



BY MARTEN & Cº

INTERNATIONAL

Herald Investment Trust

Investment companies | Annual overview | 25 June 2024

Heralding in the age of Al

In a world where AI stocks have appeared to determine the fortunes of global equity markets, Herald Investment Trust (HRI) offers a way to capitalise on these tailwinds. Further, it is trading on a discount within a universe arguably known for its high valuations, currently this is 11.5%.

HRI's war chest of liquid capital means that it may be able to take advantage of these opportunities, as well as to profit from possible inefficiencies of the UK equity market.

HRI has been able to sustain its track record of outperformance, with its NAV performance surpassing that of the US small-cap technology sector, despite its substantial allocation to the UK, a region which has materially underperformed the US over the last five years.

Small-cap technology, telecommunications and multi-media

HRI's objective is to achieve capital appreciation through investments in smaller quoted companies in the areas of telecommunications, multimedia and technology. Investments may be made across the world, although the portfolio has a strong position in UK stocks. The business activities of investee companies will include information technology, broadcasting, printing and publishing and the supply of equipment and services to these companies.

Year ended	Share price total return (%)	NAV total return (%)	Deutsche Numis ex IC plus AIM (%)	Bloomberg US 2000 Technology (%)
31/05/20	11.7	12.1	(12.1)	18.3
31/05/21	46.5	44.4	55.6	41.8
31/05/22	(17.7)	(11.6)	(11.7)	(11.7)
31/05/23	1.7	(5.3)	(11.1)	2.2
31/05/24	20.8	19.1	12.5	6.3

Source: Morningstar, Marten & Co

Sector	Global Smalle Companie
Ticker	HRI LI
Base currency	GB
Price	2,190
NAV	2,475
Premium/(discount)	(11.5%
Yield	N

Share price and discount

Time period 31/05/2019 to 20/06/2024



Source: Morningstar, Marten & Co

Performance over five years

Time period 31/05/2019 to 31/05/2024



Source: Morningstar, Marten & Co





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Domicile	United Kingdom
Inception date	21 February 1994
Manager	Katie Potts
Market cap	£1,191m
Shares outstanding (exc. treasury shares)	54.2m
Daily vol. (1-yr. avg.)	88.2k shares
Net gearing	8.3%
Click for our most re- update note	cent
Click for an updated factsheet	HRI 😘
Click for HRI's peer of analysis	group 😘



Click to provide feedback to the company



Click if you are interested in meeting HRI's managers



Click for news, research and events





Fund profile

More information can be found at the trust's website: www.heralduk.com.

Established in 1994, HRI invests globally in small technology, communications and multimedia companies with the aim of achieving capital growth. It is the only UK listed fund of its type. The trust invests globally, but has a strong bias towards the UK, which further distinguishes it from other global technology funds, which can tend to be biased towards the US.

New investments in the fund will typically have a market capitalisation of \$3bn or less, but are generally much smaller when the first investment is made. If successful, these can grow to be a multiple of their original valuation. This type of investing is longer-term in nature and so the trust's portfolio tends to have low turnover. Reflecting the risks inherent in this type of investing, and the liquidity constraints of having a small-cap investment remit, the trust maintains a highly diverse portfolio of investments (typically in excess of 250) to help mitigate this risk.

HRI's lead fund manager, Katie Potts, has managed HRI since its launch.

Katie was a technology analyst at SG Warburg (later UBS) prior to launching the fund. She owns a substantial stake in the company and a significant minority stake in the management company, and this might suggest that she is motivated to ensure the success of the fund.

Under Katie's stewardship, HRI has navigated several downturns and has benefitted from the team's ability to select companies capable of weathering difficult conditions. HRI's closed-ended structure has also been used enhance the trust's returns. Whilst open-ended funds can be forced sellers, HRI can capitalise on its ability to gear to pick up lines of stocks at what the managers believe are attractive prices, though it has been keeping a net cash allocation more recently (we discuss this further on page 10).

HRI's size, focus on smaller companies and the depth of expertise within the management team mean that it plays an important role as a provider of capital to listed technology companies looking for expansion capital. This can be particularly valuable in a downturn and may offer HRI additional opportunities to generate alpha when others are not able to.

HRI offers a liquid subcontract for any investor looking to gain access to this part of the market. Given their different focuses, an investment in HRI could be complementary to an investment in one of the large-cap technology funds.

Management arrangements

HRI owns a 15.5% stake in its management company, Herald Investment Management Limited (HIML), which was valued at £5.6m as at 31 December 2023. HIML also manages an OEIC, the Herald Worldwide Technology Fund (which has more exposure to large-cap companies than the trust).

Katie leads a team of eight analysts, three of whom have regional responsibility for overseas investments. The team is based in London, except one member who is based in New York to help support corporate access. US companies do not come

HRI's closed-ended structure can be advantageous during market selloffs



to the UK as much as they used to, and HRI feels it necessary to have a US presence to enable frequent contact with companies. The HIML team can also draw on the knowledge of three consultants. We have included some biographical details on the team at the end of this note. Research responsibilities are organised along sector lines, but Katie has also delegated responsibility for managing the Asian portfolio to Fraser Elms (the deputy manager) and Hao Luo; the continental European portfolio to Taymour Ezzat; and more recently the North American portfolio to Peter Jenkin.

Market update

HRI's recent performance could be described as a tale of two cities, a possible reflection of both the recent strength of technology sector and the woes of the UK market. HRI's performance may have captured some of the extremes of both market dynamics, having achieved gains on the back of the rally in AI-linked companies, while also trying to capitalise on the opportunities presented by the declining liquidity in the UK small-cap market.

AI - no longer science fiction

Artificial intelligence has been a major driver of the performance of global equity markets throughout 2023 and so far in 2024. The predicted efficiency gains from this technology have supported the share prices of companies heavily involved in AI, offsetting the possible challenges posed by higher interest rates. Nvidia, the US semiconductor giant, is the arguable stand-out. Its processors are the preferred choice for AI software, leading to a nine-fold increase in its share price since the start of 2023.

However, the HRI team note that the enthusiasm for AI (and the resulting investor demand) has been mainly concentrated in companies associated with what the team refers to as 'infrastructure and supply', the first level of AI development and adoption. In practical terms, this has meant that the biggest winners of the AI tailwinds have arguably been a small group of semiconductor firms, their suppliers, and select software companies. In the HRI team's mind these companies have been critical in enabling companies to develop and integrate AI software, one notable example of which has been the semiconductor giant Nvidia, which has reported gains of c.150% so far this year.

This limited group of winners has skewed the performance of managed funds. For instance, 64% of UK active equity funds outperformed the MSCI ACWI in the 30 days leading up to Nvidia's latest earnings call, but only 14% did so in the following 30 days.

The HRI team suggests that, despite the excitement in public markets, there seems to be a delay in recognising the AI opportunity compared to the activity seen within private capital, which has been more proactive. Notable investments in UK-based private AI firms include \$1bn for Wayve Technologies and \$50m for Poly AI in April.

The HRI team note that the trends around AI are not the only ones driving the sector. They have identifies other significant trends, such as the push towards carbon neutrality, onshoring of production, and the increasing demands on cybersecurity systems. The team also emphasises that in any major software trend, long-term

Al has been a major driver of global equity returns, and is still in its infancy

Al Products: Self Driving

Cars, Al Actors / Avatars, Drug Discovery, Diagnosis, Prenasalised Learning, ???



winners are often the 'picks and shovels' companies. HRI quotes the dot-com bubble as a clear example, with survivors like Cisco — which provided essential networking hardware and software — being the biggest winners.

The HRI team has mapped out the Al-value chain, as seen in Figure 1, identifying potential future winners. The team sees four broad phases of adoption, with the 'infrastructure & supply chain' and 'enablers' being the market's current focus. However, as we mentioned earlier, the 'infrastructure & supply chain' companies (the picks and shovels of Al) have seen the most investor attention, which may mean that there is significant potential for gains in other areas.

Examples LLMs, GPUs, Infrastructure 000 Accelerators, & supply chain 000 Networking, Advanced Packaging CoPilots, Chatbots, Enablers Software Assistance, Design Assistance, ΑI Adoption Call centres, Software Adopters Coding, Customer Support, (users) Creative Generation, Tutoring, Matching

Novel business

and products

Figure 1: Phases of Al adoption

Source: Herald

UK-centric issues

The team notes that the UK market has faced several challenges, compounding year-on-year, leading to a growing disconnect between the share price performance of UK companies and their fundamentals. Since our last report in November 2023, UK equities have experienced consistent outflows, continuing a nearly-decade-long trend. In 2023, outflows from UK open-ended funds reached a record £13.6bn, with billions more withdrawn so far in 2024.

This aversion to UK equities possibly stems partly from persistent political risks, which may have eroded investor confidence since the 2016 Brexit referendum. Additionally, investors may have viewed the UK market as regionally biased and dominated by cyclical stocks in the FTSE 100, and sectors that have recently underperformed the US tech sector.

The exodus of market participants has reduced liquidity may have complicated financing efforts for UK companies. Raising capital through IPOs may have become more challenging due to the scarcity of domestic capital relative to overseas

Investors have been pulling money out of the UK



markets. The HRI team comments on the difficulty that UK tech entrepreneurs are facing in growing their early-stage businesses, less they relinquish large ownership stakes to entice investors.

The team has also commented that the lack of liquidity in the smallest segments of the UK market has complicated the investment thesis in some promising UK smaller companies, less HRI find itself in a position where it cannot readily exit their holdings.

As a result of the decline in market participants, private buyers of UK companies continue to remain active in the region, with private-equity deal-making in the UK still above its pre-COVID levels, especially from international buyers as per transaction data; a reflection of the valuation opportunity within the UK.

Rates

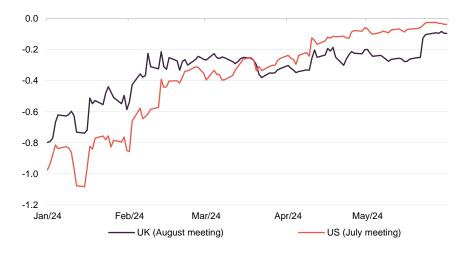
Whilst the technology sector benefits from the secular tailwinds outlined by the HRI team, as arguably demonstrated by the outsized returns of the 'Al winners', growth companies remain vulnerable to global interest rate expectations. This vulnerability is possbily heightened because technology stocks typically trade at high valuations compared to other sectors, arguably reflecting their growth potential, which may make them more sensitive to interest rate changes.

Since our last report on HRI, there have been changes in the market's rate expectations, with there being a potential divergence between the US and the UK/Europe. Higher GDP expectations, a tight labour market, and fiscally supportive policies have led the US Federal Reserve (Fed) to adopt a more hawkish stance compared to the Bank of England (BoE), given the differences in their messaging.

In its most recent meeting, the BoE maintained rates at 5.25% but did not rule out a possible rate cut in its upcoming June meeting. As shown in Figure 2, the market anticipates a higher likelihood of an interest rate cut in the UK in the near term compared to the US, based on the outcomes of the BoE's 1 August meeting and the Fed's 31 July meeting.

Lower inflation and a strongerthan-expected UK could be the catalyst for a market rerating

Figure 2: Implied change in policy interest rate cut by July/August 2024 meetings



Source: Bloomberg, as of 28/05/2024



Investment process

Bottom-up stock selection based on fundamental analysis. HRI's universe is vast with over 5,000 listed companies

Fundamental research

HRI's investment process is driven by bottom-up stock selection, based on fundamental research of the universe of smaller companies that make up the telecommunications, multimedia, and technology sectors. The listed universe within this space includes more than 5,000 quoted companies, but in their respective markets, these companies also compete against many more unquoted companies and the HRI team believes it is important to get to know as many of these as possible. This is not just because unquoted companies may eventually list, but because the information gleaned by the HIML team from competitors, customers and suppliers can be a useful source of ideas, valuable in evaluating how sustainable a company's competitive position is and assessing the risks within a business, as well as providing a useful means of cross-referencing the information provided by another company's management.

Idea-generation

In terms of idea-generation, the HRI team believe that HIML benefits from being a major player in the UK and companies will routinely make the effort to present to the team. The HRI team also believe that US is a very important market, however, and as small-cap US technology companies are visiting London less frequently, HIML established a satellite office in New York. In addition, Katie visits the US for around five weeks a year to meet companies, and the wider HIML team also travels extensively.

Searching for companies with sustainable advantages

At heart, the members of HIML's team are investors. Rather than just looking to identify companies with the capacity to grow, they are looking for companies that they believe are capable of making decent returns on capital or those with extraordinary earnings growth. This requires an analysis of a company's products, markets and competitive position. In this regard, the HIML team is looking for companies where it can see clear markets for its products and where it has advantages over the competition that mean it is more likely to succeed. These come in a range of forms, but could include superior technology, network effects or barriers to entry such as specific intellectual property, patents and the like.

Reflecting the benefits that can be accrued from making early-stage investments in technology companies, loss-making companies are considered for the portfolio. However, the team needs to be able to see both a significant market opportunity and a clear path to profitability. The team tends to be wary of companies that are trading on large multiples of sales, and prefers not to own stocks trading on what it describes as 'concept valuations'.

The team says that it does not attempt to model companies' cash flows in any great detail and that, for the types of companies in which it is investing, there is usually far too much uncertainty to make this a useful exercise. However, the team does spend time analysing companies' accounts to gain an understanding of how a business works and the robustness or otherwise of its earnings.



The importance of diversification

The nature of smaller technology, multimedia and telecommunications (TMT) companies is that they can be dependent on a single product or service and, whilst success can propel share prices many times higher, failure can mean bankruptcy. The HRI team believe that new technologies can create value quickly, but they can also severely disrupt existing business models, and product life-cycles can be quite short. The high degree of stock-specific risk that this entails is countered by having a high degree of diversification within the portfolio.

Liquidity considerations and profitability play a part. These small-cap positions can be less liquid and, from a risk management perspective, this inherently places a limit on the size of each position, as larger positions can be harder to buy and sell and are more likely to move the market. Furthermore, stocks that are held in large size by other investors can make the team nervous, in case these shareholders ever become forced sellers.

In general, HRI holds less than 5% of the share capital of the companies in its portfolio, if they are loss making businesses. This gives the manager room to support a company if it needs to undertake a fundraising. The manager also aims not to own more than 10% of the issued capital of its holdings, even if they are profitable businesses.

Reflecting this, the team comments that the handful of companies where HRI holds a larger percentage of ownership are often those that needed to raise cash, but found insufficient large investors willing or able to invest other than HRI. Katie has said previously that you can damage your own property by failing to support a fundraise.

The HIML team is conscious that, in some investors' eyes, their 326-stock portfolio could be a large number of companies to follow, but it counters that the small companies in which it is investing have far simpler business models than most large-cap companies, and that this makes them much easier to follow in detail. Cross-referencing between suppliers, customers and competitors is an important part of the investment process for the HRI team.

An alternative strategy could be to move up the market-cap scale to find greater liquidity, which would allow the team to increase the average position size and, in the manager's view, necessitate a migration to a much heavier US weighting. However, the team believes that it is crucial that HRI maintains exposure to microcaps. Katie says that this is where HRI's best returns have originated, with many stocks rising by more than 10 times. Katie also believes that smaller-cap stocks are generally better value as these companies are not well covered by analysts. MiFID II has contributed to a reduction in the amount and quality of research available.

Portfolio construction

HIML's investment process is driven entirely by stock selection and without reference to any benchmark index. The portfolio has long had a bias to the UK. This reflects Katie's belief that the UK technology sector is more vibrant than Europe's; UK stocks are, generally, more reasonably valued than US ones, and Asian stocks generally have inferior business models (frequently they are providing outsourced manufacturing services to larger tech companies and often have little pricing power).

Stock-specific risk necessitates that HRI's portfolio is diversified

Portfolio construction is driven by stock selection

Liquidity is an important driver of position size



HRI has some minor exposure to unquoted companies, including its stake in HIML. This is not an area that the trust is focused on, and no more unquoted investments are currently planned. The HIML team believes that it is useful that HRI retains the flexibility to hold unquoted investments, however, as this gives it the opportunity to retain attractive companies that choose to delist.

Sell discipline is driven by valuation and the viability/maturity of the business model

Sell discipline

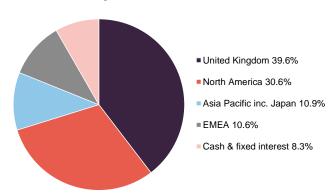
Stocks are sold when the team believes that valuations no longer reflect the growth prospects of the company, their margins start to normalise relative to the wider market (an indication that the company's intellectual property is no longer capable of supporting superior returns) or when there is a clear deterioration in the business model. Companies that have grown larger are typically top-sliced to fund new investments and provide further capital to the earlier-stage smaller companies.

Asset Allocation

HRI's team believes it has a highly diversified portfolio of global small-cap technology stocks, with the trust currently invested in 326 companies. HRI tends to hold positions for the long term, with the manager topping and tailing positions where it feels these have run ahead of themselves or represent good value. Portfolio turnover is typically in the region of 15% per annum, suggesting an average holding period of around six to seven years, but HRI's larger holdings tend to have been held for much longer.

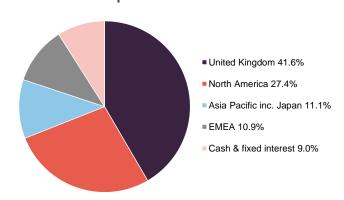
HRI's allocation may possibly differentiate it from both its open and closed ended peers. HRI invests into smallest end of the market, gaining exposure to companies to which open-ended funds might be unable to risk taking the same levels of exposure. In a market that is possibly being driven by a narrow band of companies, HRI's idiosyncratic approach to technology investing offers an attractive diversification opportunity.

Figure 3: Geographic allocation as at 30 April 2024*



Source: Herald Investment Management *Note: as a proportion of gross

Figure 4: Geographic allocation as 30 September 2023*



Source: Herald Investment Management *Note: as a proportion of gross



HRI's US allocation has increased on the back of relative outperformance

HRI retains a cash position, to

capitalise on possible price

inefficiencies

HRI's asset allocation has remained largely consistent since our last note, although there has been an increase in its US exposure. This has come about due to the outperformance of HRI's US holdings, rather than an intentional allocation by the team. This has led to the team trimming its US allocation on strength, with 2024 being the highest period of turnover within its US allocation.

HRI does not hedge its currency exposure, which can lead to deviations in its regional exposure for reasons not associated with the performance of individual companies. Since our last note, the dollar has depreciated against the pound, offsetting some of the US's outperformance.

Cash levels - keeping the war chest primed and ready

HRI keeps a portion of its assets in cash (or liquid equivalents). Although sustaining a material (c.8%-10%) amount of cash (i.e. more than required for managing trading or liquidity needs) could be viewed as a negative, the HRI team believes that the opportunities presented by the inherent illiquidity of their smallest companies, and the general lack of market participants, continues to justify running a high level of cash, as they believe that they are in a position to support investee companies at times where not doing so could harm an investment.

The team believes that a high cash level may leave HRI in a position to benefit from opportunities such as when forced sellers of UK assets emerge; for example, openended funds meeting their daily liquidity needs, or wealth managers making strategic decisions to reduce their UK exposure. Regardless of the nature of the sale, the HRI team notes that there are increasingly fewer counter parties to those seeking to sell UK assets. This may increase the spread required to generate sufficient liquidity and therefore improves the entry price for HRI. They suggest that another opportunity comes from entrepreneurs needing to offer increasingly attractive terms when attempting to raise capital.

Top 10 holdings

Figure 5 shows HRI's top 10 holdings as at 30 April 2024 and how these have changed since the end of September 2023 (the most recently available data when published our last note). There has only been one new entrant into the top 10- Trustpilot, as a result of both top-ups by the team and strong performance by the company. Other noteworthy increases include Varonis Systems, Pason systems, and Franklin Covey, with the latter two being new entrants into HRI's portfolio.

Generally speaking, one may not expect to see major shifts in HRl's top 10 between notes. The team prefers to initiate new positions through small holdings (c.0.3%), and either let them grow in weighting via their share price or top up the position as the investment case is increasingly realised.



Figure 5: Top 10 holdings as at 30 April 2024

Holding	Sector	Country	Allocation 30 April 2024 (%)	Allocation 30 September 2023 (%)	Percentage point change
Super Micro Computer	Technology hardware & equipment	US	4.3	3.9	0.4
BE Semiconductor Industries	Tech hardware and semiconductors	Netherlands	2.2	2.1	0.1
Next Fifteen Group	Media	UK	2.0	1.6	0.4
Fabrinet	Tech hardware and semiconductors	US	1.7	1.9	(0.2)
Diploma	Support services	UK	1.7	2.2	(0.5)
Silicon Motion Technology	Tech hardware and semiconductors	US	1.6	1.3	0.3
Trustpilot	Media	UK	1.6	0.9	0.7
Volex	Tech hardware and semiconductors	UK	1.4	1.6	(0.2)
Descartes Systems	Software & computer services	Canada	1.3	1.3	0.0
YouGov	Media	UK	1.3	1.4	(0.1)
Total of top 10			19.1	18.8	0.3

Source: Herald Investment Management, Marten & Co

Trustpilot

Trustpilot (uk.trustpilot.com) is the UK-listed and Danish-headquartered online review provider. Trustpilot IPO'd in 2021; however, the HRI team delayed investing until 2023, believing it was mispriced when it entered the market. Recent results for its financial year ending 31 December 2023 were positive. Trustpilot crossed a milestone in 2023, reporting its first profitable year, with an after-tax profit of \$7.1m, a positive EBITDA of \$15.5m (compared to a loss of \$4.4m in the previous year) and an 18% YoY increase in revenues.

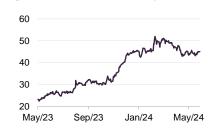
Trustpilot also reported positive user growth, with total cumulative reviews reaching 267m, a 25% increase YoY. The number of reviewed domains rose to 1.1m, and active domains exceeded 116,000 for the first time. Trustpilot continued to invest in its platform, implementing new models to predict fake reviews and prioritising genuine reviews. Trustpilot also appointed a new CEO in September 2023, Adrian Blair. He previously worked in the 'digital disruption' industry, having run accounting and healthcare software firms prior to joining Trustpilot, Adrian's tenure marked the start of a rally in Trustpilot's share price, which is up c.170% since the start of September.



Source: Bloomberg

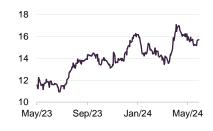


Figure 7: Varonis Systems



Source: Bloomberg

Figure 8: Pason Systems



Source: Bloomberg

Varonis Systems

Varonis Systems (www.Varonis.com) is a US data security company and sits just outside HRI's top 10 holdings. Varonis is a cyber security provider, focusing specifically on securing its clients' data, doing so using cloud-based software rather than having it installed on its client's local devices. As per its most recent results, released for the financial year ending 31 December 2023, Varonis continues to transition to a software-as-a-service (SaaS) business model, which its management believe will improve its recurring revenues and is expected by them to be the primary driver of the company's near-term growth. To that end, Varonis's management offers its SaaS customers easier deployment, faster time-to-value, and powerful automation capabilities when compared to non-SaaS. The company has also increased its utilisation of AI, via the launch of Athena AI.

Whilst the company is loss-making, its reported loss for 2023 of \$100m was 20% lower than the prior year. The company also reported a 5% growth in YoY revenues as well as a c.90% renewal rate in its clients and a 17% increase in annual recurring revenue. Varonis's management remains confident in the structural opportunities within the sector, and it highlights remote working, increasing cloud adoption, and the rise of generative AI tools as all increasing the amount of data which will require security.

Pason Systems

Pason Systems (www.pason.com) is a Canadian-listed leading global provider of specialised data management systems for drilling rigs. Pason's recent earnings (for the financial year ending 31 December 2023) showed that the company did not reflect the wider fall in drilling sector activity, generating a 10% increase in YoY revenues despite a 5% decrease in the average number of active US land drilling rigs. This revenue growth was driven by increased revenues generated per drill site and by its International Business Unit and Energy Toolbase. Though down slightly on the year, Pason still reported a high, near-50% EBITDA margin.

The company also purchased the remaining outstanding shares of Intelligent Wellhead Systems, a developer of valve management solutions for drilling rigs, which Pason's management believes will help diversify its future revenues. Management is also confident that the structural drivers surrounding the oil industry will continue to support future revenue growth, such as consolidation within the oil industry likely to increase demand for consistent automation and analytics technologies.

Performance

As can be seen in Figures 10 and 11, HRI has been able to generate returns which exceed both the Deutsche Numis Smaller Cos plus AIM ex IC (which captures the performance of the wider UK small-cap market) and the Bloomberg US 2000 Technology Index (a proxy for the US small-cap technology space that is also a close proxy for the Russell 2000 Index) for all periods of three months and above.

HRI's NAV has still been able to edge ahead of the US small-cap sector while still having a near-50% allocation to the UK, a region which has underperformed the US due to reasons we noted earlier.



150

140

130

120

110

100

100

Nov/21

May/22

Nov/22

- HRI NAV/Numis Smaller Companies Plus AIM Ex-Inv Co's Index

May/23

Nov/23

May/24

Figure 9: HRI's NAV total return relative to various indices, over five years to 31 May 2024

Source: Morningstar, Marten & Co

Nov/19

May/20

- HRI NAV/Bloomberg US 2000 Tech Index

Nov/20

80 — May/19

Figure 10: Cumulative total return performance over periods ending 31 May 2024

May/21

	1 month (%)	3 months (%)	6 months (%)	1 year (%)	3 years (%)	5 years (%)	10 years (%)
HRI NAV	4.8	4.3	20.2	19.1	(0.3)	61.4	207.8
HRI Share price	3.3	5.1	20.6	20.8	1.2	65.5	220.8
Deutsche Numis Smaller Cos plus AIM ex IC	6.4	11.8	16.8	12.5	(11.7)	20.8	56.8
Bloomberg US 2000 Technology	3.0	(1.4)	9.0	6.3	(4.0)	61.0	N/A*

Source: Morningstar, Marten & Co. * The Bloomberg US 2000 Technology was launched on 30 March 2015. Since its inception it has generated a total return of 196.1%, compared to the 199.9% NAV total return of HRI.

2023, large and in charge

The outperformance of larger companies and US-listed stocks in 2023's global returns, as we described in our market update section, is apparent within Figure 11. Of HRI's smaller, sub \$3bn allocations, only its Asia Pacific investments were able to generate a positive return. We note that the outsized returns of HRI's EMEA large-cap allocation was a result of the takeover of EQS group, described in the next section.



Regional IRR Returns	IRR all investments	IRR – investments with market cap above \$3bn	IRR – investments with market cap below \$3bn
UK	(8.7)	28.5	(10.5)
North America	31.1	84.8	(9.8)
Asia Pacific	14.8	38.5	3.5
EMEA	4.5	146.2	(11.7)
Total Company	5.7	72.1	(9.2)

US equity gains have offset HRI losses in the UK market

The arguable standout trend in Figure 11 has been the influence of the AI rally on stock returns, with investors favouring the larger technology stocks, particularly those in the US, over the smaller. At the other end of the scale, rising interest rates may have also weighed on the relative performance of smaller companies. In the case of the latter, this partly reflects that they tend to have a higher portion of their value discounted from some point in the future, but in some instances, risk may have increased as debt will be both more expensive and may be harder to come by at the margin.

Key contributors

We have highlighted four companies within HRl's portfolio which have been major contributors to its 12-month return: Super Micro Computer, Celestica, Silicone Motion Technology, and EQS Group. We also note that Trustpilot, which we described on page 11, was also one of larger contributors to HRl's returns.

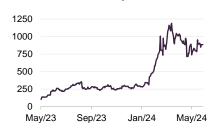
Super Micro Computer

Super Micro Computer (www.supermicro.com) is a producer of high-performance and high-efficiency servers. Based in Silicon Valley, it provides servers and platforms for a variety of markets, including enterprise data centres, cloud computing, artificial intelligence, fifth generation (5G) and edge computing. According to its recent announcement its demand for its Al solutions led to a three-fold YoY increase in sales for Q1 2024 to \$3.9bn. 2024 is on track to be a record year for the company, with a projected maximum revenue target of \$15bn for the financial year.

Its management credits the performance to "Strong demand for AI rack scale plugand-play solutions, along with our team's ability to develop innovative direct liquid cooling (DLC) designs, enabled us to expand our market leadership in AI infrastructure".

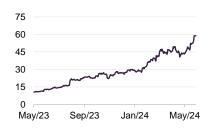
HRI reported share price gains of c.327% over 2024, with Super Micro Computer contributing 4% to HRI's total return over the period. The team has been trimming its holding for the purposes of good portfolio management.

Figure 12: Super Micro Computer



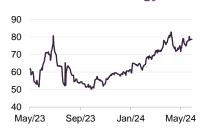
Source: Bloomberg

Figure 13: Celestica



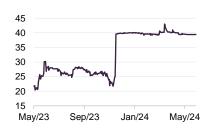
Source: Bloomberg

Figure 14: Silicon Motion Technology



Source: Bloomberg

Figure 15: EQS Group Technology



Source: Bloomberg

Celestica

Celestica (www.celestica.com) is a Canadian firm that provides solutions to optimise supply chains, ranging from design and engineering to logistics and fulfilment. Connectivity and cloud solutions account for c.60% of its revenues.

Celestica has started 2024 on a strong footing, with the company reporting a 20% YoY increase in its Q1 2024 earnings (compared to Q1 2023), as well as improving its margins and significantly increasing its earnings per share and free cash flow. The start of the year has been so strong that Celestica's management has raised its outlook for its 2024 financial year, increasing its revenue target from \$8.5bn to \$9.1bn. This comes on the back of a positive 2023, where Celestica reported 10% growth in revenues and its highest-ever profit margin of 5.6%.

Silicon Motion Technology

Silicon Motion Technology (www.siliconmotion.com) is an American-Taiwanese company that develops NAND flash controller integrated circuits for solid-state storage devices. The company saw its shares rally over the fourth quarter of 2024 after announcing positive Q4 2023 and Q1 2024 results, which reversed a downward trend that had seen the share price fall c.40% from its 2022 peak. Its results note that a stabilising of demand in end markets and that the benefits of ongoing structural tailwinds, such as the rollout of 5G networks, are coming through. The results also note that it is also benefitting from management initiatives, such as greater use of outsourcing and successful expansion into the Enterprise SSD market. The full-year outlook has been revised upwards, with revenues expected to reach c.\$815m by year end, which would be a 30% increase YoY, and an expected margin of c.45%.

EQS Group

EQS group (www.eqs.com) is a Germany-based international cloud provider in the fields of corporate compliance, investor relations and sustainability reporting. EQS was subject to a takeover by US private equity firm Thoma Bravo in November 2023, which valued the company at c. €400m (the purchase price of €40 per share was a 53% premium to the undisturbed price). EQS's founder-CEO Achim Weick highlighted that Thoma Bravo's historical track record with "transformative technologies" made it the right partner for the expansion of EQS.

Dividend

HRI is focused primarily on generating capital growth, and dividend income makes up only a small part of returns. The consequence of this is that HRI only declares a dividend where this is necessary to retain investment trust status, and in practice, no dividend has been declared since 2012.



Premium/Discount

Over the last five years, as of 31 May 2024, HRI has traded on a consistent discount, averaging 14.2%. Over the last 12 months, its discount has become more stable, as can be seen in Figure 16, trading on a 12-month average of 14.0%, ranging from a max discount of 17.2% to a minimum of 10.8%. HRI currently trades on a 11.5% discount.

HRI's discount trades just above its long-term average

It can be argued that HRI's discount is in part a reflection the wider demand for technology stocks. For example, its discount narrowed from its COVID-19 low following the COVID-related market rout in March 2020. More recently, HRI's discount has begun to narrow on the back of the AI rally. We also note that its discount has stabilised over the last 18 months, possibly aided by the board's significantly increasing its repurchase efforts (see below).

Figure 16: HRI premium/(discount) over five years



Source: Morningstar, Marten & Co

2023 was a record year for share repurchases, with the board continuing that trend into 2024, as can be seen by Figure 14. Whilst HRI's policy is not to attempt to control the discount, because it is not considered appropriate given the limited liquidity available within the underlying portfolio companies, the trust will repurchase shares opportunistically. Where repurchases are undertaken, the board's aim is to enhance the NAV per share for remaining shareholders.



7,000,000
6,000,000
5,000,000
2,000,000
1,000,000
0
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Figure 17: HRI share repurchases over the past 10 calendar years

Source: Herald Investment Trust

Fees and costs

Tiered management fee structure with no performance fee element

1% annual management fee up to assets of £1.25bn and 0.8% thereafter; no performance fee HIML is entitled to an annual management fee of 1% of HRI's net assets up to £1.25bn and 0.8% of HRI's net assets above this level.

The NAV is calculated monthly using mid-market prices, which is somewhat unusual, as most NAVs are calculated at bid prices. However, given that many of HRI's underlying holdings trade on wide spreads, the mid-market valuation gives a better indication of the true value of the portfolio. There is no performance fee. The management fee also covers the cost of company secretarial services, which HIML has delegated to Law Debenture Corporate Services.

In the year to the end of December 2023, HRI's ongoing charges ratio was 1.07%, slightly higher than the 1.05% of the year before. The asset management contract is subject to 12 months' notice.

Capital structure and life

Simple capital structure

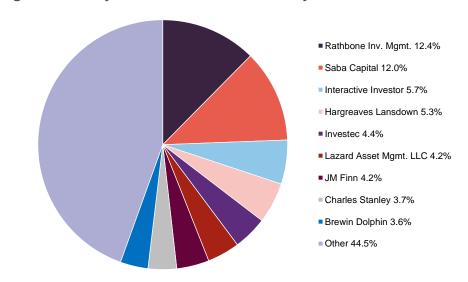
HRI has one class of ordinary share in issue. It can gear up to 50% of net assets HRI has a simple capital structure with one class of ordinary shares in issue. Its ordinary shares have a premium main market listing on the London Stock Exchange and, as at 18 June 2024, there were 54,235,252 in issue with no shares held in treasury.



The trust is permitted to borrow up to 50% of net assets; however, it currently has no form of credit. It previously had a £25m multi-currency revolving loan facility with RBS that matured on 31 December 2019 and was not replaced. As at 30 April 2024, HRI had net liquid assets of 8.3% of its total net assets, held in a combination of cash and government bonds.

Major shareholders

Figure 18: Major shareholders as at 31 May 2024



Source: Bloomberg

Unlimited life with three-yearly continuation votes

HRI does not have a fixed life, but shareholders are offered a continuation vote every three years. The next continuation vote is scheduled for the trust's AGM in April 2025.

Board

HRI now has a new chairman, Andrew Joy

HRI's board is composed of six directors, all of whom are non-executive and considered to be independent of the investment manager. The current chairman, Andrew Joy, was appointed to the role in April 2023. He replaced Tom Black, who had indicated his intention to retire from HRI's board at its AGM in April 2023. Karl Sternberg has also retired, following nine years on the board as a non-executive director.

Figure 19 shows the current composition of the board and provides some information on members' length of service and shareholdings in the company. It is board policy that all serving directors retire and offer themselves for re-election annually.



Christopher Metcalfe has made his inaugural purchase of HRI shares

Recent share purchase and disposal activity by directors

As is illustrated in Figure 19, with the exception of Priya Guha who only joined the board in December, all directors have personal investments in the trust, which we consider to be favourable as it helps align directors' interests with those of shareholders. One director has purchased HRI shares during the last 12 months. This was Christopher Metcalfe, who made his inaugural share purchase acquiring 3,000 shares on 25 April 2024 for 2,076.84p per share. None of the directors has disposed of any shares during the last year.

Figure 19: Board member – length of service and shareholdings

Director	Position	Date of appointment	Length of service (years)	Annual fee (GBP)	Shareholding 2	Years of fee invested ³
Andrew Joy	Chairman	1 October 2022	1.7	42,900	6,000	3.0
Stephanie Eastment	Chair of the audit committee	1 December 2018	5.5	34,650	3,200	2.0
James Will	Senior independent director	21 April 2015	9.1	32,340	6,000	4.0
Priya Guha	Director	13 December 2023	0.5	29,400	-	-
Henrietta Marsh	Director	1 September 2019	4.7	29,400	1,000	0.7
Christopher Metcalfe	Director	24 April 2024	0.1	29,400	3,000	2.2
Average (service length	th, annual fee, shareholding	, years of fee invested)	3.6	33,015	3,200	2.0

Source: Herald Investment Trust, Marten & Co 1) For HRI's financial year ended 30 June 2024. 2) Shareholdings as per most recent company announcements as at 29 May 2024. 3) Years of fee invested based on HRI's ordinary share price of 2,1600.00p as at 29 May 2024.

One out of the three mostsenior board positions is held by a woman

Board diversity

At the time of writing, the board has a 50/50 split in terms of gender identity (men/women), with one of the most-senior positions (chair of the audit committee) held by a woman, and two (chairman and senior independent director) held by a man.

At present, the board is composed of five individuals who are classified as White British or other White (including minority-White groups) and one that is minority ethnic. Appointments to the board are made on merit. However, the board will ensure that a diverse group of candidates is considered, and these will be evaluated against objective criteria having regards to the benefits of diversity – including gender, social and ethnic background and personal strengths, experience and knowledge.

Andrew Joy (chairman)

Andrew is highly regarded for his extensive knowledge of the financial sector and of the high-growth part of the smaller company sector. He was one of the founding partners of Cinven, a leading private equity firm investing in Europe and US, and has been chairman or director of numerous growth companies over the past 30 years. He is also a senior advisor of Stonehage Fleming, chairman of the investment committee of FPE Capital, and a trustee of several charities. He was previously chairman of The Biotech Growth Trust Plc.



Stephanie Eastment (chair of the audit committee)

Stephanie is a chartered accountant and company secretary with over 30 years' experience in the financial services industry. She has considerable experience in the investment trust sector and is a member of the AIC's Technical Committee. Stephanie qualified with KPMG and held various accounting and compliance roles at Wardley and UBS before joining Invesco Asset Management in 1996 as Manager, Investment Trust Accounts. When she left Invesco in July 2018, she was Head of Specialist Funds Company Secretariat and Accounts. Stephanie is a non-executive director and audit chair of Murray Income Trust Plc.

James Will (senior independent director)

James joined HRI's board in April 2015 and became the senior independent director on 20 April 2021 following Tom Black's appointment as chairman at the conclusion of the trust's AGM that day. James was until 2014 chairman and a senior corporate finance partner of law firm Shepherd and Wedderburn LLP, where he also headed the law firm's financial sector practice. During his career as a lawyer, James was involved in advising smaller quoted technology companies for over 20 years on a range of corporate transactions, including flotations, secondary fundraisings and mergers and acquisitions. He is chairman of both The Scottish Investment Trust Plc and Asia Dragon Trust Plc.

Henrietta Marsh (director)

Henrietta has a background in fund management, having worked in UK small-cap and private equity investment over several decades. From 2005 until 2011, she was AIM fund manager at Living Bridge Equity Partners and, prior to that, she spent 14 years at 3i in several roles, including as fund manager of 3i Smaller Quoted Companies Trust Plc (1997–2002). Henrietta spent her early career with Morgan Stanley and Shell. She is currently a non-executive director of Gamma Communications Plc (AIM listed), a trustee of 3i Group Plc's pension fund, and a member of the London Stock Exchange's AIM Advisory Group.

Priya Guha MBE (director)

Priya has significant knowledge of the global technology sector and experience in both public and private sectors. She currently has a portfolio of roles across the global and UK technology and innovation landscape including as a non-executive director at UK Research & Innovation and Digital Catapult, a venture partner at Merian Ventures (a San Francisco based venture capital fund), and as an advisor to various start-up companies including Kheiron Medical Technologies and Gallos Technologies. She is also a non-executive director at Reach Plc.

Christopher Metcalfe (director)

Christopher has considerable investment management experience, having worked previously at Newton Investment Management (2006-2017), Schroder Investment Management (1995-2006) and Henderson Administration Group plc (1985-1994). He is currently chairman of the Martin Currie Global Portfolio Trust, senior independent non-executive director at JP Morgan US Smaller Companies Investment Trust Plc, and a non-executive director of Columbia Threadneedle UK Capital and Income Investment Trust Plc. He was previously a non-executive



director of abrdn Smaller Companies Income Trust Plc until its merger with Shires Income in December 2023.

Management team

Katie Potts

Katie is the managing director and also the lead fund manager for HIML. She established HIML in December 1993 to manage HRI, which was launched in February 1994. Katie read Engineering Science on a GKN Group scholarship at Lady Margaret Hall, University of Oxford. She worked for five years in investment management at Baring Investment Management Limited before joining S.G. Warburg Securities's UK electronics research team in 1988. The team was consistently voted top team in the Extel survey of analysts in the sector, and she was voted top analyst by finance directors of electronics companies canvassed by *The Treasurer* magazine. In addition, Katie had responsibility within S.G. Warburg's UK research department for commenting on accounting issues.

Katie is supported in managing the funds by a team of eight other investment professionals and three consultants.

Fraser Elms

Fraser Elms joined HIML in May 2000. He is the deputy manager of HRI and has lead responsibility for managing HIML's Asian portfolios. Prior to joining HIML, Fraser was a technology analyst with Dresdner Kleinwort Benson, where he covered the European technology sector. Before this he worked at Prudential for three years as member of a team of three UK unit trust fund managers that managed £5bn in equities, with Fraser having lead responsibility for three funds collectively worth £400m. He graduated from Lancaster University with a degree in Economics and initially joined Prudential as a product manager for their unit trusts, before completing an MSc in Investment Analysis at the University of Stirling and re-joining Prudential in an investment role. Fraser covers the semiconductor sector.

Taymour Ezzat

Taymour joined HIML in November 2004. He is a portfolio manager on the venture funds, sitting on the venture committee and taking lead responsibility for a number of the investments in the venture portfolios. He also has analytical responsibility for the media sector across all HIML's quoted and unquoted portfolios, as well as for the European portfolio. Previously he spent a year appraising a number of venture capital opportunities for E.D. Capital Partners. Prior to that, Taymour spent six years at Northcliffe Newspapers, the regional newspapers division of Daily Mail and General Trust (DMGT), latterly as finance director of its electronics publishing arm. Prior to this, he worked for Reuters in London and Eastern Europe for four years. Taymour qualified as an accountant with Price Waterhouse, and studied Economic History at the London School of Economics and Political Science.

Hao Luo

Hao joined HIML in 2004 and works with Fraser Elms on managing the Far East portfolios. He also has analytical responsibility for the manufacturing sector globally.



Hao obtained a BA in Economics from Hunan University in China and a Masters degree in Finance from Manchester University, and worked for J&A Securities in Shanghai from 2000-2002. He is a CFA charterholder.

Peter Jenkin

Peter joined HIML as an analyst in 2015. He covers the software sector and contributes to the overall investment selection. Previously, Peter worked jointly on the European portfolio, but now has responsibility for HRI's North American portfolio. Before joining HIML, he studied Construction Engineering Management at Loughborough University.

Bob Johnston

Bob was recruited in 2016 to establish a US office for HIML. He has more than 20 years' experience in the technology sector on the sell-side, and has worked with the HIML team for roughly 15 years. Most recently, Bob was with the technology specialist Pacific Crest. He previously also worked for Hambrecht & Quist and SoundView Technology Group. Bob has taken on responsibility for telecommunications, networking and security analysis.

Danny Malach

Danny joined HIML in June 2016 and since April 2017 has acted as the funds dealer. He obtained First Class Honours in his undergraduate degree in Accounting at Northumbria University, and subsequently achieved a Merit in his MSc in International Economics and Finance.

Fati Naraghi

Fati joined HIML towards the end of 2019 to focus on the Herald Worldwide Technology Fund and to cover some of the larger technology companies. Prior to joining HIML, she spent 20 years at Newton Investment Management, where she was responsible for the global tech sector. Fati has a PhD in Communications Systems and is qualified as an AWS Cloud Practitioner.



Previous publications

Readers interested in further information about HRI may wish to read our previous notes (details are provided in Figure 20 below). You can read the notes by clicking on them in Figure 20 or by visiting our website.

Figure 20: QuotedData's previously published notes on HRI

Title	Note type	Published
Invest in the future	Initiation	16 August 2016
Tech bids demonstrate value	Update	20 December 2016
Backing growing businesses	Update	11 July 2017
Who wants to be a billionaire?	Annual overview	7 December 2017
From small acorns	Update	12 June 2018
Shifting sentiment	Annual overview	12 February 2019
"Profits are only profits when they are realised"	Update	8 October 2019
Change is a coming	Annual overview	4 April 2020
Hot chips	Update	5 November 2020
The future is bright	Annual review	2 February 2022
Efficiency savings	Annual overview	11 January 2023
Patience and Power	Update	13 November 2023

Source: Marten & Co





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50 Gresham Street, London EC2V 7AY 0203 691 9430

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