



Research report (Anno)

Bitcoin Group SE



**Continued highly profitable trading platform,
despite the difficult market environment**

Sustainable dividend and share buybacks planned

**Target price: € 80.00
(previously: 120.00 €)**

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 22

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: 11.08.2022 4:00 p.m. - German version: 10.08.2022 (11:00 a.m.)

Date and time of the first disclosure of the study: 12.08.2022 10:00 a.m. - German version: 11.08.2022 (10:00 a.m.)

Validity of the target price: until max. 31.12.2023

BITCOIN GROUP SE^{*5a,7,11}

Rating: BUY
Target price: € 80.00
(previously: € 120.00)

current price: 25.12
09.08.22 / XETRA / 4:20 p.m.
Currency: EUR

Master data:

ISIN: DE000A1TNV91
WKN: A1TNV9
Stock exchange symbol: ADE
Number of shares³: 5.00
Marketcap³: 125.60
EnterpriseValue³: -26.97
³ in million / in EUR million
Free float: < 75%

Market segment:
Freiverkehr

Accounting:
IFRS

Designated Sponsor:
Bank M AG

Financial year: 31.12.

Analysts:

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* Catalog of possible conflicts
of interest on page 23

Company profile

Industry: Software

Focus: Holding in the field of cryptocurrencies

Employees: 28 Status: 12/31/2021

Foundation: 2008

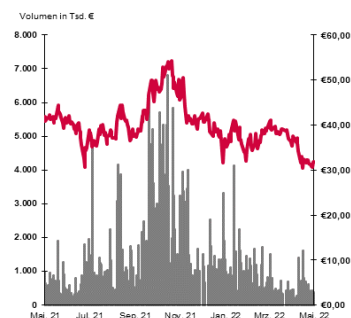
Headquarters: Herford

Management Board: Marco Bodewein, Michael Nowak,
Per Hlawatschek

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

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	31.12.2020	31.12.2021	31.12.2022e	31.12.2023e
Revenue	15.03	25.39	14.57	18.94
EBITDA	10.55	19.75	9.25	13.17
EBIT	13.54	19.74	-0.89	13.03
Net income	9.52	13.37	-0.63	8.81

Key figures in EUR				
Earnings per share	1.90	2.67	-0.13	1.76
Dividend per share	0.00	0.00	0.10	0.10

Key figures				
EV/Revenue	-1.79	-1.06	-1.85	-1.42
EV/EBITDA	-2.56	-1.37	-2.92	-2.05
EV/EBIT	-1.99	-1.37	30.24	-2.07
PE	13.19	9.39	-199.21	14.25
PB		0.83		

Financial Calendar
September 2022: Half-year statements 22

**last research from GBC:
Date: Publication / Target price in EUR / Rating
11/02/2021: RS / 120.00 / BUY
03/31/2021: RS / 120.00 / BUY
** Research studies listed above can be viewed at www.gbc-ag.de or requested from GBC AG, Halderstr. 27, D86150 Augsburg, Germany.

EXECUTIVE SUMMARY

- Bitcoin Group SE has completed a record financial year with revenue of € 25.39 million (previous year: € 15.03 million) and EBITDA of € 19.75 million (previous year: € 10.55 million). The disproportionate improvement in earnings was reflected in net income of € 13.37 million (previous year: € 9.52 million). This excellent operating performance is primarily due to the high trading volume of the crypto trading platform Bitcoin.de in the first half of 2022. The crypto markets developed very dynamically at the end of 2020 and until the middle of 2022 and numerous institutional investors and companies invested in this asset class. At the same time, crypto ETFs were launched and El Salvador recognized Bitcoin as a means of payment. Driven by this media focus, new highs were steadily reached. Starting in the winter of 2021, many cryptocurrencies lost value and media attention shifted.
- As a result of the very good operating performance, cash and cash equivalents increased to € 20.28 million (PY: € 12.01 million) and net crypto equity to € 132.43 million as of December 31, 2021. Crypto markets have lost about 50% in value since the beginning of the year, in parallel with traditional capital markets. Therefore, we estimate the current net crypto equity holdings to be around € 65 million. With a market capitalization of currently around € 125 million and cash and cash equivalents of around € 85 million, the enterprise value is around € 40 million. This means that the company's operating business, which generated net income of € 19.75 million in the past fiscal year 2021, is valued at only € 40 million. In our view, the company remains significantly undervalued. This view is also shared by the management and a share buyback program and a dividend of € 0.10 per share were approved at the Annual General Meeting on July 1, 2022.
- The financial markets are currently under pressure due to general concerns about rising inflation, geopolitical tensions, especially the Ukraine conflict, and the possibility of a tighter monetary policy by the U.S. Federal Reserve. This development is also reflected in the crypto markets. Therefore, our forecasts, as well as guidance, are below the previous year's level. We expect revenues of € 14.57 million in the current fiscal year (PY: € 25.39 million) and EBITDA of € 9.25 million (PY: € 19.75 million), followed by € 18.94 million in revenues in 2023 and EBITDA of € 13.17 million. In our opinion, 2023 should develop much more dynamically with crises overcome by then and a pending Bitcoin halving. A Bitcoin halving means a halving of Bitcoin inflation, which usually leads directly to price increases. The consensus for Bitcoin is still a value of at least € 100,000, but the time frames of many estimates differ significantly.
- **Based on our DCF model, we have determined a fair value of € 80.00 (previously € 120.00) and assign a BUY rating. The background to the reduced price target is, on the one hand, the lower forecast for the current fiscal year 2022 and, on the other hand, the increased risk-free interest rate.**

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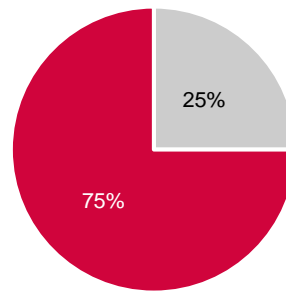
COMPANY

Shareholder structure

Shareholders	Share
Priority AG	>25%
Free float	<75%

Sources: Bitcoin Group SE; GBC AG

- Priority AG
- Freefloat



Business activities of Bitcoin Group SE

Bitcoin Group SE is an investment company with a focus on crypto and blockchain technology. The main business activity is currently the crypto trading platform bitcoin.de, which is operated by the wholly owned 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 Bitcoin.com

The screenshot shows the bitcoin.de website interface. At the top, there are navigation links: HOME, MARKTPLATZ, NEWS, FORUM, FAQ, KONTAKT, and INVESTOR RELATIONS. Below this is a menu for various cryptocurrencies: BTC / EUR, BCH / EUR, BTG / EUR, ETH / EUR, BSV / EUR, LTC / EUR, XRP / EUR, and DOGE / EUR. A note says "Neues Handelspaar!" with an arrow pointing to DOGE / EUR. The current Bitcoin price is displayed as 29.269,16 € (Stand: 17.05.22 13:45). Below the price, there are two tables: "Kaufen / Bid" and "Verkaufen / Ask". The "Kaufen / Bid" table shows several buy orders with columns for Menge (min.), EUR / BTC, Volumen, Info, and Kaufen. The "Verkaufen / Ask" table shows several sell orders with columns for Menge (min.), EUR / BTC, Volumen, Info, and Verkaufen. At the bottom, there is a chart titled "Entwicklung des Bitcoin-Kurses der vergangenen 48 Stunden in EUR" showing a candlestick price chart for BTC / EUR. The chart shows the price fluctuating between approximately 27k and 31k EUR over the last 48 hours. The x-axis shows the time from 14:00 on May 17th to 12:00 on May 18th. Below the chart, there are links for "Klassische Ansicht (BTC / EUR)" and "zum detaillierten Chart".

Source: GBC AG

ESG

In addition to the increasing regulatory aspects (keywords: 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 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 resource-saving way, as the environment is considered very important. As a company with a strong IT & 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 the 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

The most important driver for Bitcoin Group SE is the media attention on the crypto markets. Especially in crypto bull markets, Bitcoin Group SE can benefit from the increased trading volume. We used Bitcoin's price performance as an obvious proxy. However, trading volume is not necessarily linked to price development, but seems to correlate strongly with newsflow and media attention. The most important cryptocurrencies for the Bitcoin.de platform are still Bitcoin and Ethereum, which correlate strongly in terms of price and therefore we primarily consider the Bitcoin price in the context of the market analysis.

Bitcoin in 2021

The year 2021 already started with hype from the previous year, when institutional investors and companies invested extensively in cryptocurrencies. Tesla, Square, and others joined MicroStrategy by adding Bitcoin to their balance sheets as a reserve asset.

The first quarter of 2021 also saw the successful launch of three Bitcoin ETFs on the Toronto Stock Exchange. The momentum from the first quarter continued into the second quarter as many discussions arose around the environmental impact of Bitcoin mining, leading to lively debates. Out of these debates came a plethora of "clean" bitcoin mining initiatives. Furthermore, Bitcoin hit an all-time high in April 2021, only to plummet again and end the quarter with a -40% return. Bitcoin once again became the center of public debate after Tesla announced it would stop Bitcoin payments due to environmental concerns, which led to the formation of a new industry cooperative called the Bitcoin Mining Council (BMC).

Arguably the biggest crypto news of Q2 2021 was the announcement that El Salvador would adopt Bitcoin as legal tender. China, meanwhile, went the other way and banned crypto trading, triggering a short-term negative market reaction. Right at the end of the second quarter, China also cracked down on bitcoin mining, banning it completely. The hashrate (a measure of computing power in a cryptocurrency network that is a key security indicator) had reached an all-time high of about 178 exahashes per second in mid-May and then had fallen to a low of about 89 EH/s by early July in the third quarter. Since then, the hashrate has resumed its upward trend toward an all-time high. The hashrate was 179 EH/s at the end of 2021. As of April 2021, 100% of the hashrate had migrated from China to the USA, Russia, Kazakhstan and other countries.

In the third quarter, El Salvador introduced Bitcoin as legal tender and the amount of Bitcoin on the Lightning Network surged. While Bitcoin is increasingly becoming a "store of value" and a "digital savings technology," it is returning to its roots as a "pure peer-to-peer version of electronic cash," judging by the growing number of real-life implementations of the Lightning Network.

If the third quarter of 2021 was characterized by the enormous growth of bitcoin as digital cash, the "store of value" function came to the fore at the beginning of the fourth quarter. The U.S. Securities and Exchange Commission approved the first exchange-traded bitcoin futures fund in the United States. Hype surrounding the launch was high, and the ETF (ticker: BITO) reached about \$1 billion in trading volume by the end of its first day. This made it the second-most-traded new ETF of all time. However, there was much displeasure that the exchange-traded fund was a futures-based fund and not a spot ETF. Instead of holding physical Bitcoins for investors, BITO uses a mix of futures contracts to mimic the price performance of spot Bitcoin. Nonetheless, the launch of the U.S. futures bitcoin ETF added to the hype, causing bitcoin to hit another all-time high of \$68,990.90 on November 10. The price then plummeted to the \$58,000 range from late November to mid-

December. Despite expectations by many that the \$100,000 mark for a single bitcoin would be reached in 2021, bitcoin ended the year down 60% at \$46,712.90.

Bitcoin / EUR price development for the year 2021 and Q1 2022



Source: Ariva

Just as 2021 was a defining year for Bitcoin, 2022 could prove to be an even more important year in the long run. Bitcoin is steadily gaining legitimacy and is no longer seen as an esoteric digital currency for tech speculators. Increasingly, companies, institutions, national governments, and individuals are leveraging their reputations and capital to participate in the success of this ecosystem.

Bitcoin in Q1 2022

At the beginning of the first quarter of 2022, the lack of trading activity over the turn of the year, coupled with rising inflation fears, formed a negative market sentiment that persisted for most of the quarter.

In January, the USA recorded its highest inflation rate in almost 40 years. Markets also priced in geopolitical risk around the escalating crisis between Ukraine and Russia and the threat of interest rate hikes. Bitcoin suffered, as did global markets. Aggressive de-risking, accompanied by numerous sell-offs, sent Bitcoin down to \$32,950. The asset's market dominance fell below 40%, a level not seen since May 2018. Some investors remained scared, while others recognized an opportunity. This slump was quickly absorbed and the price recovered to over USD 45,000 by early February.

During most of February and early March, negative sentiment dominated and the price fell below \$40,000. Interim price increases were quickly met with profit taking and loss mitigation. In the same period, Russia's invasion of Ukraine saw the price drop by 30% and the price hit the USD 35,000 mark again. In early March, Bitcoin experienced a temporary collapse in correlation with the S&P500, due to speculation about the possibility of value transfers under the Russia sanctions.

The first half of this year was the worst two-year return for the S&P since 1970. Looking ahead to next quarter and beyond, we can expect interest rate hikes and quantitative tightening to continue, which will ultimately limit the allocation to riskier investment opportunities for many investors.

While current market conditions may seem challenging, this is not unfamiliar territory for the crypto asset class. If macroeconomic conditions gradually improve, so will the crypto market. The difficult question is, and always has been, timing. From a long-term perspective, we believe this asset class remains very attractive.

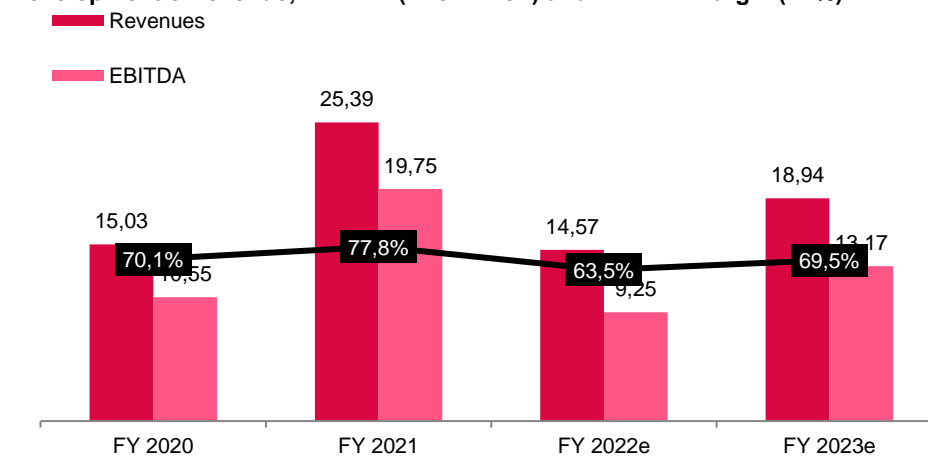
CORPORATE DEVELOPMENT

Key figures at a glance

	FY 2020	FY 2021	FY 2022e	FY 2023e
Revenues	15.03	25.39	14.57	18.94
Other operating income	0.21	0.48	0.00	0.33
Other operating expenses	-1.90	-2.89	-2.30	-2.99
Cost of materials	-0.48	-0.42	-0.42	-0.44
Personnel expenses	-2.31	-2.82	-2.60	-2.68
EBITDA	10.55	19.75	9.25	13.17
Depreciation	-0.12	-0.15	-0.14	-0.14
Depreciation/amortization (cryptocurrencies)	3.12	0.14	-10.00	0.00
EBIT	13.54	19.74	-0.89	13.03
Financing income	0.01	0.01	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	-0.02	-0.04	-0.04	-0.04
Profit before taxes	13.53	19.72	-0.93	12.99
Actual tax expense	-4.01	-6.34	0.30	-4.18
Income from deferred taxes	0.00	0.00	0.00	0.00
Net result	9.52	13.37	-0.63	8.81
Revenues	15.03	25.39	14.57	18.94
EBITDA	10.55	19.75	9.25	13.17
<i>EBITDA margin</i>	<i>70.1%</i>	<i>77.8%</i>	<i>63.5%</i>	<i>69.5%</i>
EBIT	13.54	19.74	-0.89	13.03
<i>EBIT margin</i>	<i>90.1%</i>	<i>77.8%</i>	<i>-6.1%</i>	<i>68.8%</i>
Net result	9.52	13.37	-0.63	8.81
<i>Net margin</i>	<i>63.3%</i>	<i>52.7%</i>	<i>-4.3%</i>	<i>46.5%</i>

Source: GBC AG

Development of revenue, EBITDA (in € million) and EBITDA margin (in %)



Source: GBC AG

Business Development 20 21

Income statement (in € million)	FY 2019	FY 2020	FY 2021
Revenues	6.30	15.03	25.39
EBITDA	2.59	10.55	19.75
EBITDA margin	41.2%	70.1%	77.8%
EBIT	2.54	10.42	19.60
EBIT margin	40.3%	69.3%	77.2%
Net income	2.15	9.52	13.37
EPS in €	0.43	1.90	2.67

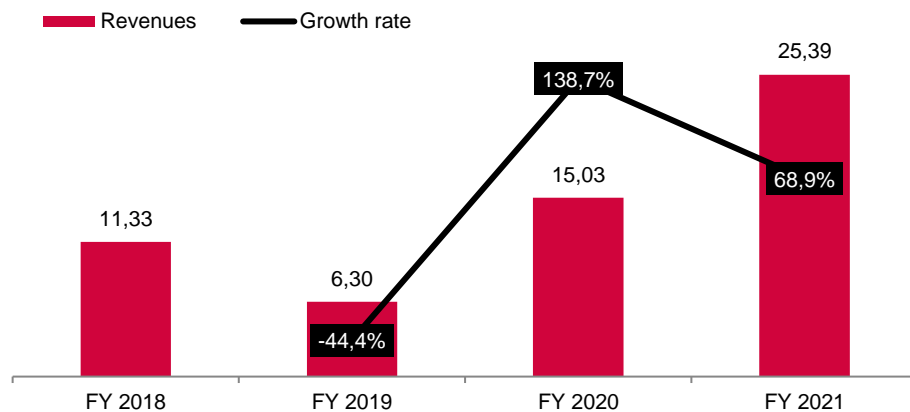
Sources: Bitcoin Group SE, GBC AG

Revenue development

Despite the comparatively high volatility of the crypto markets, our forecast was very close to reality. The company moderately exceeded our forecasts of € 24 million in revenue and EBITDA of € 18.31 million. In fact, revenue of € 25.39 million and EBITDA of € 19.75 million were achieved.

In the past fiscal year 2021, the company achieved another revenue record with a 68.9% increase in revenue to € 25.39 million (previous year: € 15.03 million). The background to this development was primarily the increased trading volume on the trading platform bitcoin.de, which on the one hand resulted from the increased interest in cryptocurrencies. On the other hand, the regulated platform served the increased interest in the cryptocurrency sector with its high user-friendliness.

Revenue development (in € million) and growth (in %)



Sources: Bitcoin Group SE, GBC AG

This also shows that customers like to operate on transparent and regulated platforms, which is reflected in the increased number of users. As planned, the number of users exceeded the one million mark in the middle of the year and reached 1.02 million by the end of 2021 (PY: 0.92 million). Thus, more than 8,000 users per month were acquired on average.

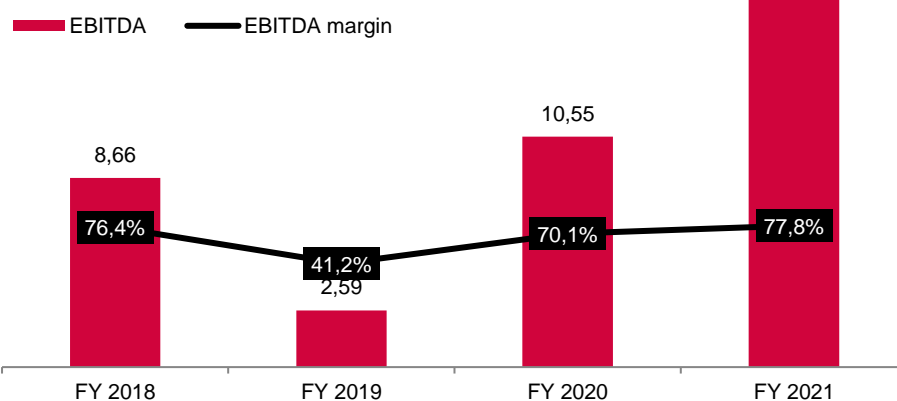
In addition, the Bitcoin Group is also constantly expanding their offering on the Bitcoin.de platform. For example, the trading options have been expanded to include Ripple (XRP) and Dogecoin (DOGE), making a total of eight cryptocurrencies available for trading against euros. In addition, it has also been possible to trade in pure cryptocurrency pairs since December 2021. Bitcoin.de is the first German platform to enable its customers to trade Ethereum, Ripple and Dogecoin against Bitcoin.

The bitcoin.de platform generates most of its revenue in times of crypto booms, which are the subject of media coverage. In particular, this was the case in the first quarter of 2021 and in parts of the second quarter of 2021. The crypto markets had already been coming out of a boom market in 2020, which continued in 2021. Other positive news, such as the entry of companies and institutional investors, boosted prices and media attention. The first crypto ETFs as well as the recognition of Bitcoin as a means of payment in El Salvador should also have contributed to this trend. Bitcoin Group was also able to benefit from this very dynamic first half of 2021 and already generated revenues of € 17.7 million in the first half of the year, which corresponds to around 70% of the full-year revenues generated. In the summer of 2021, the crypto markets came under pressure and the steady growth, which had already started in 2020, dropped. Media coverage also dropped significantly from that point on. Although the price recovered briefly in winter 2021, it did so without attracting the interest of the general public. This was likely reflected in the lower trading volume.

Earnings development

The significant increase in revenues led to a disproportionate improvement in earnings. EBITDA rose by 87.3% to € 19.75 million (PY: € 10.55 million), which corresponds to an increase in the margin from 70.1% (2020) to 77.8% (2021).

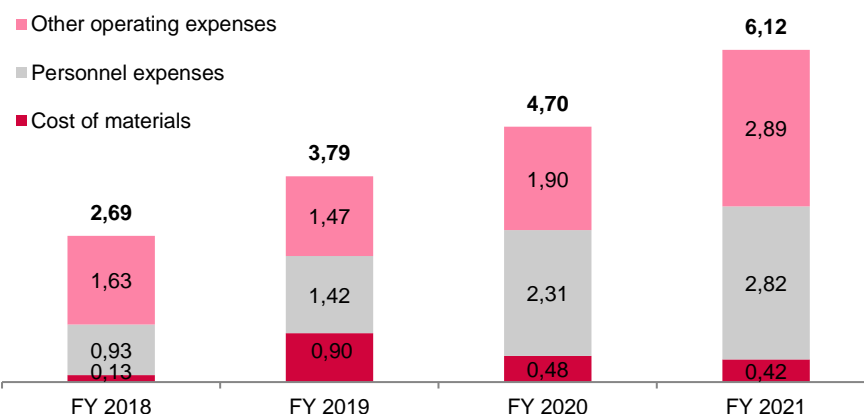
EBITDA (in € million) and EBITDA margin (in %)



Sources: Bitcoin Group SE; GBC AG

Total costs rose by a disproportionately low 30.2% to € 6.12 million (previous year: € 4.7 million), which is primarily attributable to the increase in other operating expenses and higher personnel expenses.

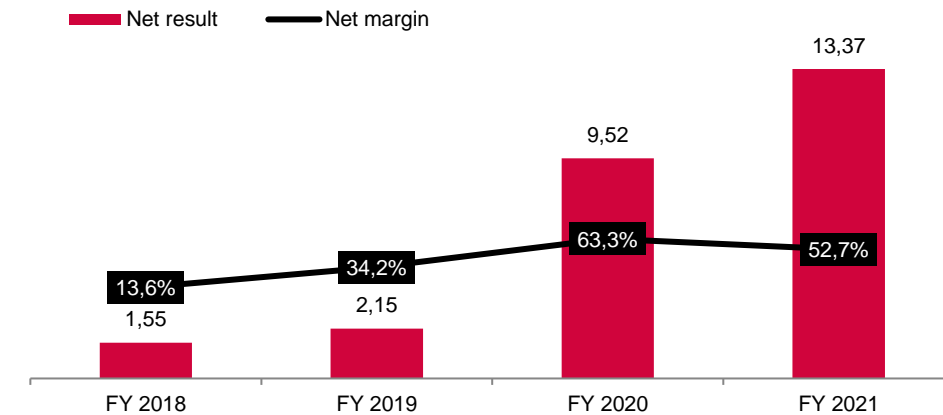
Development of operating costs (in € million)



Sources: Bitcoin Group SE; GBC AG

The 51.5% increase in other operating expenses to € 2.89 million (previous year: € 1.9 million) is primarily attributable to affiliate advertising. This is therefore largely a variable cost item that should have an equal impact on revenue. Due to the very successful financial year and the increase in the number of employees from 27 to 28, personnel expenses rose by 21.8% to € 2.82 million (previous year: € 2.41 million). Apart from the variable costs of affiliate marketing, costs thus remained comparatively stable overall.

Net income (in € million) and net margin (in %)



Sources: Bitcoin Group SE; GBC AG

Net income increased by 40.5% to € 13.37 million (PY: € 9.52 million), resulting in a margin decline from 63.3% to 52.7%. The reason for the decline was a positive one-off effect from the previous year, which had benefited from a € 3.12 million write-up of crypto inventories. Therefore, the disproportionate increase in EBITDA was not reflected in net income.

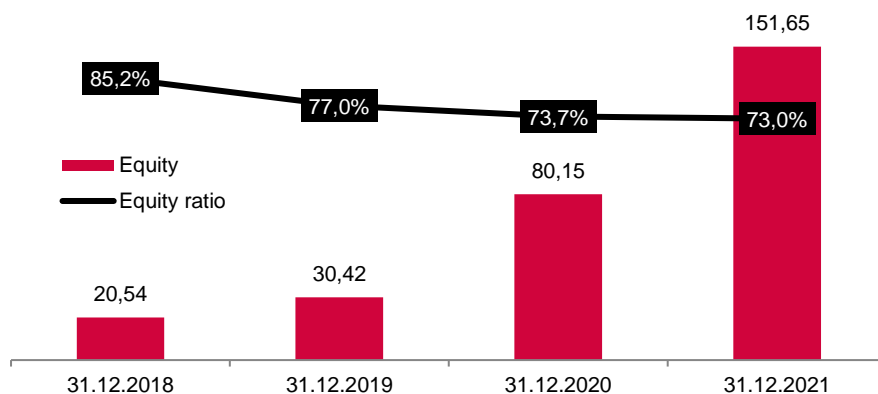
Balance sheet and financial situation as of Dec. 31, 2021

in € million	31.12.2018	31.12.2020	31.12.2021
Equity	20.54	80.15	151.65
EC ratio (in %)	85.2%	73.7%	73.0%
Operating fixed assets	0.10	1.57	1.50
Crypto proprietary	27.51	90.31	181.08
Deferred tax liabilities	6.40	23.66	48.65
Net crypto equity	21.11	66.65	132.43
Working capital	0.34	-4.12	-6.69
Net cash	2.25	12.02	20.57

Sources: Bitcoin Group SE; GBC AG

The company continues to have an excellent balance sheet. Equity rose by 89.2% to € 151.65 million (previous year: € 80.15 million); due to the expanded balance sheet total, the corresponding equity ratio of 73% was at the previous year's level (December 31, 2020: 73.7%). The significant increase in equity in absolute terms is attributable, on the one hand, to the positive net income for the year and, on the other hand, to a higher value of the crypto inventories.

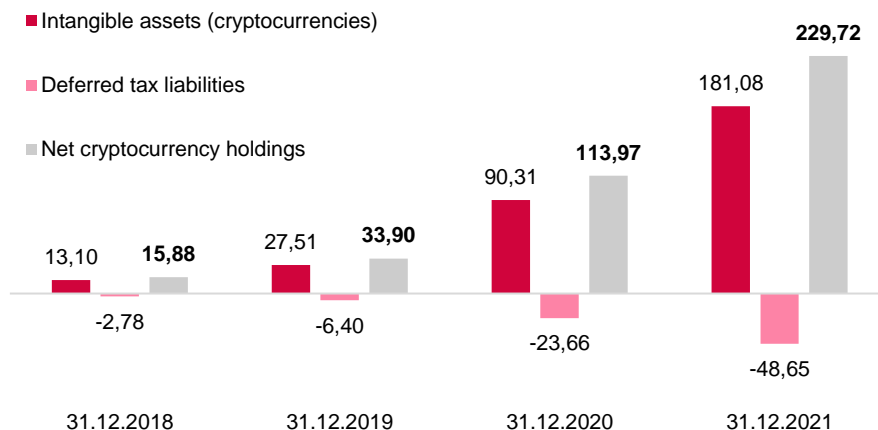
Equity (in € million) and equity ratio (in %)



Sourced: Bitcoin Group SE; GBC AG

As of December 31, 2021, the crypto proprietary portfolio increased by 100.5% to € 181.08 million (December 31, 2020: € 90.31 million), of which € 153.21 million / 84.6% was attributable to Bitcoin and € 20.69 million / 11.4% to Ethereum. In the event of a liquidation of the crypto equity, taxes would be incurred, which are reflected in the deferred tax liabilities.

Gross and net cryptocurrency and deferred tax liabilities (in € million)



Sources: Bitcoin Group SE; GBC AG

Less deferred tax liabilities of € 48.65 million, the net crypto position is € 132.43 million. In addition, cash and cash equivalents increased by 68.8% to € 20.28 million (December 31, 2020: € 12.01 million). With immaterial credit liabilities, net cash stands at € 20.57 million. Adding net crypto holdings, net cash is €153 million. The crypto markets have approximately halved since December 31, 2021 (as of August 10, 2022). Even with a halving of the net crypto holdings (around € 65 million), the net financial assets should amount to around € 85 million, which corresponds to an enterprise value of € 40 million with a market capitalization of € 125 million (09/08/2022). Thus, in our opinion, the share is currently trading very favorably based on the balance sheet alone.

The Executive Board plans to distribute part of the high level of cash and cash equivalents. At the Annual General Meeting on July 1, 2022, it was therefore resolved to pay an initial dividend of € 0.10 per share or a total of € 0.5 million.

SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Highly profitable and scalable business model • Extensive cash and crypto holdings • Comparatively independent business model from crypto price development • Steady customer growth • Own banking license • Competitive advantage due to German regulation and licensing • Stable and lean cost structure • Revenues increases can be achieved in rising and falling markets • High security, as only 2% of crypto holdings are in a hot wallet. 	<ul style="list-style-type: none"> • Value of crypto stock dependent on volatile crypto price development • Investment banking still plays a subordinate role • Turnover dependent on newsflow around cryptocurrencies • The perception of the stock is still too linked to bitcoin and the bitcoin price
Opportunities	Risks
<ul style="list-style-type: none"> • Crypto boom and strong newsflow continue • Stronger regulation could cause an influx of customers to the already regulated bitcoin.de • Broadening the business model through M&A activities • Regional expansion could accelerate growth • Bitcoin.de could develop into a dividend stock • A share buyback program may be launched 	<ul style="list-style-type: none"> • Cryptocurrencies could be banned • Interest of cryptocurrencies declines and is hardly illuminated by the press • Complete loss of value of the cryptocurrency due to a loss of trust, e.g. due to a successful hacker attack • A possible hacker attack on bitcoin.de could lead to a loss of trust

FORECAST AND VALUATION

Income statement (in € million)	FY 2021	FY 2022e	FY 2023e
Revenues	25.39	14.57	18.94
EBITDA	19.75	-0.75	13.17
EBITDA margin	77.8%	-5.2%	69.5%
EBIT	19.74	-0.89	13.03
EBIT margin	77.8%	-6.1%	68.8%
Net income	13.37	-0.63	8.81
EPS in €	2.67	-0.13	1.76

Source: GBC AG

Bitcoin Group SE took up the suggestions of the shareholders at the last Annual General Meeting and resolved to award a dividend of € 0.50 per share and a share buyback program at the Annual General Meeting on July 1, 2022. In our view, this should bring significant positive share price impetus. The share buyback program had already been forecast by us in our research dated November 2, 2021. According to management, a sustainable dividend payment is planned.

Revenue forecast

According to the company's guidance, revenues are expected to decline slightly and EBITDA to be in the upper single-digit million range. The market currently still holds a great deal of uncertainty with the current Ukraine crisis and rising interest rates.

Currently, we share the management's assessment of a currently difficult market environment. It has already been a difficult start to 2022 for Bitcoin, yet the consensus of many Bitcoin forecasts is USD 100,000 in the medium term, though the timing of this mark differs. There are general concerns about rising inflation, geopolitical tensions, particularly the Ukraine conflict, and the possibility of tighter monetary policy from the Federal Reserve. The crypto market has increasingly tracked the stock market in recent months, making it even more intertwined with global economic factors.

Bitcoin has only been above \$45,000 for a short period of time in the last four months and has not risen above \$50,000 since December 25, 2021. But even with the recent price decline, Bitcoin is still more than twice as valuable as it was just a few years ago. For Bitcoin, these kinds of ups and downs are nothing new.

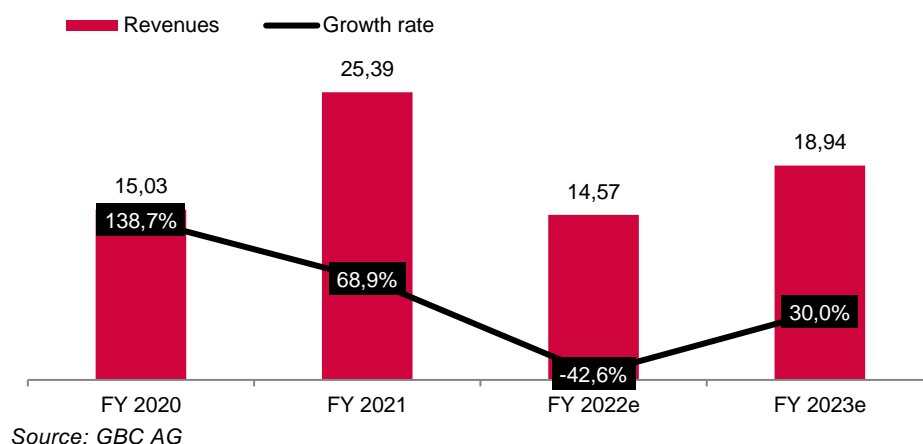
JPMorgan forecasts a long-term high of \$146,000, and Bloomberg predicts the price could reach \$400,000 if the currency rises at similar rates as in the past. Normal economic factors affect the price of cryptocurrencies just like any other currency or investment - supply and demand, public sentiment, the news cycle, market events, scarcity, and more.

According to CoinShares, a company specializing in digital asset management, Bitcoin is growing at an annual rate of 113%. (In comparison, the Internet was found to be growing at a slower rate of 63%). If people adopt Bitcoin at a pace comparable to the early days of the Internet (or faster), there will be one billion users by 2024 and four billion by 2030, according to the report.

In the wake of the crypto and financial markets currently coming under pressure, we expect a slightly lower trading volume on Bitcoin.de and forecast revenues of € 14.57 million in 2022 and € 18.94 million in 2023. The significant increase in 2023 is based on the assumption that many of the current crises, such as the Ukraine conflict and the corona pandemic, have either been overcome or the uncertainty has been fully priced in. In addition, the next bitcoin halving is due on 01/04/2024. This effectively means that Bitcoin's

inflation rate will be cut in half. New Bitcoins are issued by the Bitcoin network every 10 minutes. In the first four years of Bitcoin's existence, the number of new Bitcoins issued every 10 minutes was 50. Every four years, this number is halved. In normal markets, lower supply with no change in demand usually leads to higher prices. Since halving reduces the supply of new Bitcoins and demand usually remains constant, halving usually precedes some of the biggest Bitcoin runs. Therefore, we also expect revenue to increase in the medium term and raise the medium-term growth rate from 10% to 15% in the DCF model.

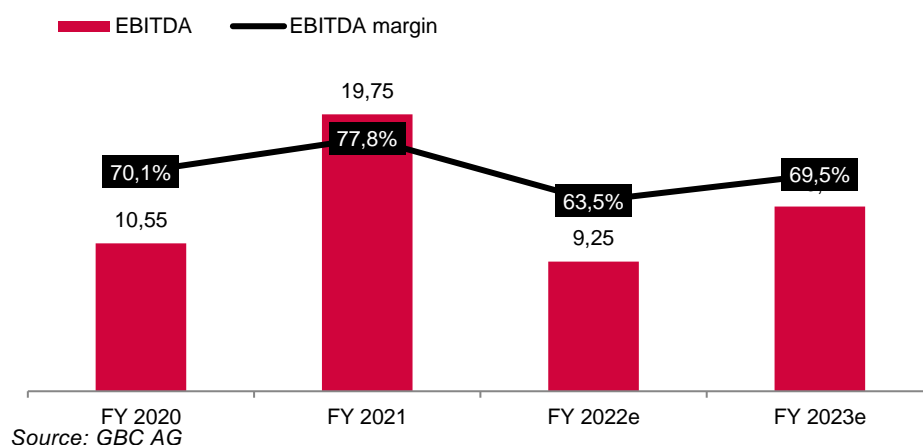
Revenues forecast (in € million) and revenues growth (in %)



Earnings forecast

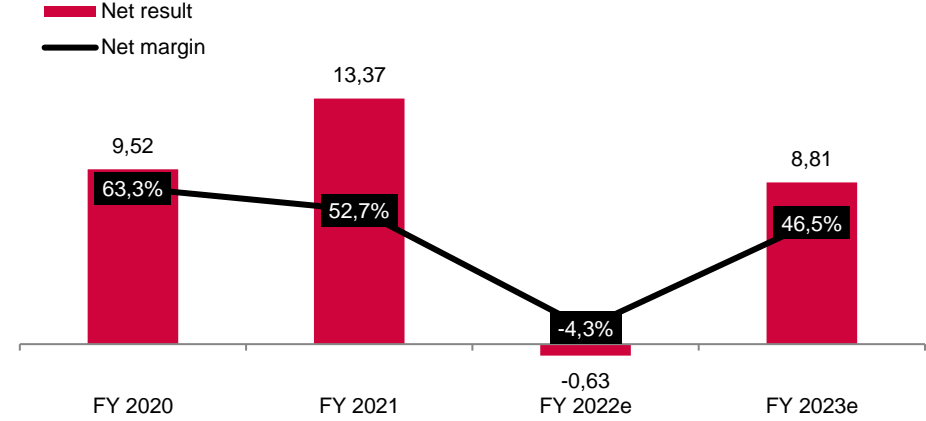
With the low revenue level, we forecast EBITDA to decline to € 9.25 million in FY 2022 and increase accordingly to € 13.17 million in FY 2023.

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



Due to the significant price declines of cryptocurrencies, there should also be significant write-downs of crypto stocks at Bitcoin Group AG. We expect write-downs of € 10 million on crypto holdings in the current fiscal year 2022. Due to these write-downs, we forecast a negative net result of € -0.63 million in the current fiscal year 2022, followed by € 8.81 million in 2023.

Forecast net income (in € million) and net margin (%)



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 2022 - 2023 in phase 1, the forecast is made from 2024 to 2029 in the second phase by applying value drivers. We expect revenues to increase by 15% (previously 10%). As a target EBITDA margin is 75.6% (previously: 80.2%). We have included a tax rate of 30% 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%.

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 average yields of the previous three months are used to smooth short-term market fluctuations. The risk-free interest rate we use is 0.6% (previously: 0.25%)

We use the historical market premium of 5.5% 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 8.26% (previously: 7.9%) (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 8.26% (previously: 7.9%).

As of December 31, 2021, crypto equity stood at € 181.08 million. Less deferred tax liabilities of € 48.65 million, net crypto holdings are € 132.43 million. Since December 31, 2021, many cryptocurrencies have fallen by about 50%. Therefore, we approximate the net crypto holdings to be € 65 million. We add the net crypto holdings to the net cash.

Valuation result

As part of our DCF valuation model, we have determined a new target price of € 80.00 (previously: € 120.00).

The background to the reduced price target is, on the one hand, the lower forecast for the current fiscal year 2022 and, on the other hand, the increased risk-free interest rate.

DCF model

Bitcoin Group SE - Discounted Cash Flow (DCF) Valuation

Value drivers of the DCF model after the estimate phase:

consistency - phase		final - phase	
Revenues growth	15.0%	Perpetual revenues growth	2.0%
EBITDA margin	72.7%	Perpetual EBITA margin	72.3%
AFA to operating fixed assets	8.0%	Effective tax rate in terminal value	30.0%
Working capital to sales	-40.0%		

three-stage DCF - model:

Phase in € M	estimate		consistency						final terminal value
	FY 22e	FY 23e	FY 24e	FY 25e	FY 26e	FY 27e	FY 28e	FY 29e	
Revenues (US)	14.57	18.94	21.78	25.05	28.81	33.13	38.10	43.81	
<i>US Change</i>	-42.6%	30.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	2.0%
<i>US to operating fixed assets</i>	9.11	11.69	13.20	14.91	16.85	19.04	21.53	24.34	
EBITDA	9.25	13.17	15.83	18.20	20.93	24.07	27.68	31.83	
<i>EBITDA margin</i>	63.5%	69.5%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	
EBITA	-0.89	13.03	15.70	18.07	20.80	23.93	27.54	31.69	
<i>EBITA margin</i>	-6.1%	68.8%	72.1%	72.1%	72.2%	72.2%	72.3%	72.3%	72.3%
Taxes on EBITA	0.29	-4.19	-4.71	-5.42	-6.24	-7.18	-8.26	-9.51	
<i>to EBITA</i>	32.2%	32.2%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
EBI (NOPLAT)	-0.61	8.84	10.99	12.65	14.56	16.75	19.28	22.18	
Return on investment	11.7%	-163.7%	-325.1%	-179.1%	-174.5%	-170.7%	-167.5%	-164.7%	-143.9%
Working capital (WC)	-7.00	-5.00	-8.71	-10.02	-11.52	-13.25	-15.24	-17.53	
<i>WC to turnover</i>	-48.0%	-26.4%	-40.0%	-40.0%	-40.0%	-40.0%	-40.0%	-40.0%	
<i>Investments in WC</i>	0.31	-2.00	3.71	1.31	1.50	1.73	1.99	2.29	
Operating assets (OAV)	1.60	1.62	1.65	1.68	1.71	1.74	1.77	1.80	
<i>AFA on OAV</i>	-10.14	-0.14	-0.13	-0.13	-0.13	-0.14	-0.14	-0.14	
<i>AFA to OAV</i>	633.8%	8.6%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	
<i>Investments in OAV</i>	-10.24	-0.16	-0.16	-0.16	-0.16	-0.17	-0.17	-0.17	
Invested capital	-5.40	-3.38	-7.06	-8.34	-9.81	-11.51	-13.47	-15.73	
EBITDA	9.25	13.17	15.83	18.20	20.93	24.07	27.68	31.83	
Taxes on EBITA	0.29	-4.19	-4.71	-5.42	-6.24	-7.18	-8.26	-9.51	
Total investments	-9.92	-2.16	3.55	1.15	1.34	1.56	1.82	2.11	
<i>Investments in OAV</i>	-10.24	-0.16	-0.16	-0.16	-0.16	-0.17	-0.17	-0.17	
<i>Investments in WC</i>	0.31	-2.00	3.71	1.31	1.50	1.73	1.99	2.29	
<i>Investments in goodwill</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Free cash flows	-0.39	6.82	14.67	13.93	16.03	18.45	21.24	24.44	366.46

Value of operating business (reporting date)	291.33	308.58
<i>Present value of explicit FCFs</i>	81.08	80.96
<i>Present value of the continuing value</i>	210.25	227.62
Net debt	-85.14	-91.42
Value of equity	376.47	400.00
Minority interests in profits	0.00	0.00
Value of share capital	376.47	400.00
Shares outstanding in million	5.00	5.00
Fair value of the share in EUR	75.29	80.00

Cost of Capital:

<i>Risk-free return</i>	0.6%
<i>Market risk premium</i>	5.5%
<i>Beta</i>	1.39
Cost of equity	8.3%
<i>Target weighting</i>	100.0%
Cost of debt	6.5%
<i>Target weighting</i>	0.0%
Tax shield	25.0%
WACC	8.3%

ROI	WACC				
	7.7%	8.0%	8.3%	8.6%	8.9%
-144.4%	86.71	83.26	80.16	77.35	74.80
-144.1%	86.62	83.18	80.08	77.28	74.73
-143.9%	86.53	83.09	80.00	77.20	74.66
-143.6%	86.44	83.01	79.92	77.13	74.59
-143.4%	86.35	82.93	79.84	77.06	74.53

APPENDIX

I.

Research under MiFID II

1. There is an agreement between the research company GBC AG and the Issuer regarding the independent preparation and publication of this research report on the Issuer. GBC AG shall be remunerated for this by the Issuer.
2. The research report shall be made available simultaneously to all investment service providers interested therein.

II.

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

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Other people involved in the study:

Manuel Hölzle, Dipl. Kaufmann, Chief Analyst

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