

# Bloc Ventures

FY21 results

Demand for deep tech unhindered by downturn

Venture capital

26 July 2022

Following the exits of Marmalade and EVERYTHNG in 2021, Bloc's FY21 NAV/share rose 7% y-o-y to £25.30. Bloc has now delivered a FY18–21 NAV/share CAGR of 19% and a portfolio IRR of 25% since inception. In Q122, incorporating a successful Series A round for Pharrowtech, NAV/share rose a further 9% to £27.51. In FY21, Bloc strengthened its team and processes with new hires. In FY22, management is raising a Series B extension round, having postponed a larger Series C funding round until market conditions improve. Despite challenging markets, management is able to identify a number of potential portfolio up-rounds that it believes could lead to growth in FY22 NAV/share of over 30% y-o-y.

## FY21 results: £6.8m cash at year end

Bloc reported FY21 net asset value (NAV) per share of £25.30, up 7% y-o-y. This included the exits from Marmalade and EVERYTHNG, as well as up-rounds for YellowDog and Yordex, offset by the write-down for Tether Technology. Bloc made three new investments, Mindtrace, Shield-IoT and Helix Geospace, maintaining its active portfolio at 10 companies. Following £9.3m of initial cash consideration from the sale of Marmalade (with multi-year earn-outs still to come), the group held cash of £6.8m at 31 December 2021.

## Deep tech, a defensive B2B proposition

Technology has become increasingly indispensable as an enabler of cost reduction and productivity increases. The deep tech sector, in particular, incorporates a broad selection of long-term, IP-based businesses operating B2B models. These are high-growth businesses seeking either to create new markets or to disrupt existing markets, with corporate demand likely to prove more resilient in a downturn than more speculative B2C models, reliant on weakening retail demand.

## Fund-raising at an attractive investment price

Given current market sentiment, Bloc has decided to focus its own fund-raising efforts on a smaller round at the previous round valuation from a core investor group, including new and existing investors. The share price premium has been brought into line with the market, despite the early stage and resilient nature of the portfolio. The funds will allow Bloc to continue to invest in new and existing companies into 2023, postponing a full Series C round until market conditions improve and investor appetite returns. Given likely future up-rounds, management anticipates that the discount to its expected FY22 NAV will fall to 0.78x by year end, underpinning a future funding round.

## Valuation: High-growth and maturing portfolio

Bloc can point to a strong track record, with an FY18–21 NAV per share CAGR of 19% and a targeted annual return of 20%+, underpinned by strong secular and technology sector trends. Its portfolio continues to offer the prospect of further up-rounds in FY22. With a clear sector focus, a structured investment process and an early-stage portfolio with high growth potential, despite worsening market conditions, Bloc remains an attractive investment opportunity for the medium term.

### Portfolio companies

AccelerComm – wireless channel coding  
Crypta Labs – quantum encryption  
Helix Geospace – advanced precision antennas  
Mindtrace – AI image processing  
Paytia – cloud-based payment security  
Pharrowtech – ultra-high bandwidth wireless  
Shield-IoT – security for mass-scale IoT  
YellowDog – commercial cloud supercomputing  
Yordex – enterprise spend management  
Zeetta Networks – enterprise private networks

### Business description

Bloc Ventures is a London-based venture capital company, active in early-stage seed+ and series A investment in the deep tech segments of the UK and European markets. Bloc has built a portfolio of 10 investee companies focused primarily on cloud, data science, connectivity and security for telecoms and computing applications.

### Next events

H122 shareholder update Q422

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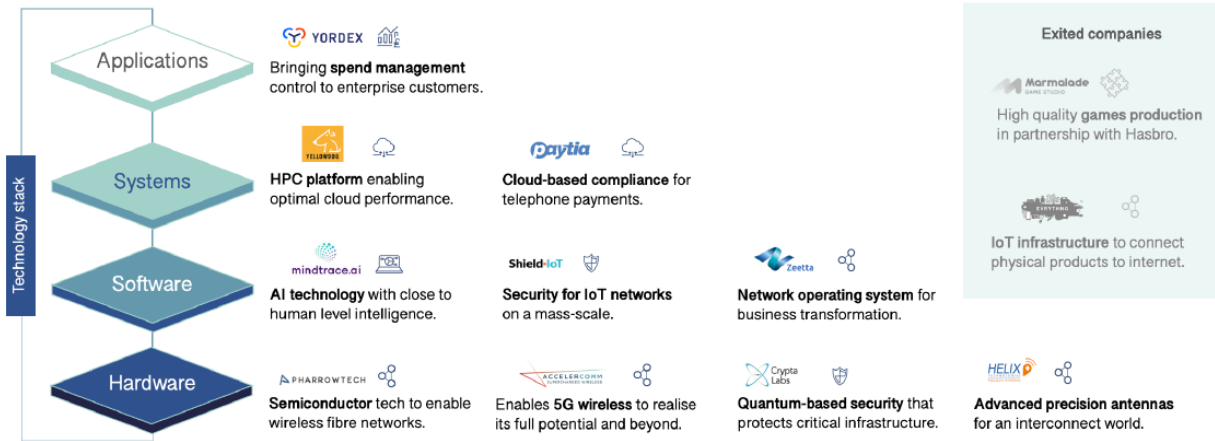
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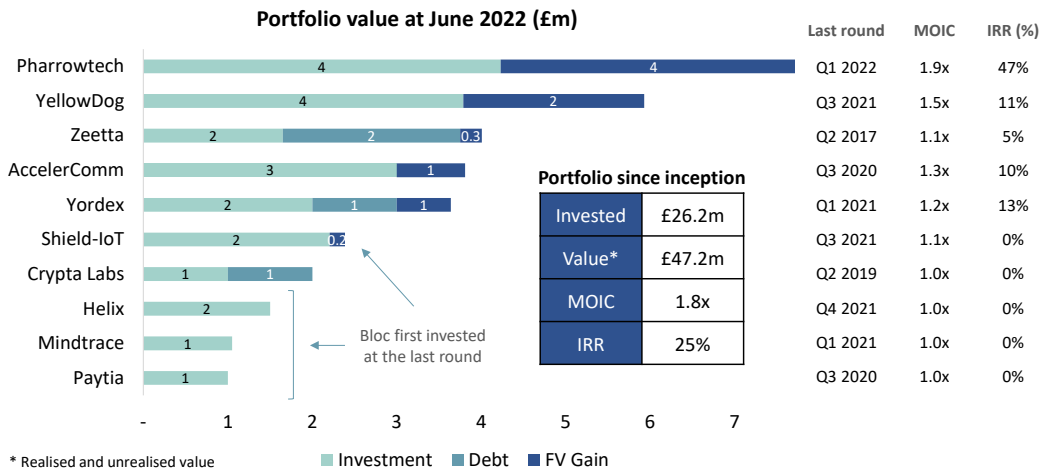
## Bloc Ventures: Strategic snapshot

Exhibit 1: Bloc's current portfolio (31 December 2021)



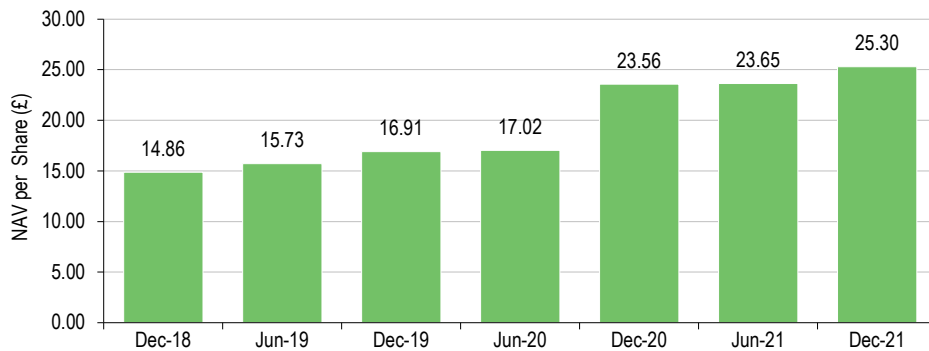
Source: Bloc Ventures

Exhibit 2: 25% portfolio internal rate of return (IRR) since inception



Source: Bloc Ventures Note: MOIC – multiple of invested capital, IRR - internal rate of return.

Exhibit 3: Year-on-year growth in NAV per share



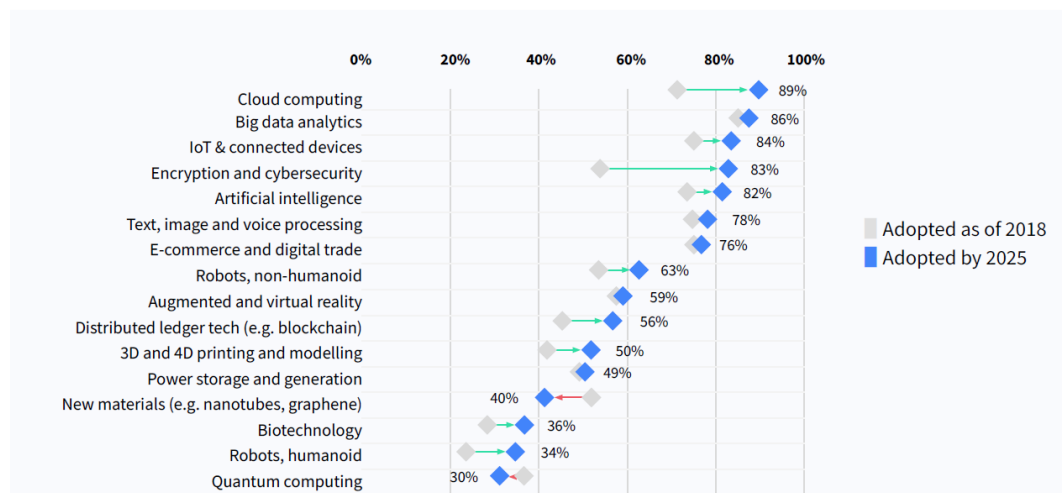
Source: Bloc Ventures, Edison Investment Research

## Q122: Deep tech showing resilience

Despite broader market weakness, Bloc's portfolio has continued to make progress, with Pharrowtech completing a successful Series A funding round in Q122 at a 3.3x increase in book value from its previous funding round. This led to a 17% rise in portfolio fair value to £33.9m for Q122, driving pro forma NAV/share up 9% over the quarter. Bloc's management is also hopeful of an attractive Series B funding round for AccelerComm in H222, with the potential for other portfolio companies (eg Mindtrace, Paytia) to defy the prevailing negative sentiment with up-rounds later in the year.

In a downturn, Bloc's deep tech focus, built around technological advancement and with a portfolio focused around the top five categories of Exhibit 4 (cloud, big data, IoT, cybersecurity and AI), should mean that it remains resilient. Its portfolio offers companies that are largely pre-revenue, or early revenue (although with a growing spread of maturity), that continue to demonstrate strong commercial progress.

**Exhibit 4: Corporate demand for deep tech solutions likely to remain strong**



Source: Dealroom.co, The State of VC in 2022 (31 May 2022)

Much of the froth has now been taken off valuations and, with portfolios such as Bloc's continuing to show strong operational growth, we are confident that the medium-term trends for the sector remain intact and expect European private technology returns to hold up in the long term.

## FY21 results

Bloc reported an FY21 fully diluted NAV per share of £25.30, with 7% growth year-on-year (FY20: £23.56), taking Bloc's three-year NAV/share CAGR to 19% (Exhibit 3). FY21 portfolio value fell due to the exit from Marmalade (4.8x return on invested capital (ROIC), 31% IRR), leading to an immediate cash receipt of £9.3m in H221, with the earn-out still to come.

Exhibit 5: H121 NAV					Exhibit 6: FY21 P&L and cash flow				
£m unless specified	FY20	H121	H221	FY21	Income statement* (£m)	FY20	H121	H221	FY21
<b>NAV per ordinary share (£)</b>	<b>23.56</b>	<b>23.65</b>	<b>25.30</b>	<b>25.30</b>	Board fees and other revenue	0.2	0.1	0.1	0.2
change y-o-y	39%	39%	7%	7%	Operating costs	(1.4)	(0.7)	(1.0)	(1.8)
Portfolio book value (start of period)	17.4	32.5	35.7	32.5	<b>Operating loss</b>	<b>(1.2)</b>	<b>(0.6)</b>	<b>(0.9)</b>	<b>(1.6)</b>
Book value increase	8.9	0.5	(0.2)	0.3	Investment income	9.3	0.7	-	0.7
FX revaluation	0.1	(0.1)	-	(0.1)	Other financial income/expense	-	-	-	-
Gross investments	7.7	2.8	6.2	9.0	<b>Net profit</b>	<b>8.2</b>	<b>0.1</b>	<b>(0.9)</b>	<b>(0.9)</b>
Realisations	(1.5)	-	(12.8)	(12.8)	<b>Cash flow and use of funds (£m)</b>	<b>FY20</b>	<b>H121</b>	<b>H221</b>	<b>FY21</b>
<b>Portfolio book value (end of period)</b>	<b>32.5</b>	<b>35.7</b>	<b>28.9</b>	<b>28.9</b>	<b>Outgoings:</b>				
change y-o-y	87%	62%	(11)%	(11)%	Investments	(7.7)	(2.3)	(6.1)	(8.4)
<b>NAV</b>	<b>37.4</b>	<b>38.0</b>	<b>39.5</b>	<b>39.5</b>	Op and funding costs	(1.3)	(0.9)	(0.8)	(1.7)
of which cash	4.5	1.9	6.8	6.8	<b>Funded by:</b>				
Net equity raised in period	7.4	0.5	2.4	2.9	Funding	7.1	0.5	2.4	2.9
Op costs net of fee income	(1.2)	(0.6)	(0.9)	(1.6)	Exits and interest	1.8	0.1	9.4	9.4
<b>annualised as % of NAV</b>	<b>3.1%</b>	<b>3.4%</b>	<b>4.6%</b>	<b>4.0%</b>	<b>Net cash flow</b>	<b>(0.2)</b>	<b>(2.7)</b>	<b>5.0</b>	<b>2.3</b>
Source: Bloc Ventures					<b>Cash at end of period</b>	<b>4.5</b>	<b>1.9</b>	<b>6.8</b>	<b>6.8</b>
					Source: Bloc Ventures.				

Bloc's income statement (Exhibit 6) shows that revenues from board fees chargeable to portfolio companies remained steady at £0.2m, while operating expenses increased from £1.4m in FY20 to £1.8m in FY21. Operating costs (net of fee income) increased markedly in FY21 from 3.4% of NAV in H121 to 4.0% of NAV for FY21 (FY20: 3.1%) as the company built out its team.

In terms of cash, Bloc committed £8.4m to investments in FY21 (FY20: £7.7m) (Exhibit 6). Commitments were weighted to H2, funded by the exit from Marmalade, which delivered upfront cash of £9.4m, together with an earn-out of £3.4m. The earn-out is payable based on a profit hurdle for FY21–24, which management expects to be paid out in full and has therefore recognised in Bloc's normalised FY21 NAV figures. Bloc also received equity in Digimarc (DMRC:NSQ) from the sale of EVERYTHING. However, these shares have subsequently fallen in value by 45% (as at 31 March 2022) since the agreement was signed. Net cash at the end of FY21 amounted to £6.8m (FY20: £4.5m).

Exhibit 7: Balance sheet				
£m	FY20	H121	H221	FY21
Portfolio	32.5	35.7	28.9	28.9
Cash	4.5	1.9	6.8	6.8
Other net assets/liabilities	0.4	0.4	3.8	3.8
Net asset value	37.4	38.0	39.5	39.5
Source: Bloc Ventures				

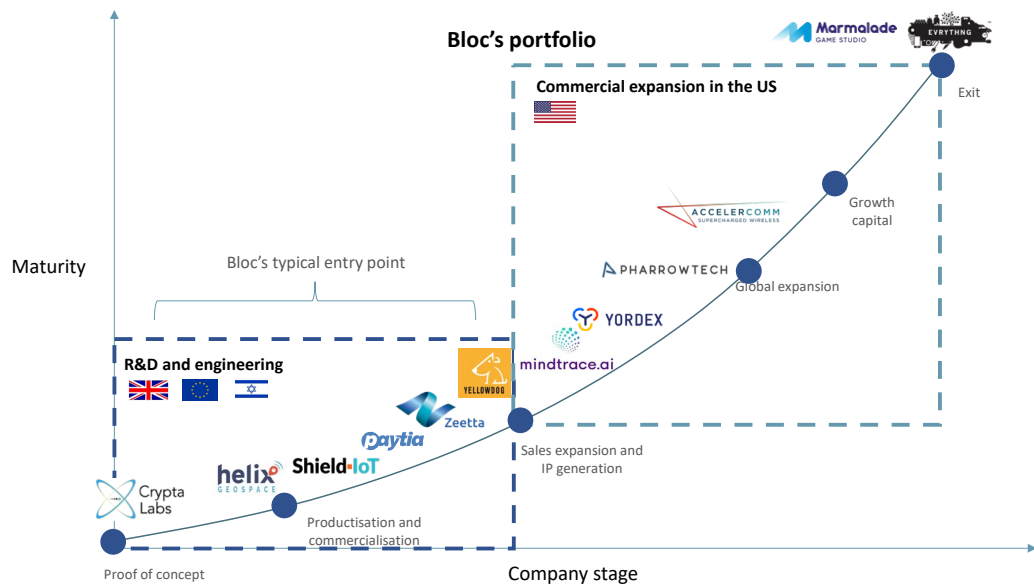
NAV comprises the book value of the portfolio (driven by latest funding rounds), together with cash at year end, with the earn-out for Marmalade accounting for the significant rise in other net assets in H221 (Exhibit 7). FY21 saw rises in the value of YellowDog and Yordex, more than offsetting the fall in value of Tether Technology, which was written off in FY21.

## Portfolio progression and deal flow growth

The benefits of Bloc's teambuilding showed through in FY21, as it was able to take a far more proactive and structured approach to marketing, research, deal flow management and pipeline building. This allowed Bloc to review 913 business plans in 2021 (an average of 76 a month), a 91% increase year-on-year. Additionally, with a far larger proportion of these deals in Bloc's core focus areas (predominantly telecommunications and computing), the percentage of companies that progressed from review to pipeline increased to 17% in FY21 (FY20: 9%). This helps to underline the benefit of Bloc's clear positioning and broader engagement with the market.

FY21 was a year of strong progress for Bloc's portfolio, with the company's first two exits, Marmalade (September 2021) and EVERYTHING (November 2021), as well as three new investments (Mindtrace, Shield-IoT and Helix Geospace). Bloc's portfolio now consists of 10 active holdings which all have a similar journey to product market fit (Exhibit 8).

**Exhibit 8: A portfolio spread along the maturity curve**



Source: Bloc Ventures

FY21 investments were as follows:

- **Mindtrace** (AI): Mindtrace has developed a software platform (Brain Sense) that enables AI to be applied to use cases currently underserved by AI due to a lack of training data, hence unlocking a wide range of new commercial opportunities such as visual image processing, asset inspection, manufacturing defect detection, and smart retailing. Mindtrace was introduced in our July 2021 note [Expert-led play on early-stage deep tech](#), and continues to deliver good commercial traction and revenues to Q122.
- **Shield-IoT** (IoT): Bloc co-led Shield-IoT's US\$7.4m Series A round alongside NextLeap Ventures. Akamai Technologies, a global cybersecurity company and a potential customer, also invested. Based on over 15 years of academic research, the company's coreset-AI technology provides security and monitoring for IoT networks across smart grids, transportation and 5G private networks. Founded in 2017, Shield-IoT addresses the proliferation of IoT cyber threats to devices, data, critical services and infrastructure, allowing brands to monitor and secure mass-scale B2B IoT and IoT networks, reduce operational costs and offer value-added services. Shield-IoT was first introduced in our December 2021 note [Two tech exits and new funds being raised](#).
- **Helix Geospace** (Telecoms): Bloc led Helix's £3m seed round with co-investment from the UK Innovation and Science Seed Fund (UKI2S). Helix is an Oxford-based company developing global navigation satellite system (GNSS) antennas that enable precise and reliable geo-location (<10cm accuracy) in difficult environments (typical of modern cities) and crowded RF spectra. The funding will be used to develop and launch its first product set in 2022, delivering initial revenues from a pipeline of early customers. James Lewis (CEO) is a serial founder, who previously led UK-based haptics company [Redux](#) from scientific concept through to commercial reality (later acquired by Google).

**Exhibit 9: Portfolio update for FY21 and Q122**

Year end March 2022, £m	BV at Dec-20	Additions/ (realisations)	Revaluation	BV at Dec-21	Additions/ (realisations)	Revaluation	BV at Mar-22
Pharrowtech	2.2	0.4	(0.1)	2.5	1.7	3.8	7.9
YellowDog	4.5	0.2	0.9	5.6	-	0.3	5.9
Zeetta	2.3	1.8	-	4.0	-	-	4.0
AccelerComm	3.8	-	-	3.8	-	-	3.8
Yordex	1.5	1.1	0.5	3.1	-	-	3.1
Shield-IoT	-	2.2	-	2.2	-	0.1	2.3
Crypta Labs	1.5	0.5	-	2.0	-	-	2.0
Helix	-	1.5	-	1.5	-	-	1.5
Mindtrace	-	1.1	-	1.1	-	-	1.1
Paytia	1.0	-	-	1.0	-	-	1.0
Marmalade	13.8	(12.8)	-	1.0	-	-	1.0
EVERYTHNG	1.1	-	-	1.1	-	(0.8)	0.3
Tether Tech	0.9	0.3	(1.2)	-	-	-	-
<b>Total</b>	<b>32.5</b>	<b>(3.8)</b>	<b>0.2</b>	<b>28.9</b>	<b>1.7</b>	<b>3.3</b>	<b>33.9</b>

Source: Bloc Ventures

Other notable portfolio developments include news that AccelerComm (a spin-out from Southampton University and also backed by IQ Capital and IP Group) is in advanced talks with investors over a Series B funding round, expected to complete later in 2022. Management expects this to deliver a further uplift for Bloc. YellowDog has had a change of leadership, with the arrival of new CEO [Noel Hurley](#) and Simon Ponsford (outgoing CEO) stepping back to CTO to focus on the company's technological roadmap. Noel is an ARM veteran and experienced entrepreneur, previously responsible for initiating ARM's entry into the cloud market, as well as running the CPU division and product teams. He was also a co-founder of XMOS, so adds real commercial and operational weight to the YellowDog team.

Finally, two of Bloc's portfolio companies experienced notable setbacks in FY21:

- **Tether Technology:** Despite Bloc management's best efforts, Bloc took the difficult decision to write-off its investment in Tether in FY21, recognising that growth would not be sufficient to allow the company to meet its interest costs.
- **EVERYTHNG** was sold to Digimarc in November 2021 at a headline valuation of US\$50m in exchange for shares in Digimarc. The value of Digimarc's shares had fallen by 45% from the time the sale was agreed up to 31 March 2022 (US\$26.37). In its Q122 updated NAV, Bloc has anticipated a significant impairment of the residual carrying value of EVERYTHNG, writing down the value of EVERYTHNG by £0.8m, from £1.1m to £0.3m.

## Strong team growth through FY21

In 2021, Bloc strengthened its team with a number of specific hires, including general counsel (Max Neuberger), head of research (David Pollington), head of marketing (Ryan Procter) and finance manager (Richard Yates).

In Q122, Bloc recruited a new investment manager to work alongside the research team and help identify new deep tech investment opportunities. [Dr Alisa Molotova](#) holds a PhD in stem cell neuroscience from Cambridge University. She has previously worked at Cambridge University's seed investment fund Cambridge Enterprise, has experience leading deep tech start-ups and most recently worked at Marshalls of Cambridge.

Bloc's management is aware that, with the growth of its team to 11 full-time staff, the company's total expense ratio has temporarily risen above management's target of 3% of NAV. As such, management now plans to pause its hiring plans for the remainder of FY22, to see how the economic environment unfolds.

## Valuation: A good time to be a private company

The direct technology investment sector is currently under pressure, with investors marking down fund manager valuations to record levels of discount, even when NAVs have been struck recently and therefore reflect a relatively current view of valuations. Latest data from [dealroom](#), supported by data in Augmentum's FY22 results presentation, suggests that European venture capital (VC) activity is slowing, with US and Asian investors starting to pull back from the market.

Over the last six to nine months, technology valuations have fallen amid broader market weakness, initially driven by a rotation out of technology and concerns over the sustainability of what many investors saw as top-of-the-market valuations in 2021. This was then compounded in H122 by the impact of the Ukraine war and, most recently, rising inflation. This has caused discounts to NAV in the sector to widen materially (now 0.43–0.83x historical NAV), Exhibit 11. Given likely up-rounds, management anticipates that the discount of the current funding round to Bloc's expected FY22 NAV will fall to 0.78x by year end, underpinning a future funding round.

**Exhibit 11: Valuations for the direct tech investment companies**

	Price	Currency	Market cap (m)	Last NAV reported (m)	Net cash/ (debt) (m)	NAV per share	NAV premium/ discount (%)
Augmentum Fintech	115	GBp	205	295	61	155	0.74
Forward Partners	45	GBp	61	140	31	104	0.43
HgCapital Trust	360	GBp	1,647	1,984	(136)	433	0.83
IP Group	80	GBp	832	1,436	270	139	0.58
Mercia Asset Management	30.3	GBp	133	201	61	46.0	0.66
Molten Ventures	480.6	GBp	735	1,434	48	937	0.51
Oakley Capital Investments	387	GBp	687	1,020	180	571	0.68
Seraphim Space IT	65	GBp	156	250	62	104	0.63
TMT Investments	3.89	USD	122	283	19	9.00	0.43
						<b>Peer group mean</b>	<b>0.61</b>
						<b>Peer group median</b>	<b>0.63</b>

Source: Company accounts, Refinitiv. Note: Priced on 25 July 2022.

As can be seen in the valuation table (Exhibit 11), the sector is at a recent record discount to NAV, with investors allowing for technology shares to fall, in some cases, over 50% further from current carrying values, irrespective of how well-funded the investment companies may be.

In our view, this approach can only be justified where:

- **In a short duration downturn in valuations**, the fund manager has been caught short of cash to support its portfolio.
- **Investors expect the downturn in valuations to persist through 2022–23**, with even well-capitalised fund managers having to materially reduce commitments and make hard choices as to which portfolio companies to support.
- **The business model of major portfolio companies (and therefore also of the fund manager) is fundamentally flawed**, with valuations therefore potentially permanently impaired, which is more likely to apply to more speculative, momentum-based B2C assets.

In all scenarios, we expect the IPO window to remain closed for much of 2022. This is not an unusual occurrence through the investment cycle and we would note that, based on our market knowledge, we would expect the primary exit route for Bloc's portfolio companies to be a trade exit to a strategic buyer.

We believe that this level of negativity is potentially misplaced for the following reasons:

- As we set out in our sector note [Waiting for long-term investors to catch on](#), the sector enjoys a 'survivor bias', with many of the current crop of fund managers having demonstrated proven, battle-hardened models, which have existed in public or private form for at least 10 years. The more speculative models have already disappeared.

- Following a record FY21, portfolio companies are largely well-funded.
- Particularly among deep tech portfolios, commercial progress remains strong with B2B business models, supported by the themes of digitalisation and cloudification, expected to remain resilient as investments either help to create new markets or disrupt established markets (ie cut costs for business).
- Portfolio companies' strong underlying growth may well partially or fully offset falls in valuation multiples if rounds are pushed back or delayed.
- As the UK and Europe seek to catch up with the more mature private capital ecosystem in the United States, there remain significant levels of capital committed to private companies in the region.
- Given the common use of preferred share structures by VCs, the common assumption that private company valuations will necessarily fall by the same level as the public markets may not hold true, at least in a relatively short-lived downturn, as VC investors are often able to reprice a prior investment round if that round is followed by a down-round.

### **Bloc valuation approach in context**

With its early-stage portfolio, as per [IPEV guidelines](#), Bloc Ventures carries all of its assets on its balance sheet based on the valuation established by historical funding rounds (for both the FY21 and the Q122 NAVs), now that it has exited Marmalade. This valuation is retrospective and dated even when it is announced, despite the high-growth nature of the portfolio. As such, investors should take comfort from the fact that valuations are prudent and realistic, even in a downturn.



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