

International Biotechnology Trust

Trust in biotech

The biotechnology sector is proving to be relatively resilient in this COVID-19 related market sell-off. International Biotechnology Trust (IBT) adopts a conservative approach to investing in what can be a quite volatile, if rewarding, sector and has fared better than its peers in this environment.

Some delay to drug development and testing programmes and product launches may be inevitable as the world focuses on tackling the coronavirus. However, the underlying picture is one of strong growth as companies bring forward cures for previously untreatable diseases, based on advances in the likes of gene therapy and immunotherapy. The race for the White House, which was one source of uncertainty, seems likely to be between Trump and Biden, which could mean business as usual for the drug companies.

Access to the fast-growing biotech sector

IBT is the longest-established of the London-listed funds specialising in the biotech/healthcare sector. It aims to achieve long-term capital growth by investing in biotechnology and other life sciences companies, and offers investors the highest yield in the sector. The portfolio is invested primarily in quoted companies, but IBT also has exposure to unquoted companies through a well-diversified investment fund.

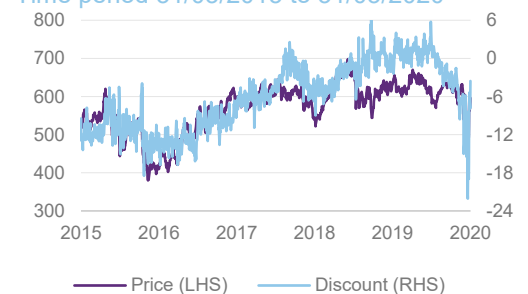
Year ended	Share price total return (%)	NAV total return (%)	NASDAQ Biotech Index TR (%)	MSCI UK total return (%)	MSCI World TR (%)
31/03/16	(23.8)	(20.6)	(21.4)	(5.9)	(0.3)
31/03/17	48.1	37.9	29.9	23.5	31.9
31/03/18	(4.2)	(5.7)	(2.1)	(0.2)	1.3
31/03/19	19.9	15.4	13.3	7.6	12.0
31/03/20	(4.8)	1.2	3.0	(20.6)	(5.0)

Source: Morningstar, Marten & Co

Sector	Sector specialist – biotechnology and healthcare
Ticker	IBT LN
Base currency	GBP
Price	596.0p
NAV	616.3p
Premium/(discount)	(3.3%)
Yield	4.2%

Share price and discount

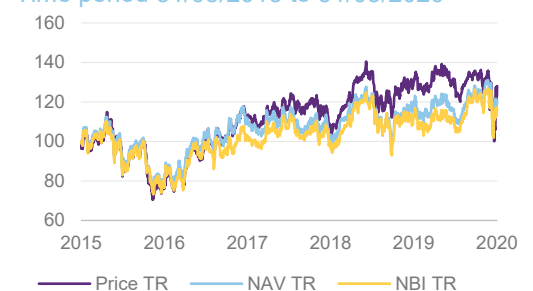
Time period 31/03/2015 to 31/03/2020



Source: Morningstar, Marten & Co

Performance over five years

Time period 31/03/2015 to 31/03/2020



Source: Morningstar, Marten & Co

Domicile	England & Wales
Inception date	31 March 1994
Manager	SV Health Managers LLP
Market cap	228.6m
Shares outstanding	38.362m
Daily vol. (1-yr. avg.)	67,059 shares
Net gearing	Nil

[Click here for our annual overview note](#)

More information is available at the trust's website:

www.ibtplc.com

Fund profile

IBT aims to achieve long-term capital growth by investing in biotechnology and other life sciences companies. Notably, it also provides a dividend equivalent to 4% of NAV, making it the highest-yielding fund in its peer group. This is despite it investing exclusively in a sector where companies do not usually provide income.

A small portion of IBT's portfolio is invested in unquoted stocks.

For the quoted portion of the portfolio, the manager seeks to provide returns to shareholders ahead of the NASDAQ Biotech Index (NBI). The NBI is a market-cap weighted index where the four largest positions are capped at 8%.

The manager

IBT is managed by SV Health Managers LLP, which is part of the wider SV group, advising and managing seven healthcare/life sciences venture capital funds with over \$2bn in capital under management. It is also the manager of the £250m [Dementia Discovery Fund](#) and has offices in Boston and London.

The lead manager is Carl Harald Janson, who joined SV Health in September 2013. He is assisted by Ailsa Craig (investment manager) and Marek Poszepczynski (portfolio manager). Kate Bingham (one of SV Health's managing partners) manages the trust's unquoted portfolio.

Sector overview

Until a few weeks ago, the dominant external influence on the biotech sector was the upcoming US Presidential election. Now, unsurprisingly, all eyes are on the progress of COVID-19.

Figure 1: NBI relative to MSCI World Index



Source: Morningstar, Marten &Co

The biotech sector has proved relatively defensive in the current environment

The ‘threat’ of a Bernie Sanders Presidency appears to be receding

We cannot rule out the possibility that the structure of the US healthcare industry evolves in the wake of COVID-19

The pace of drug discovery has accelerated in recent years

Clearly, the biotech sector has proved relatively defensive in the current environment, with the NBI outperforming broader equity indices by a considerable margin. These are growth companies; demand for their products is not cyclical neither is the primary determinant of success in the sector – drug discovery. This does not mean that these companies are unaffected by current events, however.

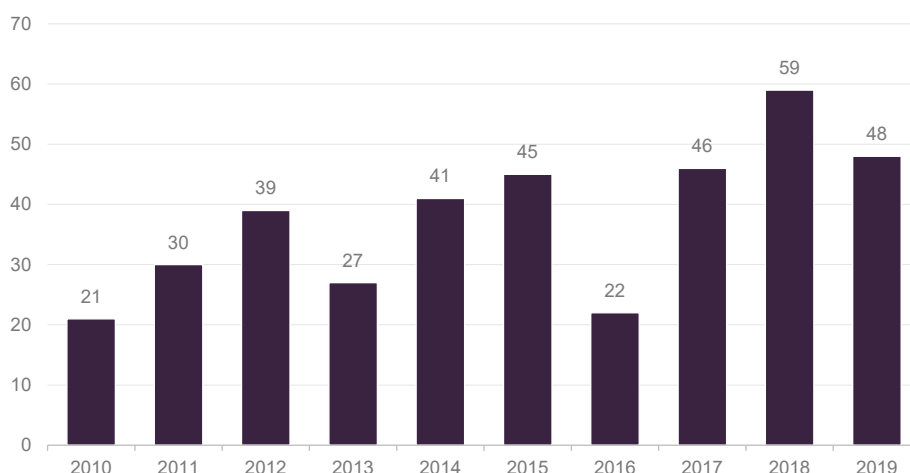
In the race for the Democratic nomination, Joe Biden seems to be close to beating Bernie Sanders and may stand a decent chance of winning the Presidential election. In theory, a Biden versus Trump election removes the ‘threat’ of Medicare for All (a shift in the way that the US healthcare system operates to bring it closer to the NHS, although still with considerable involvement of the private sector). It also reduces the likelihood of stringent controls on drug prices, although late last year, the managers highlighted a USC report that indicates that 41% of the cost of drugs in the US goes to middlemen. The managers felt that these middlemen would have been squeezed far harder than the drug companies. One other idea that has been mooted is linking US drug prices to those in other markets (international reference pricing). In this case, the managers felt that this was a prospect that the drug companies could live with.

However, it seems possible to us that, as COVID-19 drives increasing government intervention in the US healthcare sector, this could have a lasting impact on the structure of the industry.

In the short-to-medium term, COVID-19 is distorting the sector in various ways. Some drugs, therapies and over-the-counter medicines are in high demand. By contrast, many hospitals are suspending clinical trials, postponing non-essential operations and even cancer treatments as resources are diverted towards tackling the virus.

Ahead of COVID-19, we were seeing an uptick in approvals for new drugs. Absent COVID-19, this faster pace of drug approvals looked likely to be maintained. Greater understanding of the human genome is allowing the development of novel therapies based on replacing defective genes, redirecting the immune system to attack specific targets or tailor-making therapies to tackle specific disorders. This has the potential to allow cures for many conditions for the first time. Given this, the FDA has fast-tracked some approvals for new therapies. There is a quid-pro-quo, however – companies that sell or market therapies that alleviate the symptoms associated with these conditions could see their market disappear.

Figure 2: FDA new drug approvals by year

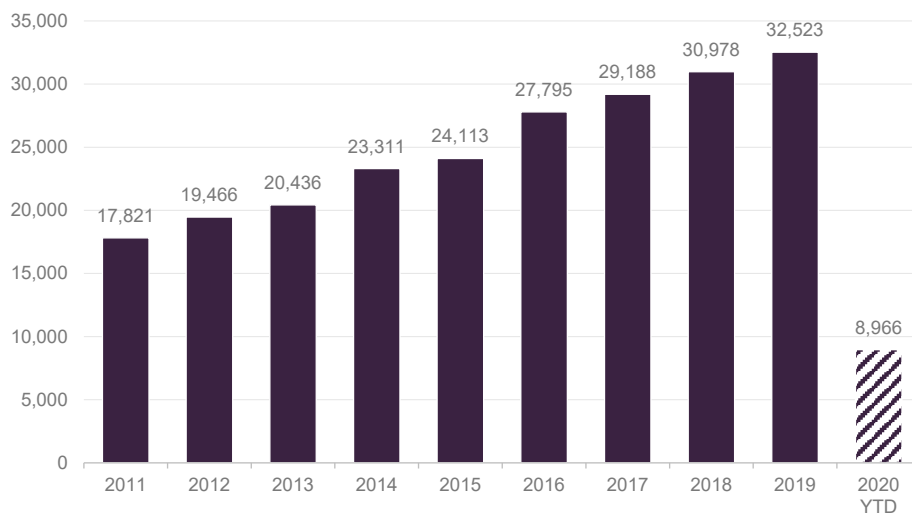


Source: US Food and Drug Administration

The 48 new approvals in 2019 included [Trikaftra](#), Vertex’s treatment for cystic fibrosis; [Skyrizi](#), a psoriasis treatment from AbbVie; [Rinvoq](#), a treatment for rheumatoid arthritis,

again from AbbVie; and [Enhertu](#), a treatment for metastatic breast cancer developed by AstraZeneca.

Figure 3: New clinical trials



Source: clinicaltrials.gov, as at 1 April 2020

Readers who would like more information on the investment approach behind IBT should read our [annual overview note](#)

Developing new therapies and bringing them to approval is an expensive business. Fund raising for cash-strapped companies is unlikely to be possible in this environment. Fortunately, IBT’s managers have actively sought to ensure that its portfolio companies are all well-financed, in the light of COVID-19. A fuller description of the investment approach is available on pages 6 to 8 of our annual overview note.

COVID-19 vaccinations and treatments

A wide range of companies are working on vaccinations and treatments for COVID-19, aided by the swift sequencing of the genome of the virus, initially by China and then replicated in many other countries. The news on this front is changing almost daily. It seems unlikely to us that any company would seek to profit from discovery of an effective treatment.

There are many promising potential vaccines in development and very early-stage trials have already started. Regulatory bodies will no doubt do what they can to speed up the approval process. However, trials must demonstrate that the vaccine does not do more harm than good – by triggering side effects or ultimately encouraging patients to develop the disease, and this process takes time. The consistent message seems to be that it will take about 18 months before a vaccine is generally available.

Treatments divide roughly into two parts – anti-virals, to control the spread of the virus in the body, and therapies that influence the inflammatory immune response, dealing with the complications that arise in severely affected patients.

Gilead, which is one of IBT’s largest holdings, is known for its anti-viral therapies, for HIV in particular. It was developing a drug, remdesivir as a treatment for Ebola and is now trialling this as a treatment for COVID-19. Two placebo-controlled trials are underway in China (with readouts due in April 2020) and Phase 3 trials are underway in the US.

Drugs that are already approved for the treatment of HIV are also being evaluated as treatments for COVID-19. Amongst these are ritonavir/lopinavir (marketed as

KALETRA by Abbvie) and darunavir/cobicistat (marketed as PREZCOBIX by Janssen). Initial results (from a trial of ritonavir/lopinavir conducted in Wuhan) were not promising.

Patients with the severe form of COVID-19 tend to develop an immune-related inflammation of the respiratory system. Effective treatment of this would reduce the mortality rate considerably. Interleukin cytokine IL6 is thought to have a role in this and drugs already exist that seek to counter this in cases of cancer and rheumatoid arthritis. Roche and Sanofi/Regeneron have approved monoclonal antibody therapies (Actemra and Kevraza, respectively), which are being trialled for COVID-19, and Regeneron also has several antibody candidates, which the managers say will be subject to clinical testing over the summer.

Another treatment that has been touted is hydroxychloroquine, maybe in conjunction with the antibiotic azithromycin. Again, a range of trials are underway or planned to evaluate this approach. However, it is associated with a number of side effects, some of which can be severe, and the trial in France that generated excitement around the approach was too small to be conclusive.

Asset allocation

As at the end of February 2020, IBT had 78 direct investments in companies and exposure to a further 22 companies through its investment in SV Fund VI.

The split of the portfolio between quoted and unquoted companies has barely changed since we last published on the company (when we used data from the end of July 2019). Similarly, the geographic split is unchanged.

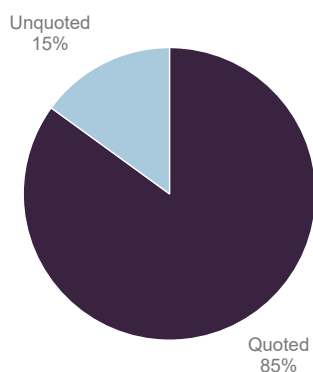
There has been a material reduction in IBT's exposure to smaller companies

One significant change to the make-up of the portfolio over the last six or seven months is a reduction in the trust's exposure to smaller companies (those with a market cap of less than \$1bn). These accounted for 20% of the quoted portfolio last July and just 3% at the end of February 2020.

Sector exposures are determined by stock selection decisions.

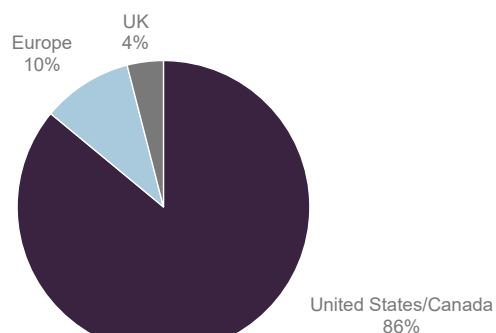
Fairly early on in the COVID-19 story, IBT's managers reduced the trust's gearing to zero. This is consistent with the managers' ambition to be the low risk trust in the sector.

Figure 4: IBT portfolio unquoted/quoted split at 29 February 2020



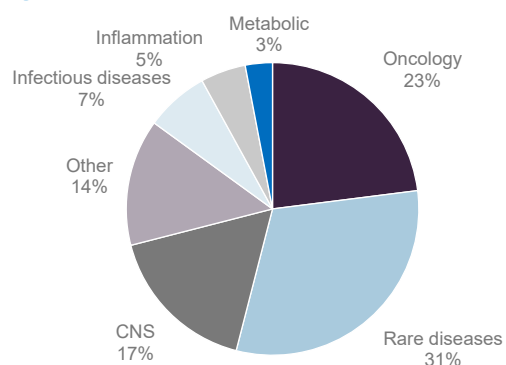
Source: International Biotechnology Trust, Marten & Co

Figure 5: IBT portfolio split by geography at 29 February 2020



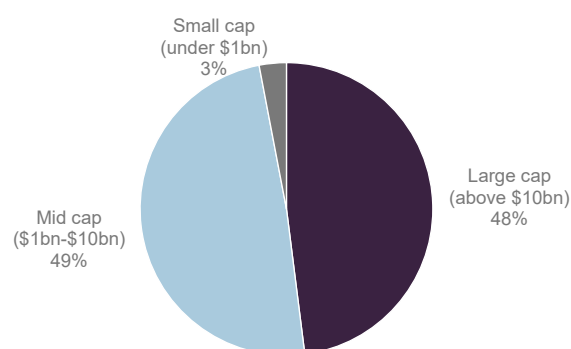
Source: International Biotechnology Trust, Marten & Co

Figure 6: IBT portfolio split by therapeutic area at 29 February 2020



Source: International Biotechnology Trust, Marten & Co

Figure 7: IBT portfolio split by market cap at 31 July 2019



Source: International Biotechnology Trust, Marten & Co

10 largest quoted holdings

Figure 8: Profile of top 10 holdings at 29 February 2020

Company	Mkt cap (\$m) ¹	% of NAV 29/02/20	% of NAV 31/07/19	Change	Focus
<u>Vertex</u>	59,870	6.3	5.4	1.1	Cystic fibrosis, inflammation and oncology
<u>Gilead</u>	92,840	5.3	6.9	(1.6)	Antiviral, including HIV and Hepatitis therapies, haematology/oncology, cardiovascular, inflammation/respiratory and remdesivir, a possible COVID-19 anti-viral
<u>Biomarin</u>	15,260	4.9	1.5	3.4	Haemophilia A, other genetic disease
<u>PTC Therapeutics</u>	2,760	4.9	3.6	1.3	Rare disease
<u>Acadia Pharma</u>	6,400	4.8	0.4	4.4	Central nervous system
<u>Biogen</u>	53,790	4.5	1.7	2.8	Neuroscience
<u>Horizon</u>	5,710	4.3	1.1	3.2	Rare disease
<u>Amgen</u>	117,470	3.5	4.1	(0.6)	Broadly-based
<u>Neurocrine</u>	7,980	3.3	5.4	(2.1)	Tardive dyskinesia, endometriosis, congenital adrenal hyperplasia, Parkinson's disease
<u>ChemoCentryx</u>	2,470	2.7	0.0	2.7	Rare disease
Total		44.5			

Source: IBT factsheets, Bloomberg, Marten & Co. Note: 1) Data correct as of 31 March 2020

Figure 9: Vertex

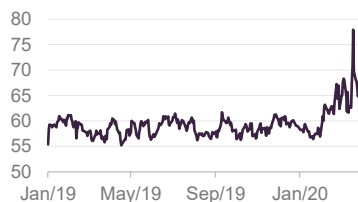


Source: Bloomberg

Vertex Pharmaceuticals

Securing approval for Trikafta in October 2019 was a significant milestone for Vertex. The managers say that this cystic fibrosis treatment can address 90% of cases and it is estimated to have the highest sales potential of any of last year's new crop of drugs. The boost that this gave to the share price is evident in Figure 9. However, the managers also say that, in addition to building on its success in cystic fibrosis, the company has a promising pipeline of other products. These include potential curative therapies for sickle cell disease, beta thalassemia, Duchenne muscular dystrophy and type 1 diabetes.

Figure 10: Gilead



Source: Bloomberg

Figure 11: BioMarin



Source: Bloomberg

Figure 12: Acadia



Source: Bloomberg

Gilead Sciences

Gilead is best-known for its antiviral franchise, with a series of therapies aimed at HIV, hepatitis C. Gilead is allowing Teva Pharmaceuticals to manufacture a generic version of Truvada, used as Pre-exposure Prophylaxis (PrEP) to prevent the spread of HIV. However, Gilead appears to be successfully shifting patients onto Descovy (27% of the market in the US at the end of 2019). It is also preparing to launch filgotinib as a therapy for rheumatoid arthritis. In recent times, Remdesivir, which was being developed as a treatment for Ebola, has shown some early promise in the fight against the coronavirus, as we discussed on page 4. This triggered a spike in Gilead's share price. However, Gilead has warned that it is not ready to manufacture this in large quantities.

BioMarin Pharmaceuticals

In 2019, BioMarin's share price benefited from the approval of Valrox as a gene-therapy treatment for haemophilia A. This was one of the therapies that the FDA chose to fast track in 2019. Launch of the treatment was expected in the second half of 2020. Linked to this, BioMarin was predicting that it would report its first full-year profit in 2020. The recent weakness in the share price may reflect fears that the launch will be delayed as resources are diverted towards dealing with COVID-19.

BioMarin has a number of other products in development. The closest to market is vorsoritide, a treatment for achondroplasia, a genetic disorder that causes dwarfism.

Acadia Pharmaceuticals

Acadia is focused on developing therapies for disorders of the central nervous system. It has a product (NUPLAZID) that launched in 2016 and is used to treat hallucinations and delusions associated with Parkinson's disease psychosis. The active ingredient is being evaluated for use in the treatment of dementia-related psychosis, depression and some symptoms of schizophrenia. Acadia also has an exclusive licence to develop and commercialise Trofinetide in North America. Trofinetide is used to treat Rett syndrome.

Elsewhere in the portfolio, Biogen fought off an attempt by Mylan to launch a generic version of its multiple sclerosis drug Tecfidera. Last year, despite initial disappointment, the FDA approved further trials of Biogen's Alzheimer's drug and the hope is that aducanumab wins FDA approval. There is huge unmet need for an Alzheimer's therapy.

The managers say that Stemline, a stock we wrote about last July, has disappointed. Its product ELZONRIS (tagraxofusp), which aims to treat a form of blood cancer, hasn't sold as well as expected.

Performance

Figure 13: IBT versus the NBI and a peer group of listed biotech and healthcare trusts to 31 March 2020



Source: Morningstar, Marten & Co

Visit [QuotedData.com](https://www.quotadata.com) for up-to-date information on IBT and its peer group

The chart compares IBT with its benchmark and a peer group average of Biotech Growth Trust, BB Healthcare, Polar Capital Global Healthcare and Worldwide Healthcare. Of these, Biotech Growth Trust is the closest comparator. The others also invest in the wider healthcare sector, including the large pharmaceutical stocks. Biotechnology stocks lagged the wider healthcare sector for the last couple of years and this is the reason that the peer group average did better for a while.

Figure 14: Cumulative total return performance to 31 March 2020 unless otherwise indicated

Heading	1 month	3 months	6 months	1 year	3 years	5 years
IBT NAV	(3.0)	(3.0)	6.8	0.1	9.0	19.4
IBT Price	10.4	(4.2)	0.6	(1.1)	13.5	28.0
Nasdaq Biotech Index	(2.4)	(4.1)	8.1	2.1	13.2	15.6
Peer group NAV average	(6.9)	(10.1)	5.7	2.2	13.0	23.3
MSCI World	(10.6)	(15.7)	(14.8)	(5.8)	6.8	40.4
Biotech Growth Trust	(8.4)	(8.4)	24.3	17.6	15.4	10.7

Source: Morningstar, Marten & Co

IBT's conservative approach means that it has a lower volatility of returns relative to Biotech Growth and the wider peer group.

Figure 15: Peer group comparison as at 31 March 2020

Heading	Market cap £m	Premium/ (discount) %	Yield %	Ongoing charges ratio %	One-year standard deviation of NAV returns
IBT	217	(3.3)	4.2	1.27	26.0
Biotech Growth Trust	313	(11.9)	0	1.06	34.7
BB Healthcare	534	(0.6)	0	1.16	33.2
Polar Capital Global Healthcare	223	(11.5)	1.1	1.13	27.2
Worldwide Healthcare	1,492	1.7	0.9	0.90	27.4

Source: Morningstar, Marten & Co

IBT was expanding last year but, when the discount widened briefly, the trust bought back stock. Its ongoing charges ratio is reflective of its size. IBT's enhanced yield is attractive to some investors and it remains the only meaningful way for investors to access income from a healthcare portfolio.

Premium/discount

Figure 16: Premium/(discount) over five years to end March 2020

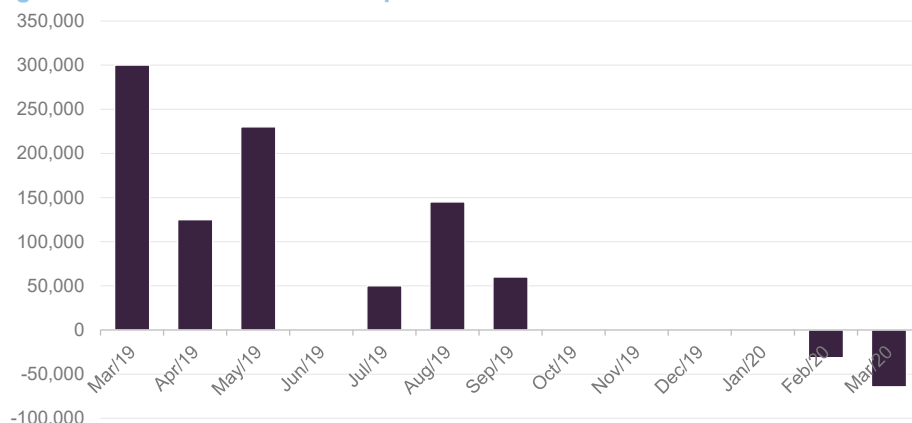


Source: Morningstar, Marten & Co

Over the 12 months ended 31 March 2020, IBT's shares traded between a premium of 5.8% and a discount of 22.1%. The average for this period was a discount of 1.7%. The recent widening of the discount can be attributed to the general uncertainty created by COVID-19.

It seemed a little unfair that IBT saw such a sharp widening of its discount over a period when it has been the best-performing investment company and in a sector that has proved relatively resilient. Investors had a brief opportunity to pick up stock relatively cheaply, but it may be that the share price moves back towards trading at asset value or a small premium now.

Figure 17: IBT share issuance/repurchase to 31 March 2020



Source: Bloomberg, Marten & Co

The trust stepped up to the plate and bought back shares when the discount spiked out. Shareholders benefited as repurchases at these levels boost the NAV for ongoing investors.

Previous publications

The various notes that we have published on IBT are listed in Figure 18. You can access the notes by clicking on the links below or by visiting our website, www.martenandco.com.

Figure 18: Marten & Co. previously published notes on HRI

Title	Note type	Date
Outperformance and income	Initiation	19 July 2018
Beating the odds	Update	8 March 2019
Healthy yield attracts investors	Annual overview	19 September 2019

Source: Marten & Co.

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