

Allied Minds

Portfolio update

FY21 to see benefits of commercial progress

In its strategic update, management highlighted robust commercial progress across the majority of Allied Minds' portfolio in FY20 (notably at Federated Wireless, BridgeComm and Orbital Sidekick), expected to be reflected by multiple funding rounds in FY21. Spin Memory was the exception, where, although technical progress has been made, six to nine months of commercial progress was lost with the closure of its foundry due to COVID-19. Together with the unexpected loss of a government bid, management now anticipates a down round for Spin Memory in FY21 at a 'significantly reduced valuation'. With estimated parent cash of US\$20.4m at year end, Allied Minds remains sufficiently capitalised. As a floor, our estimate of parent cash (6.2p) plus our estimate for Federated Wireless (23.9p fully diluted) underpins the current share price (32.3p at close on 6 January 2021). Even entirely setting aside Spin Memory, Allied Minds' remaining holdings plus parent cash total 43.1p.

Period end	Portfolio fair value (US\$m)	Parent-level net cash (US\$m)	NAV (US\$m)	NAV/share (p)	P/NAV (x)
06/19*	266.1	31.3	297.3	100.2	0.32
12/19*	169.0	31.9	200.8	66.1	0.49
06/20*	175.3	22.7	197.9	62.7	0.51
12/20	182.9	20.4**	203.3	61.7	0.52

Note: NAV is based on our estimate of fair value, plus net cash at the parent level. *H119, FY19 and H120 net cash and NAV figures include post period-end adjustments. †FY19 NAV adjusted for incorrect treatment of special dividend. **Edison estimate.

Portfolio: Funding rounds reflect progress made

Spin Memory aside, the remaining portfolio made substantive progress in FY20, with investee companies working with a range of leading strategic and financial partners, including Amazon Web Services, Arm Holdings, Boeing, Microsoft Azure, Nokia and Temasek, as well as the US government.

With multiple funding rounds anticipated in FY21, we expect upward revisions to NAV and reduced risk as rounds complete. Federated Wireless is considering a major growth round in FY21. Having been affected by COVID-19, Spin Memory will target a small down round but remains strategically well placed as the only US-based MRAM developer. BridgeComm will need further funding to support its partnerships with Boeing's defence division and Nokia. Orbital Sidekick has announced its Series A round (with matched funding from the US Air Force). Spark Insights, founded in 2018, expects to raise additional financing in FY21.

Valuation: Potential for NAV appreciation in FY21

Despite progress and continuing strong deep tech valuations, key portfolio companies are held at historical valuations established in 2018/19. With funding rounds anticipated at each of Allied Minds' three largest holdings, there is scope for material NAV upside in FY21. Based on our calculations, including Spin Memory at full holding value, our estimate of FY20 NAV per share is 61.7p, with the shares currently trading at a 48% discount to this value. Even if we set aside Spin Memory entirely, we estimate NAV per share (ex-Spin Memory) of 43.1p, with the shares currently trading at a 25% discount.

Investment companies

7 January 2021

Price **32.3p**
Market cap **£78m**

US\$1.36/£

Estimated parent cash (\$m) at 31 December 2020 20.4

Shares in issue 242.2m

Free float 91%

Code ALM

Primary exchange LSE

Secondary exchange N/A

Share price performance



% 1m 3m 12m

Abs (12.7) (21.2) (12.9)

Rel (local) (16.3) (31.9) (5.2)

52-week high/low 55.0p 20.8p

Business description

Allied Minds is an IP commercialisation company with a concentrated investment portfolio predominantly focused on early-stage technology companies. Its portfolio companies are spinouts from US federal government laboratories and universities.

Next events

FY20 results 25 March 2021

Capital markets day April 2021

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Portfolio update: Funding to drive NAV appreciation

Allied Minds has a concentrated portfolio of largely pre-revenue businesses in the deep tech sector and, as with any venture capital vehicle, it is inevitable that there will be advances and setbacks with individual portfolio companies as the overall portfolio matures towards exits.

However, looking at the remaining portfolio, Allied Minds' investee companies are working with a range of leading strategic and financial partners, including Amazon Web Services, Arm, Boeing, Microsoft Azure, Nokia and Temasek, as well as multiple branches of the US government.

Management is planning a capital markets day in April 2021, following the FY20 results in March, to help investors better understand the remaining core businesses and their prospects.

Spin Memory: Down round anticipated for FY21

We noted that Spin Memory had been subject to foundry delays in our [interim results note](#) in October. However, the extent of these delays, though understandable, is more material than anticipated. Although Spin Memory was able to 'tape out' its Endurance Engine technology into a demonstration chip in partnership with ARM, COVID-19 restrictions have delayed testing of the chip by six to nine months, slowing commercialisation. Testing finally commenced in early Q420 with positive initial results.

These delays to commercialisation, together with the unexpected loss of a government bid in late Q420, mean that Allied Minds is considering a small Series B funding round (at a significantly reduced valuation) to support commercialisation in FY21. Given the current economic climate, there is inevitable uncertainty around the valuation and timing of any round.

Federated Wireless: 500% y-o-y revenue growth forecast

Federated Wireless offers a shared spectrum technology for wireless communications in the US (on the 3.5GHZ CBRS spectrum) as well as deployment of private wireless networks through its Connectivity-as-a-Service (CaaS) offering (with a roll-out through partnerships with AWS and Microsoft Azure funded by a Series C funding round in April 2020). Since Q120, Federated Wireless has been the only Federal Communications Commission (FCC) authorised company with a fully deployed Environmental Sensing Capability, providing the company with a significant first-mover advantage.

In October 2020, the US Department of Defense announced that Federated has been awarded a project at the Marine Corps Logistics Base Albany, GA to develop a 5G Smart Warehousing solution, the first CaaS-related opportunity for Federated from its previously announced new channel partners. Federated Wireless' partners include GE Research, KPMG, Scientific Research Corporation as well equipment suppliers, AWS and Cisco.

Federated Wireless has also partnered with a value-added reseller, TESSCO Technologies, to accelerate the roll-out of CBRS private networks in industries including manufacturing, transportation and energy. Federated Wireless is starting to build its recurring revenue base, which management expects to accelerate further in FY21, with forecast y-o-y growth of over 500% in 2021. Federated has sufficient cash to fund its growth into 2022 but, if it continues to achieve milestones, it may target its Series D funding round in FY21.

BridgeComm: Initial revenues leading to Series C in FY21

BridgeComm provides optical wireless communication solutions, providing fast, secure, enterprise-grade broadband services for space, terrestrial and 5G connectivity. BridgeComm is pushing forward on two fronts: in September, it signed a partnership with Nokia to develop an ultra-high-

speed throughput last mile connectivity solution for 5G networks. BridgeComm also continues to work closely with Boeing, having signed a joint development agreement with Boeing HorizonX for applications of its secure, high-speed One-to-Many (OTM) technology. BridgeComm and Boeing are bidding on several US government contracts requiring optical communications, expected to lead to initial revenues in 2021. As well as US\$4.5m in convertible debt already provided by Boeing and Allied Minds, BridgeComm will need further financing in FY21 to fund its development work.

Orbital Sidekick: Series A funding round led by Temasek

As announced with Allied Minds' H120 results, Orbital Sidekick (satellite-based hyperspectral imaging) was awarded a multi-year contract by the US Air Force (AFVentures) as part of its strategic financing (STRATFI) program. Orbital Sidekick received US\$4m in non-dilutive financing in Q420 from AFBventures, with non-dilutive matched funding of up to a further US\$12m available over the next three years.

In December, subject to approval by the Committee on Foreign Investments in the United States, Orbital Sidekick secured US\$16m in Series A financing (sufficient to liberate the full STRATFI funding) led by Temasek, together with other new investors, as well as existing investors Allied Minds and 11.2 Capital. Allied Minds has committed US\$2.5m, including its US\$1.5m simple agreement for equity (SAFE), which converts into preferred shares. Orbital Sidekick intends to use the combined funding of US\$32m (US\$16m Series A with matched US\$16m STRATFI funding) to launch its first dedicated hyperspectral imagery satellite in 2021, allowing the company to realise revenues from its initial pilot programme for customers in the oil and gas pipeline industry. The funding will also enable it to scale, grow its sales pipeline and launch additional satellites to support its customers.

Spark Insights: Funding round anticipated in FY21

Spark is an advanced analytics company developing data products for the rapidly growing insurance analytics market. In June 2020, Spark released version 1.0 of its post-catastrophe automated damage assessment product. Spark expects to raise additional financing in 2021.

Other portfolio holdings

Allied Minds also holds shares in TouchBistro following the sale of its portfolio company, TableUp, to TouchBistro for US\$6m in August 2020. Although OcuTerra (previously SciFluor) remains a holding, we value it at zero given the lack of commercial progress.

Sufficient cash runway to deliver on its strategy

Allied Minds reported group net cash of US\$24.6m at 31 December 2020, including cash held by its subsidiaries. We estimate FY20 parent cash of US\$20.4m, taking the H120 parent cash figure of US\$29.9m, adjusted by US\$0.5m per month (US\$3.0m over H220) for central costs and US\$6.5m of investments in H220. For FY21, management projects central costs of US\$5.75m, of which US\$2.6m is for ongoing management costs and US\$3.15m relates to Allied Minds' public listing. Following the significant cost rationalisation that has taken place over the course of FY19–20, in line with its strategy, management believes that Allied Minds remains well placed to continue to fund its portfolio prudently and conservatively in order to maximise long-term shareholder value.

Realisations expected over next two to three years

Management continues to evaluate potential options for monetisation, both at the group level and for individual portfolio companies. Underlying valuations are expected to increase as investee companies continue to achieve technical and commercial goals, with the potential to deliver venture

capital-like returns on exit (ie the potential for a doubling of value every 12–18 months). On this basis, the board believes that prospects for the remaining portfolio are attractive and that the group’s best strategic option remains to support its portfolio companies towards exit over an anticipated two- to three-year time horizon. We note that capital constraints may start to limit the group’s strategic options, particularly in FY22 if there have been no prior realisations.

Valuation: Potential for NAV upgrades in FY21

Exhibit 1 sets out our NAV estimate (as at 5 January 2020) based on latest portfolio fair values.

Exhibit 1: Edison’s estimate of NAV									
Company	Business description	Latest funding round	Latest post-money value (100%) (US\$m)	Fully diluted value 31/12/20 (US\$m)	Fully diluted value 31/12/20 (p/share)	ALM holding 31/12/20	ALM fully diluted holding 31/12/20	Date of ALM valuation	Basis of estimate for fair value assessment
Federated Wireless	5G spectrum sharing and wireless CaaS provider	Apr 20	215.0	78.7	23.9	43%	37%	Sep 19	Valuation of last round (Strategics)
Spin Memory	MRAM Semiconductor memory	Jul 20	180.3	61.2	18.6	43%	34%	Apr 19	Valuation of last round (Strategics)
BridgeComm	Optical one-to-many and 5G last-mile comms service provider	Aug 20	38.0	23.9	7.3	81%	63%	Sep 18	Valuation of last round (Strategics)
Orbital Sidekick	Space-based hyperspectral imaging and analytics	Dec 20	46.0	11.1	3.4	27%	24%	Dec 20	Valuation of last round (third party)
TouchBistro (acquired TableUp)	Restaurant supply chain software provider	Aug 20		6.0	1.8			Aug 20	Valuation of all-share acquisition
Spark Insights	Property insurance analytics	Apr 19	3.2	1.9	0.6	71%	60%	Apr 19	Valuation of last round
Portfolio fair value (period end)				182.9	55.5				
Net cash at parent company (period end)				20.4	6.2				
Estimated NAV				203.3	61.7				
Latest share price					32.3				
Share price discount					48%				
Excluding Spin Memory					(18.6)				
Estimated NAV (ex-Spin Memory)					43.1				
Share price discount (ex-Spin Memory)					25%				

Source: Allied Minds, Edison Investment Research

To simplify our analysis, we have chosen only to consider the more conservative, fully diluted valuations for Allied Minds’ portfolio companies. Given the uncertain valuation outcome for Spin Memory, we have considered overall NAV both with and without Spin Memory.

Based on our calculations, including Spin Memory at full holding value, our estimate of NAV per share is 61.7p, with the current share price at a 48% discount to this value. Our estimate of NAV per share (ex0Spin Memory) is 43.1p, with the current share price trading at a 25% discount.

As we have highlighted previously, Allied Minds is a deep tech holding company that offers exposure to a concentrated number of emerging technology businesses. Despite evident progress over the course of 2020, including positive newsflow, top-up funding rounds and continuing strong technology valuations, Federated Wireless and BridgeComm in particular continue to be held at the historical valuations established at the time of their last major funding rounds in 2018 and 2019.

With all five direct holdings (ex TouchBistro) anticipating or closing funding rounds in FY21, we expect material changes in NAV over the next 12 months as funding rounds complete.

Correction: Fully diluted FY19 NAV should be 66.1p

We have historically stated the FY19 portfolio value including the US\$40m/12.6p special dividend. This overstated the group’s NAV by US\$40m or 12.6p per share. The corrected FY19 NAV should be US\$200.8m, with NAV per share correspondingly 66.1p on a fully diluted basis.

Exhibit 2: Financial summary

	US\$'000	2015	2016	2017	2018	2019
Year end 31 December		IFRS	IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT						
Revenue		3,300	2,664	5,001	5,561	2,692
Cost of Sales		(3,925)	(5,563)	(5,242)	(2,827)	(1,433)
Gross Profit		(625)	(2,899)	(241)	2,734	1,259
Normalised operating profit		(89,372)	(103,925)	(94,542)	(83,583)	(49,997)
Amortisation of acquired intangibles		0	0	0	0	0
Exceptionals		(309)	(1,365)	(2,363)	(545)	(671)
Share-based payments		(7,041)	(8,385)	(7,562)	(7,413)	1,465
Reported operating profit		(96,722)	(113,675)	(104,467)	(91,541)	(49,203)
Net Interest		670	2,318	305	1,313	741
Joint ventures & associates (post tax)		0	0	0	(3,658)	(28,850)
Fair value changes		(1,937)	(17,585)	(6,953)	139,240	127,566
Profit Before Tax (norm)		(90,639)	(119,192)	(101,190)	53,312	49,460
Profit Before Tax (reported)		(97,989)	(128,942)	(111,115)	45,354	50,254
Reported tax		0	0	0	0	0
Profit After Tax (norm)		(90,639)	(119,192)	(101,190)	53,312	49,460
Profit After Tax (reported)		(97,989)	(128,942)	(111,115)	45,354	50,254
Minority interests		20,192	32,609	35,337	(7,999)	1,081
Discontinued operations		0	0	0	0	0
Net income (normalised)		(70,447)	(86,583)	(65,853)	45,313	50,541
Net income (reported)		(77,797)	(96,333)	(75,778)	37,355	51,335
Basic average number of shares outstanding (m)		215	217	236	240	241
EPS - basic normalised (\$)		(0.33)	(0.40)	(0.28)	0.19	0.21
EPS - diluted normalised (\$)		(0.33)	(0.40)	(0.28)	0.19	0.21
EPS - basic reported (\$)		(0.36)	(0.44)	(0.32)	0.16	0.21
Dividend (\$)		0.00	0.00	0.00	0.00	0.00
Revenue growth (%)		(57.2)	(19.3)	87.7	11.2	(51.6)
Gross Margin (%)		-18.9	-108.8	-4.8	49.2	46.8
Normalised Operating Margin		N/A	N/A	N/A	N/A	N/A
BALANCE SHEET						
Fixed Assets		92,784	38,232	28,369	83,739	72,695
Intangible Assets		4,384	2,762	1,074	1,221	197
Tangible Assets		34,173	31,882	26,627	5,997	1,485
Right of use assets		0	0	0	0	1,016
Investments & other		54,227	3,588	668	76,521	69,997
Current Assets		158,427	232,007	184,792	107,034	97,854
Stocks		1,511	2,551	0	0	0
Debtors		7,342	5,900	15,642	6,400	5,702
Cash & cash equivalents		105,555	209,151	158,075	100,234	90,571
Cash at parent*		N/A	136,700	84,200	50,600	84,100
Other		44,019	14,405	11,075	400	1,581
Current Liabilities		(108,974)	(155,402)	(200,202)	(69,557)	(13,159)
Creditors		(14,268)	(13,941)	(14,276)	(13,030)	(4,685)
Tax and social security		(395)	(458)	(4,296)	(2,333)	(3,457)
Short term borrowings		(228)	(115)	0	0	0
Subsidiary preferred shares		(94,083)	(140,888)	(181,630)	(54,194)	(5,017)
Long Term Liabilities		(863)	(720)	(867)	(436)	(4,819)
Long term borrowings		(112)	0	0	0	0
Lease liabilities		0	0	0	0	(2,854)
Other long-term liabilities		(751)	(720)	(867)	(436)	(1,965)
Net Assets		141,374	114,117	12,092	120,780	152,571
Minority interests		10,631	20,797	59,241	(18,484)	(115)
Shareholders' equity		152,005	134,914	71,333	102,296	152,456
CASH FLOW						
Op Cash Flow before WC and tax		(85,286)	(97,290)	(88,440)	(77,525)	(47,173)
Working capital		2,652	468	(2,477)	6,033	506
Exceptional & other		0	0	0	(1,261)	267
Tax		0	0	0	0	0
Net operating cash flow		(82,634)	(96,822)	(90,917)	(72,753)	(46,400)
Capex		(23,213)	(4,087)	(1,522)	(9,110)	(3,675)
Acquisitions/disposals		(51,786)	74,816	5,853	(18,884)	25,180
Net interest		716	1,602	138	1,313	741
Payment of lease liability		0	0	0	0	(1,540)
Equity financing		2,443	79,319	1,595	1,594	(10,069)
Dividends		0	0	0	0	0
Other		36,165	48,993	33,892	39,438	25,292
Net Cash Flow		(118,309)	103,821	(50,961)	(58,402)	(10,471)
Opening net debt/(cash)		(223,524)	(105,215)	(209,036)	(158,075)	(100,234)
FX		0	0	0	561	808
Other non-cash movements		0	0	0	0	0
Closing net debt/(cash)		(105,215)	(209,036)	(158,075)	(100,234)	(90,571)

Source: Company accounts. Note: *For clarity, cash at parent has been broken out as a separate line from cash & cash equivalents. As a line item, it does not form part of the calculation for current assets.

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