Progressive EQUITY RESEARCH

XAAR (XAR.L)

TECHNOLOGY

July 2024

137p - Market Cap: £108.7m

SHARE PRICE (p)

12m high/low	190p/91p

Source: LSE Data

KEY DATA

Net (Debt)/Cash	£6.8m *(at 30/06/24)*
Enterprise value	£101.9m
Index/market	LSE
Next news	Interims, 18 Sept
Shares in Issue (m)	79.4

TOP TEN SHAREHOLDERS

Schroder Investment Mgt	28.8%
Odyssean Capital	9.2%
Aberforth Partners	9.1%
Columbia Threadneedle	6.7%
Hargreaves Lansdown	6.5%
Invesco	5.2%
Fidelity	3.2%
Chelverton	3.0%
Barclays	2.8%
River & Mercantile	1.8%

https://www.xaar.com

XAAR IS A RESEARCH CLIENT OF PROGRESSIVE

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Solid footings for future growth

Company description

Xaar has a 30-year history in the inkjet printing market, with a strong global position in the manufacture and sale of printheads, as well as smaller business units concentrating on broader print systems and digital imaging.

The market for industrial digital inkjet printheads is estimated by management to be approaching $1bn per annum, segmented into a number of discrete and specific markets. Xaar's product roadmap suggests that it will be able to address the vast majority of this within a few years.

Advances in technology will allow both Xaar and the wider inkjet market to broaden the range of end-customer use cases, to improve speed and quality of printing, and to reduce the environmental impact of printing activity. Combined with a recovery in market activity post-Covid (and as China hopefully reopens), this should provide a long-term positive structural growth backdrop.

Investment case summary

Xaar is a leading player in a vibrant and expanding global market - inkjet printing. The group has a strong and proven product suite, a revamped go-to-market strategy, and some useful ESG tailwinds. Near-term results should benefit from the following key drivers:

- Coming months are likely to see increasing traction around the new product designs, including enhanced functionality and the ability to manage aqueous (water-based) inks for the first time.
- Xaar has a renewed 'customer-centric' focus, and has rebuilt its position with both printer manufacturers and systems integrators who are now aware of the strength and differentiation of the new designs based on the ImagineX platform.

Xaar's high gross margins and relatively fixed cost base mean that as product and revenue traction continue to build, the impact on the bottom line should be dramatic.

FYE DEC (£M)	2021	2022	2023	2024E	2025E
Revenue	59.3	72.8	70.6	72.8	74.8
Adj EBITDA	3.2	6.2	6.4	3.7	4.0
Fully Adj PBT	-0.6	2.8	2.9	0.4	1.6
Fully Adj Dil EPS (p)	-0.1	5.0	-3.2	2.5	3.1
EV/Sales (x)	1.9x	1.5x	1.6x	1.5x	1.5x
EV/EBITDA (x)	34.9x	17.9x	17.5x	30.1x	27.9x
PER (x)	N/A	29.9x	N/A	59.3x	47.3x

Source: Company Information and Progressive Equity Research estimates

Investor criteria – how Xaar measures up…

What investors look for	What Xaar offers
Large and growing market with diverse revenue streams	Xaar's principal business is the manufacture of specialist industrial and commercial digital printheads. These printheads are used in a variety of applications, from printing ceramic tiles to posters on the sides of buildings to 'best by' dates on bottles of beer.
Recurring (or repeat) business from blue-chip customers, or otherwise reliable revenue base	Xaar works hard to ensure that printer OEMs use its printheads on their equipment and that Xaar is therefore a supplier for the production life of that model of printer.
Defensible position with barriers to entry	Xaar's core printhead design IP, manufacturing skills, track record of innovation and understanding of end applications create sizeable protection from new entrants.
Strong margins, cash generation and dividends	Printheads are sophisticated high precision pieces of equipment that command high gross margins. The business has what management diplomatically describe as 'significant latent capacity', with the potential to support revenues 3x higher than current figures limited new investment. With £12.7m net cash as at 30 June 2022, Xaar has a strong balance sheet.
Positioned for acquisitive growth	Xaar has made three acquisitions in relatively quick succession, but we do not see more acquisitions as necessary to achieve strategic goals. We expect any acquisitions to be, like FFEI, at a relatively small scale and to have the purpose of adding skills and expertise and/or market access.
Strong ESG credentials – as a business or via products/services	Xaar has made a commitment to 'net zero by 2030'. Its aqueous ink capable printheads should save on energy used to dry the inks. There is potential for the use of aqueous in place of environmentally unfriendly oil, solvent or UV cured inks.
Credible, strategic and experienced management team	John Mills, CEO, and Ian Tichias, CFO, have impressed in dealing with Xaar's issues. John has considerable experience at board level, including as CEO, within inkjet and technology companies. Ian is an experienced finance professional who has held senior roles at a number of major corporates.

Business model

Xaar manufactures printheads that are used in industrial and commercial digital printers. It can add broader ink systems, printbars and print engines to allow system developers and integrators to build their own task-specific printers.

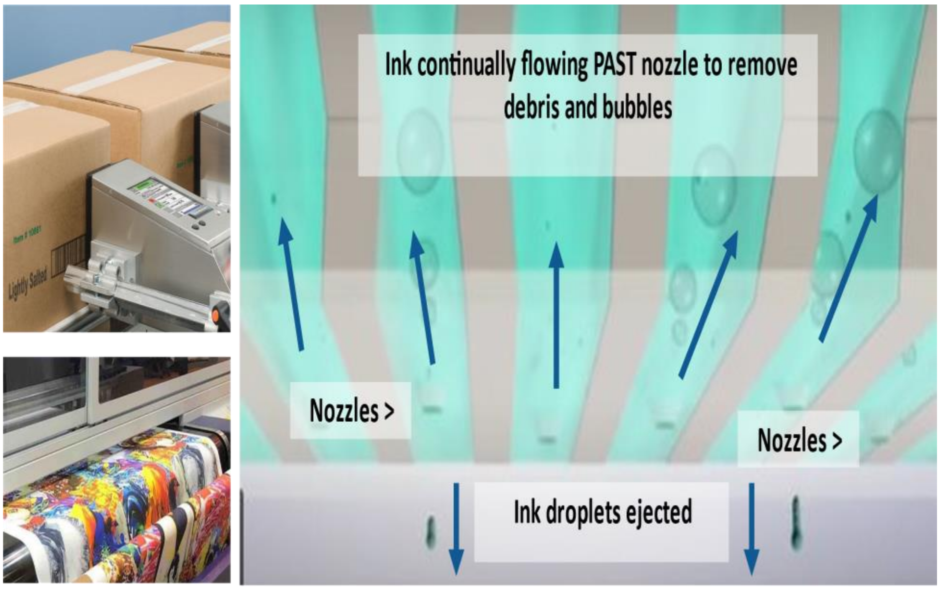
Xaar markets its products to printer manufacturer and process and printing systems integrators (UDIs).

- The route to the OEM customer is direct, with Xaar working to help them build Xaar printheads and its electronics, software and ink systems into the customer's range of printers.
- User Developer Integrators (UDIs) are also sold to directly. UDIs integrate Xaar's products into wider processes and systems rather than into a discrete machine. Xaar's work with UDIs extends to working on building its print bars and print engines into the final solution, with the goal of also having a long term ink supply relationship.
- Xaar works with leading fluid manufacturers to help them develop inks for application via Xaar printheads, whilst also selling its own branded inks to its UDI customers.
- Xaar's subsidiary EPS, is a product printing equipment manufacturer based in the US. It sells printers, ancillary equipment, services and consumables.

Xaar's business model is built around core IP and a deep understanding of both the manufacturing and application of digital printheads.

The group works to 'design in' its products - either to OEM printers for sale, or for specific UDI customer applications and use cases. This should generate long-term, reliable, high-margin revenues.

Illustration of product offering



Source: Progressive Equity Research / Company information

Market dynamics

Xaar competes across a mix of both mature and nascent markets, against a number of generally established competitors. These markets are all growing, albeit at different rates, and the ability to offer performance, reliability and customer service / awareness are seen as the keys to success.

£1bn addressable market opportunity:

- Xaar has strong history in both the £100m Ceramics and Glass, and £100m Coding & Marking and Direct to Shape markets.
- The £100m Packaging and Textiles market has not grown as anticipated due to lack of effective printheads, and the £50m 3D and Advance Manufacturing markets use difficult to handle, complex inks.
- The £500m Wide Format Graphics and Labels market, where Xaar was once the leader, is an area that requires high speed, high resolution printheads and could well move to aqueous inks in coming years. Given its recent product launch, we hope that Xaar is well placed to benefit.

Xaar is rebuilding its strong position in the Ceramics and Glass market and has a longstanding leading position in the Coding & Marking market. Xaar has worked hard to exploit and grow the £50m printing and advanced manufacturing market, applying its expertise and technology in jetting difficult inks.

Xaar is looking to enter the Packaging and Textiles market with its latest Aquinox aqueous ink capable printhead, providing a solution where others have struggled to deliver performance and reliability. In due course, management anticipate launching a new product to look to reclaim, at least in part, the group's leading position in the £500m Wide Format Graphics and Labels market.

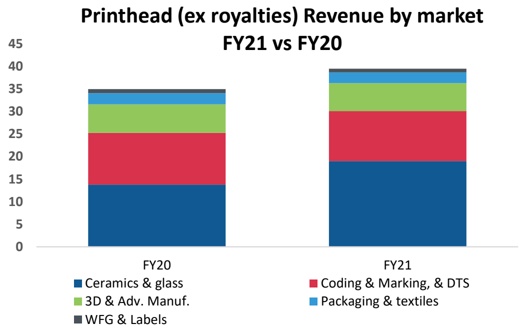
Customer examples

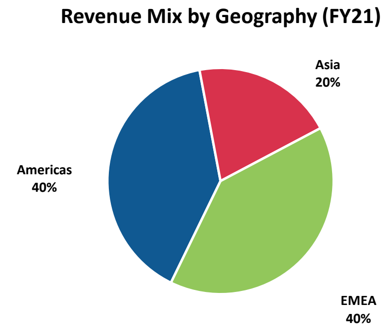
Xaar supplies many of the top industrial and commercial digital inkjet printer manufacturers and is working with a number more on their next generation devices.

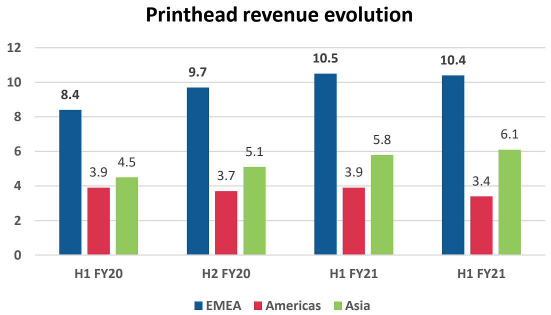
NKT 新景泰 efi VIDEOJET
KERAjet stratasys
DEKRON RN MARK DOMINO

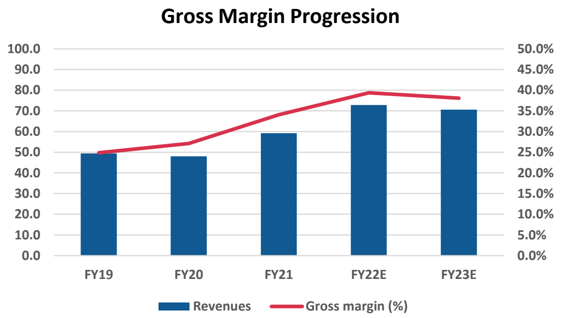
Source: Progressive Equity Research / Company information

Financial performance









Source: Progressive Equity Research / Company information

Business catalysts

- Continuing progress with regaining market share in Ceramics and Glass - the group has made strong strides in recent periods, and we hope to see significant and ongoing growth from this segment.

- New product launches, most notably aqueous in the short term - the recently-unveiled Aquinox product line will allow the group to address new markets, and apply aqueous inks to printing requirements in new areas. These inks are more environmentally friendly, can dry using less energy, and contain fewer harmful chemicals than similarly-featured inks using oil or other bases.

- Further evidence of traction with leading printer manufacturers leading to new printer launches across a number of end markets - the group's recent return to its traditional model of working closely with OEMs is beginning to deliver results, and as new printers are unveiled, incorporating Xaar printheads, the group should begin to see a steadily building "bow wave" of recurring and reliable revenue growth.

- Additional technological advances in the pipeline - the ImagineX platform (launched in Sep 2020) provides material improvement in speed and throughput, as well as handling viscose inks and long "throw" distances. The product roadmap still contains further advances around reliability, longer printhead life and even greater resolution. These, in turn, should drive additional OEM and UDI design wins, and long term performance.

Executive Management Team and Chair

Andrew Herbert Chairman	John Mills CEO	Ian Tichias CFO
		
Andrew has over 30 years' experience in the global digital printing industry. He was Group Finance Director/Chief Financial Officer of Domino Printing Sciences plc from 1998 to 2015. He has also held a number of director roles in Operations, Planning and Business Development. He is Non Executive Chairman of Midwich Group plc.	John joined Xaar in October 2019 following five years as CEO at Inca Digital. John started his career at Domino Printing Sciences plc following a Ph.D in Physics, progressing through a number of technical roles to Director of Development. Other roles since leaving Domino Printing include CEO at DataLase Ltd and COO at Plastic Logic Ltd.	Ian joined the group in March 2020 with over 15 years' experience in senior financial roles. Previously, Ian was Group FD and Deputy CFO at Ibstock plc. Other past roles include Senior Director, Finance & Global Pricing Lead – Europe, Africa and Middle East for Zoetis and before that, Head of Finance for Pfizer Diversified Businesses (PDB) UK.

Key risks and challenges

Areas of concern	Management mitigation
New product execution risk	Xaar has a long history in inkjet design and manufacture and has structured its product roadmap as a series of significant improvements rather than a wider revolution.
China risks including Covid	Xaar has a significant proportion of sales in China subject to political and more significantly Covid risk. However, it works to diversify its sales and it is noteworthy that its competitors are in the same situation wrt China.
Relatively small scale	Xaar competes mainly with subsidiaries of significantly larger companies. However, these competitors tend to be slower moving, often with less perceived commitment to the market.
Restructuring execution	The early CY23 factory shut down and restructuring was in planning for some time and within the company there is significant experience of restructuring manufacturing operations and setting up production facilities.
Competition	Aggressive new entrants could attempt to flood the market with low-cost product; Xaar has competed effectively for many years and the barriers to entry are high - both OEM and UDI customers see print quality as critical; they are unlikely to take risks for a small cost advantage.

Financial Summary: Xaar

Year end: December (£m unless shown)

PROFIT & LOSS	**2021**	**2022**	**2023**	**2024E**	**2025E**
Revenue	59.3	72.8	70.6	72.8	74.8
Adj EBITDA	3.2	6.2	6.4	3.7	4.0
Adj EBIT	0.6	2.5	(1.9)	2.2	2.8
Reported PBT	1.0	0.8	(2.4)	(0.2)	0.3
Fully Adj PBT	(0.6)	2.8	2.9	0.4	1.6
NOPAT	0.0	2.6	(1.7)	1.6	2.1
Reported EPS (p)	0.9	2.3	(2.8)	0.0	0.5
Fully Adj Dil EPS (p)	(0.1)	5.0	(3.2)	2.5	3.1
Dividend per share (p)	0.0	0.0	0.0	0.0	0.0

CASH FLOW & BALANCE SHEET	**2021**	**2022**	**2023**	**2024E**	**2025E**
Operating cash flow	(2.2)	(5.6)	(1.5)	2.8	4.1
Free Cash flow	(2.1)	(5.5)	(0.4)	3.0	4.3
FCF per share (p)	(2.6)	(7.0)	(0.6)	3.8	5.4
Acquisitions	(1.4)	(8.7)	(1.2)	(2.4)	(2.5)
Disposals	9.2	0.0	1.8	0.0	0.0
Shares issued	0.2	0.4	0.6	0.0	0.0
Net cash flow	5.1	(17.1)	(1.2)	0.5	1.7
Overdrafts / borrowings	(1.2)	(1.0)	(1.8)	(1.9)	(2.0)
Cash & equivalents	25.1	8.5	7.1	7.4	8.9
Net (Debt)/Cash	23.8	7.5	5.3	5.5	6.9

NAV AND RETURNS	**2021**	**2022**	**2023**	**2024E**	**2025E**
Net asset value	68.8	71.8	71.8	76.9	80.5
NAV/share (p)	87.8	91.5	91.4	97.8	102.4
Net Tangible Asset Value	44.4	53.3	53.4	50.3	49.3
NTAV/share (p)	56.7	68.0	67.9	64.0	62.8
Average equity	62.5	70.3	71.8	74.3	78.7
Post-tax ROE (%)	17.8%	2.3%	(3.0%)	0.0%	0.5%

METRICS	**2021**	**2022**	**2023**	**2024E**	**2025E**
Revenue growth	N/A	22.8%	(3.0%)	3.0%	2.9%
Adj EBITDA growth		94.9%	2.5%	(41.9%)	7.9%
Adj EBIT growth		336.3%	(176.5%)	(216.4%)	26.2%
Adj PBT growth		(594.2%)	2.2%	(85.1%)	279.2%
Adj EPS growth		(6308.0%)	(164.2%)	(178.5%)	25.4%
Dividend growth	N/A	N/A	N/A	N/A	N/A
Adj EBIT margins	1.0%	3.4%	(2.7%)	3.0%	3.7%

VALUATION	**2021**	**2022**	**2023**	**2024E**	**2025E**
EV/Sales (x)	1.9	1.5	1.6	1.5	1.5
EV/EBITDA (x)	34.9	17.9	17.5	30.1	27.9
EV/NOPAT (x)	-3692.3	42.0	-66.2	70.9	53.8
PER (x)	N/A	29.9	N/A	59.3	47.3
Dividend yield	N/A	N/A	N/A	N/A	N/A
FCF yield	(1.8%)	(4.7%)	(0.4%)	2.5%	3.7%

Source: Company information and Progressive Equity Research estimates

July 2024

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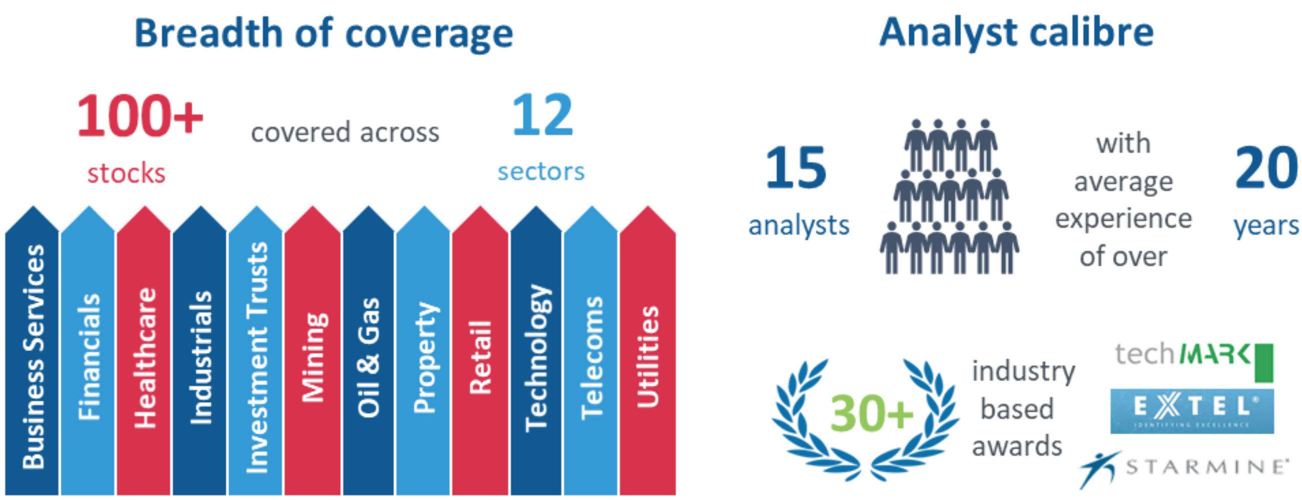

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