



Research Report (Anno)

Advanced Blockchain AG



Considerable upside potential to portfolio valuation.

-

**Track record of successful
partial divestments and financing rounds.**

**Fair Value: EUR 11.00
(Previously: EUR 10.00)**

Rating: BUY

IMPORTANT NOTE:

Please note the disclaimer/risk warning

as well as the disclosure of possible conflicts of interest in accordance with § 85 WpHG and Art. 20 MAR from page 33

Note in accordance with MiFID II regulation for research "Minor non-monetary benefits": The research in question meets the requirements for classification as "Minor non-monetary benefits". For further information, please refer to the disclosure under "I. Research under MiFID II".

Date and time of completion of the study: 11.07.2023 (17:30)

Date and time of the first disclosure of the study: 12.07.2022 (09:30)

Validity of the target price: until max. 31.12.2024

Advanced Blockchain AG^{*5a,11}

Fair Value: € 11.00
(Previously: € 10.00)
Rating: Buy

Current price: 2.93
05.07.23 / Xetra / 9:44
Currency: EUR

Company data:

ISIN: DE000A0M93V6
WKN: A0M93V
Symbol (DUS): BWQ
Number of shares³: 3.79
Marketcap³: 11.12
³in million / in EUR million

Accounting:
German GAAP (HGB)

Financial year: 31.12.

Analysts:

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Company profile

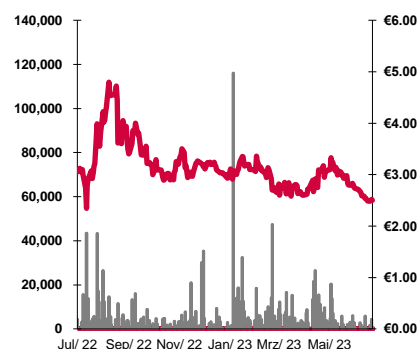
Industry: Technology, Crypto
Focus: Blockchain Technology, DeFi, Web 3.0

Employees: 30 as of 31.12.2022

Foundation: 2017

Headquarters: Berlin

Management Board: Simon Telian (CEO)



Advanced Blockchain AG is the first and oldest exchange-traded company on the German market specializing in blockchain technology. The company went public on the Düsseldorf Stock Exchange in January 2017, when Bitcoin was still trading at around EUR 3,200. The company is led by Simon Telian (as of August 31st, 2022) and formerly by Michael Geike, two successful serial tech entrepreneurs. Since March 2022 Advanced Blockchain AG is listed in the Scale segment of the Deutsche Börse. Advanced Blockchain AG specializes in the advancement, development, and investment in disruptive technologies. The company places a strong emphasis on token technologies, including token investment and incubation. One of the primary areas of focus for Advanced Blockchain AG is the venture capital market, particularly within the decentralized infrastructure sector. This includes sectors such as the Economy of Things (EoT), which explores the integration of decentralized technologies into various industries. Additionally, the company is actively engaged in decentralized finance (DeFi), a pivotal component of Web3, the next generation of the World Wide Web. By concentrating on these areas, Advanced Blockchain AG is at the forefront of fostering innovation, supporting startups, and contributing to the growth of the decentralized ecosystem. The company's dedication to advancing disruptive technologies positions it as a driving force within the blockchain industry.

P&L in EURm \ FY-end	31.12.2021	31.12.2022	31.12.2023e
Sales	17.86	14.73	5.00
EBITDA	6.65	2.77	1.62
EBIT	6.53	1.69	0.51
Net income	5.32	1.76	0.50

Key figures			
EPS	1.41	0.46	0.13
DPS	0.00	0.00	0.00

Key figures			
EV/Sales	0.45	0.54	1.60
EV/EBITDA	1.21	2.90	4.95
EV/EBIT	1.23	4.76	15.74
PE	2.21	6.66	23.24
PB		0.75	

Financial Calendar

08.2023: Annual General Meeting
09.2023: Publication of the half-year financial statements as of June 30, 2023
11.2023: Deutsches Eigenkapitalforum

**Latest research from GBC:

Date: Publication / Target price in EUR / Rating
07.11.2022: RS / 10.00 / BUY
13.07.2022: RS / 10.00 / BUY
28.04.2022: RS / 23.32 / BUY

** research reports listed above can be downloaded from www.gbc-ag.de or can be requested from GBC AG, Halderstr. 27, D86150 Augsburg, Germany.

* Catalog of possible conflicts of interest on page 34

EXECUTIVE SUMMARY

- In 2022, Advanced Blockchain AG expanded its portfolio by investing in 12 promising blockchain projects and Web3 infrastructure initiatives. Also three in-house portfolio companies secured over \$53 million in funding from renowned co-investors and investors, solidifying the reputation and confidence in Advanced Blockchain's ecosystem.
- One standout success story is Composable Finance, which raised \$32 million with an implied valuation exceeding \$350 million in a Series A financing round and launched a blockchain cross-liquidity protocol. This achievement established them as a prominent player in the DeFi ecosystem, attracting a dedicated community of users and partners. Their focus on interoperability and innovative financial products positions them for continued growth and success.
- peaq, another portfolio company, introduced DePIN technology, addressing key challenges in decentralized finance and enhancing security, scalability, and cost efficiency. peaq secured a total funding of \$10.5 million, with a round of funding of \$6 million, led by Fundamental Labs, peaq solidified its position in the industry. Their advancements in technology and investment efforts demonstrate their commitment to revolutionizing decentralized finance and driving innovation.
- In 2022, Advanced Blockchain AG faced a challenging year in the crypto market but demonstrated resilience by maintaining its business operations. Despite a 17.5% decline in revenues to €14.73 million, the company remained committed to navigating the market and pursuing its strategic objectives. To mitigate the impact of the challenging conditions, Advanced Blockchain AG implemented a comprehensive cost reduction strategy to align expenses with the market situation, improving financial stability.
- In April 2023 Advanced Blockchain AG announced that Sebastian Markowsky, an experienced investment banker and skilled dealmaker in the blockchain industry, has joined as an Advisor and Venture Partner. With a successful background advising top fintech and software companies on securing global deals, Markowsky brings a wealth of expertise to the table. His focus is on digital assets, blockchain, decentralized business models, and cutting-edge technology. With his experience at notable firms like GP Bullhound, Blockchain Valley Ventures, and Deutsche Bank, Markowsky has gained a reputation for his commitment and long-term support.
- The company experienced a decline in EBITDA to €2.77 million (PY: €6.65 million), leading to a reduced EBITDA margin of 18.8% (PY: 37.2%). The cost of materials significantly increased by 210.3% to €23.80 million due to rising development costs. However, Advanced Blockchain AG witnessed a notable rise in other operating income to €15.10 million, attributed to capitalizing internal work for software development in its subsidiaries. Despite the obstacles, the company remained profitable, albeit with a proportional reduction in net result. The net result for the year amounted to €1.76 million (PY: €5.32 million), showcasing Advanced Blockchain AG's ability to navigate challenges and maintain financial stability. With a net margin of 12.0% (PY: 29.8%), the company displayed effective cost management and resilience in the face of reduced revenues.
- In fiscal year 2023, Advanced Blockchain AG focuses on sustainable growth and cost management. The company plans to expand its team, make new investments and implement cross-chain initiatives to maintain its leading position as a blockchain in-

cubator and Web3 investor. Ongoing research and clear strategies will drive the development and adoption of various blockchain topics and use cases.

- The top 10 portfolio holdings (of the more than 30 holdings), including companies like peaq/EoT Labs GmbH, Mero, and Contango, have a conservative valuation of €39.65 million. However, we estimate that the fair value of these holdings is considerably higher and to be around €45 million. The total portfolio value, including remaining investments, is estimated at €90 million, considering a significant undervaluation in the current market conditions.
- Regarding the market, the recent endorsement of Bitcoin (BTC) by BlackRock CEO Larry Fink has had a profound impact on the growing acceptance of cryptocurrencies among Wall Street veterans. Fink, who was previously skeptical about digital currencies, announced that BlackRock aims to streamline and reduce the costs of trading and investing in Bitcoin. This acknowledgment of Bitcoin's potential as a revolutionary financial instrument marks a significant shift in the public stance of asset managers and senior executives. It highlights BlackRock's responsiveness to client demands and further validates Bitcoin's emergence as a mainstream asset within traditional finance.
- **We approximate the net asset value (NAV) to be €88 million, with a per-share value of €23.48. However, we applied an additional discount of around 53% due to the ongoing "crypto winter" and the decline in crypto markets, resulting in a fair value of €41.74 million or €11.00 per share. Based on the significant upside potential, we assign a Buy rating.**

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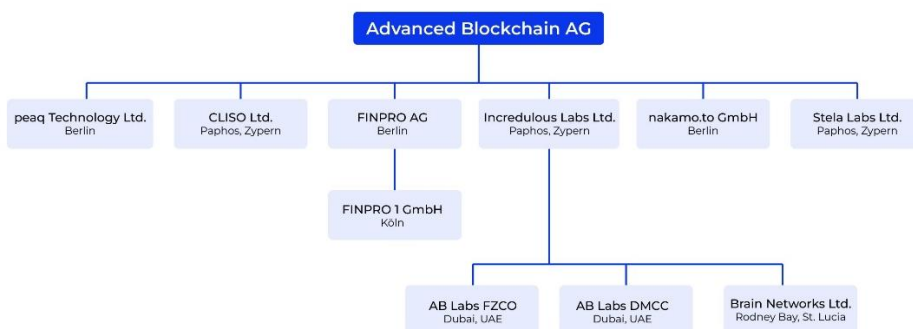
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COMPANY

Shareholder structure

The shareholder structure consists of almost 100% free float.

Company structure



Source: Advanced Blockchain AG

Advanced Blockchain AG

Advanced Blockchain AG is the first and oldest exchange-traded company on the German market specializing in blockchain technology. The company went public on the Düsseldorf Stock Exchange in January 2017, when Bitcoin was still trading at around EUR 3,200. The company is led by Simon Telian (as of August 31st, 2022) and formerly by Michael Geike, two successful serial tech entrepreneurs.

Advanced Blockchain AG specializes in the advancement, development, and investment in disruptive technologies. The company places a strong emphasis on token technologies, including token investment and incubation. One of the primary areas of focus for Advanced Blockchain AG is the venture capital market, particularly within the decentralized infrastructure sector. This includes sectors such as the Economy of Things, which explores the integration of decentralized technologies into various industries. Additionally, the company is actively engaged in decentralized finance (DeFi), a pivotal component of Web3, the next generation of the World Wide Web. By concentrating on these areas, Advanced Blockchain AG is at the forefront of fostering innovation, supporting startups, and contributing to the growth of the decentralized ecosystem. The company's dedication to advancing disruptive technologies positions it as a driving force within the blockchain industry.

In response to changing market conditions, Advanced Blockchain has implemented a significant strategic adjustment. In the previous year, the company focused on developing innovative technologies through ventures, with the goal of identifying partners or customers for potential spin-offs. However, the investment landscape has evolved, prompting the company to reevaluate its approach.

Consequently, Advanced Blockchain has shifted its strategy to a more cautious stance. The company will now only undertake new projects if funding or, at the very least, project costs are secured in advance. This adjustment reflects a prudent and financially disciplined approach to project initiation, ensuring that the company mitigates risks associated with uncertain funding.

By prioritizing secured funding or cost coverage, Advanced Blockchain aims to strengthen its financial stability and maximize potential returns on investments. This strategy adjustment exemplifies the company's dedication to maintaining a robust financial position while pursuing new opportunities in the blockchain industry.

MARKET AND MARKET ENVIRONMENT

Crypto markets in Q1 2023

In the first quarter of the year, the financial landscape faced increasing tightness, with mixed market reactions. January saw a risk rally, but February and March turned negative due to strong rhetoric from the US Federal Reserve and concerns about a possible recession. The quarter experienced the fall of mid-tier banks like Signature, Silicon Valley Bank, and First Republic, indicating cracks in the system.

To provide support to the banking sector, the US Federal Reserve and Treasury swiftly introduced the Bank Term Funding Program. This program aimed to assist banks by providing claims on US Treasury bonds and Mortgage-Backed Securities at face value directly with the Fed. While it provided some relief, the market realized that it effectively introduced an additional \$4.4 trillion to the money supply, causing assets external to the economy to rally, such as gold and Bitcoin.

The quarter highlighted the challenging position many central banks face, having to juggle the potential collapse of banks and the risk of currency debasement. Despite hawkish rhetoric, the likely choice was to continue supporting the economy, risking stagflation but creating an opportunity for Bitcoin's primary value proposition to shine.

Within the digital asset ecosystem, there were mini boom and bust cycles. The rally in Bitcoin had a trickle-down effect on lower-cap assets, leading to multiples in some cases. The Arbitrum ARB airdrop also influenced the market, introducing fresh funds and creating isolated bubbles. Ethereum's successful Shanghai fork had a positive impact on the network, with limited Beacon Chain withdrawals and sustained network uptime.

However, by the end of March, liquidity across the market decreased, exacerbated by increased regulatory scrutiny from the US. Despite the prevailing sentiment, the first quarter demonstrated that the market is full of opportunities. Moving into the second quarter, the direction of the market will likely be determined by the actions of central banks and regulators.

Cryptocurrencies

In 2022, BTC experienced a significant decline due to factors such as high inflation, an aggressive US Federal Reserve, volatile economic data, geopolitical tensions, and the capitulation of key protocols and centralized exchanges. However, in early 2023, BTC started to recover, breaking above \$20,000 by mid-January, driven by reduced concerns about counterparty risk and optimism regarding lower interest rate hikes in the second half of the year.

In February, the possibility of extended interest rate hikes resurfaced, leading to a pull-back in BTC and other risk assets as investors reduced their exposure. Regulatory actions, such as the probe into Paxos Trust Company by New York regulators, temporarily worried some investors. However, economic data and inflation narratives had a greater impact on the market than space-specific factors.

BTC faced dislocation in the latter part of the first quarter. Regulatory scrutiny affected Silvergate Bank and Silicon Valley Bank, and USDC experienced a de-pegging event. Initially, fear caused prices to decline, and BTC retested the \$20,000 level. However, faced with the dilemma of systemic collapse or hyperinflation, the US Federal Reserve chose to increase the size of its balance sheet by around \$300 billion, providing support to the market. BTC stood out during this period by breaking correlation with equities and serving as a flight to safety asset, similar to gold. Its unique qualities as a highly mobile

bearer asset made it a hedge against balance sheet expansion, banking problems, and traditional portfolios. BTC's market capitalization dominance indicates that it led much of the market strength in Q1.

Although BTC outperformed ETH from February to April, ETH's performance remained relatively healthy compared to the broader market. ETH returned +20% during this period, while other assets like MATIC, SOL, and ATOM experienced negative returns. Some DeFi assets like UNI and AAVE also suffered losses. ETH's outperformance can be attributed to its highly anticipated Shanghai Upgrade scheduled for April 12th, which enables staked ETH withdrawals and is expected to shift market dynamics by increasing capital availability.

DeFi

DeFi kicked off the quarter with a total value locked (TVL) of US\$38.7 billion in smart contracts across various blockchain platforms. This figure experienced a significant increase to US\$49.8 billion, representing a robust 28.7% quarter-on-quarter growth. The growth of DeFi during this period was driven by specific narratives within the space, with certain chains playing a more significant role than others. Ethereum, Arbitrum, and Optimism were notable contributors to this growth.

The layer 2 narrative played a crucial role, as demonstrated by the substantial increase in TVL for platforms like Arbitrum and Optimism. These layer 2 solutions saw significant adoption and utilization, contributing to the overall growth of DeFi. Additionally, the liquid staking narrative also played a significant part, with Lido's TVL nearly doubling during the quarter. As the Shanghai upgrade approaches in Q2, it remains to be seen whether Lido can maintain its dominance over other decentralized applications in terms of TVL.

Overall, the DeFi sector demonstrated impressive growth, fueled by these narratives and the adoption of platforms such as Ethereum, Arbitrum, and Optimism. The upcoming months will be crucial in determining the continued trajectory of DeFi and the dominance of specific applications in terms of TVL.

Non-Fungible Tokens

Non-Fungible Tokens (NFTs) have witnessed significant developments this quarter, as developers showcased the ability to create and store NFTs on the Bitcoin blockchain. This breakthrough has introduced a new narrative within the NFT space, expanding the market beyond Ethereum-based NFTs and attracting renowned artists and collectors. It has also sparked discussions about Bitcoin's programmability and its evolving role in the digital asset realm.

To tap into this growing market, many NFT collections that previously existed on other blockchain networks like Ethereum and Solana have sought to expand their presence onto Bitcoin. For example, Magic Eden launched a dedicated marketplace for Bitcoin-based NFTs, providing a platform for creators and enthusiasts to engage with these unique digital assets. Similarly, Yuga Labs unveiled a collection of NFTs specifically built on the Bitcoin blockchain, further highlighting the increasing interest in Bitcoin within the NFT ecosystem.

Layer 2 protocols

In the first quarter of 2023, Arbitrum, one of the highly anticipated layer 2 protocols, conducted a successful airdrop, distributing 1.275 billion ARB tokens to over 625,000 users. This resulted in an average allocation of 1,859 tokens per claimant, with a value of over US\$2,000. The airdrop solidified Arbitrum's position as a leading layer 2 solution, surpassing alternatives like Optimism and ZkSync.

Following the airdrop, the ARB tokens became usable as liquidity on the Arbitrum rollup platform, contributing to a substantial 129.6% increase in the network's total value locked (TVL). The TVL grew from US\$980 million to US\$2.25 billion quarter-on-quarter, demonstrating the growing adoption and usage of Arbitrum.

While Arbitrum gained momentum, the second most adopted Optimistic rollup, Optimism, made significant progress towards its vision of a "superchain." Coinbase announced the launch of Base, its own OP Chain built using Optimism's OP Stack. This composable layer allows the release of unique layer 2 solutions that leverage the underlying technology of Optimism. This approach resembles how Cosmos' software development kits (SDKs) enable developers to launch their own layer 1 blockchains efficiently. Optimism, as the base layer, benefits from the value generated by these OP Chains. This modular network approach appeals to companies looking to migrate from off-chain to on-chain solutions while retaining the ability to customize their own layer 2 infrastructure.

In addition to Optimistic rollups, zero-knowledge (ZK) rollups have also gained traction in this quarter. Many companies are focused on launching a zkEVM, which is a layer 2 rollup that utilizes ZK proofs to batch transactions while remaining compatible with the Ethereum Virtual Machine (EVM). This allows developers to easily port smart contracts from Ethereum to the rollup, leveraging the scalability benefits of layer 2 without requiring contract rewrites. zkSync (now rebranded as zkSync Era) and Polygon launched their zkEVMs during this period, with other notable announcements in this space. For example, the Immutable zkEVM, powered by Polygon's technology, supports the Immutable platform and provides EVM compatibility within a zk-rollup framework.

Overall, the first quarter showcased the progress of layer 2 solutions like Arbitrum, Optimism, and ZK rollups. These advancements bring scalability, interoperability, and new possibilities to the Ethereum ecosystem, opening up exciting opportunities for developers, companies, and users alike.

BUSINESS DEVELOPMENT

P&L (in m €)	FY 2021	FY 2022
Revenues	17.86	14.73
EBITDA	6.65	2.77
EBITDA margin	37.2%	18.8%
EBIT	6.53	1.69
EBIT margin	36.6%	11.5%
Net income	5.32	1.76
EPS in €	1.41	0.46

Sources: Advanced Blockchain AG, GBC AG

In 2022, Advanced Blockchain significantly expanded its portfolio by making 12 additional direct investments in promising blockchain projects and Web3 infrastructure initiatives. The incubation companies in the portfolio were able to secure over \$53 million in external funding from renowned co-investors and investors. The support and confidence displayed by these co-investors and partners reaffirm the strong reputation of the Advanced Blockchain ecosystem. This collaborative network has consistently played a pivotal role in propelling Advanced Blockchain's growth and success, positioning the company as a key player within the thriving blockchain industry.

The portfolio companies associated with Advanced Blockchain AG achieved remarkable milestones throughout the year, showcasing their immense potential.

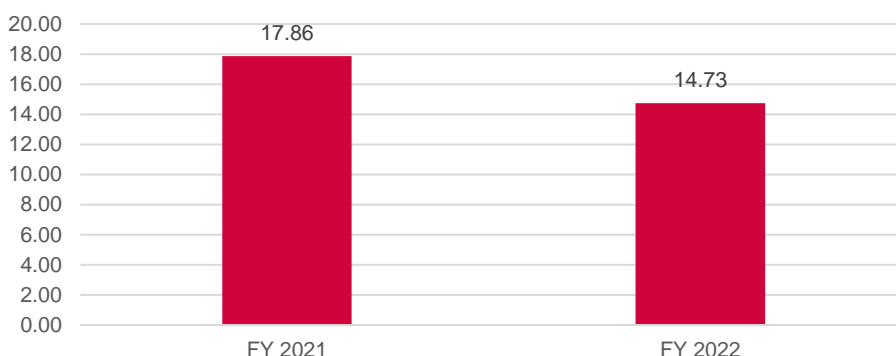
One notable success story comes from Composable Finance, an incubation company that accomplished a significant Series A financing round, raising \$32 million with an implied valuation exceeding \$350 million. Later in the year, Composable Finance launched its blockchain cross-liquidity protocol, enabling users to seamlessly move assets across different blockchain networks without the need for intermediaries. This accomplishment further established their presence within the DeFi ecosystem and attracted a dedicated community of users and partners who are committed to the cause. Composable Finance's dedication to interoperability and innovative financial products has positioned them as a prominent entity in the blockchain industry. Their platform serves as an interoperability solution for DeFi, facilitating smooth communication and data exchange between various decentralized financial protocols. By leveraging this infrastructure, developers within the Composable Finance ecosystem can create and deploy decentralized applications (dApps) that maximize compatibility and leverage multiple DeFi protocols across ecosystems like Polkadot and Cosmos, thus expanding the boundaries of DeFi.

In 2022, peaq, introduced its innovative DePIN (Decentralized Public Infrastructure Network) technology. DePIN offers enhanced security, scalability, and reduced transaction costs, effectively addressing crucial challenges within the decentralized financial sector. The introduction of DePIN received widespread recognition for its role in improving accessibility and efficiency in decentralized finance. peaq operates as a Web3 network, providing developers and users of decentralized applications (dApps) with a decentralized infrastructure and data processing tools. The network is built on top of the Polkadot blockchain, while its canary network, Krest, runs on the Kusama blockchain, serving as a testing environment. In addition to its technological advancements, peaq has also made significant strides in its investment efforts. peaq secured a total funding of \$10.5 million, with a round of funding of \$6 million, led by Fundamental Labs, peaq solidified its position in the industry. These achievements solidify peaq's position as a key player in the blockchain space, with a focus on revolutionizing decentralized finance and driving innovation within the ecosystem.

Revenue development 2022

In the face of a challenging year in the crypto market, Advanced Blockchain AG demonstrated resilience and successfully maintained its business operations. Despite the unfavorable conditions, the company generated revenues of €14.73 million in 2022, representing a 17.5% decline compared to the previous year's revenues of €17.86 million. The decrease in revenue can be primarily attributed to the limited opportunities to sell projects or tokens, which is a crucial revenue driver for Advanced Blockchain AG. Despite these obstacles, the company remained steadfast in its commitment to navigating the market and pursuing its strategic objectives.

Revenue development (in m €)

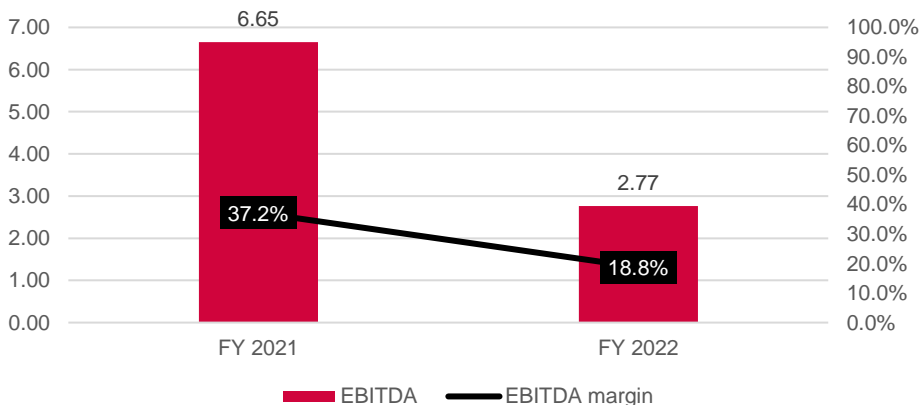


Sources: Advanced Blockchain AG, GBC AG

Earnings development 2022

In response to the challenging market conditions and the decline in revenues, the management of Advanced Blockchain AG took decisive actions to mitigate the impact. A comprehensive cost reduction strategy was implemented to align the company's expenses with the current market situation. These proactive measures aimed to improve the company's financial stability and optimize operational efficiency in the face of the tougher market conditions. By implementing cost-cutting initiatives, Advanced Blockchain AG demonstrated its commitment to adapt and navigate through the challenging environment, positioning itself for sustainable growth in the future.

Development of EBITDA (in m €) and EBITDA margin (in %)



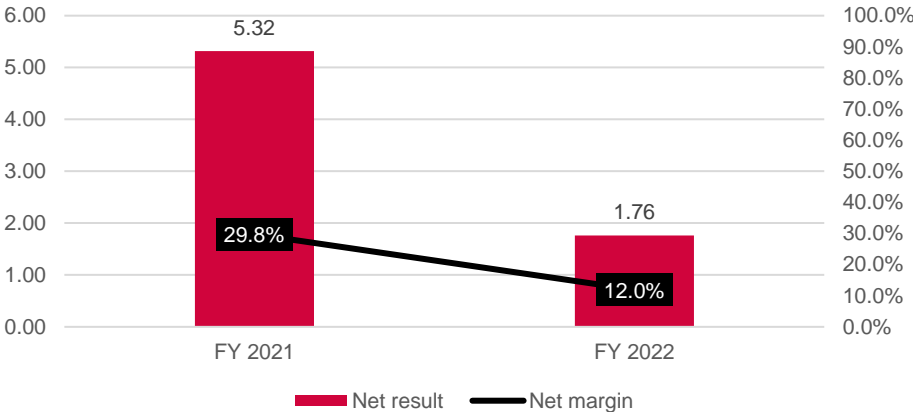
Sources: Advanced Blockchain AG, GBC AG

In 2022, Advanced Blockchain AG experienced a decline in EBITDA, which decreased to €2.77 million compared to €6.65 million in the previous year. This decline resulted in a

reduction of the EBITDA margin, which dropped to 18.8% from 37.2% in the previous year. The cost of materials experienced a substantial surge, soaring by 210.3% to reach €23.80 million, as compared to €7.70 million in the previous year. This significant increase can be attributed to rising costs associated with software developments. In contrast to the increase in costs, Advanced Blockchain witnessed a notable rise in other operating income, which reached €15.10 million compared to €0.10 million in the previous year. This boost in other operating income can be attributed to the capitalization of internal work conducted for software development within the subsidiaries.

Despite the challenging market conditions in 2022, Advanced Blockchain AG managed to remain profitable, albeit with a proportional reduction in net results. The net results for the year amounted to €1.76 million, showing a decrease from €5.32 million in the previous year. This demonstrates the company's ability to navigate through the obstacles and maintain a solid financial position.

Development of the net result (in m €) and net margin (in %)



Sources: Advanced Blockchain AG, GBC AG

With a net margin of 12.0% in 2022 (compared to 29.8% in the previous year), Advanced Blockchain AG displayed resilience and effective cost management in the face of reduced revenues. The company's ability to sustain profitability amidst a challenging market environment showcases its commitment to sound financial practices.

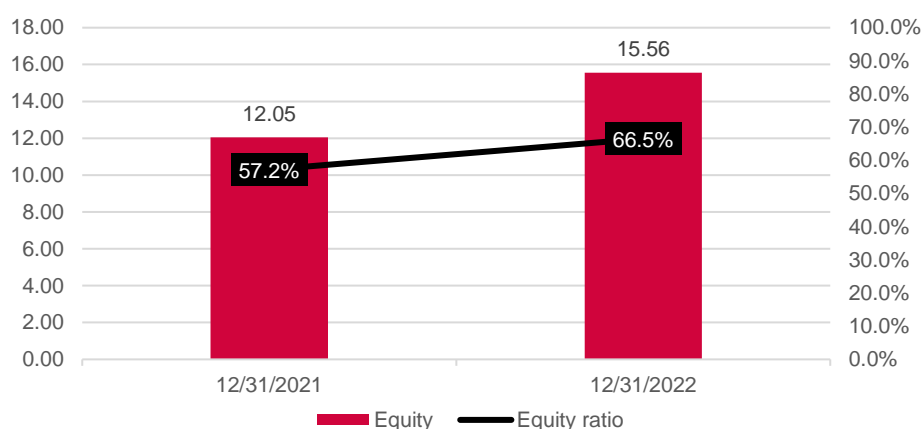
Balance sheet and financial situation as of 31.12.2022

in € million	31.12.2021*	31.12.2022*
Equity	12.05	15.56
Equity ratio (in %)	57.2%	66.5%
Operating fixed assets	0.94	1.34
Working capital	5.99	14.70
Net cash	6.52	3.70

Sources: Advanced Blockchain AG; * Estimated by GBC AG

Advanced Blockchain AG maintains a solid balance sheet. As of December 31, 2022, the company's equity experienced a significant increase, rising by 29.2% to €15.56 million compared to €12.05 million in the previous year (December 31, 2021). The rise in equity can be attributed to two key factors. Firstly, the elimination of accumulated losses carried forward from previous years contributed to bolstering the company's capital base. Additionally, the company's net profit for the year further contributed to the increase in equity. Respectively, the equity ratio reached 66.5% as of December 31, 2022, compared to 57.2% in the previous year (December 31, 2021).

Development of the equity (in m €) and the equity ratio (in %)



Sources: Advanced Blockchain AG; GBC AG

The working capital showed a significant increase, reaching €14.70 million as of December 31, 2022, compared to €5.99 million in the previous year (December 31, 2021). However, it is important to note that a direct comparison with the previous year is challenging due to the pro-forma-consolidated balance sheet's structure, where liabilities were consolidated into a single position, making it difficult to determine trade accounts payable from the previous year. On the other hand, as of December 31, 2022, the company's receivables grew to €18.46 million, up from €13.60 million in the previous year (December 31, 2021). Advanced Blockchain AG maintains a solid cash position. However, it is worth mentioning that the cash position decreased to €3.63 million as of December 31, 2022, compared to €6.52 million in the previous year (December 31, 2021).

The absence of a published cash flow statement restricts our ability to analyze the company's fund flow and assess its liquidity position.

VALUATION

To further enhance shareholder value, Advanced Blockchain AG implemented a share buyback program, which was officially announced in January 2023. This strategic initiative was designed to repurchase shares from the market and served as a clear signal of the company's confidence in its long-term prospects. Throughout the program's execution, Advanced Blockchain AG effectively acquired a significant number of shares, showcasing its unwavering commitment to delivering value to its shareholders. By prioritizing the interests of its investors and striving to optimize returns on their investments, the share buyback program demonstrated the company's dedication to creating shareholder value and reinforcing investor trust. The company, Advanced Blockchain AG, received tenders for 293,156 shares during the share buyback offer, resulting in partial utilization of the offered volume. All tendered shares were acquired at a purchase price of 3.10 € per share. For now, the company intends to retain these shares in its own portfolio.

In fiscal year 2023, Advanced Blockchain AG is focused on sustainable growth and cost management. The company expects costs to decline while generating revenue from token transactions and potential investments in upcoming token launches. Advanced Blockchain AG is in advanced discussions with potential buyers for portfolio shares related to tokens and equity transactions, aiming for up to five successful disposals totaling €5 million in sales.

To maintain its leading position as a blockchain incubator and Web3 investor, Advanced Blockchain AG plans to expand its team of global experts and make 2-3 new investments. The company also envisions implementing cross-chain initiatives in different blockchain areas to leverage success and network effects. Ongoing research and clear strategies will drive the development and adoption of various topics and use cases. Through incubating promising protocols and technologies, Advanced Blockchain AG aims to support the growth of the global blockchain ecosystem.

The ongoing assessment of the top 10 portfolio holdings is aimed at enhancing transparency for investors. As of May 31st, 2022, the top 10 holdings include peaq / EoT Labs GmbH (incubation, equity, and token investment), Mero (token investment), Contango (token investment), Maverick (token investment), Talisman (token investment), Neon Labs (token investment), Obol Network (token investment), Polymer (equity and token investment), DELV / Element Finance (token investment), and Composable Finance (incubation and token investment), listed in no particular order. Based on an independent valuation conducted on May 31st, 2023, these top 10 portfolio companies of Advanced Blockchain currently represent a total value of €39.65 million. It is evident that a highly conservative valuation approach has been employed in this analysis, and we believe the fair value of the listed valuations to be considerably higher. Our estimate places it around €45 million.

Portfolio estimates	(in € million)
Top 10 holdings	45
Remaining investments holdings	45
Holding costs	-2
Total	88

Source: GBC AG

The undervaluation of Advanced Blockchain becomes evident when considering just the top 10 positions in its portfolio and the market cap. These positions alone hold a at least fair value of approximately €40 million, whereas the market cap of Advanced Blockchain currently stands at around €11 million. We assume that the remaining investments hold a similar value to that of the top 10. Consequently, we estimate the current portfolio value

to be around €90 million. We estimate the holding costs to stay at €2 million. Therefore, considering these adjustments, the total portfolio value, after deducting holding costs, should amount to approximately €88 million.

We have recalculated the enterprise value based on net asset value (NAV) and determined it to be approximately €88 million (previously €83 million). This corresponds to a per-share value of €23.19 (previously €21.99). However, due to the significant decline in crypto markets and the ongoing "crypto winter," we have applied an additional discount to the fair value calculation. Currently, we estimate this discount to be around 53% (previously: 55%), which aligns with the average decline of leading cryptocurrencies Bitcoin and Ethereum since our initial valuation on April 21st, 2021.

Taking these factors into account, we have arrived at a fair value of €41.74 million or €11.00 per share (previously €10.00 per share). We anticipate adjusting our "market discount" accordingly in the event of a stabilization in the crypto markets and the emergence of a "crypto spring." Based on the significant upside potential, we assign a Buy rating.

Peer Group analysis

Due to limited disclosed financial information and due to the one-of-a-kind nature of its business model, there are currently no comparable publicly traded peers. At this moment, we can therefore not provide valuation by comparison with peers.

FORECAST

According to the regulations stated in §21 (1c) AGB of Deutsche Börse AG for the Freiv-erkehr on the Frankfurt Stock Exchange, a Research Update requires the inclusion of an (updated) forecast model. However, our analysts have determined that such a forecast model is not suitable for investment companies, including Advanced Blockchain AG, which operates in the crypto sector.

As we employ the GBC NAV valuation approach to assess the company, we do not find it appropriate to use a forecast model for sales and earnings metrics. Instead, we focus on estimating the value of the investments.

We maintain the view that a forecast model for investment companies like Advanced Blockchain AG does not provide meaningful and useful insights for investors. The potential revenues and results in this industry are highly volatile, and we believe that valuing the investment company should primarily be based on the valuation of its investments and projects.

To meet the legal requirement stated in §21 (1c) AGBs, we have included this forecast in the research report. However, we want to emphasize that, in our opinion, the forecast model to be supplementary.

P&L (in m €)	FY 2021	FY 2022	FY 2023e
Revenue	17.86	14.73	5.00
EBITDA	6.65	2.77	1.62
EBITDA margin	37.2%	18.8%	32.4%
EBIT	6.53	1.69	0.51
EBIT margin	36.6%	11.5%	10.2%
Net result	5.32	1.76	0.50
EPS in €	1.41	0.46	0.13

Source: GBC AG

However, we want to reiterate and emphasize that the forecasts provided above should be considered highly volatile and unreliable. This is due to the inherently volatile nature of Advanced Blockchain as an investment company, operating in a young and highly volatile market environment, namely the crypto sector. Consequently, we believe that relying solely on the above forecasts for valuation purposes would not be meaningful or appropriate. It may lead to a misvaluation of the company.

Instead, we recommend focusing on the valuation of the investments held by Advanced Blockchain AG and their potential value. This approach is more suitable and aligns with the unique characteristics of the company and the industry in which it operates.

APPENDIX

I.

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2. the research report shall be made available simultaneously to all investment service providers interested therein.

II.

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