotiating power over testing providers such as Spirent, although one assumes repeat long-standing customers are awake to the need to maintain good business terms.

Beyond the hypotheticals, what is known is that increased connectivity is needed and we are still far from a conclusive 5G rollout. As infrastructure investment continues to increase, so will Spirent's profit growth. It is possible to have the odd cyclical and brief dip amid an extended period of secular growth. ●

LONG-TERM SALES, PROFIT & MARGIN GROWTH HAVE BEEN CONSISTENT

Source: FactSet *Estimates

Company details	Name Spirent Communications (SPT)	Mkt cap £1.39bn	Price 228p	52-wk hi/Lo 294p / 210p
Size/Debt	NAV per share* 54p	Net Cash / Debt (-) £134mn	Net Debt / Ebitda –	Op Cash/ Ebitda 81%
Valuation	Fwd PE (+12mths) 15	Fwd DY (+12mths) 2.9%	FCF yld (+12mths) 5.9%	P/Sales 4.0
Quality/ Growth	EBIT Margin 18.5%	ROCE 22.8%	5yr Sales CAGR 4.3%	5yr EPS CAGR –
Forecasts/ Momentum	Fwd EPS grth NTM 4%	Fwd EPS grth STM 4%	3-mth Mom -12.9%	3-mth Fwd EPS change % -7.3%

Year end to 31 Dec	Sales ($mn)	Profit before tax ($mn)	Earnings per share (¢)	Dividend per share (¢)
2019	504	93	13.2	4.04
2020	522	103	14.5	4.26
2021	576	115	16.5	5.94
Forecast 2022	607	124	17.1	6.02
Forecast 2023	630	130	17.9	6.46
Change (%)	+4	+5	+5	+7

*Converted to £, includes intangibles of £154mn, or 25p a share
Source: FactSet, adjusted PTP and EPS figures
NTM = Next 12 months
STM = Second 12 months (ie, one year from now)

The Great Industrial Revival?

The prospect of a soft landing for the US economy, combined with lower energy prices, is breathing life into some venerable businesses. Julian Hofmann reports

IC JULIAN HOFMANN

After a terrible 2022 in the main, investors in US shares have seen their portfolios green up since the final weeks of last year as economic signs point increasingly to a relatively soft landing for the US economy. That has meant a re-rating for the S&P 500 and the Nasdaq ahead of the big Wall Street earnings season, and while this should present investors with a decent set of opportunities, it is complicated by a few cyclical factors.

Firstly, the value rotation has continued for far longer than some expected due to the complications of Russia's energy war on Europe – a host of US-based oil, gas and shale producers have enjoyed record years as tankers ship ever greater amounts of LNG and petroleum to keep Europe's economies fuelled.

That does wonders for America's balance of payments, making the country a net exporter of energy for the first time since the early 1970s: the balance of payments gap has narrowed by more than $21bn, according to the US Bureau of Economic Analysis.

But it also means traditional value shares are now expensive by historic standards, while growth stocks have typically not yet fallen enough to qualify as value prospects themselves. It is clear, then, that a more nuanced approach to picking shares is needed in a year that looks set to be dominated once again by supply chain questions and uncertainty over export markets and energy prices.

AMERICA IS A NET EXPORTER OF ENERGY FOR THE FIRST TIME SINCE THE EARLY 1970S

There is truth in the stock market saying that investors should buy the valuation and leave the trends to sort themselves out. But sometimes where a company sources its input products, plus the size of its global market at a given point in the business cycle, means that trends do matter. It is based on this premise that a deeper look at America's oft-forgotten soft industrials sector could yield some interesting investment angles.

A firm with the right chemistry

It could be that 2023 proves the year for makers of tangible products. With big tech reeling from overspending during the pandemic, and currently firing large numbers of employees to cut costs, America's more traditional mid-cap manufacturing companies – which have had to manage supply chain constraints and a host of ballooning costs over the past two years – could come to the fore. By and large, this has left them looking considerably better prepared for a recovery in 2023, with share prices not yet pricing this in.

Our first deep dive is a commodity chemicals producer based in Irving, Texas: **Celanese (US:CE)**. If you need anything to do with acetates (which, incidentally, are also a key ingredient in modern explosives) then Celanese can make it.

The company, along with similar peers, has benefited from its raw materials being available in abundance via the US's own supply of feedstock natural gas in the Permian Basin. The byproducts of this go into producing acetates for customers in the intermediate chemistry segment: polymer emulsion producers who make paint, for instance. A key point to remember is that the US industrial base has suffered far less from energy price inflation than competitors in Europe and Asia due to America's transition to a net energy producer in 2019.

9%

BERKSHIRE HATHAWAY NOW OWNS 9 PER CENT OF CELANESE'S FREE FLOAT

A key dynamic to consider is that while natural gas input prices initially rose during 2022, the crash back to lower levels has been swift, and in the US is effectively a return to the secular long-term trend of lower natural gas prices. That is notable for Celanese because it is occurring as the producer price index for its core output has risen to a 30-year high (see chart). If you track the trend for gas prices, it's clear that an inverse correlation with Celanese shares exists – when prices are lower, as they are currently, then Celanese's share price rises. In essence, the company's costs are cratering just at the point when its products are fetching premium prices, and investors have to take notice.

The company was also able to push through substantial price increases, at an average of 15 per cent, at the end of 2022, indicating perhaps a lack of serious homegrown competition in its core market, and wide moats around its core intellectual property. Currently, operating margins are running two percentage points above the five-year average of 24 per cent, suggesting that the company's pricing power has been enhanced.

Berkshire Hathaway (US:BRK.B), Warren Buffett's investment vehicle, added to its existing holding in Celanese during the last quarter. In fact, most of Berkshire's recent purchases – **Jefferies Financial Group (US:JEF)**, **Paramount Global (US:PARA)** and **Louisiana-Pacific (US:LPX)** (a building materials manufacturer) – are all varying bets on the strength of the US economy. In total, Berkshire now owns 9 per cent of Celanese's free float.

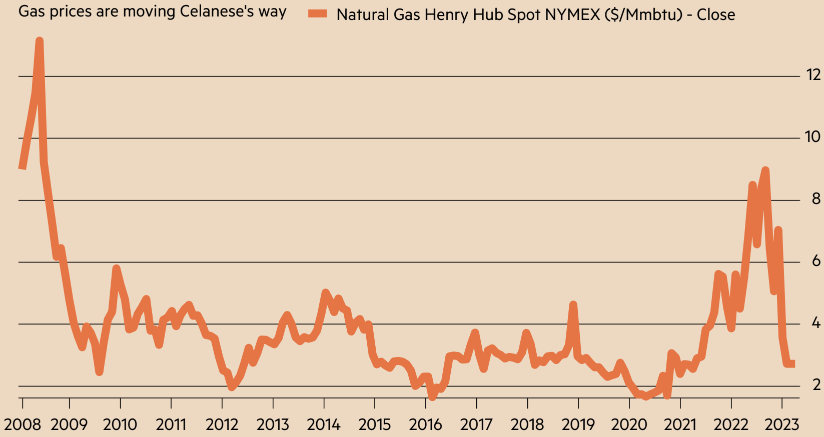
Indeed, betting on the strength of future earnings has also directed Celanese's strategy for this year. In November, it completed the acquisition of most of the chemical giant **Dupont's (US:DD)** mobility and materials business for a total of $11bn (£9.7bn). The sales price was roughly eight times cash profit, and the key point for the company is that it offers a large niche in the polymers market for cars and other vehicles. The beauty of this is that it doesn't really matter whether the vehicle is electric or fossil-fuel driven: the demand for materials not connected with propulsion is exactly the same. In fact, the business has put a lot of effort into showcasing polymers specifically aimed at the electric vehicle market.

Celanese has had a presence in China since 2005, when it built an acetate plant to leverage China's cost advantage in the early stages of its industrial modernisation. That is of relevance in the context of increasing geopolitical rivalry: the intervening years have evidently seen big changes. But in 2021, Celanese told the trade press that China's cost advantage had now eroded given the rise of a wealthier middle class – who presumably find working in an acetate factory less than aspirational. This means that future investment is likely to stay close to the US home market where, despite higher labour costs, there exists a productivity advantage.

In terms of valuation, analyst upgrades have been coming through since the start of the year and Celanese's shares are now rated at a historically cheap forward price/earnings (PE) ratio of 8.4, according to FactSet consensus, rising to 10 times as the impact of the DuPont divisional acquisition feeds through the earnings statement. That represents a clear discount to a competitor such as **BASF (DE:BAS)**, where the PE struggles to get below 12.5, despite German industry's well-documented energy problems in recent months. In that context, Celanese is a well-priced and operationally geared play on US energy independence and home economic strength. ●

NATURAL GAS HENRY HUB SPOT LAST 15 YEARS

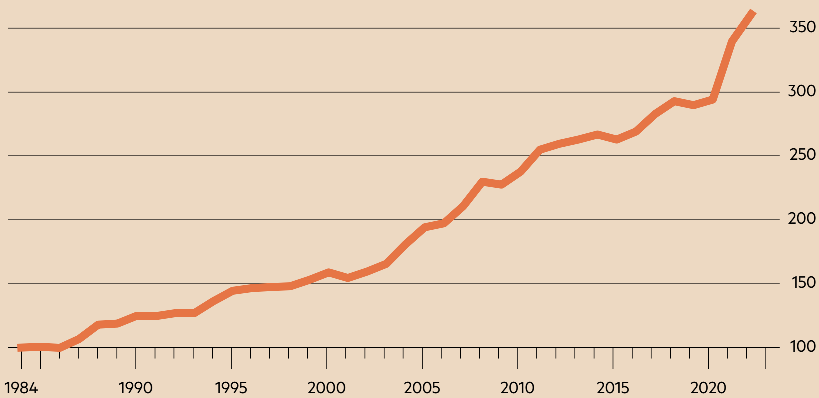
Gas prices are moving Celanese's way



Source: FactSet

PPI CHEMICALS PRICES SINCE 1984

Chemical prices reach all time high



Source: Bureau of Economic Analysis

CELANESE

Company details	**Name**	**Mkt cap**	**Price**	**52-Wk Hi/Lo**
	Celanese Corporation (CE)	$13.6bn	$124.98	16,208¢/8,671¢
Size/debt	**NAV per share***	**Net cash/debt (-)***	**Net debt/Ebitda**	**Op cash/Ebitda**
	4,184¢	-$2.91bn	1.5 x	96%
Valuation	**Fwd PE (+12mths)**	**Fwd DY (+12mths)**	**FCF yld (+12mths)**	**CAPE**
	10	2.30%	8.30%	12.9
Quality/growth	**Ebit margin**	**ROCE**	**5-yr sales CAGR**	**5-yr EPS CAGR**
	19.20%	24.10%	9.60%	22.20%
Forecasts/momentum	**Fwd EPS grth NTM**	**Fwd EPS grth STM**	**3-mth mom**	**3-mth fwd EPS change %**
	-33%	21%	27.10%	-14.40%

Year end to 31 Dec	Sales ($bn)	Profit before tax ($bn)	Earnings per share (¢)	Dividend per share (¢)
2019	6.3	1.37	952	240
2020	5.7	1.03	764	251
2021	8.5	2.35	1,812	272
Forecast 2022	9.8	1.94	1,608	275
Forecast 2023	12.2	1.65	1,281	284
Change (%)	24	-15	-20	3

*Includes intangible assets of $2.1bn, or 1,980¢ a share.
Source: FactSet, adjusted PTP and EPS figures. NTM = Next 12 months STM = Second 12 months (ie, one year from now)

Calm in all weather

We introduce the ultimate buy-and-hold portfolio, which does what it says on the can. Philip Ryland reports

'Expert portfolio' may be a misnomer in the case of the portfolio we're introducing this week. The whole point of the *Investors' Chronicle* All-Weather Portfolio is that to run it requires no expertise, no timing and next-to-no effort. For that, it offers the prospect of very acceptable investment returns. What's not to like?

Readers may recall that the IC All-Weather Portfolio got its first airing late last year ('An All-Weather portfolio', IC, 16 September 2022) when we suggested its approach to investing might be as good as it gets. Certainly, the clue is in the name. It is a portfolio for all investment conditions; the ultimate buy-and-hold investment vehicle.

Nor should investors take our word for it: our all-weather portfolio is derivative and comes from a brain far better than anything we can offer, that of billionaire US hedge-fund manager Ray Dalio.

Dalio, whose firm runs about $235bn (£194bn) of client money, came up with the all-weather idea when he addressed a particular problem – who would manage his family's wealth when he was no longer around? He needed a plan so simple any fool could follow it, but which offered equity-style returns without the volatility that equities often bring.

Much thought produced the all-weather approach, which rested on two insights. First, returns on almost any asset are driven by whether both economic growth and inflation are rising or falling relative to investors' average expectations. While growth and inflation may be the driving factors, different assets react to them in different ways. For equities, fast economic growth is good; slowing growth bad. For conventional fixed-interest bonds, slowing growth is fine since that implies a drop in interest rates, which will drive up the value of their fixed dividends.

So mixing equities and fixed-interest bonds in a portfolio stabilises returns. But only to an extent. Come stagflation, which features slowing growth and rising inflation, both equities and conventional bonds suffer. Other assets are needed to play the offsetting role. Commodities are useful and gold should be the ultimate flight-to-safety asset whenever inflation surges. Index-linked bonds, whose dividends and return of capital are both tied to a measure of consumer price inflation, also play a balancing role when inflation rises; although that notion has been tested lately.

The second vital insight was that the focus of the average investment portfolio is on allocating capital according to the expected returns of various asset classes rather than according to their risk (or volatility). As a result, portfolios tend to be too heavily weighted to equities.

True, that has brought higher returns over the long haul and – barring catastrophe – should continue to do so in the future. However, the outperformance comes at the cost of high volatility. Research by Bridgewater shows that a typical diversified portfolio allocated 60 per cent of its capital to equities. As a result, equities – a particularly volatile asset class – accounted for almost 90 per cent of the portfolio's risk. In other words, overexposure to equities means that other assets with less volatility, especially bonds, can do little to reduce overall portfolio volatility. And the real risk is that over-reliance on equities means portfolio value can be badly damaged just at the point where capital needs to be turned into cash.

The correct spread of assets

So what's needed is the correct spread of assets – equities, bonds and so on – and, crucially, they should be mixed in the right proportions. Get those proportions correct and at any time – regardless of how economic growth and inflation are moving relative to expectations – enough of the portfolio will be doing well to ensure that nothing really nasty will happen to it. True, its good times won't be as good as the best, but its worst times will be well short of, say, the equity markets' worst. That's what Dalio's reasoning said should happen and it's what back-testing of the indices and funds behind various iterations of the all-weather approach has shown does happen.

6.5%

THE PORTFOLIO WOULD HAVE GENERATED ANNUALISED RETURNS AVERAGING 6.5 PER CENT FROM DECEMBER 1997 TO JUNE 2022

Dalio's original approach kept things simple, but his portfolio did include some assets, such as emerging market debt, that retail investors might struggle to buy. We have side-stepped that difficulty by following a simplified approach to Dalio's from the Lazy Portfolio ETF website. This US-based site constructs and back-tests many investing plans based on exchange traded funds (ETFs) and runs a Ray Dalio All Weather Portfolio. The IC All-Weather approach adds another tweak by being wholly comprised of London-listed ETFs. Almost by definition, these are eligible for inclusion in both self-invested personal pensions (Sipps) and individual savings accounts (Isas).

Back-testing, mostly using the underlying indexes tracked by the ETFs in the prototype IC All-Weather portfolio, produced impressive results. The portfolio would have generated annualised returns averaging 6.5 per cent from December 1997 to June 2022. That is only 0.7 percentage points less than the total return for UK shares over the same period, as measured by the FTSE All-Share index, yet with much less than half the volatility. Simultaneously, the average real return – ie, in excess of inflation as measured by the retail price index – was 3.6 per cent a year.

For, as it were, the 'live' IC All-Weather portfolio we have made two bits of fine-tuning to the prototype. Thus the portfolio's make-up is as shown in Table 1 – just six London-listed ETFs, to be held in the weightings shown. Hopefully, these will cover

TABLE 1: INVESTORS' CHRONICLE ALL-WEATHER ASSET ALLOCATION

Asset class	Weight (%)	Exchange traded fund	Code	Distributing	Dealing currency	Benchmark index
Equities	30	iShares MSCI ACWI	SSAC	No	£	MSCI ACWI index
Bonds						
Fixed interest	40	iShares Global Govt Bond	IGLH	Yes	£	FTSE G7 Govt Bond index
Index-linked	15	iShares £ Index-Linked Gilts	INXG	Yes	£	Bloomberg UK Govt Inflation-linked bond
Commodities						
Gold	7.5	WisdomTree Physical Gold	PHAU	No	$	Gold spot
Diversified commod's	3.75	WisdomTree Broad Comm's	AIGC	No	$	Bloomberg Comm's TR Index (BCOMTR)
Energy	3.75	WisdomTree Energy	AIGE	No	$	Bloomberg Energy Index

all eventualities that the thud of unexpected events can land on an unsuspecting investor. First, the exposure to equities becomes **iShares MSCI ACWI (SSAC)**, which tracks the all-countries version of a global equities index (including emerging markets) from data processor MSCI. Our original version shadowed MSCI's global index just for developed country equities. Our guess is that, given the choice, it is better to have exposure to emerging market equities than not. After all, consensus says emerging nations will continue to produce faster economic growth than developed ones. Over the long haul, we can expect that to be reflected in investment returns.

The logic for the second tweak is similar to the first. An ETF that tracks UK government bonds has been swapped for **iShares Global Government Bond (IGLH)**, which does what the name says. Given the choice between having global exposure to an asset class or just UK exposure, for the purposes of this buy-and-leave fund, we would prefer global exposure. However, that argument does not apply to inflation-linked bonds since the vast majority of IC readers will want to protect themselves from the UK's pace of inflation rather than a global rate.

While the changes from the original IC portfolio are minimal, they have the effect of slightly reducing returns over the 10 years or so for which there is data for the performance of the actual ETFs. The average annualised return for the portfolio drops from 5.3 per cent to 5.1 per cent. Simultaneously, volatility – as measured by the standard deviation of monthly returns over the 111-month period against their average – rises from 7.4 per cent to 8.1 per cent.

As Table 2 shows, that is still acceptable. The IC All-Weather Portfolio has underperformed the total return for the FTSE All-Share index for the period October 2013 to December 2022 – with an average return of 5.1 per cent versus 6.6 per cent for the total return on the FTSE All-Share index – but a gap is be expected over most decently-long periods. However, the trade-off is less volatility in returns – 8.1 per cent for the All-Weather Portfolio compared with 11.2 per cent for the All-Share. Similarly, it would have been rare for a holder of the All-Weather Portfolio to be nursing losses exceeding 10 per cent – that happened in just three months since late 2013, all of which occurred from November 2013 to January 2014. By contrast, exposure solely to the All-Share would have meant that, on average, losses of that scale crop up one month every year.

Now is an interesting time to be launching a portfolio that has, as one of its chief selling points, low volatility. That's because the price of the component that functions as volatility-reducer-in-chief has just lately been... well... extremely volatile. Not just that, but all the volatility has been on the downside. The component is index-linked bonds, represented by **iShares £ Index-Linked Gilts (INXG)**. In the 13 months to the end of December, the ETF lost 38 per cent of its value as year-on-year losses worsened seven months running.

For index-linked government debt, this was almost unheard of, and those losses were a big factor in the portfolio's unusually poor performance in the past six months. However, in the bigger scheme of things, losses on the index-linked ETF have had limited effect. Exclude the past nine months in calculating the annualised average from October 2013 and returns remain at 5.1 per cent, although volatility edges up by 0.2 percentage points. Now the hope is that revised inflation expectations have been baked into investors' thoughts and inflation-linked bonds should resume their quiet course. We should have an idea by mid-summer whether that's proving to be the case. ●

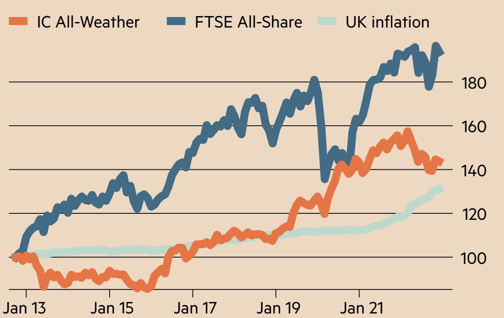
TABLE 2: RELATIVE PERFORMANCE

	Change on year (%)		
	IC All-Weather	FTSE All-Share*	UK inflation
Best/highest	21.7	35.4	11.1
Worst/lowest	-12.5	-18.6	-0.2
Average	5.1	6.6	2.4
St'd Dev'n	8.1	11.2	2.6
+1 St Dev	13.2	17.8	5.0
-1 St Dev	-3.0	-4.6	-0.2
12-month periods	111	111	111
Falls >10%	3	9	0
Every 'x' years	3.1	1.0	na

October 2013-December 2022. Source: FactSet, ONS, Investors' Chronicle *total return

IC ALL-WEATHER VS ALL-SHARE & INFLATION

Re-based to 100, October 2012



Source: FactSet, ONS, Investors' Chronicle

Weighing up the risks with this safety specialist

Trader Michael Taylor spots a trend change in a tech company's share price

MICHAEL TAYLOR

The market has been on a roaring rally since the start of the year. Great for bulls, and bad for those who are predicting a market crash – of which there are many.

Jeremy Grantham of asset management company GMO warned of a potential stock market crash in his 2023 outlook letter. Even after last year's stock market declines, he is calling for the S&P 500 to fall to 3,200 by the end of the calendar year. But he also gives plenty of factors that could prevent a further slide in equity prices.

The presidential cycle, declining inflation, continued strength of the job market, and also the reopening of the Chinese economy. So quite a few, then.

Basically: there could be a crash. But there also could be no crash. In fairness, he's laid out what could happen, which is a lot of things. It's the people that tell you in absolute terms that you need to be careful of. People who are drunk on doom sound clever, but the reality is long-term bears don't make money. Just look at the charts of the world's stock market indices – barely any of them have long-term extended downtrends.

It pays to be bullish. Because over a long enough period of time, the bulls usually win (I am talking about stock markets and not individual stocks). And so even though the market has rallied sharply and the Fear & Greed Index from CNN is 74 (and 1 away from 'Extreme Greed'), I still believe in going with the flow rather than having strong opinions that are deeply entrenched.

We last looked at **Seeing Machines (SEE)** on 24 November 2021 ('An eye-opening tech opportunity') and back then the stock was poised to break out. It had tagged 12p several times and the trade idea was that if it actually broke out of the level it could go on a rally.

Looking at Chart 1, we can see that didn't happen. The stock rallied again and failed to reach 11.5p before breaking through all the moving averages and trending downwards for the rest of the year.

This is why strict risk management is so important. It doesn't matter how good a stock looks – if it doesn't break out the price is telling you something: it's not ready. By pre-empting the breakout, you're gambling that the stock will break out and rally. It's far better to wait for the actual breakthrough of resistance to get on board. Imagine holding a balloon and trying to put a pen through it. To start, you'll get pushback from the balloon as the rubber stretches and expands to accommodate the pen's pressure.

But, eventually, the balloon pops and there is no resistance for the pen. This is exactly like the price going through resistance – we want to be buying at the point of least resistance.

Moving to Chart 2, we can see that recently the stock has bottomed twice around 5p and since started to look as though the trend may be turning. There was a test of the 200-day exponential moving average (EMA) (pink line), and several other tests before the stock started trading clearly above it. The stock is testing the recent high at 7.4p, and I feel a break of this level could be a good risk/reward trade. For stop placement, I'd want to place my stop below the 50-day EMA, which has been recent support, and I'd adjust my position size for risk using the position size calculator on my website.

However, there are some things to be cautious about. The Fear & Greed Index from CNN is now showing 77 or Extreme Greed – and so it's possible we may be in for a pullback in the market at some point.

Revenue growth at Seeing Machines is also not terribly exciting, with the year-end results showing that revenue grew 15 per cent to A$54.4mn (£31.4mn). This converts into a loss after income tax of A$25.32mn so there is clearly a lot of work to do for the company to achieve profitability.

Whenever a company is as horrifically lossmaking as this, I always find it a good idea to check the cash flow statement and balance sheet. The company had A$58.8mn in cash and cash equivalents and had a significant post-period investment of US$65mn (£53.7mn) through Magna International. In terms of capital and liquidity, Seeing Machines should have more than enough for the foreseeable future – so the risk of a discounted placing isn't one I'm worried about.

One benefit of Seeing Machines is that it's SETS traded – this means you can place orders to buy and sell at different levels on the order book, as well as having automated take-profit targets and stop-losses. This automation suits those with full-time jobs and those who aren't always able to be at the screens. Such automation can't be applied with SETSqx, which is a market maker system.

I'll be interested if the stock breaks out of the 7.4p level, but with us being in Extreme Greed and the market having rallied so sharply so quickly, I'm cautious and think it's not unlikely we'll see a pullback in the near future. ●

CHART 1: SEEING MACHINES' FAILED RALLY

CHART 2: THE TREND MAY BE TURNING

Bearbull

IC OPINION

Special chemistry – capex and cash flow

The link between capital spending and free cash is worth understanding

The sophistication – or lack of it – of financial markets in general and equity markets in particular is a never-ending topic for debate. I tend towards the deferential view, which says that the many brains shaping market prices are likely to be smarter than a single, solitary lump of grey matter. So market prices have a better chance of being right than one punter's stab at valuation. However, the chart for speciality chemicals group **Victrex (VCT)** might tempt me to revise that opinion.

If financial markets are smart, they should see through the flim-flam and get to the meat of the thing. They should, for instance, be able to distinguish between a company that declares lots of accounting profit but little in the way of free cash (bad) from one that majors on the cash flow and lets the bean counters look after accounting profit (good).

Okay, investment life is rarely that clear cut, but the chart shows a simplified version of some features of Victrex over the past 10 years and suggests that the market has been a bit thick. As a result, the share price was out of sync with what was happening. It was rising when it might well have been falling; more recently, it was falling when, perhaps, it should have been rising.

The determining factor with Victrex is the relationship between a group's capital spending and its free cash flow (the cash profit left over for shareholders after all obligations – tax, interest, you name it – have been paid). Ultimately, free cash is what equity investors want because it is theirs and it's real money, not an accountancy variety. So, yes, in the long run generating free cash will determine a company's value. But that's not necessarily so over a shorter timespan, especially if free cash is generated at the cost of investing in the company's long-term development.

£18.70

AT ITS CURRENT £18.70, VICTREX'S SHARE PRICE IS UP 20 PER CENT FROM DECEMBER'S 12-MONTH LOW

We can't be so blunt as to suggest that was happening at Victrex. However, it is clear from the chart that, in the past 10 years, its share price was at its strongest – 2016 to 2018 – when capital spending was dropping; put more bluntly, the price was rising the most when the company's investment in its future was the least.

To smooth the trends, the chart shows the three-year rolling average of Victrex's capital spending and its free cash flow over its 10 financial years to end September 2022. On a yearly basis, capex peaked at £66mn in 2013-14 and dropped to £10mn in 2017-18. Over the same period, free cash flow rose from £32mn to £119mn and the share price (based on the average end-month prices for the previous 12 months) rose 57 per cent from £17.61 to £27.65.

Why the share price movement was 'wrong' is because the market appeared to be tracking the increase in free cash whereas it should have been anticipating it. After all, that's the point of markets; they are a discounting mechanism, offering the value of the future at a price today. So in this example, markets should have responded earlier in Victrex's capital-spending cycle. They should have estimated that high capital spending would lead to increased cash flow as new plant began producing income and marked up Victrex's share price even when free cash was falling.

Next, arguably the market repeated its mistake but in reverse. From 2020 through to 2022, the share price was falling even as capital spending was rising. That trend of rising capex will continue for a while. Victrex's latest capital spending cycle probably topped out at £46mn in 2021-22, but capex will be close to that amount both this financial year and next. Much of the spend finances expansion in China where new plant, which is close to being commissioned, will raise capacity to about 1,500 tonnes of the group's PEEK thermoplastic. That's a significant addition to a group whose annual sales volume runs at about 4,700 tonnes and whose annual sales in China (£40mn in 2021-22) are still less than half the sales in its biggest market, the US, where last year's revenue was £88mn.

In fairness, perhaps the market now shows signs of tracking the right relationship between capex and cash flow. At least Victrex's share price has been moving in the right direction this year. At its current £18.70, the price is up 20 per cent from December's 12-month low. So there may be momentum in the price, although the shares have still badly underperformed the FTSE All-Share index in the past 15 months. As a result – and concerning the search for new holdings for the Bearbull Income Portfolio – shares in Victrex, for so long rated as a high-class growth stock, now just about qualify for high-yield status with a likely 3.2 per cent dividend yield on offer for the current financial year.

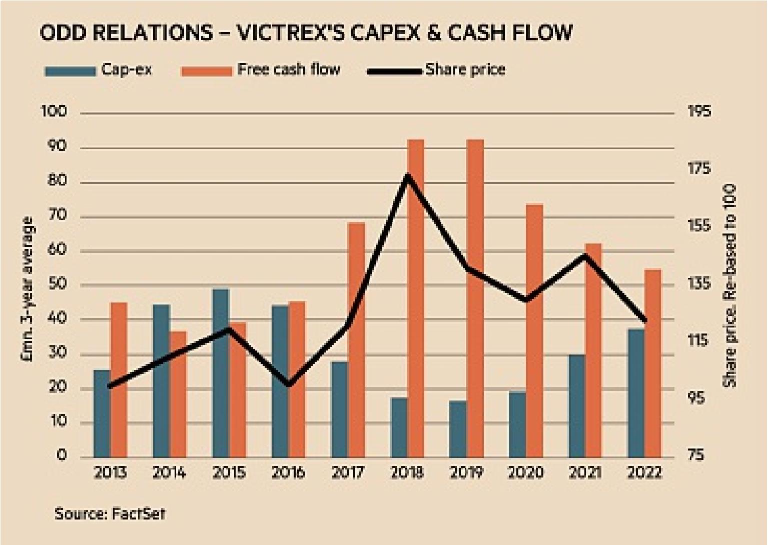
True, when growth stocks show signs of becoming high-yield stocks that can be a concern. For proof, consider pharmaceuticals group **GSK (GSK)**, which,

ULTIMATELY, FREE CASH IS WHAT EQUITY INVESTORS WANT BECAUSE IT IS THEIRS AND IT'S REAL MONEY

as plain old Glaxo, was for much of the 1980s the London market's – arguably the western world's – favourite growth stock. Look at it now with a share price (£14.85) approaching 40 per cent below the level at which it closed the 20th century and offering a yield – 4.1 per cent – that is scant compensation for that decline.

This is not to suggest Victrex is becoming another GSK. The pharma group has never been able to fill the gap caused by the loss of patent protection for its anti-ulcer blockbuster, Zantac. Meanwhile, for many years Victrex has had to cope with competition to produce PEEK, the clever and tough plastic that has a wide range of applications from pistons and pumps to valves and, increasingly, medical implants. Sure, its patents help. Victrex claims more than 200 of them to protect the specifics of production processes. But they are just a building block – albeit an important one – in the barriers to competition that have enabled Victrex to average profit margins of 37 per cent in the past 10 years and return on assets of 17 per cent, a figure that most manufacturing companies would die for. Granted, these ratios are currently at the low end of the range. Even so, 2021-22's profit margin of 29 per cent provides a thick safety blanket and return on assets of 12 per cent remains clear of the level many manufacturers would dearly love for their company's return on equity.

Management is playing down expectations for 2022-23, citing the effects of "unprecedented energy and raw material inflation" and suggesting that "the opportunity to improve on last year's record group volumes is likely to be challenging". As a result, on average, City analysts reckon that group sales volumes will slightly slip from last year's 4,727 tonnes. Ever the optimists, however, they also think volumes will bounce by 5 per cent in 2023-24 as sales in Asia are boosted by China's recovery and the new manufacturing capacity there. They also think underlying pre-tax profits and earnings will follow a similar path, nudging upwards this year and rising by maybe 12 per cent in 2023-24, which would make the respective figures £110mn of profit and 108p of earnings.



Normally I wouldn't rush to buy a stock that was rated at 17 times earnings for a financial year that does not start for eight months. That said, I don't place much store by price/earnings ratios anyway. Also, it's fairly clear that investors who seek to extract their valuation from Victrex's income statement will search in vain. Even assuming that its record operating profit – £128mn in 2017-18 – could be the basis for a valuation that grosses up net operating profit by the group's estimated cost of capital, the estimated value per share would still be well short of the share price – about £14 compared with £18.70 in the market.

It is more productive to focus on the cash flow statement since that shows how Victrex's heavy capital spending – perhaps twice its depreciation charge over a five-year cycle – generates plenty of value when capitalised at the group's likely return on investment.

Granted, some brave assumptions go into an estimated valuation using the cash flow model – none more than the rate at which excess investment returns will fade to the cost of capital, for example – and it is still necessary to be generous about the assumptions made for the group's operating cash flow. Still, it is possible to make the current share price look decent value using as the value drivers a combination of free cash flow and capital spending in excess of depreciation.

It is also encouraging that there is no stock in the Bearbull portfolio that behaves like Victrex. Shares in foundries supplier **Vesuvius (VSVS)** move to similar global macroeconomic signals, but that's the only one. Victrex's idiosyncrasy is backed up by the data. Over the past 10 years, its correlation coefficient with the Bearbull portfolio – a measure of the extent to which their prices move together – is less than 0.3, where 1.0 would be unison and zero would be the absolute opposite. That's good. Over the long haul, price movements showing little relation to each other tend to reduce portfolio volatility without harming returns. Sure, past correlation co-efficients won't necessarily persist. Even so, the combination of intuition and data help persuade me to buy a holding in the stock; just small to start with, maybe more later this year when the acquisition of sausage-skin maker **Devro (DVO)** will bring in a lump of cash. ●

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No Free Lunch

IC OPINION

Is Rolls-Royce in decline?

Why two chief executives disagree about the company's prospects. Paul Jackson reports

During his eight years as chief executive of **Rolls Royce (RR.)**, Warren East had to face a series of crises. Some had been inherited; others came from external events. The most recent was the pandemic, which grounded international air travel – the generator of much of the group's revenues. Rolls had to borrow heavily to stay afloat and introduced a radical restructuring, which cut 9,000 jobs in an attempt to save £1.3bn.

In his last trading update, for the period up to 31 October 2022, East emphasised the progress being made. "The continued recovery in large engine flying hours, record order intake in power systems and resilience in the defence business give us confidence in the future," he said. "Our expertise and strong positions in established markets and investment in new markets place us well to pursue decarbonisation, net zero and evolutionary technologies that can create substantial long-term economic and social value." A disposal had enabled the group to pay back a £2bn loan. Its debt had now become more manageable. Contracts were being renewed, orders were increasing, particularly in the power systems business, and the group was investing in new technologies. Despite Brexit, Rolls will be a partner in six of the 20 aviation research and innovation programmes being funded by the EU.

Its more recent media releases glowed with optimism: "Rolls-Royce supplies large-scale battery storage... to stabilise the Dutch power grid" reads one. Another said that it's developing hydrogen as a means of storing electricity as well as powering aircraft. East expected its investments in electric aircraft and small modular nuclear reactors to produce annual revenues of £5bn by the early 2030s. It was all very reassuring. Rolls-Royce was coming out of the mire, and it was transforming itself at the same time.

Not so, according to his successor, Tufan Erginbilgic. "Every investment we make, we destroy value," he told employees in late January. "We underperform every key competitor out there." He said that investors were losing patience with the group. "This is our last chance. We have a burning platform... it cannot continue." And then, as if trashing East's record, he said: "Rolls-Royce has not been performing for a long, long time... Covid created a crisis, but the issue in hand has nothing to do with it." His message was hardly morale boosting; the *Financial Times* described it as "brutal". It was as though the company was doomed.

There had been rumbles last July, when Anita Frew, who chairs **Croda (CRDA)** as well as Rolls Royce, said that East's replacement need have no experience of aerospace as long as he or she was "used to a big global complex industrial business". Industry experts raised concerns. If neither of the top two senior positions came from the industry, how well would they understand how the long investment cycles work in this business? Would they succumb to seductive short-term solutions that disguised damaging long-term consequences?

£1.3BN

IN 2020 ROLLS CUT 9,000 JOBS IN AN ATTEMPT TO SAVE £1.3BN

She later justified Erginbilgic's appointment by saying that he has "extensive strategic and operational experience and a firm understanding of safety-critical industries, including aerospace, as well as the challenges and commercial opportunities presented by the drive for low-carbon technologies". He was recruited from Global Infrastructure Partners, a private equity firm known for its management of energy transition in large-scale investments, especially in energy and transport. Before that, he had worked at **BP (BP.)** for 20 years, where he invested in biofuels and set up partnerships for charging electric vehicles. He was, Frew said, used to leading "winning teams within complex multinational organisations".

For Erginbilgic, a high-performance culture has no room for businesses that generate low returns. Jam tomorrow might never come. Employees need to "think differently, act differently, make a difference so this business corrects itself. We don't have much time". Rolls-Royce has traditionally sold its engines cheaply, and then made money from maintaining them according to how long they are in the air. He seemed to claim that this model doesn't work. He was reported as saying that, even before the pandemic, its civil aerospace division was failing to generate adequate returns in either cash or profit. That suggests the problem might persist even if long-haul travel numbers increase again. Some fear more job cuts.

Erginbilgic may have been trying to shake employees out of complacency by urging them to focus on the bottom line. A hard-headed objective analysis, or a naïve conclusion by an inexperienced outsider? There could be another reason. The best game plan for chief executives is to underpromise and overdeliver. Longer-serving ones such as East need to balance this by conveying optimism to justify their past performance; new ones prefer to lower expectations by finding faults wherever they can. It's called kitchen-sinking. Whether or not Erginbilgic is an extreme example, investors seem relatively unfazed: the share price fell only slightly in response to his comments. The danger is that he might mean what he says. ●

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