

Research Report (Initial Coverage)



A platform for fintech and crypto

Strong growing FinTech specialist for the mobile Financial trading and the trading of virtual goods

Target Price: €5.15

Rating: BUY

IMPORTANT NOTE: Please take note of the disclaimer/risk warning, as well as the disclosure of potential conflicts of interest as required by section 34b of the Securities Trading Act (WpHG) from page 28

Note on research as a "minor non-monetary benefit" according to the MiFID II regulation: This research meets the requirements for being classified as a "minor non-monetary benefit". For more information, see the disclosure under "I. Research under MiFID II"

Date and time of completion of this research: 10/12/2018 (4:45 pm) Date and time of first distribution: 11/12/2018 (9:00 am) Target price valid until: max. 31/12/2019



The NAGA Group AG^{*5a;11}

BUY Target Price: 5.15

Current price: 2.10 10.12.2018 / XETRA / 3:55 pm Currency: EUR

Key data:

ISIN: DE000A161NR7 WKN: A161NR Ticker symbol: N4G Number of shares³: 40.20 Marketcap³: 84.43 ³ in m / in EUR m Freefloat: around 8%

Transparency level: Scale

Market Segment: Open Market

Accounting Standard: IFRS

Financial year-end: 31/12

Designated Sponsor: Oddo Seydler Bank AG

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* catalogue of potential conflicts of interests on page 29

Company Profile

Sector: FinTech

Focus: social trading and investing in financial instruments, cryptocurrencies and virtual goods

Employees:: 180 (01/11/2017)

Founded in: 2015

Headguarter: Hamburg

Executive Board: Yasin Sebastian Qureshi, Benjamin Bilski, Andreas Luecke



The NAGA Group AG is an innovative FinTech group engaged in the trading of financial securities, cryptocurrencies and virtual goods. Founded in 2015, the company focuses on trading transactions (commissions, SWOP and market making) mainly on forex, indices, stocks, ETFs and CFDs generated on an easy-to-use social trading environment. The interactive interface allows the copying of one single trade or an entire strategy of a professional trader. These technical features are an important reason for its appeal to younger customers and thus for NAGA's high customer loyalty. A second consistent revenue stream stems from the service activities (such as consulting and license support) brought forward in cooperation with the external partner NAGA Development Association Ltd. An innovative virtual goods exchange is currently under development, which is a cross-game platform to sell online virtual items for computer games. Anchor shareholder with a stake of around 30% is the strategic partner FOSUN Fintech group from Hong Kong. This latter might also drive future strategic partnerships in the Asian market.

P&L in €m \ FY-End	1st HY 2018	FY 2018e	FY 2019e	FY2020e
Revenue	8.08	19.39	25.81	38.54
EBITDA	2.20	3.03	5.75	15.40
EBIT	-0.06	-1.26	1.10	10.90
Net profit	-0.02	-1.38	1,14	9,14
Per Share Figures in EUR				
EPS	0.00	-0.03	0.03	0.23
Dividend per share	0.00	0.00	0.00	0.00
Key financials				
EV/Sales	-	4.09	3.07	2.05
EV/EBITDA	-	26.15	13.78	5.15
EV/EBIT	-	neg.	72.04	7.27
P/E	-	neg.	74.06	9.24
PEG	1.82			

Financial Dates:

11-12 Dec.18: MKK-Munich

**last research published by GBC:

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EXECUTIVE SUMMARY

- The NAGA Group AG is a public listed German Fintech company that aims to build an ecosystem of user-friendly interconnected trading services. Within a social network interface, the platforms make the trading easy-to-use. Simply, the system enables users to copy and share trades, learning from others, exchanging ideas and, more generally, investing in financial markets, crypto-currencies and virtual goods. On these bases, customer accounts have reached about 500,000 users in the NA-GA-ecosystem at the date of this writing.
- Under the brand NAGA Trader the company currently performs the most significant part of its trading services. This mobile-oriented application seems to be more appealing to younger users even without financial knowledge (the platform is available for iOS, Android and Web). For this reason, NAGA is committed to introduce the platform (e.g. with a demo) to new target users from unrelated environments such as the games industry. Compared to the competitors (e.g. Ayondo or eToro), NAGA Trade offers more flexible tools, such as the opportunity to partially or completely copy the trades of an expert trader. The offer is integrated with a personalized robo-advisor (CYBO) that combines the crowd-trading behavior of humans with artificial intelligence. The proprietary technology has, from an early stage, represented one of the main assets on the consolidated balance sheet.
- Worth mentioning is the consolidation of the acquired Hanseatic Brokerhouse Securities AG in the H1/18. The new subsidiary owns a license as a financial services provider under the Cyprus security and exchange commission. A further strategic acquisition has been the 25% of easyfolio GmbH with the option to increase to the stake to up to 49%. The Frankfurt investment company is an ETF-platform active in Germany, with assets under management of more than €50m at the time of writing. Moreover a strategic partnership with the listed company MyBucks has been concluded in 2018 to extend NAGA cryptocurrency products (NAGA Wallet) to MyBucks's clients. NA-GA's corporate strategy is oriented to integrate all the services, currently in different website and apps, in one unique platform.
- In addition, an expansion of business activities in Europe and worldwide is planned. A core point for the implementation is the starting of strategic alliances or M&A (e.g. in Asia boosted by the Hong Kong based shareholder). Given a steady increase in the volume of users for both finance and crypto divisions, we anticipate an increase in revenues of up to €38.45m in FY 2020. This is the basis for our valuation approach, which uses a DCF model. However, we have to underline that the company acts as a new founded venture and is active in a highly competitive environment.
- Based on the DCF model, we calculate a fair value per NAGA share of €5.15 Based on the current share price of €2.10, resulting in a share price potential of over 140% and, therefore, we are including NAGA as a new entry in the research coverage with a Buy rating.



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COMPANY



Organizational structure as at 31/08/2018



Source: The NAGA Group AG; GBC AG

The NAGA Group (abbreviated to NAGA) is a holding group engaged in financial technology for the trading of financial instruments and virtual items. On one hand the brokerage business in financial securities is performed under NAGA Finance, which includes NAGA Trader (brokerage business), NAGA Card (card services) and the Cypriot & EUregulated online broker Hanseatic Brokerhouse Securities (trading trainings and courses). On the other hand, NAGA Crypto operates in the trade of Cryptocurrencies under the brand NAGA Wallet and in the listing of token and ICO (initial coin offer) services with, respectively, NAGA Exchange and NAGA ICO services. All the products provide the same concept of mobile and simple interface.



Summary of Company history

Year	Event
Oct. 2015	The NAGA Group AG is founded
Feb. 2016	Hauck & Aufhäuser invests in the Naga Group AG
Aug. 2016	Fosun Group buys a stake
Nov. 2016	Joint Venture with Deutsche Börse for Naga Virtual
Jul. 2017	IPO on the Frankfurt Stock Exchange (350%+ oversubscribed)
NovDec. 2017	Naga Token sale €35m
Dec. 2017	Partnership between the Japanese gaming manufacturer Asobimo Inc. and Naga Virtual platform
Jan. 2018	Investment in Easyfolio GmbH (ETF-based investment platform)
Apr. 2018	Partnership with MyBucks to expand to NAGA cryptocurrencies distribution
Apr. 2018	Launch of Naga Wallet (platform for digital currency and financial markets)
May. 2018	Launch of Naga Virtual (platform for virtual goods trading)
May. 2018	Partnership with the public blockchain systems Ontology
Jul. 2018	Simplex Partnership for fraudless payment processing
Aug. 2018	Sponsorship on SKY Media
Source: The NA	GA Group AG: GBC AG

Source: The NAGA Group AG; GBC AG

Business model of The NAGA Group AG

The NAGA Group AG is intensely engaged in the development of a cutting-edge technology aimed at building a unified platform for digital, gaming and financials securities trading. According to the company, typical users are young males between the age of 25-35, with an average monthly income between $\leq 2,000$ and $\leq 3,000$, who are active in social networking. Additionally, the data also shows the profile of an international customer, who is generally risk-seeking with digital and financial knowledge.

The technology is based on the Blockchain platform that ensures the security and speed of transactions. Following the acquisition of a broker and asset management company, NAGA included in its assets an EU-brokerage license to cover both the platforms for financial trading and for virtual goods. Beside the investments in licences, a roboadvisory tool (CYBO) and an algorithmic trading to gaming further expanded NAGA's product range. Under the vision of a complete and integrated trading offer, training services are performed within the Hanseatic Broker house. The workshops and seminars represent a favourable access to introduce NAGA's products to new customers and expand the business internationally.

NAGA's Brands

CURRENT MONETISED NAGA PROJECTS

NAGA TRADER	NAGA MARKETS	NAGA WALLET	🏟 NAGA VIRTUAL	10 NAGA BROKERS
Social network for stock and FoRex trading	Financial Institution for Stock, ForEx and CFD Brokerage regulated by CySEC	Multi-asset wallet for digital currencies	Marketplace for buying and selling in-game items	Financial trading seminars and webinars
NAGA CARD				
Prepaid debit card linked to trading account				
Prepaid debit card linked to trading account				
to trading account	♦ NAGA ACADEMY	NAGA WEALTH	• NAGA STOCKS	🖲 NAGA GUARD

Source: The NAGA Group AG; GBC AG



At the current stage of development, the revenue model revolves mainly around a market makers system and transaction fees (commission for trade). The group is working on simplifying and making the entire process more reliable through the crypto currency NAGA Coin. This latter is a crypto currency that is issued by NAGA and that allows the execution of every trade in the whole NAGA ecosystem.

Monetization Flow (Core)

1) Buy/sell a virtual good on NAGA VIRTUAL		+Transaction fees
2) Credit proceeds in Bitcoin onto the NAGA WALLET	₿	+Service fees
3) Exchange Bitcoin for fiat on NAGA EXCHANGE	₿≓\$	+Exchange fees
4) Use fiat to buy Apple Stock/CFD on NAGA TRADER	۲	+Trading fees
5) Sell Apple Stock/CFD on NAGA TRADER for fiat	€ =\$	+Trading fees
5) Credit profits in fiat onto prepaid NAGA CARD	Face Site well liter for wells	+Card fees
7) Use NAGA CARD to pay for shopping at Amazon	amazon	+Card fees
		Revenues

Source: The NAGA Group AG; GBC AG

As of June 2018, the group is active in Germany (with two offices in Hamburg), Spain (offices in Barcelona, Madrid, Valencia and Palma de Mallorca), Cyprus (Limassol) and has a access to more than 20,000 paying clients.

NAGA's Products

As exhibited in the figure, the company is currently operating with a large number of brands. Besides web-based platforms, a considerable effort had been made to the development of mobile applications.

NAGA Trader – the social trading platform

The product NAGA Trader is the core of NAGA's offer. The special technology allows users to trade Forex, Indices, stocks, ETFs and CFDs in an innovative way. The technology is client-centric and allows exchanging knowledge between members of different backgrounds and enhances their trading experience. It results in a sense of community that affords the opportunity to make comments on news, share one's expertise and thus increase interactions. This is more appealing to younger users and is ideal to attract beginners in the field of financial trading. This can expand the customer base to broader user' segments (e.g. games), also supported by initial tools such as the virtual goods trader. In the whole process the trader can open a NAGA account or operate directly from external accounts.

Traders that have shared their investment strategies and been copied are rewarded with a compensation bonus. A user, on the other hand, has the opportunity to copy a single trading idea or the entire strategy (auto-copying), an added value compared to the other social trading networks. Overall, NAGA statistics report that on average the time spent



by a single user on the platform sums up to more than 23 minutes. This is quite high, compared with the time spent on traditional social networks (e.g. Twitter, Instagram etc.).

NAGA Trading Features



Source: The NAGA Group AG; GBC AG

Aside from NAGA's trading technology, the product mix contains an innovative and multifunctional robo-trading advisor, called CYBO. Taking into account personal investment preferences, this product combines components of crowd trading behavior together with artificial intelligence. These characteristics eliminate client mistakes in trading related to emotional reactions. CYBO's key priorities are: (1) to highlight the best market opportunities (2) improvements over risk and trade control (3) the mix between followed traders and selected trading instruments. It was revealed that between June 2016 and July 2017, CYBO outperformed peer-to-peer investment advisors. Furthermore it is planned to launch an opportunity driven crypto index managed by CYBO.

NAGA Wallet – Cryptocurrency accounts

The NAGA Wallet can be viewed as a deposit account where the users can store, manage and exchange cryptocurrencies and fiat money. The user is able to execute payments between different blockchain assets and easily convert them into different currencies such as Bitcoin (BTC), Ethereum (ETH) or Litecoin (LTC). Additionally, the Wallet application provides solutions for investments in virtual goods. As universal currency for the whole ecosystem, the NAGA Coin should boost the integration of the different platforms in the ecosystem. The link of NAGA Wallet with the NAGA Trader gives access to stocks, forex and commodities trading, within the NAGA ecosystem. The NAGA wallet simplifies the transaction with cryptocurrencies. For example, at generally low transaction costs, crypto currencies can be transferred via email or simply purchased via credit cards.

NAGA Virtual – The place for good exchange

NAGA Virtual represents a market place to exchange all kinds of games and virtual goods. Its innovation revolves around the possibility of combining the primary and secondary market in one ecosystem. Users can trade items from each other or buy directly from the publisher. The system enables players in the secondary market to sell their items to other users or vice versa by acquiring them from other users. Taking advantage of the blockchain technology, NAGA Virtual-platform combines safe transactions and security for the settlements.



Simplified NAGA Virtual Business Model Overview



Source: The NAGA Group AG; GBC AG

NAGA Card – prepaid debit card

After the opening of a NAGA real money trading account, users are qualified to apply for a NAGA Card. This latter is a prepaid debit card directly connected to the user accounts that includes a multicurrency services and IBAN for global transactions. Comparing with the majority of competitors, the card supports three main currencies (EUR, GBP and USD) in an easy to navigate dashboard. Thus, the NAGA Ecosystem, allows users to manage with a simple login the payment services.

NAGA Exchange – the crypto trading system

Under the brand NAGA Exchange a high-frequency trading system between fiat and cryptocurrency (e.g. BTC/USD) is performed. This innovative virtual platform currently includes over fifty cryptocurrency pairs with a real time news-flow in an intuitive trading platform.

NAGA Academy – Online Trading University

The academy is a division that offers webinars and web-based courses as well as offline education through classes, workshops and seminars about trading financial securities, FinTech technology, crypto-currencies and virtual goods. Partner of the project will be a well-known Cypriot educational institution with expertise in UK bachelor's and master's degrees. The courses will take place in accordance with the European regulations. The proposed seminar and webinars generate both direct revenues and long term engagement.

NAGA Guard – cryptocurrency rating

As with the growing high demand for tokens and the need to have more insights and learning tools, NAGA is developing a cryptocurrency rating services. This market research tool might improve the speed in the exchange system, making retail clients, B2B algorithmic-traders, as well as brokers more aware of their trade. The risk score analysis will be based on machine learning and data mining techniques and performed in cooperation with Finery, a company, that provides support in the NAGA robo-advisor CYBO development.



Directors

Yasin Sebastian Qureshi (Founder & Executive Director)



Yasin Sebastian Qureshi is a banking and finance professional and has been in the business for a long time. He is the youngest person in Europe ever to have obtained a banking license, and subsequently founded and ran his own investment bank successfully going public in 2007. Yasin is an investor in technology start-ups and firms and has also co-

founded the Global Citizen Foundation. He has a strong focus on finance, brokerage and technology. Indeed, he is a hands-on, passionate entrepreneur aiming to seriously disrupt current financial business structures.

Benjamin Bilski (Founder & Executive Director)



Benjamin Bilski is a serial entrepreneur and former professional swimmer. At the age of 21 he co-founded angelplatz.de, one of Germany's leading e-commerce shops for fishing equipment. During his entrepreneurial career he studied and graduated from EBS University with a M.Sc. in Management. Benjamin Bilski is strongly technology-focused

and has a deep understanding of eCommerce, finance, mobile and affiliate-based models. He has been included in the famous "FORBES 30 under 30 - Europe talent list.

Andreas Luecke (Executive Director)



Andreas Luecke is a senior corporate and tax lawyer with 25 years' experience in M&A as well as structuring of investments for private and institutional clients. He has deep insights into internationally diversified groups and in optimizing their structures from a legal and tax perspective. Prior to his engagement at The NAGA Group he had been a part-

ner in a Big Four firm as well as in a multidisciplinary tax-and-law boutique.



MARKET AND MARKET ENVIRONMENT

The NAGA Group (NAGA) operates in several markets and combines different products in a single ecosystem. NAGA's mission is to open up the world of trading financial and virtual goods to everyone in a unified platform. Currently, no other company offers this vast range of trading possibilities in a single platform. Hence, we will take a deeper look into some of the most important market trends for NAGA.

The Fintech Market

Generally speaking, NAGA is active in the Fintech market. Fintech can be seen as an evolution of the financial industry and, indeed, its creation was sparked by the 2008 financial crisis. The enormous potential for this new market segment has received growing attention and nearly every year new financing records are set.



Annual VC-backed global fintech deals and financing (in USD Billion)

VC-backed Fintech companies raised 16.5 billion USD across 1,165 deals globally in 2017. According to CBInsights, in Q3 2018, VC-backed fintech companies raised 5.64 billion USD across 375 deals globally.

Especially in Europe, various Fintech companies try to challenge the traditional banking model and spread globally with new entrants targeting niche customer pain points. Collectively in 2018, startups trying to disrupt retail and commercial banking have raised over 1.5 billion USD in venture capital across 55 deals, both annual records. Furthermore, Fintech challengers have already attracted more than 15m reported customers, accounts, and downloads, and are still growing strongly. In our opinion, NAGA Group has a good chance of becoming one of the so-called Fintech Unicorns because it has a clear strategy and solves several customer problems or pain points at once. With the single login into the NAGA ecosystem, the customer has access to NAGA Trader, NAGA Markets, NAGA Wallet, NAGA Virtual, NAGA Brokers, NAGA Card and, subsequently, also NAGA Exchange, NAGA Academy, NAGA Wealth, NAGA Stocks and NAGA Guard.

The NAGA ecosystem is set in the growth markets of social trading, cryptocurrencies, CFDs, FX-trading, equity-trading and virtual goods. NAGA is situated in Germany and currently focusses on the German and European market. The overall trading volume in Germany started growing significantly in 1997 and reached about 1.8 trillion USD (from less than 0.5 trillion USD) in 2001. This surge in trading volume was caused by the dot-com hype. Nevertheless, even after the dot-com crash, the trading volume in Germany mostly stayed between one and two trillion USD. Overall, the sentiment in Germany



seems to be slowly shifting and more and more people have begun trading shares. Germans are gradually investing more of their money in stocks. However, the overall number of shareholders in Europe's largest economy is still low compared to other nations. According to DAI (Deutsches Aktieninstitut) in 2015, just over nine million Germans owned stocks in some capacity, whether by directly investing in companies or through a mutual fund or workers' shareholding scheme. That number is still considerably lower than the 13 million people who owned stocks at the height of the dot-com bubble, but it is nonetheless on the upswing. Regardless of the positive trend, only nine million people in a country of about 83 million is low for a country with a fully developed economy. In comparison, about 50% of all North Americans invest in the stock market in some way; according to the Fed (Federal Reserve). In our opinion, NAGA could benefit from this trend and make investing with the NAGA Trader even more attractive and interesting for Germans and other Europeans. Moreover, NAGA products could theoretically be rolled out globally and not only focus on the German and European market, as long as the company complies with the relevant financial regulations.



Trading Volume in Germany (in Trillion USD)

Source: World Bank

The cryptocurrency market

Furthermore, NAGA created a cryptocurrency and implemented it into its ecosystem. In addition to that, NAGA offers the NAGA Wallet and NAGA Exchange. The NAGA token sale was a success with over 63,000 investors and raised funds of more than 50m USD, vastly exceeding the original target of 30m USD. The timing of the sale was excellent in hindsight--with the closing in December at the height of the cryptocurrency markets in January.

Number of Initial Coin Offerings and funds raised (in m USD)



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The cryptocurrency industry peaked in January/February 2018 and declined from there on. Nevertheless, the crypto market has had several booms and busts in its short history and we expect a turnaround in the future. Cryptocurrencies have been losing value since the beginning of the year, triggering an industry-wide domino effect that has caused significant concern among investors. For cryptocurrency startups undertaking ICOs, October was the most challenging month this year, with only about 63 million USD being raised. This is a sharp drop compared to January when figures stood at just over 1.5 billion USD (ICOdata.io).



Global Fintech blockchain market (in m USD)

In our opinion, the market is currently overheated but should sooner or later return to its former state of growth, because the blockchain technology has the potential to revolutionize business and redefine companies and economies. However, we think this transformation will occur slowly, because blockchain is not a technology which can attack a traditional business model with a lower-cost solution and overtake incumbent firms quickly. Blockchain is a foundational technology with the potential to create new foundations for the economy and for companies. But while the impact could be enormous, it will take some time for the blockchain to seep into our economic and social infrastructure. According to MarketWatch, the enormous potential should lead to a dynamic growth of 74.2% and the global market for Fintech blockchain should reach 34,1bn USD by 2026.

Robo-advisory and virtual goods

Furthermore, NAGA is active in the Robo-advisory market, an emerging trend across the wealth management industry. Deloitte estimates that there are close to 100 Robo-Advisors in 15 countries, with widely different offerings. Deloitte predicts the Roboadvisory market will have between 2.2 and 3.7 trillion USD in assets under management by 2020 and those Robo-advisory services will grow to over 16.0 trillion USD in assets under management by the year 2025. The reason for this enormous growth is that Roboadvisors might be a potential solution to the complexities of financial decision-making. Robo-advisors are services that use algorithms to automatically perform many investment tasks, which would usually be performed by a human financial advisor. As Robo-advisors are cheaper than human advisors they can take customers with little savings and also advise a larger audience, since Robo-advisors are very scalable. Robo advisors create value in two ways. Firstly, they give retail investors access to investing their wealth at a much lower cost. Secondly, the asset allocation part of the solution acts as a personal financial advisor, someone who historically has only been accessible to high net worth individuals. The Robo-advisor could drastically change the asset management industry. Therefore, we think NAGA could benefit from this significant growth potential.



Robo-Advisory market (in Trillion USD)



Also, NAGA enables its users to trade virtual goods. This allows users to broaden their investment strategies and it might also attract new investors that were formerly only interested in virtual goods. In recent years, selling virtual goods has become an effective business model in the games industry. Instead of charging players for the game client or requiring a monthly subscription fee, game publishers allow players to play for free and tempt them to purchase virtual goods for real money within the game. Games that operate using a virtual good sales model and require no upfront payment from the players are commonly known as free-to-play. In contemporary video games players can often buy, sell and trade these items. The items can change the appearance of players in the game or add new items/functions.

Currently, primary and secondary markets of virtual goods exist. In the primary market for virtual goods, video gamers purchase virtual content directly from the game publishers. In the secondary market, players can trade items on different platforms. Often even external platforms can be used to validate this trade. Currently, NAGA participates in the virtual goods market with NAGA Trader, where one can trade CFD of virtual goods and with NAGA Virtual, where players can trade items.

According to Newzoo, in the USA the majority of paying gamers (79%) have spent money on in-game items or virtual goods in the past six months. In comparison, in Germany, the world's fifth largest games market, 60% of paying gamers have spent money on ingame items or virtual goods in the past six months. Also, the global games market is still growing strongly with an expected growth rate of 10.3% and revenues of 180.1 billion USD by 2021 (Newzoo). While the virtual goods market is still relatively young, it will be interesting to see how effectively external companies and NAGA can benefit from the growing trend of trading virtual goods.



Global games market and revenue per segment (in billion USD)



Social trading networks

Overall, NAGA operates in all trading platforms and exchanges in one social trading network with elements of gamification. Social networks in 2017 generated around 41.0 billion USD in advertising revenue (eMarketer). And an increasing number of internet users join a social network. According to eMarketer, 3.02 billion people will have joined a social network by 2021, which is 73.1% of all internet users.



For users/traders there are several reasons to join a social network trading community such as the one from NAGA. Being part of the online world brings a trader closer to other successful traders, who can then be emulated. Becoming active within a trading community also means having access to useful information. Moreover, traders who are able to engage in social trading networks often want to gain an edge by using the wisdom of crowds. Furthermore, these communities can help to develop a trading literacy, which can lead to mutual success on these platforms. Social media trading networks, such as the NAGA Academy, can help to develop trading literacy and make the exchange industry more accessible and approachable. Overall, NAGA is active in several growth markets that could generate even greater synergies with each other and accelerate NAGA's potential even more.

Global social network users and penetration (in billion people)



BUSINESS DEVELOPMENT

Key financial figures

P&L (in €m)	FY 2017	FY 2018e	FY 2019e	FY 2020e
Revenue	12.84	19.39	25.81	38.58
Activated programming services	1.27	0.00	0.00	0.00
Other income	3.53	5.13	2.85	2.95
R&D-expenses	0.00	-2.79	-3.77	-4.14
Direct trading expenses	0.00	-1.90	-2.32	-3.47
Commission expenses	-3.43	-0.02	-0.06	-0.08
Personell expenses	-2.70	-7.42	-7.80	-8.18
Marketing expenses	-1.74	-3.18	-3.82	-4.58
Other expenses	-6.91	-6.18	-5.15	-5.67
EBITDA	2.88	3.03	5.75	15.40
Depreciation	-4.78	-4.29	-4.65	-4.50
EBIT	-1.90	-1.26	1.10	10.90
Financial income	0.00	0.00	0.12	0.12
Financial expenses	-0.21	-0.05	-0.05	-0.10
Earnings before taxes	-2.11	-1.31	1.17	10.92
Taxes	-0.14	-0.07	-0.35	-3.28
Net profit	-2.25	-1.38	0.82	7.64
EBITDA	2.88	3.03	5.75	15.40
EBIT	-1.90	-1.26	1.10	10.90
Source: The NAGA Group AG; GBC AC	3			



P&L (in €m)	07-12 2016	FY 2017	1.HY 2018
Revenue	1.97	12.84	8.08
EBITDA	-1.40	2.88	2.20
EBIT	-3.74	-1.90	-0.05
Financial result	-0.70	-0.20	-0.06
Net profit	-3.89	-2.25	-0.01

Historical Revenue Development

Source: The NAGA Group AG; GBC AG

Since NAGA did not generate any relevant sales and earnings in the first half of 2016, the historical analysis of the business development only covers the period from the second half of 2016. Accordingly, we have only a full fiscal year for the 2017 financial year, and therefore the year-on-year comparison is only very limitedly meaningful.

Based on the current product pipeline or the products marketed in the 2017 financial year, the company's revenues primarily include trading revenues from the brokerage business and thus the product NAGA Trader. Trading proceeds result from the trading of customers with Contracts for Difference (CFD), whereby NAGA acts as a counterparty to trades executed by clients. Trading revenues in fiscal year 2017 amounted to € 6.52 million. The sharp increase compared to the short financial year 2016 results from the first-time inclusion of a twelve-month period. In addition, the NAGA Markets customer base has grown to 9,787, with a trading volume of approximately € 42 billion. As of June 30, 2018, the number of customers continued to rise on 11.256, and the level of trading revenues reached € 4.63 million (H1 17: € 3.74 million), a significant increase of 23.7%.

In addition to the trading revenues NAGA also shows sales stemmed from services delivered to the Naga Development Association (NADL), an external cooperation partner. These service revenues arise mainly from licenses, commissions and general consulting activities. Additionally to that the ICO (Initial Coin Offer) service, including listing and promotion of the NAGA ecosystem, token listing on NAGA Exchange and advertisement space on NAGA Trader, contributed to the total turnover.



Revenue development (in €m)

Additional income from the passing on of expenses from the token sale, which NAGA initially took from the Naga Development Association, completes the income side of the company. The other operating income amounts to \notin 3.53 million in the 2017 financial year and \notin 2.00 million in the first half of 2018, respectively. In the coming reporting periods, this income stream should decline.

Source: The NAGA Group AG; GBC AG



Historical Earnings Development

The earnings of the NAGA were principally affected by of three factors. Main items of the cost structure were the personal expenses, amortization of technological products, development costs and marketing costs.



Operating expenses (in €m)

The largest cost position is represented by personnel expenses. The figure increased to € -2.85m in H1/18 (compared to € -1.25m in the previous period) and accounted for around 35% of total revenues. On the one hand, this is the result of the integration of Hanseatic Brokerhouse Securities Group employees and technicians. This take-over was essential for the management of CFD-trading accounts and training content. The HBS group is also well connected in the Spanish market with representatives in Madrid, Barcelona, Valencia and Palma de Mallorca. On the other hand, in H1/18 NAGA recorded higher wages and more bonuses. In total, it has been declared that the number of employees exceeds the figure of 160 professionals across Europe.





Source: The NAGA Group AG; GBC AG

In order to improve transparency, since H1 2018 the expenses for development (€1.56m in H1/18 vs. €1.34m in H1/17) and the direct expenses for trading (€0.45m H1/18 vs. €0.43m H1/17) have been presented separately from the general administration costs.

Source: The NAGA Group AG; GBC AG



Marketing costs were \in 1.11m, roughly 14% of turnover, reflecting the effort in NAGA brands development. This includes primarily sponsorship for sport events (soccer team) and on television (Sky Media).

Overall, a significant improvement was achieved in consolidated **EBITDA**, which reached the positive number of \notin 2.20m, 27% of total turnover. This represents a further milestone for the Hamburg-based group founded in August 2015.

The acquired technology as well as the self-developed software, which is largely activated, represents the largest asset of the company. On the basis of the expected useful life of 3 to 5 years, this results in comparatively high depreciation. In the full year 2017, these amounted to \notin 4.78 million and in the first half of 2018 \notin 2.25 million. As a result, NAGA still reports a negative EBIT level. With only low financial expenses and non-relevant tax burdens, NAGA's earnings after tax are almost at the level of EBIT.



in €m	31/12/2016	31/12/2017	30/06/2018
Equity	14.58	27.68	46.50
Equity Ratio	55.9%	79.7%	91.3%
Assets	19.16	15.73	35.24
Liquid Assets	4.63	8.73	6.84
Working Capital	-4.14	4.14	5.85
Cashflow – operating activities	0.91	-4.16	-0.57
Cashflow – investing activities	-0.67	-1.60	-1.66
Cashflow – financing activities	3.84	9.86	0.00

Historical Development of the financial situation

Source: The NAGA Group AG; GBC AG

Balance sheet figures

The balance sheet of NAGA has undergone significant changes since the inception of the business. On the equity side, these consist of the implementation of various financing rounds (seed capital), the investment of the Fosun Group and the successful implementation of the IPO capital increase. In addition, at the beginning of the current financial year 2018, the acquisition of 60% of Hanseatic Brokerhouse Securities AG (HBS) was carried out by means of a capital increase against contribution in kind, which further increased equity to \notin 46.50 million (31/12/17: \notin 27.68 million). As NAGA currently only uses small amounts of debt to finance its operational activities, the equity ratio is very high at 91.3%:



Equity (in €m) and Equity ratio (in %)

The growth of the company and the acquisition of HBS resulted in a significant increase in assets. The acquisition of HBS for a calculated purchase price of \notin 18.55 million (there was no outflow of liquidity) had led to an increase in goodwill of \notin 17.82 million. Together with the capitalized software, NAGA reports intangible assets totaling \notin 35.24 million (31/12/17: \notin 15.73 million).

Since there was no outflow of liquidity for the HBS acquisition and, otherwise, the cash outflow from operating activities and from investments in the first half of 2018 is at a low level, the company still has a high cash position of 6.84 million. € (31/12/17: € 8.73 million). As shown, most of this comes from the capital increases made in previous periods. The Token Sale of the Naga Development Association Ltd. (NDAL) of \$ 50 million has had no impact on the balance sheet of The NAGA Group AG. NDAL has no corporate law relationship with NAGA and has initiated the token sale on its own account.



Cashflow-Development

Operating cash flow was negative for both full year 2017 and first half of 2018. An important factor here, however, was the increase in working capital, as a result of an increase in trade receivables. These are linked to the services provided to NDAL (see development of sales and earnings). Adjusted for working capital effects, NAGA would have reported a positive cash flow of \in 2.81 million (FY 2017) and \notin 2.15 million (HY 2018, respectively:



Operating cashflow and cashflow before changes in working capital (in €m)

The analysis of the cash flows from investments confirms NAGA's efforts to develop its strategic assets. Main items such as cash outflows were related to the investments in intangible assets (\notin 1.24m). These investments should proceed in the upcoming quarters as a result of the expected improvements in blockchain technology and with the long term goal of building a unique trading solution.



FORECAST AND VALUATION

P&L (in €m)	FY 2017	FY 2018e	FY 2019e	FY 2020e
Revenue	12.84	19.39	25.81	38.58
EBITDA	2.88	3.03	5.75	15.40
EBIT	-1.90	-1.26	1.10	10.90
Net profit	-2.25	-1.38	1,14	9,14

Source: The NAGA Group AG; GBC AG

Company strategy

NAGA is currently on a dynamic growth path with the objective of establishing a unique structure and platform for the trading of financial assets, gaming and digital currencies. This development is based on the following three tracks: (1) technology development, (2) legal and licensing development, (3) community and business development.

The **technology** track aims to develop the concept and structure of Naga Coin and its ecosystem as well as infrastructure for fund administration, reporting, analysis and integration with third parties. Over 50 expert developers are already employed in the NAGA team.

A second important track is the development of the **legal and licensing** structure. This is designed in keeping with the need for compliance with infrastructure regulations. The expertise of NAGA's legal and executive team in this area, enables the company to set up a fully transparent, licensed and auditable structure.

In order to expand the number of users a further step is an increase in **community and business development**. Pillars for the continuation of the group's expansion are new partnerships to improve brand awareness. The way and success in building partnership with external parts such as online marketing agencies and consulting companies might boost the plans.

To most important driver for the whole NAGA Ecosystem is the cryptocurrency NAGA Coin. Based on blockchain technology, the coin is also a tool for marketing and customer loyalty. Its branding power will allow the expansion of the concept across borders and thus reaching a further international niche of customers. Multiple benefits for users are expected, such as lower fees or access to a decentralised ecosystem.

NAGA COIN Ecosystem



Source: I ne INAGA Group AG; GBC

Currently the company is operating in three countries and plans to further expand its geographical presence. For 2019-2021, the main focus remains user acquisition through marketing campaigns (with a major campaign launched in Q4). Growth via M&A and strategic alliances is to expect due to the characteristics of the FinTech market.



Revenue forecasts

Our forecasts are based on certain assumptions related to NAGA's business segments. The main metrics are the number of active trades and their growth, the volume traded per client, revenues generated, cost of acquisitions and conversion rate.

The main share in the revenues should be generated with the product NAGA Trader (Brokerage), as it has been the case so far. The basis for our sales forecasts is the expected development of the number of active customers, that should be around 4,600 at the current time. For the coming years, we expect the marketing measures to have a visible impact and, thus, a significant increase in active customers to more than 11,000 in 2019 and over 19,000 by the end of the financial year 2020.

Development of active users NAGA Trader



Source: GBC AG

Within the NAGA Card already launched on the market, our sales forecasts are based on the number of customers who have a live trading account. The hurdle to apply for a free prepaid card is likely to be low in our assumptions. However, we assume that only 50% of the requested cards will be used, which is why we expect a slightly lower customer base in the medium term than the NAGA Trader. According to our estimates, more than 12,000 customers should use the NAGA Card by 2020.

In accordance with the product structure, the NAGA Trader and the NAGA Card represent the revenues of the NAGA Finance division. In our model, we have formulated our revenue forecasts based on the presented forecasted number of customers. For this, we have created historical values regarding the average customer sales as well as forecasts derived from the industry. In total, we expect revenues of \notin 10.09 million for the FY 2018. Given the strong growth in the customer base, the revenues should increase significantly to \notin 30.77 million by 2020:





Source: GBC AG



Within the second division NAGA Crypto we divided our forecasts in three parts: Wallet, Exchange and ICO services.

Overall, this second product area should deliver significantly lower sales contributions. Although, our expected sales with NAGA Wallet are based on a significantly larger number of customers than with the NAGA Trader, the average revenue per customer and thus also the fees charged by NAGA should be significantly lower. By the year 2020, we expect revenues in the NAGA Wallet to amount to \notin 3.74 million.

For the **NAGA Exchange** business we calculated revenues from the trade in Bitcoin and listing services. This makes NAGA Exchange the marketplace for cryptocurrencies that can be used by users of NAGA Wallet. We expect that around 35% of NAGA Wallet users will also actively trade in cryptocurrencies and thus pay fees to NAGA. In our sales estimates, however, we assume comparatively low sales, with an average transaction fee of just 0.2%.

Within NAGA Exchange, however, the company will also charge listing fees for cryptocurrencies. The basic idea is that the initiators of cryptocurrencies endeavor to be traded as well as possible and thus seek a listing within the NAGA trading system. By 2020, the company should generate around \notin 0.40 million from this.

A small portion in the total sales is also given by the **ICO service.** These latter are related to the service of listing the ICO that includes technical support and promotion of the offer.



Revenue forecasts NAGA Crypto (in €m)

Source: GBC AG

NAGA generated significant revenues (service revenues) in the FY 2017 and first half of 2018 in connection with the Naga Development Association's token sale. This amounted to \notin 3.45 million in the first half of the FY 2018. For the current business year, we expect a continued significant contribution to revenue from the services sector (\notin 8.07 million), which should, however, gradually decline in the coming fiscal years.



Revenues by division (€m)	2018e	2019e	2020e
NAGA Trader	9.63	16.71	27.57
NAGA Card	0.46	2.46	3.19
NAGA Finance (total)	10.09	19.17	30.77
NAGA Wallet	0.40	2.88	3.74
NAGA Exchange	0.09	0.46	0.64
NAGA ICO Service	0.74	0.47	0.47
NAGA Crypto (total)	1.23	3.81	4.84
Service Revenues	8.07	2.84	2.98
Total Revenues	19.39	25.81	38.58
0 000 40			

Source: GBC AG

Earnings forecasts

In parallel to the expansion of revenue, we expect a gradual improvement in operating profit margins.

The EBITDA margin is expected to rise to nearly 40% by 2020, according to our expectations. The basis for the significant improvement in earnings is primarily due to the significant increase in sales expected. We also assume that operating costs, especially in terms of personnel expenses and other operating expenses, will only increase at a below-average rate. In terms of development and research expenditure, however, we expect a somewhat higher cost increase in the course of expected further product development and launches. The same applies to marketing and sales expenses, on the basis of which customer acquisition should be further promoted. The first major marketing campaign was launched in the fourth quarter 2018 and should be continued into the coming fiscal year. The establishment of affiliate programs should be also in the company's focus.

EBITDA (in €m) and EBITDA-margin (in %)



The break-even point already reached at EBITDA level should be achieved in the next financial year 2019 on EBIT-level as well as on the level net profit. The company will continue to experience relatively high write-downs on internally developed and acquired software as well as on the acquired intangible assets from the HBS acquisition. In the financial year 2020, our last concrete year of estimation, NAGA should also post substantial earnings contributions in EBIT.

We classify the self-financing capacity of the company as sufficient and therefore see no need for borrowing. This causes only a small increase in financial expenses, which had



already hardly any relevance in previous financial years anyway. Due to the loss carry forwards that still exist, we should see low tax expenses for NAGA, at least beyond our concrete forecast period, so that the EBIT will be well reflected in the after-tax result. We therefore expect earnings after tax to exceed the break-even point in the coming 2019 financial year.



Source: GBC AG



Valuation

Model assumptions

We rated The NAGA Group AG using a three-stage DCF model. Starting with the specific consolidated estimates for the years 2018 - 2020 in phase 1, the outlook for 2021 to 2025 was developed in phase 2 using value drivers. We expect increases in revenue of 10.0 %. We have set 45.0% as the target EBITDA margin. We have included the tax rate in phase 2 at 30.0%, following a lower tax rate for the period 2018 to 2021, based on the remaining losses carried forward. Additionally, after the end of the forecast horizon, a residual value is determined in the third phase by means of a perpetual annuity. As the final value, we assume a growth rate of 3.0 %.

Determining the capital costs

The weighted average cost of capital (WACC) of The NAGA Group AG is calculated from the equity cost and the cost of debt. The market premium, the company-specific beta, as well as the risk-free interest rate have to be determined in order to determine the equity cost.

The risk-free interest rate is derived from the current structured interest rate curves for risk-free bonds in accordance with the recommendations from the "Fachausschuss für Unternehmensbewertung und Betriebswirtschaft" (FAUB, Special Committee for Business Valuation and Business Management) of the "Institut der Wirtschaftsprüfer in Deutschland e.V." (Institute of Public Auditors in Germany). This is based on the zero bond interest rate calculated using the Svensson Method published by the German Bundesbank. In order to compensate for short-term market fluctuations, the average returns for the previous three months are used and the result is rounded up to the nearest 0.25 basis points. The value currently used for the risk-free interest rate is 1.25 %.

We set the historical market premium of 5.50 % as a reasonable expectation of the market premium. This is supported by historical analyses of equity market returns. The market premium reflects in a percentage the improved return expected from equity markets relative to low-risk government bonds.

According to GBC estimates, a beta of 1.45 is currently determined. Using the premises provided, the equity cost is calculated at 9.24 % (beta multiplied by risk premium plus risk-free interest rate). As we assume a sustainable weighting of the equity cost of 100 %, the result is a weighted average cost of capital (WACC) of 9.24 %.

Valuation result

The resulting fair value per share at the end of the 2019 financial year corresponds to the stock price target of \in 5.15.



DCF-model

The NAGA Group AG - Discounted Cashflow (DCF) model scenario

Value driver of the DCF - model after the estimate phase:

consistency - phase		final - phase	
Revenue growth	10.0%	Eternal growth rate	3.0%
EBITDA-Margin	45.0%	Eternal EBITA - margin	38.7%
Depreciation to fixed assets	17.0%	Effective tax rate in final phase	30.0%
Working Capital to revenue	15.0%		

phase	estimate)		consiste	ency				final
in €m	FY 18e	FY19e	FY 20e	FY 21e	FY 22e	FY 23e	FY 24e	FY 25e	value
Revenues (RE)	19.39	25.81	38.58	42.44	46.69	51.36	56.49	62.14	
RE change	51.0%	33.1%	49.5%	10.0%	10.0%	10.0%	10.0%	10.0%	3.0%
RE to fixed assets	1.20	1.52	2.13	2.13	2.23	2.34	2.45	2.57	
EBITDA	3.03	5.75	15.40	19.10	21.01	23.11	25.42	27.96	
EBITDA-Margin	15.6%	22.3%	39.9%	45.0%	45.0%	45.0%	45.0%	45.0%	
EBITA	-1.26	1.10	10.90	16.01	17.63	19.56	21.69	24.05	
EBITA-Margin	-6.5%	4.3%	28.3%	37.7%	37.8%	38.1%	38.4%	38.7%	38.7%
Taxes on EBITA	-0.07	-0.03	-1.74	-4.80	-5.29	-5.87	-6.51	-7.21	
Taxes to EBITA	-5.3%	2.6%	16.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
EBI (NOPLAT)	-1.33	1.07	9.16	11.21	12.34	13.69	15.18	16.83	
Return on capital	-6.7%	5.0%	41.1%	46.4%	47.0%	49.1%	51.2%	53.4%	51.7%
Working Capital (WC)	5.20	5.30	6.00	6.37	7.00	7.70	8.47	9.32	
WC to Revenues	26.8%	20.5%	15.6%	15.0%	15.0%	15.0%	15.0%	15.0%	
Investment in WC	-1.06	-0.10	-0.70	-0.37	-0.64	-0.70	-0.77	-0.85	
Operating fixed assets (OAV)	16.10	17.00	18.15	19.90	20.90	21.94	23.04	24.19	
Depreciation on OAV	-4.29	-4.65	-4.50	-3.09	-3.38	-3.55	-3.73	-3.92	
Depreciation to OAV	26.6%	27.4%	24.8%	17.0%	17.0%	17.0%	17.0%	17.0%	
Investment in OAV	-4.75	-5.55	-5.65	-4.84	-4.38	-4.60	-4.83	-5.07	
Capital employed	21.30	22.30	24.15	26.27	27.90	29.64	31.51	33.51	
EBITDA	3.03	5.75	15.40	19.10	21.01	23.11	25.42	27.96	
Taxes on EBITA	-0.07	-0.03	-1.74	-4.80	-5.29	-5.87	-6.51	-7.21	
Total investment	-5.81	-5.65	-6.35	-5.20	-5.01	-5.30	-5.60	-5.92	
Investment in OAV	-4.75	-5.55	-5.65	-4.84	-4.38	-4.60	-4.83	-5.07	1
Investment in WC	-1.06	-0.10	-0.70	-0.37	-0.64	-0.70	-0.77	-0.85	
Investment in Goodwill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1
Free cashflows	-2.85	0.07	7.31	9.09	10.71	11.95	13.32	14.83	261.5

Value operating business (due date)	185.02	202.06
Net present value explicit free Cashflows	44.18	48.19
Net present value of terminal value	140.85	153.87
Net debt	-4.80	-4.94
Value of equity	189.83	207.00
Minority interests	0.00	0.00
Value of share capital	189.83	207.00
Outstanding shares in m	40.20	40.20
Fair value per share in €	4.72	5.15

8		WACC				
capital		7.2%	8.2%	9.2%	10.2%	11.2%
ca	49.7%	7.35	5.94	4.99	4.32	3.81
u	50.7%	7.48	6.04	5.07	4.38	3.87
Ξ	51.7%	7.61	6.14	5.15	4.45	3.92
Return	52.7%	7.74	6.24	5.23	4.51	3.97
ć	53.7%	7.87	6.33	5.31	4.57	4.03

Cost of capital:	
Risk free rate	1.3%
Market risk premium	5.5%
Beta	1.45
Cost of equity	9.2%
Target weight	100.0%
Cost of debt	6.5%
Target weight	0.0%
Taxshield	25.0%
WACC	9.2%

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ANNEX

<u>I.</u>

Research under MiFID II

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2. The research report is simultaneously made available to all interested investment services companies.

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BUY	The expected return, based on the derived target price, incl. dividend payments within the relevant time horizon is $>= +10\%$.
HOLD	The expected return, based on the derived target price, incl. dividend payments within the relevant time horizon is $> -10\%$ and $< +10\%$.
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The analysts responsible for this analysis are: Dario Maugeri, M.Sc., Financial Analyst Cosmin Filker, Dipl. Betriebswirt (FH), Vice Head of research

Other person involved:

Manuel Hölzle, Dipl. Kaufmann, Head of research

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