

Research report (Anno)

Bitcoin Group SE



Strengthening in the crisis, safety standards and trust as success factors

Competitive environment clears up, Opportunities for further growth

Target price: € 58.00 (previously: € 50.00)

Rating: BUY

IMPORTANT NOTICE: Please note the disclaimer/risk notice as well as the disclosure of potential conflicts of interest pursuant to Section 85 WpHG and Art. 20 MAR from page 22

Note in accordance with MiFID II regulation for research "Minor Non-Monetary Contribution": The present research meets the requirements for classification as "Minor Non-Monetary Contribution". For further information, please refer to the disclosure under "I. Research under MiFID II".

Date and time of completion of the study: 09.08.2023 (12:00) Date and time of the first disclosure of the study: 16.08.2023 (10:00) Validity of the target price: until max. 31.12.2024



Rating: Buy Target price: €58.00 (previously: €50.00)

current price: €21.00 09.08.23 / XETRA / 5:36 p.m. Currency: EUR

Master data:

ISIN: DE000A1TNV91 WKN: A1TNV9 Stock exchange symbol: ADE Number of shares³: 5.00 Marketcap³: 105.00 EnterpriseValue³: 45.21 ³ in million / in EUR million Free float: <75.0%

Market segment: Over-the-counter Accounting: IFRS

Designated Sponsor: Bank M AG

Financial year: 31.12.

Analysts:

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BITCOIN GROUP SE^{*5a, 11}

Company profile Industry: Software

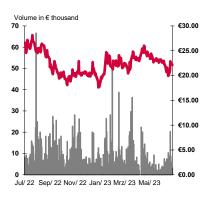
Focus: Holding in the field of cryptocurrencies

Employees: 35 Status: 12/31/2022

Foundation: 2008

Headquarters: Herford

Management Board: Marco Bodewein, Michael Nowak, Per Hlawatschek



Bitcoin Group SE is a holding company focused on innovative and disruptive cryptocurrency and blockchain business models and technologies.

Bitcoin Group SE holds 100% of the shares in futurum bank AG, which operates a trading platform for digital currencies such as Bitcoin, Bitcoin Cash, Bitcoin Gold, Ethereum and others under Bitcoin.de in addition to classic securities services, as well as 50% of the shares in Sineus Financial Services GmbH, a financial services provider.

The company's goal is to build up a portfolio of investments through further acquisitions that meets the requirements of investors in terms of risk diversification and potential returns.

P&L in EUR million \ FY-end	31.12.2021	31.12.2022	31.12.2023e	31.12.2024e
Sales	25.39	8.34	7.03	13.57
EBITDA	19.75	1.37	-0.08	5.31
EBIT	19.74	-3.76	-0.22	5.18
Net income	13.37	-2.41	-0.20	3.37
Key figures in EUR				
Earnings per share	2.67	-0.48	-0.04	0.67
Dividend per share	0.00	0.10	0.10	0.10
Key figures				
EV/sales	1.78	5.42	6.43	3.33
EV/EBITDA	2.29	32.98	-560.63	8.51
EV/EBIT	2.29	-12.04	-204.90	8.73
KGV	7.85	-43.59	-527.08	31.12
KBV		1.43		

Financial Calendar

August 11, 2023: Annual General Meeting 23

September 2022: Half-year financial statements 23

**last research from GBC:	
Date: Publication / Target price in EUR / Rating	
07.12.2022: RS / 50.00 / BUY	
08/11/2022: RS / 80.00 / BUY	
11/02/2021: RS / 120.00 / BUY	
03/31/2021: RS / 120.00 / BUY	

** Research studies listed above can be viewed at <u>www.gbc-ag.de</u> or requested from GBC AG, Halderstr. 27, D86150 Augsburg, Germany.

* Catalog of possible conflicts of interest on page 23



EXECUTIVE SUMMARY

- In 2022, Bitcoin Group recorded a significant year-on-year decline in revenues of approximately 67.1% to €8.34 million (PY: €25.39 million). This decline was mainly due to the decreased trading volume on bitcoin.de. Several factors contributed to this decline, including interest rate hikes by major central banks worldwide, which made credit-financed crypto investments more expensive and traditional investment products more attractive. In addition, the Ukraine war, increased inflation, and the collapse of the FTX crypto exchange in November 2022 affected investor confidence in cryptocurrencies and crypto trading exchanges.
- Due to the significant decrease in revenues, Bitcoin Group's EBITDA decreased from €19.75 million (FY 2021) to €1.37 million (FY 2022). The negative result led to a tax income of €1.27 million and a net result of €-2.41 million (PY: €13.37 million).
- Bitcoin Group's equity decreased to €73.35 million as of 12/31/2022 (12/31/21: €151.65 million), mainly due to the price development of the devalued long-term crypto holdings. Nevertheless, the equity ratio increased to over 77.2% (12/31/2021: 73.0%). The company has low interest-bearing liabilities and significant net financial assets of €14.79 million. Crypto holdings decreased to €70.77 million (12/31/21: €181.08 million) due to exchange rate losses, while net crypto holdings after deducting deferred tax liabilities amounted to €54.42 million (12/31/21: €132.43 million). Due to the increase in many cryptocurrencies (June 2023) by about 80% compared to 12/31/2021, we estimate the current crypto holdings to be around €125 million. Taking into account the also increased deferred tax liabilities, we forecast a current net crypto stock of around €100 million. If net crypto holdings are added to cash and cash equivalents, the company currently has an enterprise value of around €45 million, which we believe already represents a significant undervaluation of the company.
- Bitcoin Group's management expects a slight decline in revenues and a slightly negative EBITDA for the financial year 2023. The exact forecast is difficult due to the current situation (Ukraine war, regulatory uncertainties). Nevertheless, the company sees itself emerging stronger from the challenging market conditions of 2022 and is aiming for EU-wide uniform regulation to drive expansion. The stock-to-flow model shows a positive correlation between the scarcity of Bitcoin and its price. Based on the model, the BTC price is expected to turn bullish in the near future, especially due to the upcoming Bitcoin halving event in 2024. Our revenue forecast for Bitcoin Group is €7.03 million in 2023 and €13.57 million in 2024.
- Bitcoin Group has canceled the planned acquisition of Bankhaus von der Heydt as it sees no added value for the company and its shareholders. The acquisition had incurred monthly costs, which will affect the result of the fiscal year 2023. According to our forecasts, we expect EBITDA of €-0.08 million in 2023 and €5.31 million in 2024. Net income, according to our estimates, will be €-0.2 million in 2023 and €3.37 million in 2024. There is a possibility that the company will sell part of its crypto equity holdings to take advantage of the negative earnings trend and pay lower taxes on the sale. Such an action would improve net income, but we have not factored this into our guidance. We still expect a dividend of 10 cents to be proposed to shareholders.
- Based on our DCF model, we have raised our price target to €58.00 (previously: €50.00). The adjustment of the forecast is based on opposing effects



in the valuation model. On the one hand, risk-free interest rates have increased, on the other hand, we have slightly adjusted our forecast and since the last valuation in December 2022, cryptocurrencies have again increased significantly. This led to a significant increase in net crypto holdings. Due to the upside potential, we assign a Buy rating.



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25%

COMPANY

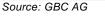
Shareholder structure		
Shareholders	Share	Priority AG
Priority AG	>25%	Ereefloat
Free float	<75%	
Sources: Bitcoin Group SE; GBC AG	~~~~	

Business activities of Bitcoin Group SE

Bitcoin Group SE is an investment company focusing on crypto and blockchain technology. The main business activity is currently the crypto trading platform bitcoin.de, which is operated by the 100% subsidiary futurum bank AG. In addition to the trading platform, futurum bank AG operates classic investment banking as well as investment banking with a crypto approach (e.g. a crypto trading desk).

The website Bitcoir	n.com					
Bitcoin-Marktplatz - Made in						Log in Register
HOME > MARKETPLACE	NEWS FO	DRUM FAQ C	ONTACT	INVESTOR RELATIONS		● * ●
BTC / EUR BCH / EUR	BTG / EUR	ETH / EUR LT	IC / EUR	USDT/EUR XRP/EL		pairs •
() Data	updated before:	0 seconds		Current Bitcoin pr	ice: €26,626.81 (as o	if: 8/3/23 2:30 PM)
🛇 Buy / Bid				🛇 Sell / Ask		
Amount (min.)	EUR / BTC	Volume In	ifo Buy	Amount (n	nin.) EUR / BTC	Volume Info Sell
0.075 (0.025)	€26,499.00	€1,987.43 ●	🕑 BUY	0.01 (0.0	€26,400.00	€264.00 🛑 🔗 SELL
0.4 (0.4)	€26,500.00	€10,600.00 ●	🕑 BUY	0.002275 (0.002	275) €26,370.00	€59.99 🔴 🔗 SELL
0.039 (0.039)	€26,700.00	€1,041.30 @	🛛 BUY	0.05688573 (0	.05) €26,368.66	€1,500.00 🔴 🔗 SELL
0.02 (0.02)	€26,799.86	€536.00 @	🕑 BUY	0.05688573 (0	.05) €26,368.65	€1,500.00 🔴 🛛 🔗 SELL
0.02 (0.02)	€26,799.87	€536.00 🛟	Ø BUY	0.00228 (0.002	228) €26,310.00	€59.99 🔴 🔗 SELL
0.154 (0.01)	€26,812.49	€4,129.12 @	🛛 BUY	0.002281 (0.002	281) €26,300.01	€59.99 🔴 🔗 SELL
		more sale	offers 🕥			more purchase requests 🕥
BTC / EUR BCH / EUR	ETH / EUR	BTG / EUR LTC /	EUR XF	RP / EUR DOGE / EUR	BTC / USD	







ESG

In addition to increasing regulatory considerations (keyword: EU taxonomy, disclosure regulation, etc.), the topic of sustainability has another, no less important dimension for listed companies: today, sustainability and transparency play a supporting role for the valuation of a company on the capital market and are decisive for the investment decisions of institutional investors - both for shares and bonds. Against this background, we have subjected Bitcoin Group SE to a sustainability check based on our standardized and proprietary sustainability questionnaire in order to create a company-specific ESG profile and to screen concrete sustainability-oriented corporate activities.

ESG profile: sustainability-oriented activities of the company (based on responses to the GBC sustainability questionnaire).

- E Contribution to environmental and climate protection (environmental management)
- Partly own power generation
- Paperless office
- Electric cars / e-bikes in the fleet

S - Measures for a sustainable working environment and personnel development

- IT training
- Child support (kindergarten subsidy, financial childcare subsidy).
- Part-time positions for employees with children
- Home office/remote work
- Health offers
- Retirement provision
- Subsidies for public transport
- Loyalty bonus
- Capital-forming benefits
- Above-tariff pay with variable compensation on an annual basis as well as variable incentive systems based on multi-year business developments
- **G** Corporate governance (sustainable corporate governance)
- Sponsoring of cultural or social commitments

ESG has a high priority at Bitcoin Group SE and is based on the strategic corporate policy and the company's own corporate philosophy. Primarily, it is about working in a resourcesaving way, as the environment is considered very important. As a company with a strong IT and banking focus, the focus is on people. As a result, high average tenures of six to nine years can be achieved. In addition, employees are paid above the collective wage agreement. The background to economic sustainability for the company is social responsibility. In addition, the area of research and development is driven by investments in the future with investments in new technologies/digitization as well as in employees. Due to the trustful cooperation, customer relationships exist over many years. An ESG/sustainability report is not prepared separately for this. Overall, there is a strong focus on employees with home-office options. Furthermore, the company produces its own electricity with solar modules.

SDG reference: company-specific contribution to the 17 UN Sustainable Development Goals (excerpt)

Bitcoin Group SE makes a significant contribution to Goals 3, 7, 8, 9 and 13. Thus, the company actively contributes to the fulfillment of five of 17 UN Sustainable Development Goals. Thus, it becomes clear that the consideration of sustainability aspects is an



essential part of the business model and the corporate strategy, respectively, and that the topic of sustainability has an immanent importance in the orientation of the investment decisions of Bitcoin Group SE.



GBC Sustainability Conclusion:

In summary, Bitcoin Group SE addresses a total of **five of the 17** UNESCO sustainability goals and thus actively contributes to their achievement. In our opinion, this ensures an investment in a sustainably-operating company and is thus well suited for a sustainability-oriented (ESG-compliant) portfolio. Bitcoin Group SE offers potential investors the opportunity to invest in an investment company with a focus on innovative business models. In this context, an increased environmental awareness within a sustainability-oriented investment approach of Bitcoin Group SE represents a **solid ESG/impact investment**.



MARKET AND MARKET ENVIRONMENT

Overview of the crypto market

The evolution of the cryptocurrency market has been a fascinating journey since the launch of Bitcoin in 2009. Over the years, the crypto market has experienced significant growth and has evolved into a diverse ecosystem of digital assets and blockchain-based technologies.

In its early years, Bitcoin gained recognition as a pioneering cryptocurrency used primarily for peer-to-peer transactions and as a store of value. Bitcoin's decentralized nature and limited supply attracted a community of early followers and enthusiasts and paved the way for the emergence of alternative cryptocurrencies.

As the crypto market expanded, numerous altcoins (alternative cryptocurrencies) entered the scene, each with their own characteristics and use cases. Ethereum, which launched in 2015, introduced programmable smart contracts, opening the doors to decentralized applications (DApps) and the Initial Coin Offering (ICO) boom. Other notable cryptocurrencies such as Ripple (XRP), Litecoin (LTC), and Bitcoin Cash (BCH) also gained notoriety.

The crypto market is characterized by remarkable price volatility, with significant price fluctuations observed over time. Factors such as regulatory developments, market sentiment, macroeconomic conditions, and technological advancements have influenced the volatility of the market. Nevertheless, the market has also seen increasing institutional participation and growing acceptance from the established financial community.

In recent years, the rise of decentralized financial protocols (DeFi) has transformed the crypto market. DeFi allows users to access financial services such as lending, borrowing, and earning returns without intermediaries, achieving greater financial inclusivity. In addition, the explosion of non-fungible tokens (NFTs) has revolutionized the digital art and collectibles market, demonstrating the potential of blockchain technology beyond currencies.

Governments around the world have begun exploring central bank digital currencies (CBDCs) as a digital form of their national currencies. CBDCs aim to combine the benefits of cryptocurrencies with regulatory oversight. In addition, institutional players such as major banks, hedge funds, and corporations have shown increasing interest in investing in cryptocurrencies, adding further legitimacy to the market.

The regulatory framework for cryptocurrencies has gradually evolved, with governments around the world trying to strike a balance between innovation and consumer protection. Regulations vary from country to country, ranging from outright bans to supportive frameworks that encourage innovation and responsible market participation. Clear regulation is critical to the long-term growth and stability of the crypto market.

Blockchain technology, as the foundation of cryptocurrencies, is constantly evolving. The transition from Ethereum to Ethereum 2.0, which aims to address scalability issues, is highly anticipated. Layer 2 solutions, such as payment channels and sidechains, are being implemented to increase transaction speeds and reduce costs. In addition, interoperability protocols are striving to connect different blockchains to promote collaboration and expand capabilities.

The future of the crypto market holds immense potential, with ongoing developments in areas such as decentralized governance, scalability solutions, and improved user



experiences. It is important to approach the market with caution, conduct thorough research, and stay abreast of the latest developments. As the market continues to mature, responsible participation and risk management will be key factors in navigating the crypto landscape.

Bitcoin (BTC)

Bitcoin was introduced in 2009 by an anonymous person or group named Satoshi Nakamoto. It was the first decentralized cryptocurrency that operated on a peer-to-peer network called the blockchain. In 2010, Bitcoin gained attention when Laszlo Hanyecz made the first known real-world transaction by buying two pizzas for 10,000 BTC.

Bitcoin experienced its first major price surge in 2013, reaching a high of over \$260 per BTC, followed by a significant correction. The most notable period for Bitcoin was 2017-2018, when it experienced an unprecedented bull market, reaching an all-time high of nearly \$20,000 in December 2017. This rally was driven by increasing public interest, media coverage, and the emergence of cryptocurrency exchanges.

However, the following year saw a bear market, and the bitcoin price declined significantly. In December 2018, it reached a low of around \$3,200. In 2020, Bitcoin attracted institutional investors, with companies such as MicroStrategy and Square publicly announcing large BTC investments. This institutional interest, coupled with the narrative of Bitcoin as a store of value and hedge against inflation, contributed to a new bull market.



BTC/USD exchange rate

In 2021, Bitcoin reached a new all-time high, surpassing \$60,000 per BTC in March. However, there was also increased volatility with notable price corrections. At the end of 2022, the price was around \$17,000 per BTC and has now risen again to around \$30,000 per BTC as of June 2022.

Ethereum (ETH)

Ethereum was launched in 2015 by Vitalik Buterin and introduced a blockchain platform that enables the development of smart contracts and decentralized applications (DApps). The Ethereum network's native cryptocurrency, Ether (ETH), served as the fuel for conducting transactions and running applications.

In 2017, Ethereum gained a lot of attention when Initial Coin Offerings (ICOs) gained popularity. Many projects raised money by issuing tokens on the Ethereum platform. The price

Source: Yahoo Finance



of Ethereum followed the general market trend and surged during the crypto market bull market in late 2017 and early 2018, reaching a high of over \$1,400 per Ethereum.

Similar to Bitcoin, Ethereum experienced a bear market from 2018 to 2019, and its price declined significantly. In December 2018, it reached a low of around \$80. However, in 2020, Ethereum experienced increasing adoption in the decentralized finance (DeFi) space. Various financial applications such as lending and decentralized exchanges flourished on the Ethereum network. The rise in DeFi activity and the growth of stablecoins significantly increased network usage and demand for ETH.

In 2021, the Ethereum price soared to a new all-time high, surpassing \$4,000 in May. This rally was fueled by factors such as the widespread use of Ethereum for non-fungible tokens (NFTs), upgrades to improve scalability, and anticipation of the transition to Ethereum 2.0. At the end of 2022, the price was around \$1,200 and rebounded to around \$1,900 as of June 2022.



ETH/USD exchange rate

Source: Yahoo Finance

Crypto markets in the 1st quarter of 2023

In the first quarter of 2023, the financial landscape faced increasing stress, with mixed market reactions. January saw a rally in risk, but the market turned negative in February and March due to strong rhetoric from the Federal Reserve and concerns about a potential recession. This quarter, mid-sized banks such as Signature, Silicon Valley Bank, and First Republic plunged, indicating cracks in the system.

To support the banking sector, the Federal Reserve and the Treasury quickly introduced the Bank Term Funding Program. This program aimed to support banks by depositing claims on U.S. government bonds and mortgage-backed securities at par directly with the Fed. While it provided some relief, the market recognized that it effectively put an additional \$4.4 trillion of money into circulation, leading to a surge in assets outside the economy, such as gold and bitcoin.

The quarter highlighted the difficult situation facing many central banks, which have to juggle the potential collapse of banks and the risk of currency devaluation.



Within the digital asset ecosystem, there have been small boom and bust cycles. The Bitcoin rally had a trickle-down effect to assets with smaller market capitalizations, leading to multiples in some cases. The Arbitrum ARB airdrop also affected the market by introducing new funds and creating individual bubbles. The successful spinoff of Ethereum in Shanghai had a positive impact on the network by limiting withdrawals in the Beacon Chain and making the network consistently available.

However, market liquidity declined at the end of March, exacerbated by increased regulatory scrutiny in the US. Despite the prevailing sentiment, the first quarter has shown that the market is full of opportunities.

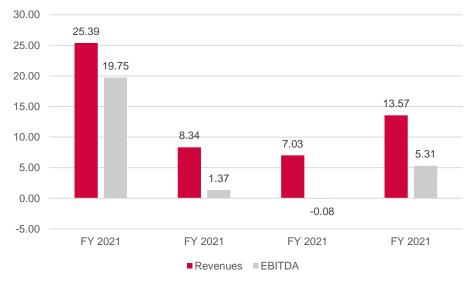


CORPORATE DEVELOPMENT

Key figures at a glance

	FY 2021	FY 2022	FY 2023e	FY 2024e
Revenues	25.39	8.34	7.03	13.57
Other operating income	0.48	0.32	0.00	0.30
Other operating expenses	-2.89	-2.82	-2.85	-2.88
Cost of materials	-0.42	-1.70	-1.43	-2.76
Personnel expenses	-2.82	-2.77	-2.83	-2.91
EBITDA	19.75	1.37	-0.08	5.31
Depreciation	-0.15	-5.13	-0.14	-0.14
Depreciation/amortization (cryptocurrencies).	0.14	0.00	0.00	0.00
EBIT	19.74	-3.76	-0.22	5.18
Financing income	0.01	0.08	0.00	0.00
Financing income from affiliated companies	0.00	0.00	0.00	0.00
Financing expenses affiliated companies	0.00	0.00	0.00	0.00
Finance expenses	-0.04	-0.07	-0.07	-0.07
Profit before taxes	19.72	-3.74	-0.29	5.10
Actual tax expense	-6.34	1.27	0.09	-1.73
Income from deferred taxes	0.00	0.07	0.00	0.00
Net result	13.37	-2.41	-0.20	3.37
Revenues	25.39	8.34	7.03	13.57
EBITDA	19.75	1.37	-0.08	5.31
EBITDA margin	77.8%	16.4%	-1.1%	39.2%
EBIT	19.74	-3.76	-0.22	5.18
EBIT margin	77.8%	-45.0%	-3.1%	38.1%
Net result	13.37	-2.41	-0.20	3.37
Net margin	52.7%	-28.9%	-2.8%	24.9%

Development of revenue and of the EBITDA (in € million)



Source: GBC AG



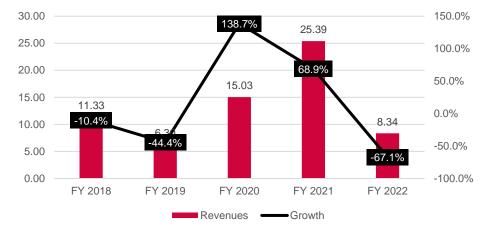
Business Development 20 22

Income statement (in € million)	FY 2020	FY 2021	FY 2022
Revenues	15.03	25.39	8.34
EBITDA	10.55	19.75	1.37
EBITDA margin	70.1%	77.8%	16.4%
EBIT	13.54	19.74	-3.76
EBIT margin	90.1%	77.8%	-45.0%
Net income	9.52	13.37	-2.41
EPS in €	1.90	2.67	-0.48

Sources: Bitcoin Group SE, GBC AG

Sales development

In 2022, Bitcoin Group recorded a decrease in revenues of approximately 67.1% to €8.34 million compared to €25.39 million in fiscal year 2021. The most significant and important revenue item is revenue from commissions, especially related to bitcoins, but also to other cryptocurrencies. This decrease is mainly due to the lower trading volume on bitcoin.de.



Net sales (in € million)

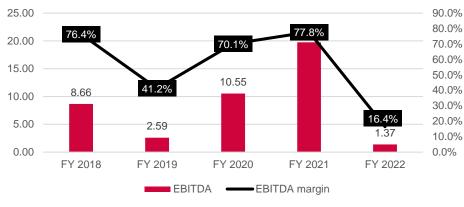
There is often a correlation between the decreased trading volume and the decrease in crypto prices. In 2022, there were several reasons that led to a decline in crypto markets. Interest rate hikes by major central banks around the world played a significant role. These made credit-financed crypto investments more expensive and made traditional interestrate products appear more attractive. In addition, the interest rate hikes led to price declines in technology-based exchanges, which traditionally correlate strongly with crypto prices. The Ukraine war and increased inflation also contributed to investors becoming more cautious, as cryptocurrencies are considered risky assets. The collapse of the FTX crypto exchange in November 2022 also had a negative impact on crypto markets.

Earnings development

Due to the significant decrease in sales revenues, EBITDA decreased significantly from €19.75 million (FY 2021) to €1.37 million (FY 2022). The largest operating costs relate to personnel, whose costs fell by 1.6% to €2.77 million (previous year: €2.82 million), and other operating expenses, mainly legal and consulting costs and marketing, which remained virtually unchanged at €2.82 million (previous year: €2.89 million).

Sources: Bitcoin Group SE, GBC AG



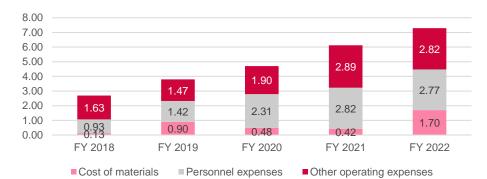


EBITDA (in € million) and EBITDA margin (in %)

Sources: Bitcoin Group SE; GBC AG

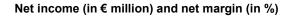
Mainly due to non-cash flow-related write-downs on crypto trading assets amounting to €5.13 million (previous year: €0.15 million), earnings before taxes (EBT) decreased to €-3.74 million (previous year: €19.72 million).

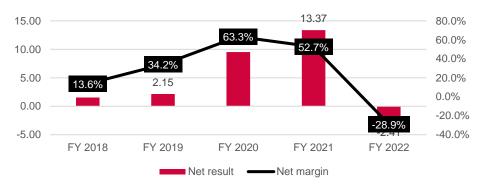




Sources: Bitcoin Group SE; GBC AG

The negative result led to tax income of ≤ 1.27 million (previous year: ≤ -6.34 million), which ultimately resulted in a net result of ≤ -2.41 million (previous year: ≤ 13.37 million). Due to the significantly higher trading volume, significantly higher sales and a correspondingly higher result were achieved in the previous year. The company is extremely scalable and costs are increasing at a much lower rate than sales.





Sources: Bitcoin Group SE; GBC AG



Balance sheet and financial situation as of Dec. 31, 2022

in € million	31.12.2018	31.12.2020	31.12.2021	31.12.2022
Equity	20.54	80.15	151.65	73.35
EC ratio (in %)	85.2%	73.7%	73.0%	77.2%
Operating fixed assets	0.10	1.57	1.50	1.43
Crypto proprietary	27.51	90.31	181.08	70.77
Deferred tax liabilities	6.40	23.66	48.65	16.35
Net crypto equity	21.11	66.65	132.43	54.42
Working capital	0.34	-4.12	-6.69	-1.23
Net financial assets	2.25	12.02	20.57	14.79
Courses Ditasia Crown CC. CDC AC				

Sources: Bitcoin Group SE; GBC AG

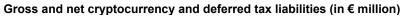
As of Dec. 31, 2022, equity decreased significantly to €73.35 million (Dec. 31, 2021: €151.65 million). The main reason for this decrease was the price development of the long-term crypto holdings, which decreased by €75.4 million to €70.77 million (previous year: €181.08 million) and thus led to an almost halving of equity. Due to the simultaneous balance sheet reductions, the typically high equity ratio of 73.0% (12/31/21) increased further to 77.2%.

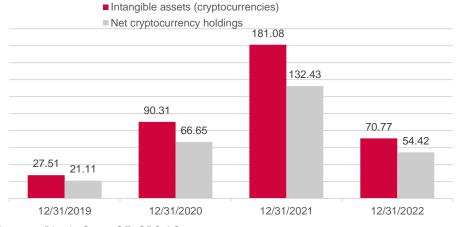
Equity (in € million) and equity ratio (in %)



Sources: Bitcoin Group SE; GBC AG

The company has only minor interest-bearing liabilities of €0.79 million (Dec. 31, 2021: €0.1 million). Thanks to a high level of cash and cash equivalents of €14.88 million (Dec. 31, 2021: €20.28 million), it has considerable net financial assets of €14.79 million (Dec. 31, 2021: €20.57 million).





Sources: Bitcoin Group SE; GBC AG



Due to cryptocurrency exchange rate losses, crypto stocks decreased to €70.77 million as of Dec. 31, 2022, compared with €181.08 million as of Dec. 31, 2021. After deducting deferred tax liabilities of €16.35 million (Dec. 31, 2021: €48.65 million), which would be incurred if crypto stocks were sold, net crypto stocks amounted to a value of €54.42 million.

FORECAST AND EVALUATION

Income statement (in € million)	FY 2022	FY 2023e	FY 2024e
Revenues	8.34	7.03	13.57
EBITDA	1.37	-0.08	5.31
EBITDA margin	16.4%	-1.1%	39.2%
EBIT	-3.76	-0.22	5.18
EBIT margin	-45.0%	-3.1%	38.1%
Net income	-2.41	-0.20	3.37
EPS in €	-0.48	-0.04	0.67
Source: GBC AG			

Sales forecast

Bitcoin Group's management expects the number of registered users to increase to 1,065,000 by the end of fiscal year 2023. In order to better exploit the potential of the increased customer base, measures to improve usability and customer experience are to be implemented. For the full year 2023, revenues are expected to decline slightly and EBITDA is expected to be slightly negative. The management board expects the cryptocurrency price and media interest to shape the 2023 financial year. The company continues to strive to maximize cryptocurrency opportunities for customers and shareholders. According to management, due to the current situation, including the war in Ukraine and regulatory uncertainties, it is difficult to make an accurate forecast. Media interest and the prices of major cryptocurrencies are subject to strong fluctuations.

However, Bitcoin Group is confident to emerge stronger from the challenging market conditions of 2022. The crisis in the industry has led to a less competitive environment. Bitcoin Group offers high security standards through BaFin regulation and its existing securities trading license. This ensures maximum regulatory security and transparency for customers. Trust in the company has led to a growing customer base. Although 2022 was a difficult year for cryptocurrencies, Bitcoin Group continued to attract active customers. Bitcoin Group is seeking EU-wide uniform regulation to drive expansion. It sees itself as a pioneer, offering security and transparency benefits for customers, compared to foreign crypto marketplaces. The potential of the crypto industry is far from exhausted and cryptocurrencies have established themselves as a promising asset class despite the crypto winter of 2022.

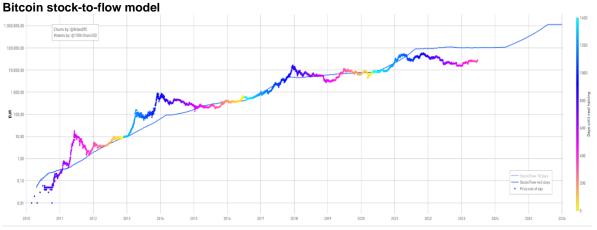
Stock-to-flow model

The Bitcoin stock-to-flow model measures the scarcity of Bitcoin by comparing the current supply (stock) to the rate of new supply entering the market over time (flow). The model calculates the stock-to-flow ratio by dividing the circulating supply of bitcoin by the annual issuance of new coins. A higher ratio indicates greater scarcity.

The stock-to-flow model has gained popularity due to its historical accuracy in tracking the Bitcoin price. It suggests a positive correlation between the scarcity of Bitcoin (as indicated by the stock-to-flow ratio) and its price. This has attracted the interest of investors and traders who use the model for price prediction and investment decisions.

To interpret the stock-to-flow model, one must understand the logic behind it. Bitcoin's scarcity stems from the fixed supply limit of 21 million coins and the regular halving events that reduce the rate at which new coins are issued. A higher stock-to-flow ratio means a higher scarcity, which can lead to a perceived increase in bitcoin value and potentially affect the price.





Source bitbo.io

Based on the chart, according to the Bitcoin stock-to-flow model, the BTC price is currently in an undervalued zone and trending towards the oversold zone, indicating a possible upside move. The upcoming Bitcoin halving event in 2024 could lead to a significant rally as observed in the past.

We forecast that the Bitcoin market will trend sideways in the near future, but significant price increases are expected in 2024. In particular, this price increase is expected to be related to the upcoming bitcoin halving event in 2024.

Bitcoin Group has lost Fidor Bank as an express trading partner. Fidor Bank was launched in 2009 as a community banking project, allowing users to exchange funds and banking functions. In 2016, the company was acquired by the major French bank BPCE, but it failed to develop Fidor into a powerful fintech. The two companies struggled to unite their different corporate cultures. The last few years have been challenging for the bank's customers and owners due to accessibility and workflow issues. BPCE was unable to sell its retail business and was only able to sell its software division, Fidor Solutions, to Sopra Steria. The bank now announced that it would wind down at the end of 2023, which came as a surprise to many customers. Most customers have only two months to transfer their balances. The discontinuation of express trading could have a negative impact on revenue performance in fiscal year 2023. However, Bitcoin Group's management is actively looking for a new partner for express trading and is already holding promising talks.

As a result, we expect revenues to be \in 7.03 million in 2023, followed by an increase to \in 13.57 million in 2024.



Sales forecast (in € million) and sales growth (in %)

Source: GBC AG



Earnings forecast

Bitcoin Group announced in May 2023 that it would not to proceed with the planned acquisition of Bankhaus von der Heydt. The management board decided to exercise its right of rescission after concluding that the acquisition does not offer any added value for the company and its shareholders. The planned takeover has resulted in additional high monthly costs, which will also have an impact on the results for the 2023 financial year.

Based on the low revenue level, we expect EBITDA to decline to \in -0.08 million in 2023 and not to return to positive territory until fiscal 2024, when we forecast EBITDA of \in 5.31 million.



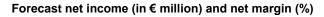
Forecast EBITDA (in € million) and EBITDA margin (%)

Source: GBC AG

The development of EBITDA is almost entirely reflected in the net result. We expect a net result of \in -0.2 million for the current financial year 2023 and \notin 3.37 million for 2024.

It is possible that the company will use its negative earnings development to reduce some of its crypto equity holdings. This could result in lower taxes than if the disposal were to take place in a very successful fiscal year. Such an action would lead to a significant improvement in net income. However, we have not considered a divestment in our forecast model.

In addition, we expect that a dividend of 10 cents will continue to be proposed to shareholders. As long as the company has positive cash flows, distributions should be made.





Source: GBC AG



Evaluation

Model assumptions

Bitcoin Group SE was valued by us using a three-stage DCF model. Starting with the concrete estimates for the years 2023 - 2024 in phase 1, the forecast is made from 2025 to 2030 in the second phase by applying value drivers. We expect sales to increase by 15.0%. As a target EBITDA margin is 72.6% (previously: 70.6%). We have included a tax rate of 30.0% in phase 2. In the third phase, a residual value is also determined after the end of the forecast horizon using the perpetual annuity. In the terminal value, we assume a growth rate of 2.0%.

Determination of the cost of capital

The weighted average cost of capital (WACC) of Bitcoin Group SE is calculated from the cost of equity and the cost of debt. For the calculation of the cost of equity, the fair market premium, the company-specific beta as well as the risk-free interest rate have to be determined.

The risk-free interest rate is determined in accordance with the recommendations of the Fachausschuss für Unternehmensbewertungen und Betriebswirtschaft (FAUB) of the IDW (German Institute of Auditors) on the basis of current interest rate structures. curves for risk-free bonds were derived. The basis for this is provided by the Deutsche Bundesbank published zero bond interest rates according to the Svensson method. The risk-free interest rate we use is 2.0% (previously: 1.25%)

We set the historical market premium of 5.50% as a reasonable expectation of a market premium. This is supported by historical analyses of stock market returns. The market premium reflects the percentage by which the stock market is expected to yield better than low-risk government bonds.

According to the GBC estimation method, a beta of 1.39 is currently determined.

Using the assumptions made, we calculate a cost of equity of 9.7% (previously: 8.26%) (beta multiplied by risk premium plus risk-free interest rate). As we assume a sustainable weighting of 100% for the cost of equity, the weighted average cost of capital (WACC) is 9.7% (previously: 8.26%).

The company's crypto holdings amounted to \notin 70.77 million as of Dec. 31, 2022. After deducting deferred tax liabilities of \notin 16.35 million, the net crypto holdings amount to \notin 54.42 million. Due to the increase in many cryptocurrencies by around 80% since Dec. 31, 2021, we estimate the crypto inventory to be around \notin 125 million. Taking into account the deferred tax liabilities, which have also increased, we forecast a current net crypto stock of \notin 100 million. We add the net crypto holdings to net cash.

Valuation result

As part of our DCF valuation model, we have determined a new target price of \in 58.00 (previously: \in 50.00). The adjustment of the forecast is based on opposing effects in the valuation model. On the one hand, risk-free interest rates have risen, on the other hand, we have slightly adjusted our forecast and since the last valuation in December 2022, cryptocurrencies have again risen significantly. This led to a significant increase in net crypto holdings.



DCF model

Bitcoin Group SE - Discounted Cash Flow (DCF) Consideration

Value drivers of the DCF model after the estimate phase:

consistency - phase	
Sales growth	15.0%
EBITDA margin	72.6%
AFA to operating fixed assets	8.0%
Working capital to sales	-15.0%

final - phase	
Perpetual sales growth	2.0%
Perpetual EBITA margin	72.2%
Effective tax rate in terminal value	30.0%

three-stage DCF - model:									
Phase	estimat	e		consister	ncy				final
in EUR mil- lion	GJ 23e	GJ 24e	GJ 25e	GJ 26e	GJ 27e	GJ 28e	FY 29e	GJ 30e	Final value
Sales (US)	7.03	13.57	15.61	17.95	20.64	23.73	27.29	31.39	
US Change	-15.7%	93.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	2.0%
US to operating fixed assets	4.77	8.94	10.08	11.37	12.83	14.48	16.36	18.48	
EBITDA	-0.08	5.31	11.34	13.04	14.99	17.24	19.83	22.80	
EBITDA margin	-1.1%	39.2%	72.6%	72.6%	72.6%	72.6%	72.6%	72.6%	
EBITA	-0.22	5.18	11.21	12.91	14.87	17.11	19.70	22.67	
EBITA margin	-3.1%	38.1%	71.9%	72.0%	72.0%	72.1%	72.2%	72.2%	72.2%
Taxes on EBITA	0.07	-1.75	-3.36	-3.87	-4.46	-5.13	-5.91	-6.80	
to EBITA	32.2%	33.9%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
EBI (NOPLAT)	-0.15	3.42	7.85	9.04	10.41	11.98	13.79	15.87	
Return on investment	-74.2%	780.7%	-1631.4%	-1141.0%	- 934.7%	- 805.5%	- 717.5%	- 654.2%	- 537.8%
Working capital (WC)	-1.04	-2.00	-2.34	-2.69	-3.10	-3.56	-4.09	-4.71	
WC to turnover	-14.7%	-14.7%	-15.0%	-15.0%	-15.0%	-15.0%	-15.0%	-15.0%	
Investments in WC	-0.19	0.96	0.34	0.35	0.40	0.46	0.53	0.61	
Operating assets (OAV)	1.47	1.52	1.55	1.58	1.61	1.64	1.67	1.70	
AFA on OAV	-0.14	-0.14	-0.12	-0.12	-0.13	-0.13	-0.13	-0.13	
AFA to OAV	9.5%	9.1%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	
Investments in OAV	-0.18	-0.18	-0.15	-0.15	-0.16	-0.16	-0.16	-0.16	
Invested capital	0.44	-0.48	-0.79	-1.11	-1.49	-1.92	-2.43	-3.01	
EBITDA	-0.08	5.31	11.34	13.04	14.99	17.24	19.83	22.80	
Taxes on EBITA	0.07	-1.75	-3.36	-3.87	-4.46	-5.13	-5.91	-6.80	
Total investments	-0.38	0.78	0.19	0.20	0.25	0.31	0.37	0.00	
Investments in OAV	-0.18	-0.18	-0.15	-0.15	-0.16	-0.16	-0.16	-0.16	
Investments in WC	-0.19	0.96	0.10	0.35	0.40	0.46	0.10	0.61	
Investments in goodwill	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
	5.50	5.50	0.00	5.50	0.00	0.00	0.00	0.00	

Value of operating business (reporting date)	161.17	172.40
Present value of explicit FCFs	49.97	50.46
Present value of the continuing value	111.20	121.94
Net debt	-113.83	-117.60
Value of equity	275.00	290.00
Minority interests in profits	0.00	0.00
Value of share capital	275.00	290.00
Shares outstanding in million	5.00	5.00
Fair value of the share in EUR	55.00	58.00

Risk-free return	2.0%
Market risk premium	5.5%
Beta	1.39
Cost of equity	9.7%
Target weighting	100.0%
Cost of debt	6.5%
Target weighting	0.0%
Tax shield	25.0%
WACC	9.7%

Cost of Capital Determination:

			WACC		
	9.1%	9.4%	9.7%	10.0%	10.3%
-538.3%	60.98	59.44	58.02	56.72	55.52
-538.0%	60.97	59.43	58.01	56.71	55.51
-537.8%	60.96	59.41	58.00	56.70	55.50
-537.5%	60.94	59.40	57.99	56.69	55.49
-537.3%	60.93	59.39	57.98	56.68	55.48
	-538.0% -537.8% -537.5%	-538.3% 60.98 -538.0% 60.97 -537.8% 60.96 -537.5% 60.94	-538.3% 60.98 59.44 -538.0% 60.97 59.43 -537.8% 60.96 59.41 -537.5% 60.94 59.40	9.1% 9.4% 9.7% -538.3% 60.98 59.44 58.02 -538.0% 60.97 59.43 58.01 -537.8% 60.96 59.41 58.00 -537.5% 60.94 59.40 57.99	9.1% 9.4% 9.7% 10.0% -538.3% 60.98 59.44 58.02 56.72 -538.0% 60.97 59.43 58.01 56.71 -537.8% 60.96 59.41 58.00 56.70 -537.5% 60.94 59.40 57.99 56.69



APPENDIX

<u>I.</u>

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

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The respective recommendations/classifications/ ratings are associated with the following expectations:

BUY

The expected return, based on the determined price target, including dividend payment within the corresponding time horizon is >= +10%.

1



HOLD	The expected return, based on the determined price target, including dividend payment within the corresponding time horizon is $> -10\%$ and $< +10\%$.
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