

<b>Buy</b>  <b>EUR 65.00</b>  Price <b>EUR 51.50</b> <b>Upside 26.2 %</b>	<b>Value Indicators:</b> EUR SotP: 65.02	<b>Warburg ESG Risk Score: 2.8</b> <b>ESG Score (MSCI based): 3.0</b> Balance Sheet Score: 5.0 Market Liquidity Score: 0.5	<b>Description:</b> Online broker specialized on heavy traders
	<b>Market Snapshot:</b> EUR m Market cap: 120.4 No. of shares (m): 2.3 EV: 100.7 Freefloat MC: 86.8 Ø Trad. Vol. (30d): 47.03 th	<b>Shareholders:</b> Freefloat 72.1 % Management 3.0 % HSBC Trinkaus & Burkhardt 24.9 %	<b>Key Figures (WRe):</b> 2020/21e Beta: 1.4 Price / Book: 3.7 x Equity Ratio: 92 %

## Investment in Germany's fastest growing neo-broker; Initiation with Buy

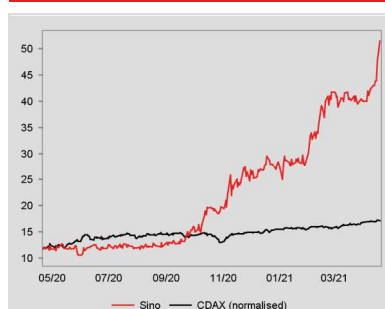
sino operates an online brokerage business that **specialises in the niche market of heavy traders** and offers tailor-made services for this clientele. Customers are provided with a highly customisable trading tool developed by external software partner tick TS. With HSBC as a long-standing transaction partner, sino takes care of its clients' needs and provides them with excellent technical and trading support. Like other brokerage businesses, sino **benefits significantly from the current market environment**:

- The company is experiencing strong tailwinds from the ongoing Covid-19 pandemic, which has led to a high number of new capital market participants among the German population. It seems fair to assume that a small portion of these new entrants will develop heavy trader trading behaviour over time, thus increasing sino's addressable market.
- Furthermore, the current market environment is leading to significantly increased trading behaviour among the existing customer base, resulting in an excellent operating performance in 2020 and 2021e.

The operating business is valued at EUR 21.31 per share on a DCF basis, heavily influenced and secured by the **current strong cash flows** and the recent sales of the shares in Trade Republic. The remaining **7.1% stake in Trade Republic**, Germany's fastest growing neo-broker, **adds significant value**. sino provided the company with start-up financing in 2017, acquired a majority stake and fully consolidated it for two years. In the course of several capital increases and occasional share sales, the stake was gradually reduced to the current level. However, the remaining stake should still constitute a significant value, as:

- Trade Republic should be the **fastest growing neo-broker in Germany** with an **estimated current customer base of 1m**
- The current market environment should have significantly boosted the run rate of new customers, which should lead to **extraordinary growth rates** (we assume +200% in customer base and +306% in revenues in 2021)
- Despite producing manageable start-up losses (partly reflected in sino's P&L), we **expect the company to break even in 2022** and achieve strong margin growth thereafter
- Based on the estimated customer base of 1m, we **value Trade Republic at EUR 1.5bn**, contributing some EUR 41 per share to sino's valuation

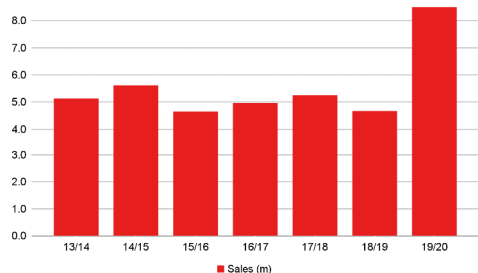
Even though there is little public information about Trade Republic's business development, we think there is a good chance that the actual development might be even better than anticipated. Trade Republic has by far the strongest download statistics in the app stores and since the company offers unbeatable pricing with only EUR 1 per trade and no order size limit, it should have won a large share of the new market entrants. Overall, our **SOTP valuation approach suggests a fair value of EUR 65.19** per share, which forms the basis of our **PT of EUR 65**. Due to the significant upside potential, we **initiate our coverage with Buy**.



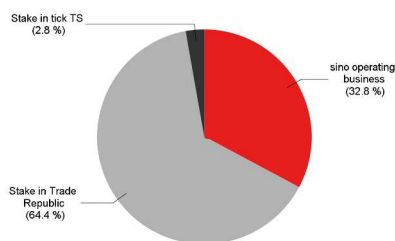
Rel. Performance vs CDAX:	
1 month:	23.6 %
6 months:	145.0 %
Year to date:	70.6 %
Trailing 12 months:	275.1 %

Company events:	
23.04.21	AGM
31.05.21	Prel. Q2
30.06.21	Q2
31.08.21	Prel. Q3

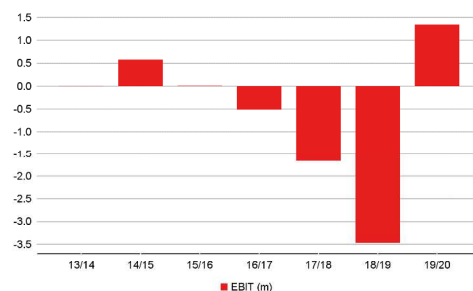
FY End: 30.9. in EUR m	CAGR (19/20-22/23e)	2016/17	2017/18	2018/19	2019/20	2020/21e	2021/22e	2022/23e
<b>Sales</b>	-9.3 %	5.0	5.3	4.7	8.5	11.7	6.3	6.3
Change Sales yoy		6.8 %	5.8 %	-11.1 %	82.0 %	37.4 %	-46.4 %	1.5 %
Gross profit margin		100.0 %	100.0 %	95.8 %	100.0 %	100.0 %	100.0 %	100.0 %
<b>EBITDA</b>	1.5 %	-0.3	-1.4	-3.1	1.6	4.1	1.7	1.7
Margin		-6.9 %	-26.6 %	-66.6 %	19.2 %	35.3 %	27.0 %	26.9 %
<b>EBIT</b>	2.6 %	-0.5	-1.7	-3.5	1.3	3.7	1.4	1.5
Margin		-10.4 %	-31.6 %	-74.3 %	15.8 %	31.3 %	23.0 %	22.9 %
<b>Net income</b>	-55.1 %	2.2	-1.0	-1.6	13.9	16.4	1.3	1.3
<b>EPS</b>	-55.1 %	0.96	-0.42	-0.69	5.95	7.02	0.54	0.54
<b>EPS adj.</b>	-55.1 %	0.96	-0.42	-0.69	5.95	7.02	0.54	0.54
<b>DPS</b>	-	0.10	0.00	0.64	2.92	0.00	0.00	0.00
Dividend Yield		2.1 %	n.a.	15.0 %	33.7 %	n.a.	n.a.	n.a.
<b>FCFPS</b>		-0.29	-0.36	-1.01	3.30	8.41	1.54	0.60
<b>FCF / Market cap</b>		-6.3 %	-10.1 %	-23.8 %	38.1 %	16.3 %	3.0 %	1.2 %
<b>EV / Sales</b>		2.0 x	1.6 x	2.1 x	2.4 x	8.6 x	15.5 x	15.1 x
<b>EV / EBITDA</b>		n.a.	n.a.	n.a.	12.4 x	24.4 x	57.5 x	56.1 x
<b>EV / EBIT</b>		n.a.	n.a.	n.a.	15.0 x	27.6 x	67.5 x	65.9 x
<b>P / E</b>		4.9 x	n.a.	n.a.	1.5 x	7.3 x	95.4 x	95.4 x
<b>P / E adj.</b>		4.9 x	n.a.	n.a.	1.5 x	7.3 x	95.4 x	95.4 x
<b>FCF Potential Yield</b>		-3.9 %	-11.7 %	-22.6 %	4.5 %	3.0 %	1.2 %	1.2 %
<b>Net Debt</b>		-0.7	-0.3	0.0	0.0	-19.7	-23.3	-24.7
<b>ROCE (NOPAT)</b>		n.a.	n.a.	n.a.	12.3 %	23.4 %	8.5 %	9.7 %
<b>Guidance:</b>	Sales between EUR 10.5m and 13.5m and net income between EUR 12.5m and 14.9m							

**Sales development**  
in EUR m


Source: Warburg Research

**Valuation contributors**  
in %


Source: Warburg Research

**EBIT development**  
in EUR m


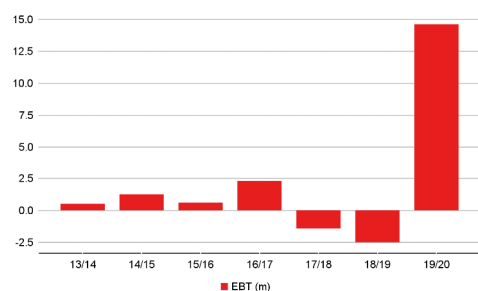
Source: Warburg Research

## Company Background

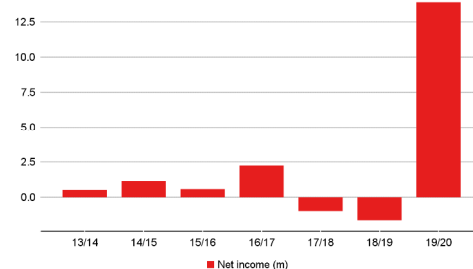
- sino is a high end online brokerage company, specializing on providing services to heavy traders.
- The trading software tool MX-PRO is especially designed to fulfill the needs of heavy traders providing extraordinary high stability.
- In addition to common product offerings, such as stocks, bonds, futures, derivatives, ETFs, funds and forex, sino also grants access to IPOs and the ability to short-sale securities.
- The very experienced management team is actively contributing to the development of the industry with investments in the fintech startups Trade Republic and Quinn Technologies.

## Competitive Quality

- High end trading platform provides extended scale of services through customizable software tools with access to a greater variety of financial products than usual brokerage businesses.
- sino operates in the niche market of heavy traders with few competitors and considerable entry barriers due to the loyalty of the customer base.
- The strong software and trading partners, HSBC Trinkaus and tick Trading Software, support sino through banking and operational frameworks.
- With the outsourcing of the IT and technical settlements to third-parties, sino is able to keep a lean corporate structure.
- Attractive shareholdings in Trade Republic, tick Trading Software and Quinn Technologies add significant value.

**EBT development**  
in EUR m


Source: Warburg Research

**Net income development**  
in EUR m


Source: Warburg Research

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## Summary of Investment Case

### Investment triggers

- Value of operating business is highly secured by current cash flows from the operating business and recent sales of stake in Trade Republic
- Unique access to investment in Trade Republic, Germany's fastest growing neo-broker
- Based on our assumptions, the remaining 7.1% stake in Trade Republic is roughly worth the current market capitalisation, with upside potential from higher-than-expected customer growth rates
- Any transparency on the operating development of Trade Republic could be a significant trigger for the share as visibility on the value increases

### Valuation

- SotP model suggests a fair value per share of EUR 65.19
- Operating business is valued on a DCF basis, with strong value contributions from existing liquid assets and strong cash flows in 2021, suggesting a value contribution of EUR 21.31 per share
- Trade Republic stake is valued using a multiple approach, mainly based on the number of current customers, pointing to a value contribution of EUR 41.71 per share
- 12.7% share in tick TS AG adds further value of EUR 2.01 per share

### Growth

- Upward trend in German brokerage market should also lead to a growing number of heavy traders
- After years of declining customer numbers due to the exclusion of customers with no or very low trading activity, we assume a very slight growth rate of 1.5% from 2022e onwards
- Any effort in additional marketing could lead to growing market shares and therefore stronger customer growth, offering further upside potential
- Trade Republic's strong growth and excellent brand awareness drive the value of the equity investment
- Increased market volatility and higher trading activity boost revenues




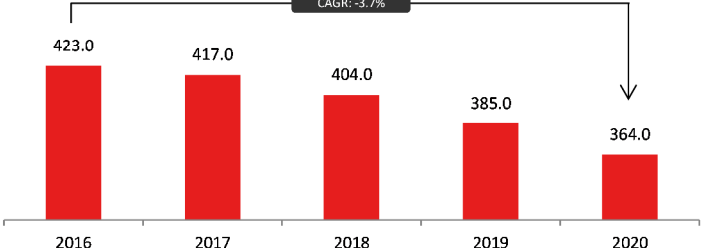
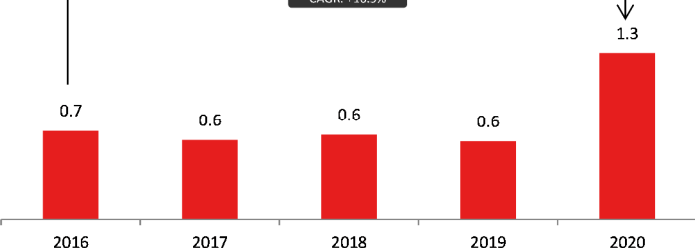







### Competitive quality

- High-end trading platform offers extended scope of services through customisable software tools
- sino provides access to a greater variety of financial products than usual brokerage businesses
- sino operates in a niche market with few competitors and considerable entry barriers due to the loyalty of the customer base
- Strong software and trading partners, HSBC Trinkaus and tick Trading Software, support sino through banking and operational frameworks
- Outsourcing of IT and technical processing to third parties enables sino to maintain a lean corporate structure

### Warburg versus consensus

- No consensus available due to lack of coverage

## Company Overview

		
	<b>Sales in EUR m</b>	<b>EBT in EUR m</b>
<b>FY20</b>	8.50	14.60
<b>FY19</b>	4.67	-2.48
<b>FY18</b>	5.25	-1.41
<b>Equity Interests</b>		
<b>Ownership</b>	7.1%	12.7%
<b>Company Info</b>	German securities trading bank and Europe's first commission-free mobile broker	German developer of software solutions in the financial services sector
<b>Number of Depots sino AG</b> 		<b>Number of Trades sino AG (m)</b> 
<b>Partners</b>	   	
<b>Competitors</b>	  	
	<b>Revenue Growth</b>	<b>EBIT Margin</b>
<b>FY21E</b>	37.4%	31.3%
<b>FY22E</b>	-46.4%	23.0%
<b>FY23E</b>	1.5%	22.9%

Source: Warburg Research

## Competitive Quality

- Established provider of online brokerage services in the niche of heavy traders secures a loyal customer base for sino
- Niche market should protect sino from increasing competition from new market participants, resulting in few competitors
- Outsourcing of software development and technical processing of transactions ensures lean corporate structure and high degree of flexibility
- Remaining stake of 7.1% in Germany's fastest growing neo-broker, Trade Republic, represents a clear USP

## Online brokerage platform focused on heavy traders

sino operates a high-end trading platform that is highly specialised on the niche market of heavy traders. The main difference from usual brokerage businesses is the extended scope of services, access to a greater variety of financial products and the offer of customisable software tools. sino's offer is based on the following key aspects, which make it very attractive for heavy traders:

- **Broad product offering:** The product offering includes a broad variety of financial products such as stocks, bonds, futures, derivatives, ETFs, funds and forex. Furthermore, sino grants access to IPOs and the secondary market. In addition, customers have the option to short sell securities. While most other brokers usually offer short selling via derivatives, this is a rather unique feature for private clients.
- **Access to trading venues:** Broad access to currently more than 50 trading venues ensures highest level of access even to exotic national and international financial products.
- **Software support:** The software tool MX-PRO is specifically tailored to the needs of heavy traders. It provides customers with a clear overview of their securities and the user interface is highly customisable. Among other things, users can determine whether real-time charting, various securities information or which trading functions should be quickly and easily accessible. Besides the stationary MX-Pro, sino is also currently developing a mobile app. This should increase the usability for customers even further.
- **Technical stability:** sino's trading tools have exceptionally high stability (99.999% system uptime) which is crucial for heavy traders. Furthermore, sino offers personal customer support between 07:15 and 22:10 to ensure the highest possible level of trading support for clients.
- **Attractive pricing:** sino usually charges its customers a commission per order, which ranges from 0.10-0.15%, with a minimum of EUR 6-8 and a cap of EUR 50-75, depending on the monthly trading volume. Furthermore, the company offers a flat fee model for specific clients with individual pricing.
- **Highly qualified customer support team:** The customer support team is made up of former stock exchange traders and skilled employees who have been with sino for an average of approximately eight years.

## Operating in a niche market with few competitors

sino focuses its business activities on the niche of the most active trading customers in Germany, who have a trading volume of easily 1k trades per customer and year or more. These heavy traders are not only the most active customer group in the online brokerage market, but also have the highest demands regarding product and support functions. Due to their high trading activity, heavy traders usually use specific trading tools to ensure the highest level of convenience, reliability and speed in the transaction of financial instruments.

While the number of people in Germany who own stocks, funds or ETFs increased by 2.7m to 12.4m in 2020, only a very small fraction of them can be considered heavy traders. There is no clear definition of when traders are considered heavy traders, but according to Justtrade, about 2% of stock owners can be considered heavy traders with 250 trades per year or more. However, we believe that the number of trades per year should be more in the range of 1k trades or more for heavy trader brokerage services with specific software tools to become important. Assuming that 0.2-0.5% of the total market meets these criteria, the addressable market for sino in Germany is about 25k-60k customers.

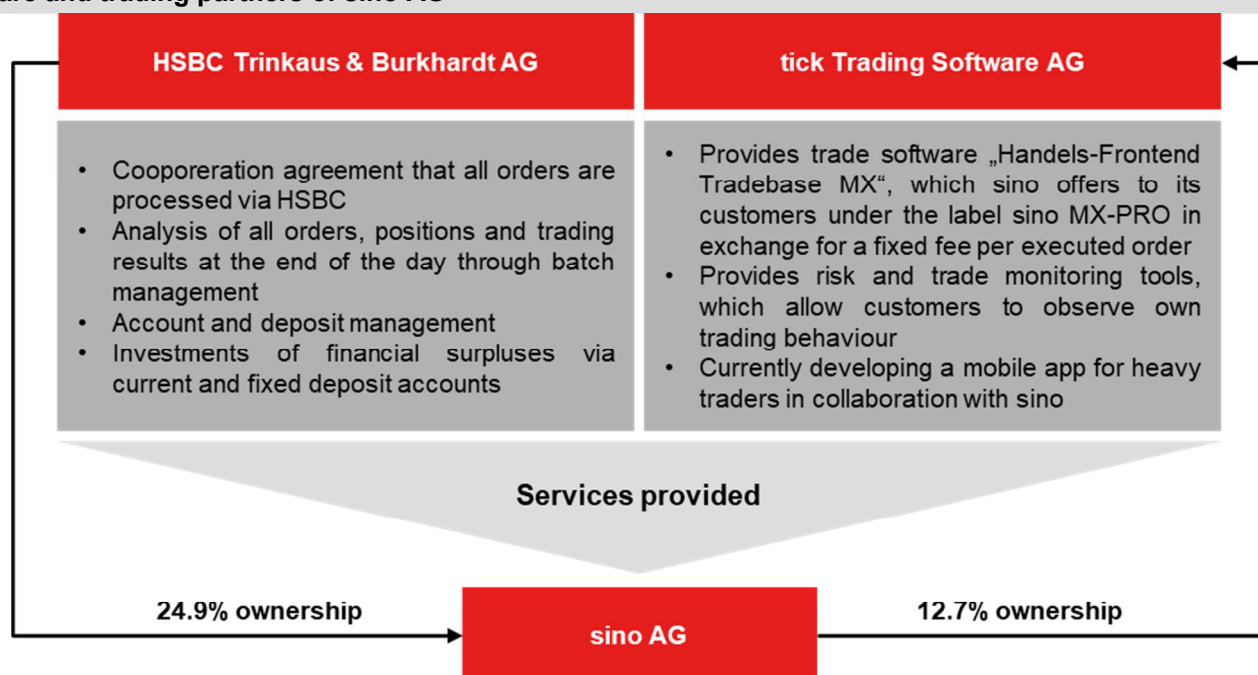
However, since online brokerage is usually a highly scalable business and only a small fraction of customers are heavy traders, most online brokers offer highly standardised platforms. Only a few providers offer specific trading tools and software support as described above. Apart from sino, flatexDEGIRO-owned ViTrade and Lynx are probably the most relevant competitors. Due to the limited market size, we do not expect competition to increase significantly. New market entrants would have to invest significantly in marketing and most heavy traders are likely to be reluctant to switch providers. The highly customised software and personalised trading support should lead to high customer stickiness, as any time spent adapting to a new trading system could come at the cost of the trader's performance.

### Supported by strong software and trading partners

Since sino was founded in 1998, the company has had a partnership with HSBC Trinkaus, which provides the banking framework and handles transaction settlement. HSBC manages the cash and securities accounts for the customers and grants access to its international trading structures. sino, on the other hand, provides customer service and brokers orders under its financial services license for investment and acquisition brokerage. In return, HSBC Trinkaus is sino's largest single shareholder.

Another important cooperation is with tick Trading Software AG, a software provider for the financial services industry. The company mainly offers trading software for financial institutions, including comdirect, S Broker, Lang & Schwarz and HSBC. tick provides sino with its trading front-end Tradebase MX, which is thus marketed under the brand name sino MX-PRO. This cooperation is also long-standing, and sino currently holds 12.7% of the shares in tick Trading Software.

#### Software and trading partners of sino AG



Source: Warburg Research

This shows that sino is at the centre of highly performance-oriented providers of software and transaction settlement. However, this also results in some dependencies on the respective partners. While there are no indications of any changes to the status quo, the ongoing restructuring of HSBC in particular creates some uncertainties.

### **Lean corporate structure**

In line with the partnerships described above, sino itself has a very lean group structure. As most of the IT and the technical processing are provided by third parties, sino fulfils the functions of customer and trade support and brokerage of transactions, which is highly automated. As of September 2020, sino had 17 employees and two board members. 13 of these employees are allocated to trading, IT and back-office functions, supporting customers' trading activities. However, considering the business model, we assume that growing customer numbers would only lead to a marginal increase in the number of employees, which in turn would result in proportionately lower cost growth.

### **Attractive shareholdings add significant value**

Besides the operational business with heavy traders, sino has some highly attractive shareholdings. The most prominent and important is probably the shareholding in Trade Republic Bank GmbH, Germany's fastest growing neo-broker. sino became a major shareholder in the company in 2017 with a 67% stake, providing start-up financing as well as industry know-how, management support and contacts. In 2019, BaFin granted Trade Republic a banking license and the company became the first online broker to offer nearly free stock trading to consumers. In further financing rounds, sino's share in the company was diluted over time, further supported by the sale of shares. Today, sino still holds 13.72% of the shares, which will most likely be further reduced to 7.1% after the exercise of management options. However, Trade Republic boasts strong momentum and we expect extraordinary customer growth in 2020 and 2021, which should drive the valuation significantly.

In addition, as described above, sino AG holds around 12.7% of the outstanding shares in tick Trading Software AG. While this is clearly of strategic importance, tick also shows a beneficial development with growing revenues and profits, increasing the value of sino's share as well.

In October 2020, sino acquired a minority share in Quinn Technologies GmbH, a German fintech offering free trading advice to private customers. While neo-brokers revolutionised the retail market by significantly reducing trading costs, Quinn aims to advise these customers on product selection. Especially for inexperienced customers, the selection of financial products can be intimidating in view of the huge offer. Quinn therefore aims to provide customers with fully digital advice to create a portfolio that matches individual risk/return parameters.

### **Competitive environment**

In the online brokerage market, two different fields of competition have emerged over the past few years. With the hype surrounding the American online brokerage firm Robinhood in recent years, the market for online and commission-free brokerage has gained increasing media attention and is becoming an option for many first-time or non-professional traders. Companies operating in the market, such as Trade Republic, in which sino AG holds an economic stake of 7.1%, are growing considerably. While these companies generate revenues through kick-backs, traditional professional brokerage companies are dependent on the order fees they receive per trade. These online brokerage companies, which focus on professional day traders and heavy traders, are close competitors of sino AG. sino AG's peer group includes online brokerage companies such as ViTrade, Lynx, CapTrader, Directa, Consorsbank and Comdirect.

Services offered to clients by competitors in the professional day trading market are becoming increasingly similar with the shift to online brokerage. In most cases, customers can choose between trading platform workstations and webtraders, which can be used as desktop versions with a simpler interface. The main differentiator of the

products and services offered by competitors are the differences in the efficiency, stability and user-friendliness of these platforms as well as the speed of finalising trades. Some companies, such as Lynx and CapTrader complement their services with a mobile app that is linked to the other trading platforms. The same services are offered by sino AG, whereas the company can benefit from its equity stakes in Trade Republic Bank GmbH and tick Trading Software AG.

Customers can access 40 international exchanges and 10 direct trading partners via sino AG's trading platform, sino MX-PRO, which is in line with competitors' offerings. However, sino AG provides its customers with the opportunity to access some smaller, exotic exchanges and direct trading partners via phone, or specific access can be activated in case of strong interest. The fee structure is also in line with competitors with provisions on order volume between 0.1% and 0.15% with a minimum of EUR 6-8 and a cap of EUR 50-75 per trade depending on the monthly trading volume. For the best traders, there are commission agreements that are far below these levels.

#### sino AG's main competitors

Company	Business model	Access	Fee structure
<b>ViTrade</b>	ViTrade is an online brokerage for professional traders and offers customized conditions and individual tools for traders.	<ul style="list-style-type: none"> <li>- 19 exchanges</li> <li>- 33 countries</li> </ul>	<ul style="list-style-type: none"> <li>- International order: 0.12% of volume per trade from Min: EUR 6.95 to Max: EUR 40</li> <li>- Domestic order: 0.09% of volume per trade from Min: EUR 5.95 to Max: EUR 40</li> </ul>
<b>Lynx</b>	Lynx is an online brokerage for professional securities trading and provides its services to the customers through its trading platform and mobile app.	<ul style="list-style-type: none"> <li>- 135 exchanges</li> <li>- 23 currencies</li> <li>- 33 countries</li> </ul>	<ul style="list-style-type: none"> <li>- International order: \$ 5 per trade</li> <li>- Domestic order: 0.14% of volume per trade from Min: EUR 5.8</li> </ul>
<b>CapTrader</b>	CapTrader operates as online broker that offers its customers three different trading platforms, a trader workstation, a web browser trader and a mobile app.	<ul style="list-style-type: none"> <li>- 19 exchanges</li> </ul>	<ul style="list-style-type: none"> <li>- International order: from 0.10% of order volume up to 0.25% of order volume</li> <li>- Domestic order: 0.10% of volume per trade from Min: EUR 2 to Max: EUR 99 (only for XETRA)</li> </ul>
<b>Directa</b>	The Italian broker Directa is specializing in very active traders, such as day traders or heavy traders, and provides its online trading platform increasingly to customers in Germany.	<ul style="list-style-type: none"> <li>- 1.2 million financial instruments</li> <li>- 135 exchanges</li> <li>- 23 currencies</li> </ul>	<ul style="list-style-type: none"> <li>- USA order: \$ 9 per trade</li> <li>- Germany order: 0.025% of volume per trade with min trade value of EUR 9.5</li> <li>- EUR 2.5 per options contract</li> </ul>
<b>Consorsbank</b>	Leading direct bank in Europe and subsidiary of BNP Paribas offering current account business and online brokerage.	<ul style="list-style-type: none"> <li>- &gt; 10,000 funds</li> <li>- 23 exchanges</li> <li>- 22 countries</li> </ul>	<ul style="list-style-type: none"> <li>- Up to EUR 20,000 and trade via TradeGate: EUR 3.9 per order</li> <li>- International orders and over EUR 20,000: 0.25% of order volume and Min: EUR 9.95, Max: EUR 69</li> </ul>
<b>Comdirect</b>	B2C: direct bank with current account and brokerage business. B2B: Full service partner for banks, insurance and other financial service companies.	<ul style="list-style-type: none"> <li>- 17 exchanges</li> <li>- 12 countries</li> </ul>	<ul style="list-style-type: none"> <li>- International order: EUR 7.9 + 0.25% of volume per trade Up to EUR 2,000: Min EUR 12.9, Max EUR 62.9</li> <li>- Domestic order: EUR 4.9 + 0.25% of volume per trade Up to EUR 2,000: Min EUR 9.9, Max EUR 59.9</li> </ul>

Source: Warburg Research

## Analysis of return on capital

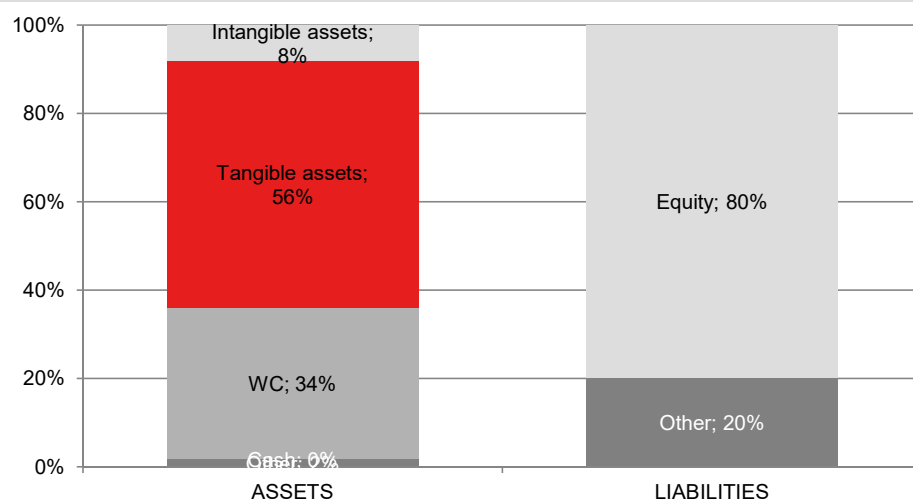
- Lean corporate structure results in a simple balance sheet
- 2018 and 2019 figures were significantly impacted by the full consolidation of Trade Republic
- Scalability of operating brokerage business secures margin expansion potential in case of top-line growth

### Balance sheet is characterised by financial investments

sino's lean business model is also visible in the current structure of its balance sheet with a total of EUR 19m in FY 2019/20.

- **Tangible assets** primarily consist of investments in associated companies, mainly sino Beteiligungen GmbH. However, sino Beteiligungen holds the shares in tick TS (represented at EUR 406k) and Trade Republic Bank GmbH (represented at EUR 8.96m). However, it has to be considered that sino reports according to local GAAP and thus has high hidden reserves in its balance sheet.
- **Working capital** mainly consists of receivables from financial institutions. In 2019/20, this included parts of an outstanding purchase price payment for the sale of a stake in Trade Republic Bank GmbH. Furthermore, liquid assets are pledged to HSBC for the assumption of trading risks, which are officially recognised as receivables.

### Assets mainly comprise financial investments



Source: sino AG, Warburg Research

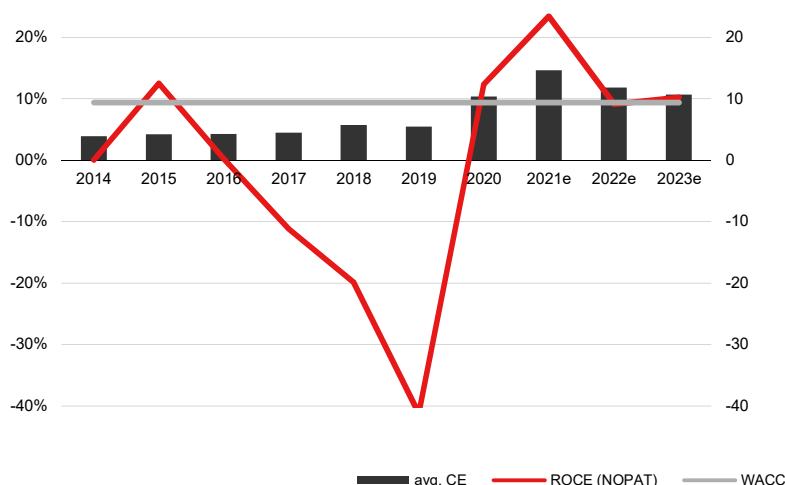
### Low capex and capital intensity

sino's business model is characterised by **very low capital intensity**. Apart from investments in other companies, which have had a significant impact on the balance sheet in the past, the business model does not require significant investments. All crucial software services are sourced by tick TS and trade settlement is provided by HSBC. sino AG's commission income is shown on a net basis and already includes HSBC's trading costs. Therefore, any higher trading costs are already reflected in the top-line development. tick TS is paid with a relatively high share of fixed costs to which a fee per trade is added. As became visible in 2020, the existing structures contain a high operating leverage potential once the existing customer base cranks up its trading activity. The number of employees was even reduced by 1 to 17. The increase of FTE and personnel costs would thus be the result of top-line growth on the basis of customer growth to ensure service quality.

## ROCE to increase as operating business is expected to dominate P&L

Following the acquisition of a majority stake in Trade Republic in 2017, sino fully consolidated the company in its 2017/18 and 2018/19 annual reports. As these years were characterised by strong growth investments at Trade Republic, revenue and profit contributions were rather limited while driving the cost base.

### ROCE development



Source: sino AG, Warburg Research

Capital employed remained rather flat at a low level until 2018. Thereafter, the sale of a stake in tick TS led to a significant investment income, which was subsequently invested in the Trade Republic stake, also increasing capital employed.

Even though the average capital employed increased significantly in 2020, sino was able to generate **ROCE well above the anticipated WACC of 9.42%**. Considering that the stake in Trade Republic accounts for around 50% of the balance sheet, the capital employed for sino's operating business would be significantly lower. Furthermore, the contributions from the investment are not reflected in the ROCE, as NOPAT does not include the investment income.

The ROCE development of the past years showed a negative trend until 2020. As described above, the consolidation of Trade Republic in 2018 and 2019 accelerated this trend even further by contributing start-up losses. However, as the previous years were also characterised by lower trading activity and the elimination of customer accounts with no or little trading activity, ROCE rates would have been also lower on a standalone operative basis.

While we do not expect returns to remain at 2020 or 2021 levels in a long-term view, **ROCE rates should return to levels at or slightly above WACC**. However, considering again the lower capital employed for the operative business, sino should be able to sustainably earn its cost of capital.

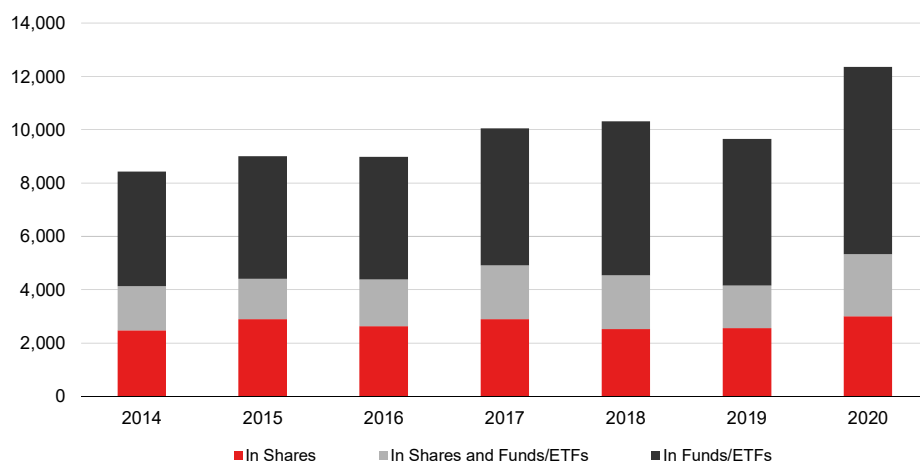
## Growth / Financials

- **Increased interest in capital markets** during Covid-19 pandemic should result in a sustainably larger market
- Assuming that some of the new market participants develop into heavy traders over time, this should lead to some **market growth in sino's niche market** and thus offer top-line growth potential
- Increased personnel and administrative expenses in 2018 and 2019 due to full consolidation of Trade Republic led to negative margin developments in the respective years
- Past sales of stake in Trade Republic resulted in **extraordinary profits of EUR 21m**, compared to an original investment of EUR 3m
- **Long-term margin prospects are appealing**, assuming sustainably higher market activity in the coming years

## Brokerage market in Germany trending upwards

While the Covid-19 pandemic was a major challenge for many hotels, restaurants or shops in 2020, it can be considered an opportunity and boost for online brokers in Germany. The lockdown in Europe forced many to cancel vacations and even weekend plans, resulting in higher savings. As most people's daily routines also changed, many people had more time to consider how to spend their increased savings while staying at home. Moreover, the sharp fall in share prices at the beginning of 2020 was seen as an opportunity to enter the stock market. This combination led to a 27.9% increase in the number of people investing in shares, funds and ETFs in Germany, the strongest annual increase in the last 20 years. This means that **12.4m people are invested in shares, funds and ETFs compared with 9.7m in 2019**.

### German population investing in shares and funds/ETFs (in k)

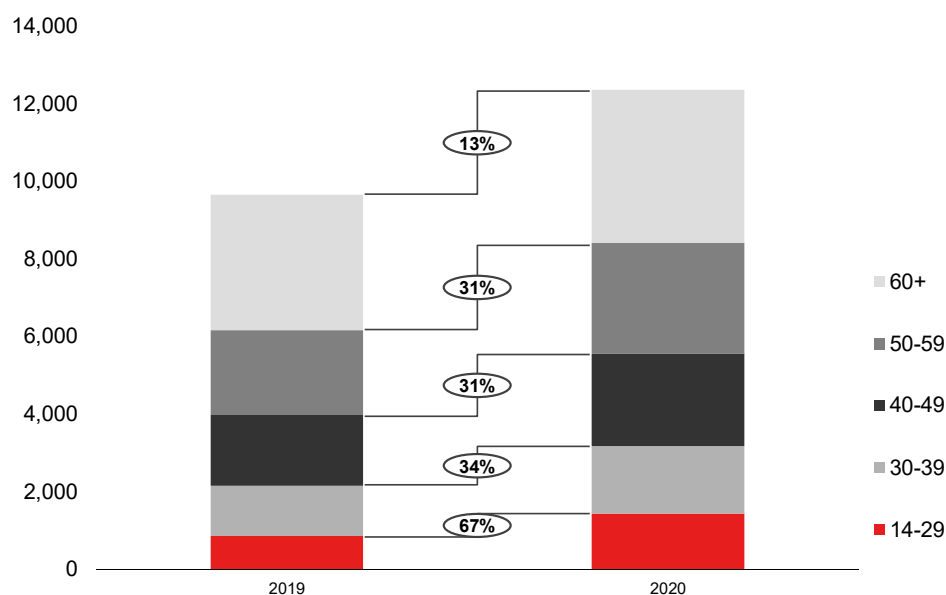


Source: Deutsches Aktieninstitut, Warburg Research

The digitalisation of the stock market has influenced many younger people to invest their savings. Attractive smartphone apps from low-cost brokers, such as Trade Republic, enable younger people to manage their portfolio with just a few clicks on their mobile phones. Social media platforms reinforced this effect, as more investment recommendations were digitally shared with this target group via influencers or internet forums. As a result, **the number of 14- to 29-year-olds invested in shares, ETFs and funds rose 67% last year, from about 862,000 to 1,439,000**. The number of people in the 30 to 59 age structure investing grew by slightly over 30%, while the number of people

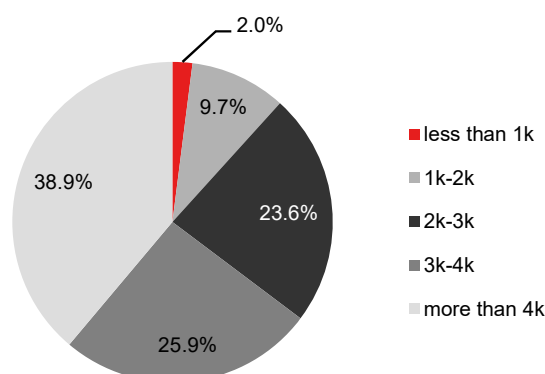
over 60 who invest in equity grew by only 13%. While part of the increase is driven by the Covid-19 pandemic, the simplicity of smartphone brokerage apps has played a significant influence and will contribute to this process in the future as these companies are just beginning to grow. Therefore, Trade Republic can benefit from the momentum created by the pandemic to increase its customer base. For sino AG, the rise in investments by younger people is unlikely to have a short-term effect on the number of depots, as most of the traders trade insignificant amounts and execute a small number of trades. However, the more people are familiar with trading and investing now, the higher the probability that more people will execute a larger number of transactions per year in the future.

#### Age structure of German population invested in equity (in k)



Source: Deutsches Aktieninstitut, Warburg Research

For many people who invest their savings in shares, ETFs, and funds, monthly net household income plays a significant role, as after deducting expenses, more money flows into savings accounts for people with a higher net income. If individuals have just enough money to pay their bills, they do not have enough money left over to invest, which is reflected in the fact that 2.0% of the investing population earned less than EUR 1k in 2020. The share of people investing increases from 9.7% with a net income between EUR 1-2k to 23.6% for people with a net income between EUR 2-3k. 25.9% of investing individuals earn a monthly net household income between EUR 3-4k and 38.9% earn more than EUR 4k. These proportions are in line with the expectation that older people either earn a higher monthly net household income or have higher savings.

**Invested population in Germany based on monthly net income in 2020**


Source: Deutsches Aktieninstitut, Warburg Research

However, it seems fair to assume that among younger market entrants in particular, some will develop a heavy trader trading behaviour in the longer term. As described in the Competitive Quality section, roughly 2% of Germans invested in equity can be considered highly active traders with more than 250 transactions p.a. These should be considered as the addressable market in a broad perspective, while sino's core market is rather in the range of 1k transactions p.a., which is assumed to be the case for roughly 0.5% of Germans invested in equity. Considering the increase of people only invested in shares in 2020 (+459k people), the **potential core market growth of the past year amounts to 2.3k people**. For the broad perspective, the market increase would add up to some 9.2k accounts. Based on the current number of sino customers of 345 as of September 2020, a market gain of even a fraction of these additional accounts would result in significant top-line growth.

**sino P&L**

in EUR m	2017	2018	2019	2020	2021e	2022e	2023e
<b>Sales</b>	<b>5.0</b>	<b>5.3</b>	<b>4.7</b>	<b>8.5</b>	<b>11.7</b>	<b>6.3</b>	<b>6.3</b>
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Own work capitalised	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total sales</b>	<b>5.0</b>	<b>5.3</b>	<b>4.7</b>	<b>8.5</b>	<b>11.7</b>	<b>6.3</b>	<b>6.3</b>
Material Expenses	0.0	0.0	0.2	0.0	0.0	0.0	0.0
<b>Gross profit</b>	<b>5.0</b>	<b>5.3</b>	<b>4.5</b>	<b>8.5</b>	<b>11.7</b>	<b>6.3</b>	<b>6.3</b>
Personnel expenses	1.8	2.6	2.9	2.7	2.8	2.1	2.1
Other operating income	0.5	0.5	0.5	0.3	0.5	0.5	0.5
Other operating expenses	4.0	4.6	5.1	4.5	5.3	3.0	3.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBITDA</b>	<b>-0.3</b>	<b>-1.4</b>	<b>-3.1</b>	<b>1.6</b>	<b>4.1</b>	<b>1.7</b>	<b>1.7</b>
Depreciation of fixed assets	0.2	0.3	0.4	0.3	0.5	0.3	0.3
<b>EBITA</b>	<b>-0.5</b>	<b>-1.7</b>	<b>-3.5</b>	<b>1.3</b>	<b>3.7</b>	<b>1.4</b>	<b>1.5</b>
Amortisation of intangible fixed assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Impairment charges and amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBIT</b>	<b>-0.5</b>	<b>-1.7</b>	<b>-3.5</b>	<b>1.3</b>	<b>3.7</b>	<b>1.4</b>	<b>1.5</b>
Interest income	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial result	2.8	0.3	1.0	13.3	13.9	0.4	0.4
<b>Recurring pretax income from cont. operations</b>	<b>2.3</b>	<b>-1.4</b>	<b>-2.5</b>	<b>14.6</b>	<b>17.5</b>	<b>1.8</b>	<b>1.8</b>
Extraordinary income/loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBT</b>	<b>2.3</b>	<b>-1.4</b>	<b>-2.5</b>	<b>14.6</b>	<b>17.5</b>	<b>1.8</b>	<b>1.8</b>
Taxes total	0.1	-0.4	-0.9	0.7	1.1	0.5	0.5
<b>Net income from continuing operations</b>	<b>2.2</b>	<b>-1.0</b>	<b>-1.6</b>	<b>13.9</b>	<b>16.4</b>	<b>1.3</b>	<b>1.3</b>
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income before minorities</b>	<b>2.2</b>	<b>-1.0</b>	<b>-1.6</b>	<b>13.9</b>	<b>16.4</b>	<b>1.3</b>	<b>1.3</b>
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income</b>	<b>2.2</b>	<b>-1.0</b>	<b>-1.6</b>	<b>13.9</b>	<b>16.4</b>	<b>1.3</b>	<b>1.3</b>

Source: sino, Warburg Research

sino's fiscal year does not correspond to the calendar year and ends in September. When mentioning fiscal years in the following text, we refer to the fiscal year which ends in the respective year.

### Key reporting indicators

As a brokerage company, sino generates the majority of its top line from commission income, which is referred to as **sales** in the above accounting statement. Commission income, in turn, is directly related to the number of transactions processed and the number of customers.

As a result of a lean corporate structure, **EBITDA** is thus influenced by the development of personnel expenses and other operating expenses, which are strongly affected by the fees for tick TS.

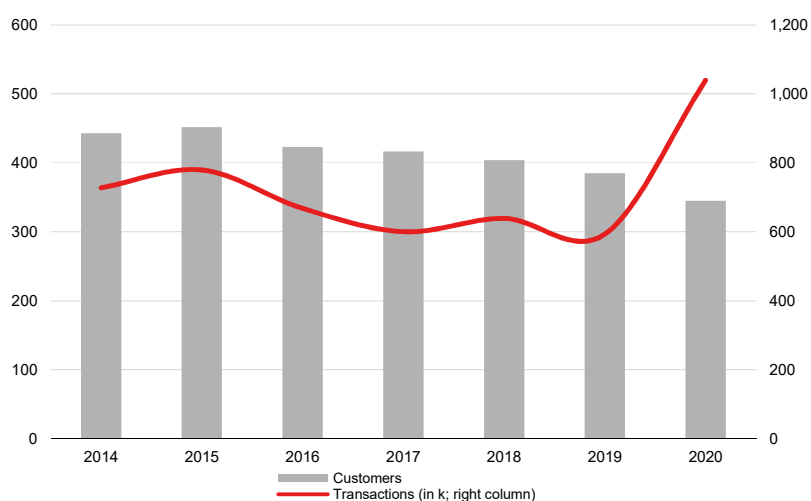
The **financial result** includes the contributions from investments, mainly Trade Republic and tick TS. Furthermore, the sale of the respective shares in these investments is reflected in this line and has become more important in recent years.

### Top line affected by number of customers and market volatility

As described above, sino's commission income is a function of the executed transactions, which in turn is determined by the number of customers and trades per customer and year of a given period.

In recent years, sino has purged customers with low or no activity from its customer base, resulting in a decline in customers from 443 in 2014 to 345 in 2020, representing a CAGR of -4.1%. As the company is focused on heavy traders and its services are tailored to this clientele, customers with trading activity below a certain threshold cannot be served efficiently. However, after several years of declining customer accounts, we expect this trend to come to an end and assume stable to slightly growing customers going forward.

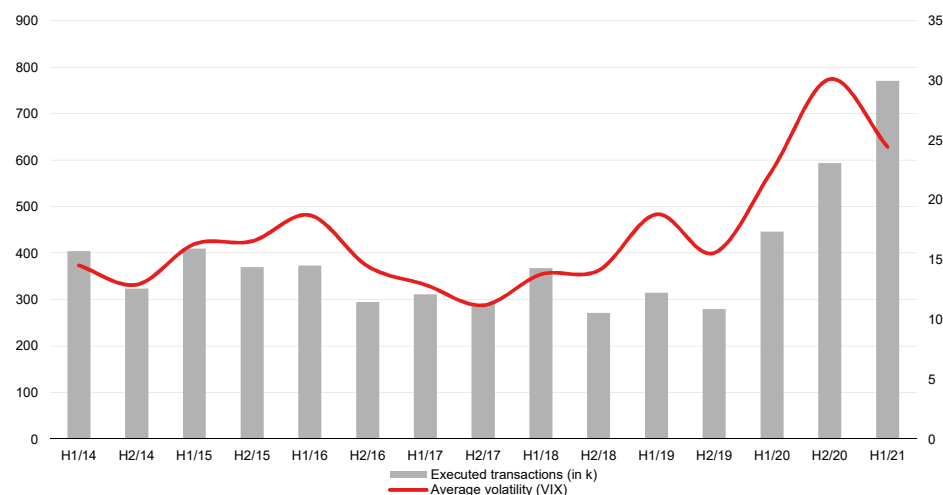
### Development of customers and transactions



Source: sino AG, Warburg Research

The number of executed transactions developed in line with the customer development until 2019 and declined from 728k transactions in 2014 to 594k in 2019. However, the years 2017 to 2019 can also be seen as years with rather low volatility on the capital markets. In 2020, the number of executed trades increased significantly to over 1m due to exceptionally high capital market volatility. This shows that the trading activity of customers is significantly affected by market fluctuations and volume.

### Development of total transactions and VIX index



Source: sino AG, Warburg Research

Even though the number of customers was rather low in 2020, the number of executed transactions recently reached record highs. The chart above shows the development of sino's executed transactions and the average volatility, approximated by the VIX index. Even though the customer base seems to generate a certain underlying trading volume, it becomes clear that an **increase in volatility also leads to significantly increased transactions**. Despite a slightly lower average volatility level in H1 21 (October '20 – March '21), sino reported another record in executed trades. Obviously, sino's customers even increased their trading activities.

### Top-line assumptions

	17/18	yoy	18/19	yoy	19/20	yoy	20/21e	yoy	21/22e	yoy	22/23e	yoy
Customer accounts	417		385	-7.7%	345	-10.4%	335	-2.9%	340	1.5%	345	1.5%
Trades per customer	1,440		1,542	7.1%	3,013	95.5%	4,250	41.0%	2,300	-45.9%	2,300	0.0%
Total Transactions (in k)	600.5		593.6	-1.1%	1,039.6	75.1%	1,423.8	37.0%	782.0	-45.1%	793.5	1.5%
Commission income/trade	8.27		7.78	-5.9%	8.17	5.1%	8.20	0.3%	8.00	-2.4%	8.00	0.0%
Total revenues (in EURm)	4.97		4.62	-7.0%	8.50	84.1%	11.67	37.4%	6.26	-46.4%	6.35	1.5%

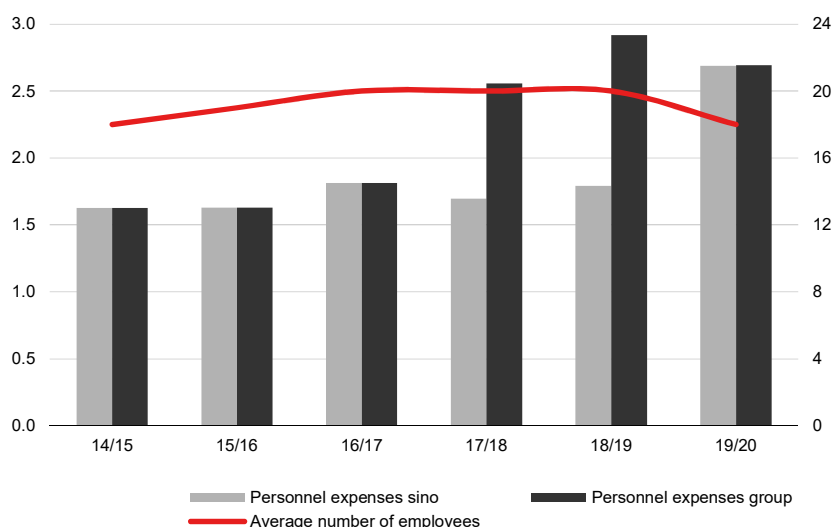
Source: sino AG, Warburg Research

- The net decline in **customer accounts** is expected to come to an end in 20/21e. For the detailed planning period, we assume slight growth of around +1.5%, corresponding to a net addition of 5 accounts per year. However, considering the potential market growth of 2.3k potential new customers from the new market entrants in 2020, significantly stronger growth rates seem conceivable. In the past, sino has not spent much on marketing. However, additional marketing expenses could be worthwhile in the current market environment and would presumably lead to stronger customer growth.
- Average **trades per customer and year** doubled to just above 3k in 2020. As can be seen above, H1 21 led to even higher trading figures compared to 2020. Therefore, we assume that trades per customer will increase further in the current year. Even though the current market results in an exceptional boom for sino, a return to more normal levels should be assumed thereafter. However, in the medium term, we expect the number of trades per customer and year to stabilise above pre-Covid levels. This follows the current trend of sustained high trading volumes and the assumption of generally higher activity in the capital markets by a larger number of participants.
- The **commission income** per trade is the result of retrocessions from HSBC, which handles the accounts and transaction settlement for sino customers. While it has fluctuated slightly in recent years, an average of EUR 8 per transaction should be reasonable to assume in a long-term perspective. While a slight trend towards lower transaction prices could also start in the heavy trader niche, the high degree of tailor-made services should protect against significantly declining prices.

## Costs driven by personnel and external services

The cost side of sino AG largely reflects personnel and other expenses, mainly driven by expenses for services purchased by tick TS.

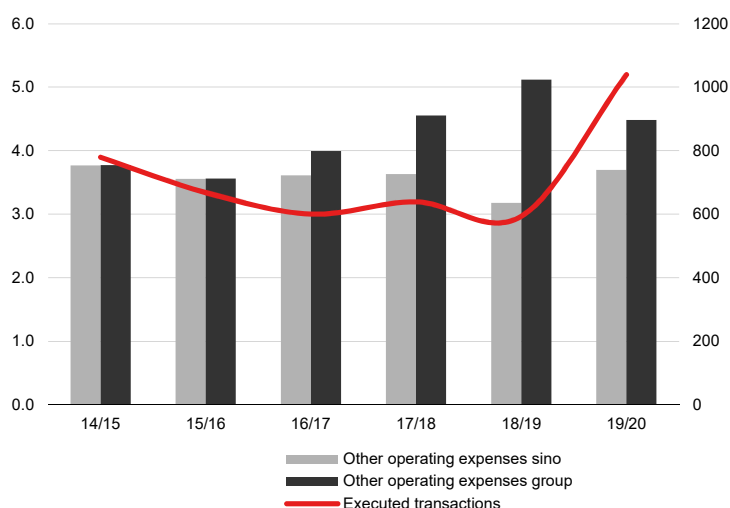
### Development of personnel expenses



Source: sino AG, Warburg Research

- Personnel expenses remained relatively stable from 2015 to 2017 and developed synchronously at sino and sino group level. The number of employees shown refers to sino and has not changed significantly in recent years.
- In 2018 and 2019, personnel expenses on group level were significantly higher. Both years were characterised by the full consolidation of Trade Republic. However, as TR has been consolidated at equity since 2020, personnel expenses have levelled off again, which is also expected to be the case in the future.
- 2020 was characterised by significantly higher personnel expenses compared to previous years. The delta of roughly EUR 1m can presumably be explained by sino's strong operating performance, which led to high variable compensation components. However, as 2020 was surprisingly strong, the year should serve as an example for the maximum level of variable payments. Therefore, we assume a flattish development of personnel expenses for 2021, considering the beneficial market environment. Thereafter, wages should return to a more normal level in line with the operating result of the company.

### Other operating expenses



Source: sino AG, Warburg Research

- Other operating expenses also matched at sino and group level until 2017. Thereafter, a discrepancy resulted from the full consolidation of Trade Republic. While personnel expenses synchronised with the deconsolidation of TR, a gap remained in other operating expenses. As legal and consulting fees continue to be incurred, also in connection with the recent sale of shares, other operating expenses remain slightly increased at group level.
- In the 2019/20 financial year, tick TS reported revenues of EUR 7.3m, of which around 18% were generated with sino AG. This corresponds to EUR 1.3m recognised in other operating expenses at sino and reflects approximately 40% of the respective expenses in 19/20 at sino AG.
- While the development of other operating expenses at sino AG shows a correlation with the number of executed trades, costs increased at a lower rate in 19/20. This leads us to the assumption that the majority of service costs for tick TS are on a fixed cost basis and only a minor proportion is based on costs per trade.

### Recent sales of financial investments contribute extraordinary profits

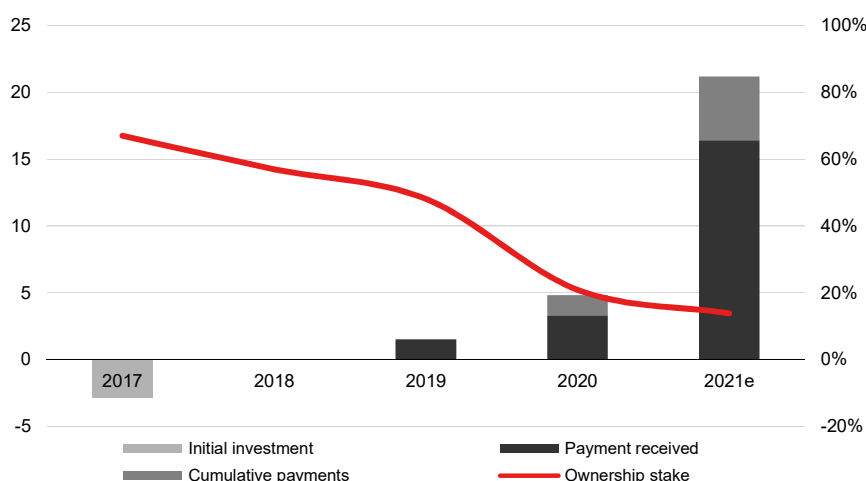
#### Development of ownership in Trade Republic GmbH

Date	Ownership stake
August 2017	67.0%
September 2018	57.0%
March 2019	54.6%
June 2019	49.7%
September 2019	48.1%
March 2020	30.0%
September 2020	20.9%
January 2021	13.7%

Source: sino AG, Warburg Research

In 2017, sino purchased a majority stake of 67% in 20.1797 Neon GmbH, which was later renamed to Trade Republic Bank GmbH, for a total of EUR 2.9m. With the acquisition of the majority stake, Ingo Hillen also became managing director of Trade Republic and sino provided strategic advice and support to the fintech. However, in the course of several capital increases, sino's stake was gradually diluted. As of January 21, sino's stake reached the current level of 13.72%. Due to management options of Trade Republic's management, this share can be further reduced to 7.1%. In light of the assumed favourable development of Trade Republic, we see a high probability that these options will be exercised. Therefore, we **calculate with an effective stake of 7.1% attributable to sino.**

### Purchase and sale of Trade Republic stake



Source: sino AG, Warburg Research

In 2019, sino initially sold a stake in Trade Republic worth around EUR 1.5m. In the course of capital increases, sino sold further shares in 2020, resulting in further earnings worth around EUR 3.3m. At this point, the income from the shares sales already significantly exceeded the original investment. However, in 2021, sino reported further sales with a total value of around EUR 16.4m. Overall, **sino has generated sales proceeds of over EUR 21m to date, well above the initial investment of EUR 2.9m.** Even considering the operating cost contributions of roughly EUR 6m (see charts above) and the attributable losses of EUR 1.9m in 19/20, the investment remains highly profitable.

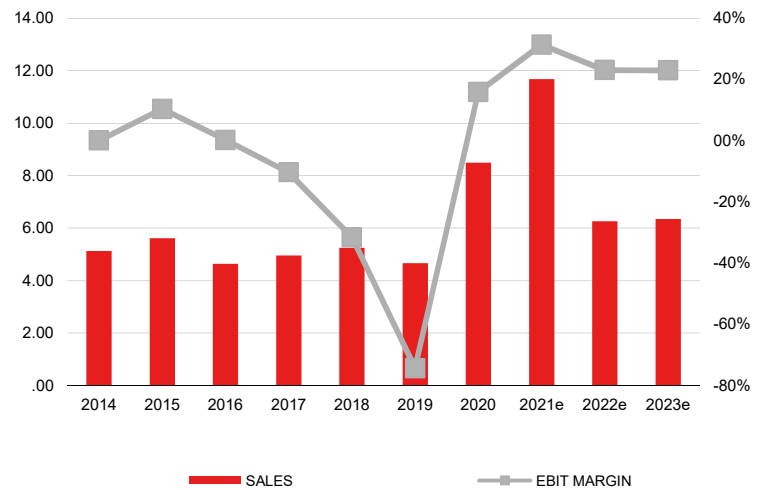
### Attractive long-term margin prospects

sino's cost structure allows for multiple **economies of scale to increase profitability**:

- As the business model is focused on value creation by providing excellent customer support services and software and settlement services are purchased from external partners, the lion's share of costs is attributable to personnel and purchased services.
- As shown above, the majority of purchased services have fixed-cost character and therefore do not grow in line with revenue.

Even considering variable compensation components, 2020 should mark the upper limit of personnel expenses, to be exceeded only with growing FTEs. As we assume only moderate customer growth, personnel expenses can be expected to remain stable at a lower level compared to 2020.

### Development of sales and EBIT



Source: sino AG, Warburg Research

Based on the effects described, we expect the EBIT margin to climb to over 20% already at a slightly higher sales level compared to previous years. In 2020 and 2021, variable compensation components limit the margin expansion potential, which should not be the case in a long-term growth scenario. Therefore, even higher EBIT margins appear conceivable under the assumption of stronger top-line growth.

## Valuation

- Our **PT of EUR 65** is based on a SOTP approach
- The operating brokerage business is valued using a DCF approach, the tick TS stake is valued at its market value and the stake in Trade Republic is valued using a multiples approach
- The remaining 7.1% stake in Trade Republic should **represent** a value per share of at least EUR 41.7
- Due to the very limited visibility of Trade Republic KPIs, the valuation is based on WRe assumptions, underpinned by indications for user development and peer-group comparison

### SOTP as a combination of different value contributors

As sino has different value contributors, we apply a sum-of-the-parts model to derive a fair value for the company. We value **sino's operating business** on a DCF basis and derive a fair value contribution of **EUR 21.31 per share**. The **tick TS stake** of 12.7% is reflected with its current market cap, adding another **EUR 2.01 per share**. Finally, the lion's share of our current fair value per share of EUR 65.19 is derived from an indicative multiple valuation for sino's remaining **7.1% stake in Trade Republic**, which contributes **around EUR 41.71**.

SOTP valuation			
	sino operating business	Stake in tick TS	Stake in Trade Republic
Valuation indicator	DCF model	Market value	Multiple valuation
Value per share	21.31	2.01	41.71
<b>Total value per share</b>	<b>65.02</b>		

Source: Warburg Research

From the sum-of-the-parts valuation, we derive a fair value of EUR 65.02 per share, which is the basis for our **current PT of EUR 65**.

### DCF for the operating brokerage business

The brokerage business for heavy traders as sino's core business is valued using a DCF model. The value contribution of EUR 21.31 per share is the result of the following assumptions:

- Revenue is expected to peak in 2021e due to the favourable current market environment and the related high trading activity.
- While returning to a normalised level in 2022e, we assume a slight long-term growth rate of 1.5%, following moderate customer growth in light of generally higher interest in the capital markets.
- Significantly higher top-line growth rates appear conceivable if sino can gain market share.
- Existing net cash of EUR 6.4m, supplemented by high cash flow in 2021 as a result of an extraordinary profit from the sale of a stake in Trade Republic, which is reflected in Others.
- Remaining Trade Republic stake is reflected with a balance sheet value of EUR 9m.

Our DCF model points to a **fair value contribution of EUR 21.31 per share** for sino's operating business. Obviously, the main share of the derived value will be generated in the detailed forecast period, especially in the current fiscal year. The anticipated cash generation from the share sales of Trade Republic should lead to a significantly high extraordinary cash flow. However, based on our moderate growth assumptions, the operating business should be worth nearly half of the current market capitalisation.

### DCF for sino's operating business

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	
Sales	11.7	6.3	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.2	7.3	7.4	1.5 %
Sales change	37.4 %	-46.4 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	
EBIT	3.7	1.4	1.5	1.5	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	
EBIT-margin	31.3 %	23.0 %	22.9 %	23.0 %	24.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	
Tax rate (EBT)	6.3 %	30.0 %	30.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	
NOPAT	3.4	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.3	
Depreciation	0.5	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
in % of Sales	4.0 %	4.0 %	4.0 %	4.0 %	3.0 %	2.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	
Change in provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in liquidity from														
- Working Capital	-2.9	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Capex	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Capex in % of Sales	0.9 %	1.7 %	1.7 %	2.0 %	2.0 %	2.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	
Other	-13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC-model)	20.6	3.4	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	
PV of FCF	19.5	2.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	5.0
share of PVs	68.7 %			16.7 %										14.7 %

#### Model parameter

##### Derivation of WACC:

Debt ratio	0.0 %
Cost of debt	6.0 %
Market return	7.0 %
Risk free rate	1.5 %
Risk premium	5.5 %
Cost of equity	9.4 %
<b>WACC</b>	<b>9.42 %</b>

##### Derivation of Beta:

Financial Strength	1.20
Liquidity	1.50
Cyclicality	1.40
Transparency	1.60
Others	1.50
<b>Beta</b>	<b>1.44</b>

#### Valuation (m)

Present values until 2033e	29.0	No. of shares (m)	2.3
Terminal Value	5.0		
Financial liabilities	0.0	Value per share (EUR)	<b>21.31</b>
Pension liabilities	0.0		
Hybrid capital	0.0		
Minority interest	0.0		
Market val. of investments	9.4		
Liquidity	6.4		
<b>Equity Value</b>	<b>49.8</b>		

#### Sensitivity Value per share (EUR)

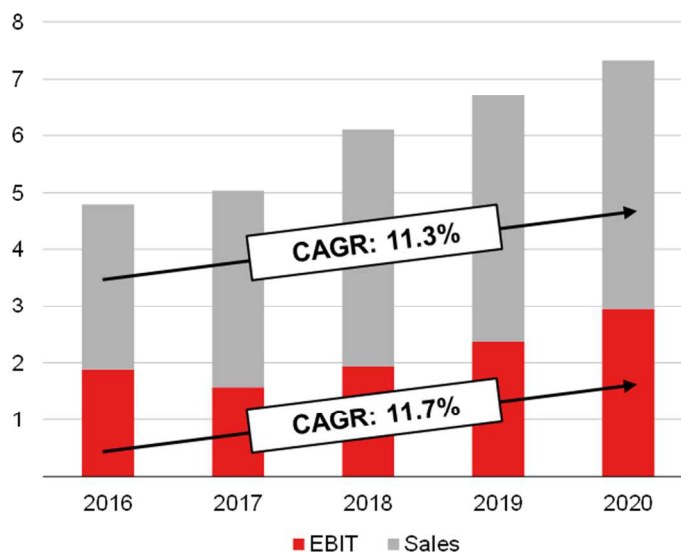
Beta	(WACC)	Terminal Growth							Delta EBIT-margin						
		0.75 %	1.00 %	1.25 %	1.50 %	1.75 %	2.00 %	2.25 %	-1.50 pp	-1.00 pp	-0.50 pp	0.0	0.50 pp	1.00 pp	1.50 pp
<b>1.62</b>	(10.4 %)	20.50	20.54	20.59	20.63	20.68	20.73	20.79	20.28	20.40	20.51	20.63	20.75	20.87	20.99
<b>1.53</b>	(9.9 %)	20.80	20.85	20.90	20.95	21.01	21.07	21.14	20.58	20.70	20.83	20.95	21.08	21.20	21.33
<b>1.49</b>	(9.7 %)	20.95	21.01	21.06	21.12	21.19	21.25	21.33	20.74	20.87	21.00	21.12	21.25	21.38	21.51
<b>1.44</b>	(9.4 %)	21.12	21.18	21.24	<b>21.31</b>	21.38	21.45	21.53	20.91	21.04	21.17	<b>21.31</b>	21.44	21.57	21.70
<b>1.39</b>	(9.2 %)	21.30	21.36	21.43	21.50	21.58	21.66	21.75	21.09	21.23	21.36	21.50	21.64	21.77	21.91
<b>1.35</b>	(8.9 %)	21.48	21.55	21.63	21.71	21.79	21.88	21.98	21.29	21.43	21.57	21.71	21.84	21.98	22.12
<b>1.26</b>	(8.4 %)	21.89	21.97	22.06	22.16	22.26	22.37	22.49	21.71	21.86	22.01	22.16	22.31	22.45	22.60

Source: Warburg Research

### tick TS share considered at market value

tick TS is a software company that was founded by Ingo Hillen in 2002 and provides software services to sino. In 2020 and 2019, sino was responsible for roughly 18% of tick TS's sales, indicating a rather broad positioning. In recent years, sino has occasionally sold shares in tick TS, thus reducing its stake to the current level of 12.7%. The operating development of tick TS is characterised by steady sales and EBIT growth, ensuring the value of the company.

However, as tick TS is a listed company, we take the current market value of the investment into account as a valuation contribution. At tick TS's current share price of EUR 39.8, the 12.7% reflect a value of EUR 5.09m. Considering the current book value for the tick TS investment of EUR 0.4m, which is already reflected in the financial investments in the DCF, the value contribution of the tick TS stake points to EUR 2.02 per sino share.

**tick TS sales and EBIT development (EURm)**


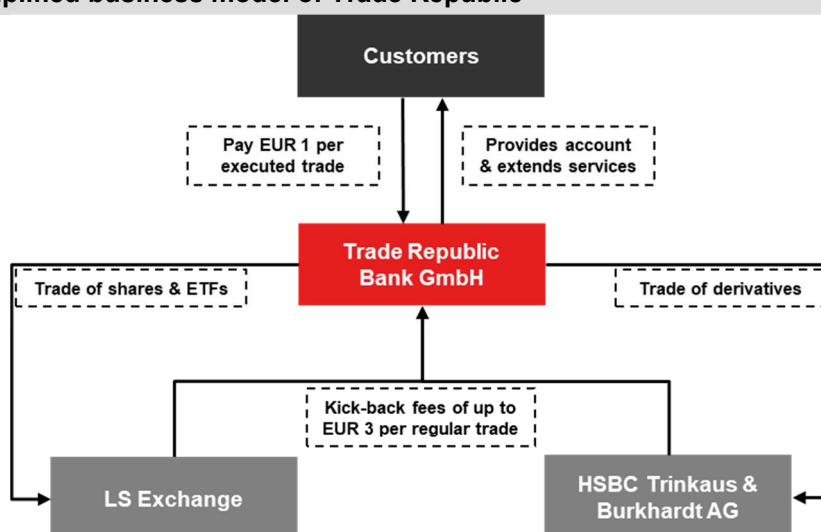
Source: Warburg Research

### Equity investment in Trade Republic

Trade Republic, founded in 2015 by Christian Hecker, Thomas Pischke and Marco Cancellieri, is Europe's first mobile and commission-free broker. The company now offers private investors the opportunity to trade more than 8,500 international stocks and ETFs as well as around 40,000 derivatives via its mobile app. In 2017, sino AG made a strategic investment in the fintech start-up and acquired a 67% stake in Trade Republic. In January 2019, Trade Republic received its license as a securities trading bank and has since offered its customers the opportunity to submit market, limit and stop orders via its platform. The company has developed efficient and modern technological structures that save its customers from paying high order commissions. All deposits are legally secured up to EUR 100,000 per investor and are held in an escrow account at solarisBank through which Trade Republic can manage the funds digitally and securely. Trade Republic's services also include the settlement of taxes from securities transactions and the issuance of an annual tax certificate.

The customer's orders are processed in cooperation with HSBC Transaction Services, the largest securities processor in Germany by number of transactions. The customer trades shares and ETFs via LS Exchange, which is part of the Hamburg Stock Exchange, and derivatives over the counter via HSBC Trinkaus & Burkhardt AG. Trade Republic deliberately offers trading only through these partners, as its business model is dependent on them. In Trade Republic's terms and conditions, customers waive the rights to any provisions or kick-back fees they would receive for settling trades with these counterparties. Therefore, Trade Republic receives up to EUR 3 per completed trade from the counterparties and is able to generate revenues. In exceptions, depending on the size and type of orders, the kick-back fees can rise up to EUR 17.6 per trade. Additionally, Trade Republic charges its customers a third-party fee of EUR 1 per trade for processing and administration.

### Simplified business model of Trade Republic








Source: Warburg Research

### German neo-broker market

After Robinhood, founded in 2013, offered the first commission-free trading of stocks and ETFs via a mobile app in 2015, competition for the same market in Europe between discount brokers began. Trade Republic is Europe's first commission-free broker, but competition has increased in recent years. Other companies, such as Smartbroker, Gratisbroker, Scalable Capital and Justtrade, have entered the German market and operate similar business models. Customers using these platforms do not have to pay custody fees or negative interest on their deposits in most cases. While Justtrade and Gratisbroker do not charge per trade fees, customers have to trade a minimum volume of EUR 500 per order, which makes these brokers an unattractive alternative for private investors with little experience. Smartbroker's customers have to pay EUR 4 for order sizes below EUR 500. For orders above EUR 500, customers pay no fees on Gettex and EUR 1 for trades on L&S. Only Scalable Capital offers a similar service to Trade Republic at 99 cents per trade but with a minimum order volume of EUR 250. However, Scalable Capital offers additional plans for EUR 3-5 per month that allow its users to trade for free.

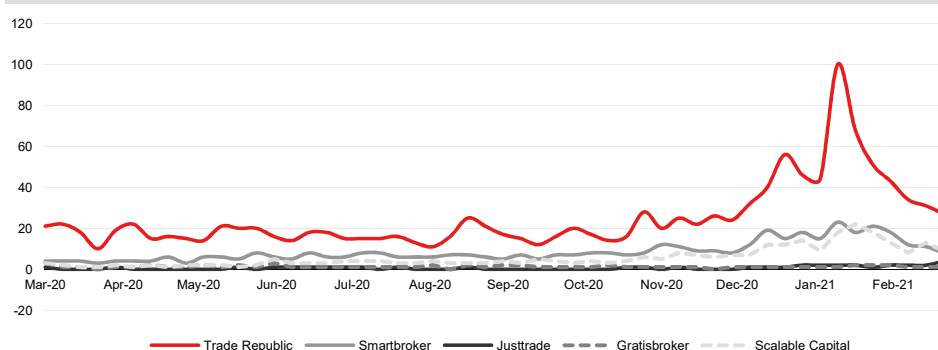
### Comparison of German neo-brokers

					
Trading fees	EUR 1 per trade	EUR 2.99 per month or EUR 0.99 per trade	EUR 4 per trade; above EUR 500 order EUR 0 to 4 depending on stock exchange	EUR 0	EUR 0
Cost of account	-	-	0.5% p.a. (after 15% allowance)	0.5% p.a.	-
Minimum order size	EUR 1	gettex: EUR 250 Xetra: EUR 0	EUR 0	EUR 500	EUR 500
Access	Mobile app	Mobile app + desktop	Desktop	Mobile (Web App) + desktop	Desktop

Source: Warburg Research

Trade Republic, Smartbroker and Scalable Capital can be considered close competitors and are currently among the most attractive neo-brokers for first-time investors, with Trade Republic having already built up greater brand awareness. This is reflected in the strong relative frequency of searches for Trade Republic on Google. The increased brand awareness enables Trade Republic to considerably increase its market share for online trades and the company is able to attract a large share of first-time online trading customers.

### Relative frequency of searches for discount brokers



Source: Google Trends, Warburg Research

This is further supported by Trade Republic's rapid customer growth. 11 months after the official launch of the app in early 2019, the company announced the latest update for the number of customers, which at that time is said to have exceeded 150k. While this was before the high capital market volatilities in 2020, we assume that customer growth increased significantly thereafter (also supported by the frequency of Google searches). Scalable Capital reported some 80k customers in an interview in mid-2020, Smartbroker also gathered some 80k in 2020 and wallstreet:online assumes that the number of customers will grow to 200k by the end of 2021. Justtrade announced in an interview in August 2020 that it was still well below its own target of 40-50k customers. Therefore, we assume that the number of customers at that time was roughly 10k-20k.

### App store statistics

	No. of downloads (playstore)	No. of reviews (playstore)	Average rating (playstore)	No. of ratings (App Store)	Average rating (App Store)
Trade Republic	+1,000,000	43,686	4.7/5.0	63,334	3.9/5.0
Scalable Capital	+500,000	2,811	3.8/5.0	3,692	4.4/5.0
Justtrade	+10,000	148	2.8/5.0	92	2.9/5.0

Source: Google Playstore, App Store, Warburg Research

The current app statistics (for neo-brokers that offer an app) also clearly speaks in favour of Trade Republic. Not only is the number of downloads significantly higher compared to competitors, but the number of reviews is also at least 15x higher. Overall, **Trade Republic appears to be by far the fastest growing neo-broker in Germany.**

### Valuation approach

As sino still holds an effective stake of 7.1% in Trade Republic and has already earned significant profits from this investment, we expect this to be a significant valuation driver. Unfortunately, there is little information publicly available when it comes to Trade Republic's trading or P&L figures.

In sino's 2019/20 financial report, the company reported a 20.934% stake in Trade Republic. However, in the supplementary report, sino cites different capital measures that

would presumably lead to a further reduction of its stake to 13.72%. These measures include:

- Sale of a stake for a purchase price of EUR 5.3m, agreed on in April 2020
- Capital increase at Trade Republic in January 2021
- Further sale of stake with a purchase price of EUR 11.1m agreed in December 2020, expected to be executed by the end of February 2021
- Another capital increase at Trade Republic should be executed soon, further reducing sino's stake

After the mentioned capital measures, sino is expected to remain with a stake of 13.72% in Trade Republic, which is a difference of 7.214% compared to previous levels. However, we assume that the valuation for Trade Republic increased significantly in the course of 2020 and that sino generated EUR 11.1m for a 2% stake in the company at the last share sale. This translates into a valuation basis of **EUR 555m as of December 2020**.

However, the **development since December 2020 should have been highly favourable** and we assume that the valuation has increased significantly since then. To derive a fair value for the remaining stake, the following assumptions are made about Trade Republic's business:

Trade Republic assumptions									
Trade Republic Assumptions	September 2019	September 2020	yoy	September 2021	yoy	September 2022	yoy	September 2023	yoy
Customers per fiscal year-end (m)	0.09	0.45	400%	1.35	200%	2.19	62%	3.03	38%
Customers average (m)	0.05	0.27		0.9		1.77		2.61	
Revenues per customer (EUR)	16.18	138		168		125		130	
Trades per year	5.6	60		70		50		50	
Total trades (m)	0.252	16.2	6329%	63	289%	88.5	40%	130.5	47%
Revenue per trade (EUR)	2.9	2.3		2.4		2.5		2.6	
<b>Total revenues (EURm)</b>	<b>0.728</b>	<b>37.26</b>	<b>5018%</b>	<b>151.2</b>	<b>306%</b>	<b>221.25</b>	<b>46%</b>	<b>339.3</b>	<b>53%</b>
cost per trade (EUR)		0.7		0.7		0.7		0.7	
Trading costs total (EURm)		11.3		41.0	261%	57.5	40%	84.8	47%
Gross profit (EURm)		25.9		110.3	325%	163.7	49%	254.5	55%
Employees	25	200	700%	420	110%	551	31%	656	19%
Personnel expenses (EURm)		7.5		37.8	404%	49.56	31%	59.1	19%
Other costs (EURm)		5		10		20	100%	30	50%
<b>Marketing (EURm)</b>		<b>28.8</b>		<b>81</b>	<b>181%</b>	<b>75.6</b>	<b>-7%</b>	<b>75.6</b>	<b>0%</b>
<b>EBITDA (EURm)</b>	<b>-4.8</b>	<b>-15.4</b>		<b>-18.6</b>		<b>18.6</b>		<b>89.8</b>	<b>384%</b>
<b>margin</b>	<b>-653%</b>	<b>-41%</b>		<b>-12%</b>		<b>8%</b>		<b>26%</b>	

Source: Warburg Research

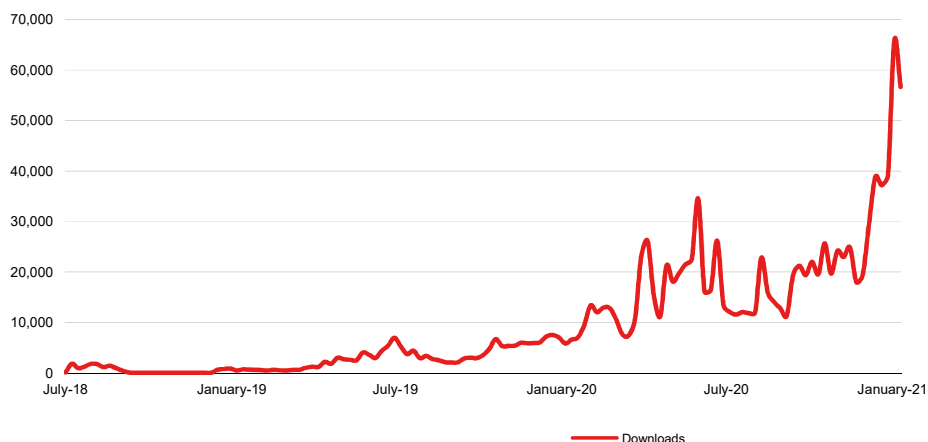
The 2019 figures were published in the company's annual report. The remaining KPIs are based on the following assumptions:

#### Customers

- In the annual report 2019, published in February 2020, Trade Republic Bank reported a current high five-digit number of registered customers (we assume 80-90k)
- In **April 2020**, Trade republic announced to have a total of **more than 150k customers**, which translates to a customer gain of more than 60k in two months. In those eight weeks, the app was downloaded roughly 87k times, which would

correspond to a conversion rate of 69%.

### Total Trade Republic app downloads per week



Source: Airnow, Warburg Research

- Thereafter, the run rate of new customers should have increased on the back of a strong market recovery.
- By the end of September 2020, the app was downloaded 458k times. Assuming an unchanged conversion rate of 69%, this would have resulted in another 316k customers. For simplicity, we calculate with a total number of 450k customers by the end of September. This points to a run rate of 55k new customers between mid-April and end of September 2020.
- The app download rate remained at a level of around 20k downloads per week until the end of 2020 before sky-rocketing in early 2021. This is in line with the very favourable development of other brokers (flatexDEGIRO has already increased its guidance twice in 2021) and the operating development at sino. Therefore, we expect customer growth to accelerate even more from 2021 onwards.
- Overall, we **assume a current customer growth rate of approximately 75k customers per month for 2021e**, considering the ongoing beneficial market environment, and some 70k per month in 2022e and 2023e.
- Considering the extremely high download rates in early 2021, the ongoing high marketing efforts and the expansion into other European countries (Austria and France already active, others to follow), we believe there could still be significant upside to our estimates.

### Trades per year and customer

- 2019 was characterised by the start of the business and most customers were active for a rather short period of time.
- 2020e and 2021e are expected to show rather high trades per customer, driven by high volatility in the capital markets
- We assume that Trade Republic's customers will remain quite active after that, with an average of 50 trades per customer and year. Based on the **low trading costs of EUR 1 per trade** and the **unlimited order size**, customers are likely to trade more frequently compared to the competitor's customer base.

### Revenue per trade

- Trade Republic generates revenues of EUR 1 per trade, paid by the customer, and earns kick-back fees from product partners.
- As we assume more ETF trading activity in 2020e, the kick-back payments should have

reduced to roughly EUR 1.3. However, with strongly growing transaction numbers, Trade Republic should be able to **negotiate slightly higher kick-back fees over time**, also supported by potential further derivative product partners.

#### Costs per trade

- With HSBC, Trade Republic has a strong settlement partner with a high transaction volume. This should lead to rather low costs per trade.
- Taking into consideration cross-reads from other brokers and our estimate of settlement fees for sino, we believe about EUR 0.65-0.7 per trade to be reasonable.

#### Employees and personnel expenses

- In its 2019 annual report, Trade republic reported around 25 FTE.
- In October 2020, Christian Hecker stated in an interview that Trade Republic currently has about 200 employees.
- Personnel expenses are calculated with EUR 90k per employee. In 2020e, expenses are well below this number, as we assume that the majority of new employees joined by the end of the fiscal year.

#### Marketing expenses

- We assume that Trade Republic has customer acquisition costs of roughly EUR 90 per new customer, which is broadly in line with other brokerage businesses.
- The company benefits from a first-mover advantage, the current market environment and strong media coverage.

Overall, we expect Trade Republic to show impressive top-line growth of over 300% in 2021, which should also be the last loss-making year for the company. Due to the high scalability of the business model and continued strong top-line growth, we expect Trade Republic to become profitable from 2022e onwards, with a steep margin expansion thereafter.

#### Multiple valuation

Based on our assumptions above, we apply a peer-group comparison to derive a valuation indication for Trade Republic.

Peer-group valuation					
in m	Current valuation in m (market cap when possible)	Customers in m (reported or WRe)	customer multiple in EUR	P/Sales '21	2020 revenue per customer in EUR
FlatexDegiro (WRe)	2518.7 EUR	1.50	1679	6.0	174.33
Wallstreet:online (WRe)	271.8 EUR	0.16	1699	4.9	178.75
Robinhood	20000.0 USD	13.00	1282	n.a.	91.08
Charles Schwab	121789.9 USD	31.50	3222	6.9	309.29
eToro	10800.0 USD	20.00	450	10.6	25.21
Interactive Brokers	6834.1 USD	1.33	4298	2.7	1571.07
Swissquote	2133.3 CHF	0.41	5200	5.8	934.31
Median			1699	5.9	179
Average			2547	5.3	469

Source: Warburg Research

The peer group was selected on the basis of comparability of the business model, which is why mainly pure online brokerage businesses are included.

- The number of customers reflects the most recently reported or our estimates (for flatexDEGIRO and Wallstreet:online).
- Robinhood should probably be considered the most similar competitor and, as reported in March, is aiming for an IPO. Although little information is publicly available, we cautiously estimate a valuation of USD 20bn, taking into account the latest level of 13m customers, reported in 2020.

- Obviously, the multiples in the observed peer group vary strongly in a range between EUR 450 and 5200 per customer. However, the higher the revenue per customer at the respective company, the higher the multiple per customer.
- As all companies show very different growth profiles, price/sales for 2021 ranges between 2.7x and 10.6x.

#### Trade Republic valuation estimated at least at EUR 1.5bn

Multiple valuation of Trade Republic		
	Current customers (in m)	2021e Sales (EURm)
TR value (WRe)	1.0	151.2
Applied multiple	1500x	10.0x
<b>Fair value suggestion</b>	<b>1500.00</b>	<b>1512.00</b>

Source: Warburg Research

- A current **customer multiple of 1500x is applied** on an estimated current customer base of roughly 1m at Trade Republic, pointing to a **total valuation of EUR 1.5bn**. The current number of 1m customers is derived from an estimated 0.45m as of September 2021, supplemented by a current run rate of 75k additional customers per month.
- We regard a multiple of 1500x on the customer base as a fair value, as we assume that the revenue per customer is slightly lower compared to the German peers but relatively close. Considering the strong customer growth rate, a premium to this value would presumably be fair, but due to the low visibility we stick to the above value.
- For 2021e sales, we have applied a rather high multiple of 10x, reflecting the strong growth profile. Even though visibility is low for this KPI as well, Trade Republic's growth profile should exceed most of the aforementioned companies. Therefore, we have applied a multiple at the upper end of the mentioned range.

Even though visibility is extremely low, we believe Trade Republic should be valued at least at EUR 1.5bn. Based on the indications we have gathered, we believe that the **number of customers could be underestimated**, but we remain cautious for the time being. Further customer growth momentum could come from an integration of crypto currency trading, which is assumed to follow soon.

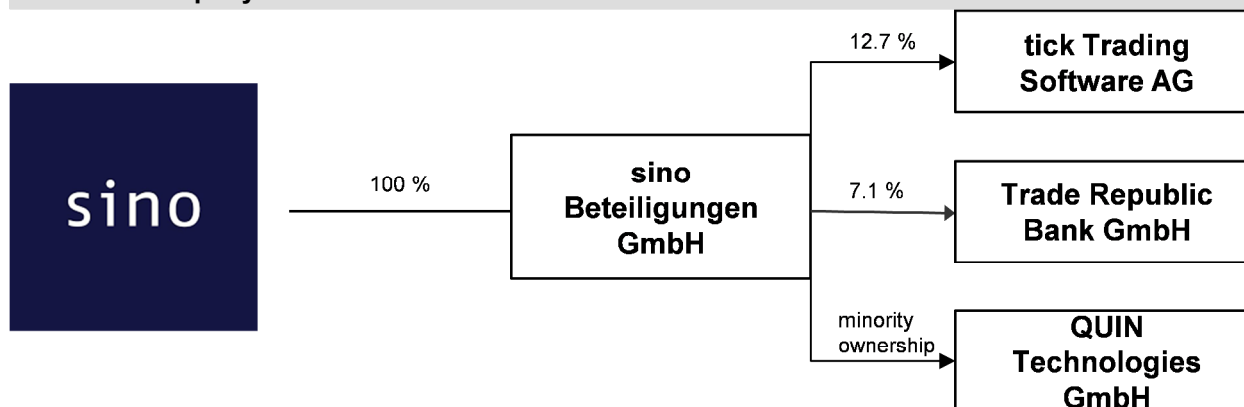
However, based on our assumptions and the remaining efficient stake of 7.1% in Trade Republic, the value contribution for sino shareholders should be EUR 106.5m. We deduct EUR 9m, which is the current book value of the Trade Republic stake in sino's balance sheet, and end up with a value of EUR 97.5m, which translates to EUR 41.71 per share.

## Company Background

### Business overview

sino AG is a high-end brokerage company that is the only online broker in Germany exclusively specialising on providing a platform and trading tools for heavy traders. Founded in 1998, sino AG has more than 20 years of experience in the German brokerage market and processed over 1m orders for 345 customers in the fiscal year 2019-2020. In 2020, sino AG generated revenues of EUR 8.5m (+82% yoy) and EBIT of EUR 1.3m (EBIT margin 15.8%). EBT was significantly higher at EUR 14.6m due to the favourable development of Trade Republic and the sale of a stake in the company.

#### Sino AG: Company structure



Source: Warburg Research

### Company structure

sino AG's operating, financing and investing activities to facilitate the settlement of its customers' securities transactions are exercised directly through sino AG. The company, headquartered in Düsseldorf, manages its equity investments in **tick Trading Software AG**, **Trade Republic Bank GmbH** and **QUIN Technologies GmbH** through **sino Beteiligungen GmbH**, which is the sole business purpose of its wholly owned subsidiary.

Founded in 2002 by CEO Ingo Hillen, **tick Trading Software AG** develops software solutions in the financial services sector that connect clients to major stock exchanges worldwide via its own trading platform. The company provides tailor-made solutions for the development and implementation of its clients' trading infrastructure. Its trading system also merges order flows from multiple trading applications into a single, unified order pool. Listed on the Düsseldorf Stock Exchange, sino AG currently holds 12.7% of the company's shares, having almost halved its stake in 2017 and selling 12.4% of the shares in tick Trading Software AG for EUR 2.6m.

sino AG invested in **Trade Republic Bank GmbH** in 2017 and currently holds 7.1% of the shares. Both the CEO and the member of the Board of Directors of sino AG Ingo Hillen and Karsten Müller worked at Trade Republic Bank GmbH from 2018 to 2020. Founded in 2015, Trade Republic Bank GmbH is Europe's first online and commission-free broker that offers its customers to trade listed securities, ETFs and derivatives via its user-friendly mobile app.

In October 2020, sino AG acquired a minority stake in the fintech start-up **QUIN Technologies GmbH**, which operates as getquin, and was the lead investor in the seed round. Through its mobile app, which has been in operation since June 2020, the company enables its customers to create their own ETF portfolios and supports its customers in finding the best broker. However, getquin does not manage the accounts of its customers. The company's offer is aimed at all investors, but especially at young, inexperienced investors who want to familiarise themselves with the capital market

through ETF investments.

## Company history

<b>1998</b>	Ingo Hillen and Matthias Hocke found sino Wertpapierhandelsgesellschaft mbH on March 24
<b>1999</b>	sino Wertpapierhandelsgesellschaft mbH is licensed as an investment broker by the German Federal Banking Supervisory Office (BaFin)
<b>2000</b>	sino Wertpapierhandelsgesellschaft mbH changes its name to sino AG
<b>2001</b>	sino AG provides private customers with the possibility of short selling overnight
<b>2002</b>	The company plans improved concepts for cross-border trades with the American market and tests its sino x-trader_pro platform
<b>2003</b>	sino x-trader_pro enables users to trade EUREX futures
<b>2004</b>	Users of sino AG's platform can now trade stocks, options and certificates in direct trading
<b>2004</b>	IPO of 1.75m shares on the Düsseldorf Stock Exchange at EUR 7.4 per share
<b>2006</b>	The GRID was introduced in sino MX-PRO to facilitate futures trading
<b>2008</b>	Latest market news is added to the trading platform to improve efficiency for users
<b>2010</b>	sino AG's new alert module enables automated securities lending
<b>2016</b>	Founder Matthias Hocke leaves sino AG's Board of Directors and joins the Board of tick Trading Software AG; Mr. Hocke remains involved in the operating activities of sino AG as a consultant
<b>2016</b>	The trading monitor checks orders and monitors potential market manipulation and market abuse
<b>2017</b>	Customers are able to trade futures via sino AG's new TT® platform
<b>2017</b>	sino Beteiligungen GmbH acquires shares of Trade Republic Bank GmbH as a strategic investor
<b>2019</b>	Trade Republic Bank GmbH wins award for best Fintech of the year from finance blog Payment & Banking.

## Products & services

sino AG offers flexible and user-friendly trading tools, making the company a leading online broker for heavy traders in Germany with up to 50 orders per second and latencies in the lower single-digit millisecond range. Providing innovative functionalities and increasing automation options on a fast and stable state-of-the-art trading platform is sino AG's main objective. The company's two trading platforms are **sino MX-PRO** and **sino X2GO**.

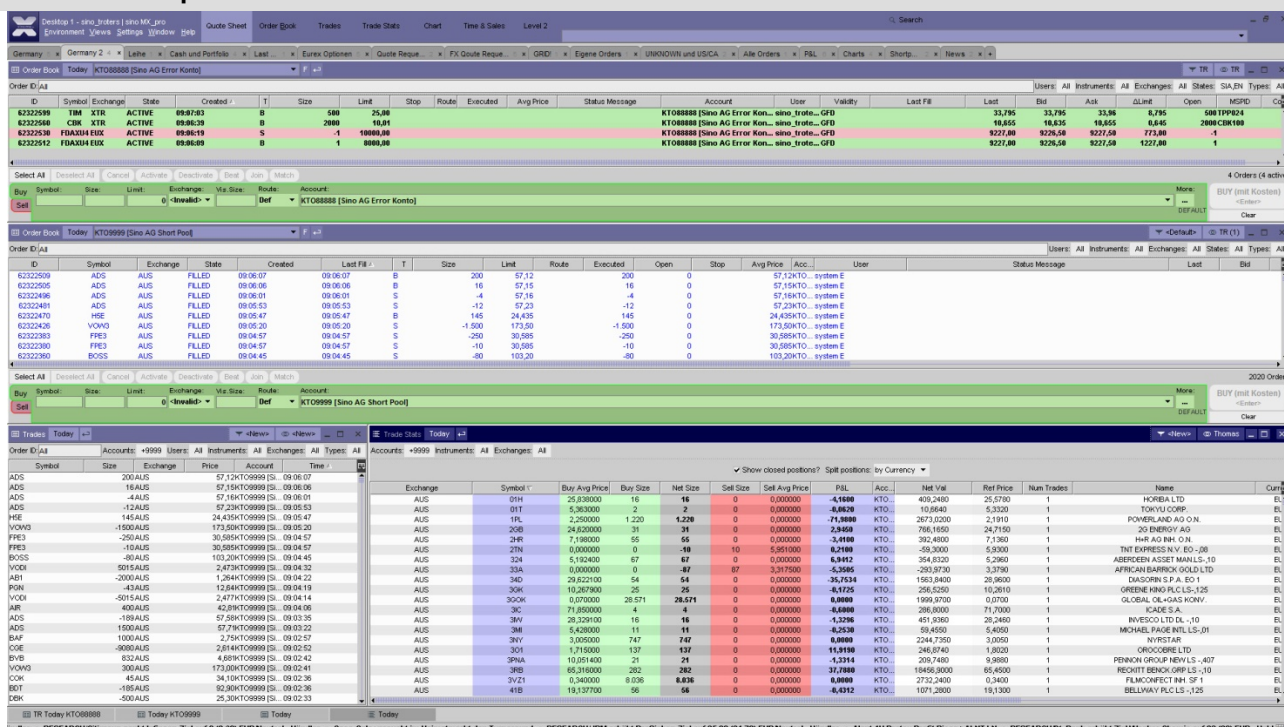
### sino MX-PRO

The sino MX-PRO trading tool with click trading and multi-exchange access enables its users to place orders quickly and securely. All customers can trade on 43 trading centres worldwide and 9 additional over-the-counter trading partners. Orders can also be initiated by telephone on other international stock exchanges. In addition to access to NASDAQ,

NYSE and Chi-X, sino's customers can also trade futures on EUREX and CME/CBOT. Moreover, the sino MX-PRO platform enables its users to trade FOREX and to trade in the pre- and post-market sessions in Germany, the USA and Canada. Furthermore, customers have the possibility to execute intraday and overnight short sales for almost all liquid equities.

sino AG continuously updates sino MX-PRO in cooperation with tick-TS AG and selected customers of sino AG to meet new legal requirements, but also to make adjustments to the application and design. During this process, numerous customer requests regarding the frontend have been implemented to increase the efficiency of the platform and improve usability. In the quote sheet, users can, among other things, create individual watch lists with push quotes and display their own orders. The order screen of the sino MX-PRO allows users to conveniently trade on several exchanges at the same time. Orders can be placed, changed or deleted within seconds and the order entry lines are freely configurable to increase efficiency. In addition to viewing a detailed order history, users can sort trades and orders according to various criteria.

## sino MX-PRO excerpt



The screenshot displays the sino MX-PRO trading platform interface. It includes several key sections:

- Order Book:** Shows a list of orders with columns for Symbol, Exchange, State, Created, T, Size, Limit, Stop, Route, Executed, Avg Price, Status Message, and Validity. It lists orders for various symbols like TIB, XTR, and FBA.
- Order Entry:** A section for entering new orders, including fields for Buy/Sell, Symbol, Size, Limit, Exchange, Via, Size, Route, and Account.
- Trades:** A section showing executed trades with columns for Symbol, Size, Exchange, Price, Account, and Time.
- Open Orders:** A detailed list of open orders with columns for Symbol, Size, Exchange, Price, Account, Time, and various status indicators.

Source: Warburg Research

## sino X2Go

sino X2GO is the app for the sino MX-PRO and was developed to transfer the concept of the computer platform to mobile devices. Due to the increasing use of smartphones and tablets worldwide, the demand for an app solution has increased, also for heavy traders. The app gives the users the ability to react faster and more flexibly to market-influencing news. sino X2GO is used as part of a trading account for the sino MX-PRO and is available in the common app stores. Via the app, users can access their order books, positions and order entries. All trades initiated in the sino X2GO app can be viewed, modified and deleted via sino MX-PRO. Customers can also view all relevant market data.

## sino MX-PRO features

The **GRID** is an add-on module of the sino MX-PRO trading platform and is directly integrated into the software. Different market situations are characterised by colour

intensity to provide a better overview in dynamic moments. Orders and limit orders can be set, changed and deleted directly from the chart. Since the market history is more intuitively accessible through the graphical representation, The GRID enables heavy traders to trade EUREX futures within seconds. The control panel has evolved over the last few years so that neither speed nor precision can be surpassed when using The GRID over a keyboard. The connection via the new high-speed interface ensures unsurpassed speed in order routing. The control panel's portfolio view displays profit and loss for different accounts, including unrealised profit and loss. Moreover, the control panel enables users to close positions, cancel orders or configure new orders.

### The GRID: Graphical representation and control panel



Source: Company data

sino MX-PRO customers can optimise futures trading with the **TT@** platform from Trading Technologies Inc. The MD Trader® and the "Depth of Market Ladder" enable faster and easier order entry, as a quote ladder displays quotes and positions next to each other and enables one-click trading. Order forms not available on EUREX, such as Iceberg orders, Buy-Stop-Market orders or Bracket Orders, can be executed via TT@. With the app from Trading Technologies, users are able to track orders at any time and full synchronisation between the app and desktop facilitates trading. With the latest version of Trading Technologies, the classic X-Trader, customers can build individual trading platforms the way they need.

### HSBC Trinkaus as cooperation partner

Through sino's partnership with HSBC Trinkaus, heavy traders can access the network of one of the largest securities clearing houses in Germany, which is accepted as counterparty by virtually all market participants due to its AA rating. Therefore, sino's customers benefit from HSBC's immediate access to a large number of securities. On the basis of a cooperation agreement since the very beginning of sino's operations in 1998, the securities processing of orders from sino customers is handled exclusively by HSBC Trinkaus. The bank manages the customer's cash and securities accounts and grants access to its international trading structures. While HSBC benefits from the trading commission and the significant order flow from sino's heavy traders, sino receives retrocessions from the executed trades of its customers.

## Management

### Board of Directors



#### **Ingo Hillen (Chief Executive Officer)**

Ingo Hillen founded sino AG in 1998 and has served as Chief Executive Officer ever since. After starting his career at Deutsche Bank and founding sino AG, Mr. Hillen founded the trading software company tick Trading Software AG, which develops software solutions in the financial services sector, such as trading platforms. Since the foundation of tick TS, he has served as Vice Chairman of the Supervisory Board. From 2018 to 2020, Mr. Hillen was Managing Director of Trade Republic Bank GmbH.



#### **Karsten Müller (Member of the Board of Directors)**

Karsten Müller was appointed to the Board of Directors in 2020. He has an educational background in law and completed his studies in Düsseldorf in 2001. After working as a lawyer for Schneider Rechtsanwälte, he joined sino AG as in-house lawyer in 2005. In addition to his position at sino AG, Mr. Müller has been working with Mr. Hillen at Trade Republic Bank GmbH since 2018 and has been Managing Director since then.

### Supervisory Board

#### **Dr. Marcus Krumbholz (Chairman of the Supervisory Board)**

Dr. Marcus Krumbholz was appointed Chairman of the Supervisory Board in 2020. He works as an auditor and tax consultant in Erkrath.

#### **Götz Röhr (Member of the Supervisory Board)**

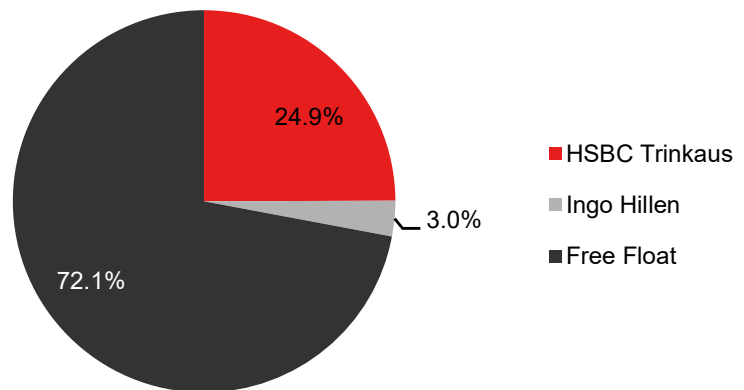
Götz Röhr has been a member of the Supervisory Board of sino AG since 2017. He has worked for HSBC Trinkaus & Burkhardt AG for more than 20 years and is currently Managing Director in the HSBC Transaction Services division, having previously served as Head of Banks and Broker Dealers and Head of Product Management and Services. Since 2017, Mr. Röhr has also been a member of the Supervisory Board of tick Trading Software AG.

#### **Stefan Middelhoff (Member of the Supervisory Board)**

Stefan Middelhoff was appointed as a member of the Supervisory Board in 2020. From 2001 to 2005, Mr. Middelhoff worked for sino AG before becoming an independent day trader.

## Shareholder structure

The company's shares have been listed and traded on the Prime Market segment of the Düsseldorf Stock Exchange since 2004. HSBC Trinkaus owns 24.9% of the shares and CEO and founder Ingo Hillen holds around 3% of the shares. The remaining 72.1% are in free float.

**sino AG: Shareholder structure**

Source: Company data, Warburg Research

Valuation	2016/17	2017/18	2018/19	2019/20	2020/21e	2021/22e	2022/23e
Price / Book	1.9 x	1.2 x	2.2 x	1.2 x	3.7 x	3.6 x	3.4 x
Book value per share ex intangibles	2.30	2.63	1.72	6.83	13.85	14.34	14.84
EV / Sales	2.0 x	1.6 x	2.1 x	2.4 x	8.6 x	15.5 x	15.1 x
EV / EBITDA	n.a.	n.a.	n.a.	12.4 x	24.4 x	57.5 x	56.1 x
EV / EBIT	n.a.	n.a.	n.a.	15.0 x	27.6 x	67.5 x	65.9 x
EV / EBIT adj.*	n.a.	n.a.	n.a.	15.0 x	27.6 x	67.5 x	65.9 x
P / FCF	n.a.	n.a.	n.a.	2.6 x	6.1 x	33.5 x	85.4 x
P / E	4.9 x	n.a.	n.a.	1.5 x	7.3 x	95.4 x	95.4 x
P / E adj.*	4.9 x	n.a.	n.a.	1.5 x	7.3 x	95.4 x	95.4 x
Dividend Yield	2.1 %	n.a.	15.0 %	33.7 %	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	-3.9 %	-11.7 %	-22.6 %	4.5 %	3.0 %	1.2 %	1.2 %
*Adjustments made for: -							

## Consolidated profit & loss

In EUR m	2016/17	2017/18	2018/19	2019/20	2020/21e	2021/22e	2022/23e
<b>Sales</b>	<b>5.0</b>	<b>5.3</b>	<b>4.7</b>	<b>8.5</b>	<b>11.7</b>	<b>6.3</b>	<b>6.3</b>
Change Sales yoy	6.8 %	5.8 %	-11.1 %	82.0 %	37.4 %	-46.4 %	1.5 %
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Own work capitalised	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Sales</b>	<b>5.0</b>	<b>5.3</b>	<b>4.7</b>	<b>8.5</b>	<b>11.7</b>	<b>6.3</b>	<b>6.3</b>
Material expenses	0.0	0.0	0.2	0.0	0.0	0.0	0.0
<b>Gross profit</b>	<b>5.0</b>	<b>5.3</b>	<b>4.5</b>	<b>8.5</b>	<b>11.7</b>	<b>6.3</b>	<b>6.3</b>
<b>Gross profit margin</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>95.8 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
Personnel expenses	1.8	2.6	2.9	2.7	2.8	2.1	2.1
Other operating income	0.5	0.5	0.5	0.3	0.5	0.5	0.5
Other operating expenses	4.0	4.6	5.1	4.5	5.3	3.0	3.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBITDA</b>	<b>-0.3</b>	<b>-1.4</b>	<b>-3.1</b>	<b>1.6</b>	<b>4.1</b>	<b>1.7</b>	<b>1.7</b>
<b>Margin</b>	<b>-6.9 %</b>	<b>-26.6 %</b>	<b>-66.6 %</b>	<b>19.2 %</b>	<b>35.3 %</b>	<b>27.0 %</b>	<b>26.9 %</b>
Depreciation of fixed assets	0.2	0.3	0.4	0.3	0.5	0.3	0.3
<b>EBITA</b>	<b>-0.5</b>	<b>-1.7</b>	<b>-3.5</b>	<b>1.3</b>	<b>3.7</b>	<b>1.4</b>	<b>1.5</b>
Amortisation of intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBIT</b>	<b>-0.5</b>	<b>-1.7</b>	<b>-3.5</b>	<b>1.3</b>	<b>3.7</b>	<b>1.4</b>	<b>1.5</b>
<b>Margin</b>	<b>-10.4 %</b>	<b>-31.6 %</b>	<b>-74.3 %</b>	<b>15.8 %</b>	<b>31.3 %</b>	<b>23.0 %</b>	<b>22.9 %</b>
<b>EBIT adj.</b>	<b>-0.5</b>	<b>-1.7</b>	<b>-3.5</b>	<b>1.3</b>	<b>3.7</b>	<b>1.4</b>	<b>1.5</b>
Interest income	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other financial income (loss)	3.3	0.6	1.2	13.3	14.0	0.5	0.5
<b>EBT</b>	<b>2.3</b>	<b>-1.4</b>	<b>-2.5</b>	<b>14.6</b>	<b>17.5</b>	<b>1.8</b>	<b>1.8</b>
<b>Margin</b>	<b>46.3 %</b>	<b>-26.8 %</b>	<b>-53.1 %</b>	<b>172.1 %</b>	<b>149.9 %</b>	<b>28.6 %</b>	<b>28.4 %</b>
Total taxes	0.1	-0.4	-0.9	0.7	1.1	0.5	0.5
<b>Net income from continuing operations</b>	<b>2.2</b>	<b>-1.0</b>	<b>-1.6</b>	<b>13.9</b>	<b>16.4</b>	<b>1.3</b>	<b>1.3</b>
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income before minorities</b>	<b>2.2</b>	<b>-1.0</b>	<b>-1.6</b>	<b>13.9</b>	<b>16.4</b>	<b>1.3</b>	<b>1.3</b>
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income</b>	<b>2.2</b>	<b>-1.0</b>	<b>-1.6</b>	<b>13.9</b>	<b>16.4</b>	<b>1.3</b>	<b>1.3</b>
<b>Margin</b>	<b>45.2 %</b>	<b>-18.5 %</b>	<b>-34.7 %</b>	<b>163.6 %</b>	<b>140.5 %</b>	<b>20.0 %</b>	<b>19.9 %</b>
Number of shares, average	2.3	2.3	2.3	2.3	2.3	2.3	2.3
<b>EPS</b>	<b>0.96</b>	<b>-0.42</b>	<b>-0.69</b>	<b>5.95</b>	<b>7.02</b>	<b>0.54</b>	<b>0.54</b>
EPS adj.	0.96	-0.42	-0.69	5.95	7.02	0.54	0.54

\*Adjustments made for:

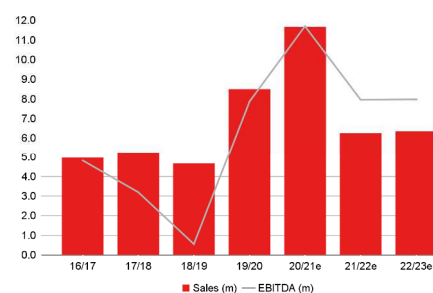
**Guidance: Sales between EUR 10.5m and 13.5m and net income between EUR 12.5m and 14.9m**

## Financial Ratios

	2016/17	2017/18	2018/19	2019/20	2020/21e	2021/22e	2022/23e
Total Operating Costs / Sales	106.9 %	126.6 %	166.6 %	80.8 %	64.7 %	73.0 %	73.1 %
Operating Leverage	n.a.	38.4 x	-9.8 x	n.a.	4.6 x	1.3 x	0.7 x
EBITDA / Interest expenses	n.m.	n.m.	n.m.	331.7 x	n.a.	n.a.	n.a.
Tax rate (EBT)	2.5 %	31.0 %	34.7 %	4.9 %	6.3 %	30.0 %	30.0 %
Dividend Payout Ratio	10.4 %	0.0 %	n.m.	49.1 %	0.0 %	0.0 %	0.0 %
Sales per Employee	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

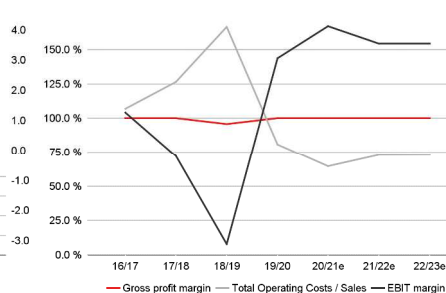
### Sales, EBITDA

in EUR m

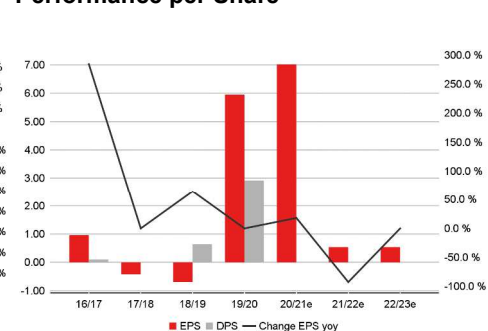


### Operating Performance

in %



### Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

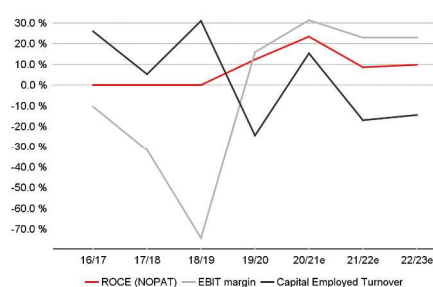
## Consolidated balance sheet

In EUR m	2016/17	2017/18	2018/19	2019/20	2020/21e	2021/22e	2022/23e
<b>Assets</b>							
Goodwill and other intangible assets	0.3	0.7	0.5	0.3	0.3	0.3	0.3
thereof other intangible assets	0.2	0.5	0.5	0.3	0.3	0.3	0.3
thereof Goodwill	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Property, plant and equipment	0.3	0.4	0.3	0.2	-0.1	-0.3	-0.4
Financial assets	0.6	0.6	2.5	9.4	9.3	9.3	9.2
Other long-term assets	0.4	0.3	0.3	1.3	1.3	1.3	1.3
<b>Fixed assets</b>	<b>1.6</b>	<b>2.0</b>	<b>3.6</b>	<b>11.2</b>	<b>10.8</b>	<b>10.6</b>	<b>10.4</b>
Inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts receivable	4.6	5.4	1.9	7.7	4.8	2.6	2.6
Liquid assets	0.7	0.3	0.0	0.0	19.7	23.3	24.7
Other short-term assets	0.1	0.8	0.1	0.1	0.1	0.1	0.1
<b>Current assets</b>	<b>5.4</b>	<b>6.4</b>	<b>2.0</b>	<b>7.9</b>	<b>24.6</b>	<b>26.0</b>	<b>27.4</b>
<b>Total Assets</b>	<b>7.0</b>	<b>8.4</b>	<b>5.6</b>	<b>19.1</b>	<b>35.4</b>	<b>36.6</b>	<b>37.8</b>
<b>Liabilities and shareholders' equity</b>							
Subscribed capital	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Capital reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retained earnings	0.2	0.2	0.2	1.4	17.8	19.0	20.3
Other equity components	3.1	4.2	1.9	12.5	12.5	12.4	12.3
Shareholders' equity	5.7	6.8	4.5	16.3	32.7	33.8	35.0
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total equity</b>	<b>5.7</b>	<b>6.8</b>	<b>4.5</b>	<b>16.3</b>	<b>32.7</b>	<b>33.8</b>	<b>35.0</b>
Provisions	0.8	0.7	0.6	1.5	1.5	1.5	1.5
thereof provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilities (total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
thereof short-term financial liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts payable	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities	0.5	0.8	0.5	1.3	1.3	1.3	1.3
<b>Liabilities</b>	<b>1.3</b>	<b>1.5</b>	<b>1.1</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>
<b>Total liabilities and shareholders' equity</b>	<b>7.0</b>	<b>8.4</b>	<b>5.6</b>	<b>19.1</b>	<b>35.4</b>	<b>36.6</b>	<b>37.8</b>

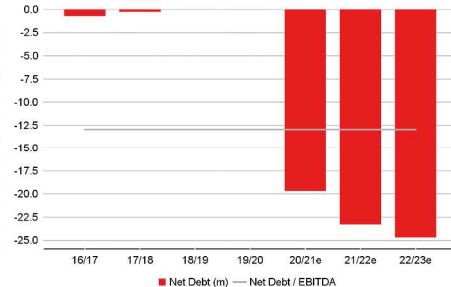
## Financial Ratios

	2016/17	2017/18	2018/19	2019/20	2020/21e	2021/22e	2022/23e
<b>Efficiency of Capital Employment</b>							
Operating Assets Turnover	1.0 x	0.9 x	2.1 x	1.1 x	2.5 x	2.7 x	2.9 x
Capital Employed Turnover	1.0 x	0.8 x	1.0 x	0.5 x	0.9 x	0.6 x	0.6 x
ROA	136.8 %	-47.8 %	-45.2 %	124.2 %	152.1 %	11.8 %	12.1 %
<b>Return on Capital</b>							
ROCE (NOPAT)	n.a.	n.a.	n.a.	12.3 %	23.4 %	8.5 %	9.7 %
ROE	46.2 %	-15.5 %	-28.7 %	134.0 %	67.0 %	3.8 %	3.7 %
Adj. ROE	46.2 %	-15.5 %	-28.7 %	134.0 %	67.0 %	3.8 %	3.7 %
<b>Balance sheet quality</b>							
Net Debt	-0.7	-0.3	0.0	0.0	-19.7	-23.3	-24.7
Net Financial Debt	-0.7	-0.3	0.0	0.0	-19.7	-23.3	-24.7
Net Gearing	-12.7 %	-3.8 %	-0.2 %	-0.1 %	-60.2 %	-68.8 %	-70.5 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Book Value / Share	2.4	2.9	1.9	7.0	14.0	14.5	15.0
Book value per share ex intangibles	2.3	2.6	1.7	6.8	13.9	14.3	14.8

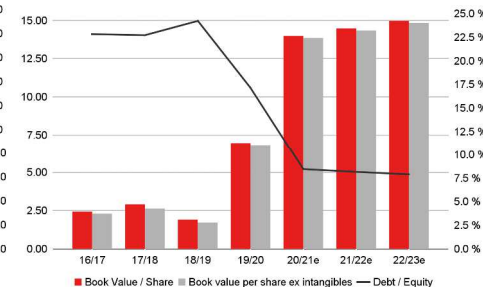
### ROCE Development



### Net debt in EUR m



### Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

## Consolidated cash flow statement

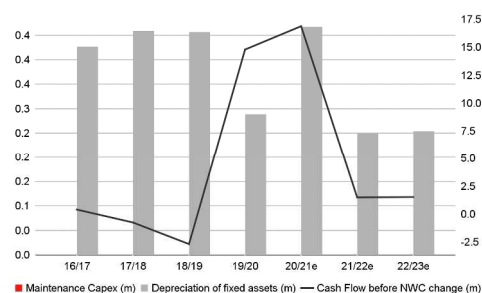
In EUR m	2016/17	2017/18	2018/19	2019/20	2020/21e	2021/22e	2022/23e
Net income	2.2	-1.0	-1.6	13.9	16.4	1.3	1.3
Depreciation of fixed assets	0.4	0.5	0.5	0.3	0.5	0.3	0.3
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase/decrease in long-term provisions	0.1	-0.2	0.2	0.6	0.0	0.0	0.0
Other non-cash income and expenses	-2.4	-0.1	-1.7	0.0	0.0	0.0	0.0
<b>Cash Flow before NWC change</b>	<b>0.4</b>	<b>-0.8</b>	<b>-2.7</b>	<b>14.8</b>	<b>16.9</b>	<b>1.5</b>	<b>1.5</b>
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase / decrease in accounts receivable	-0.2	0.2	0.4	-0.1	2.9	2.2	0.0
Increase / decrease in accounts payable	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Increase / decrease in other working capital positions	-0.5	0.4	-0.1	-6.9	0.0	0.0	0.0
Increase / decrease in working capital (total)	-0.8	0.6	0.7	-6.9	2.9	2.2	0.0
<b>Net cash provided by operating activities [1]</b>	<b>-0.4</b>	<b>-0.1</b>	<b>-2.0</b>	<b>7.9</b>	<b>19.8</b>	<b>3.7</b>	<b>1.5</b>
Investments in intangible assets	-0.1	-0.5	-0.3	0.0	0.0	0.0	0.0
Investments in property, plant and equipment	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
Payments for acquisitions	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	2.6	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net cash provided by investing activities [2]</b>	<b>2.4</b>	<b>-0.7</b>	<b>-0.4</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>
Change in financial liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividends paid	-0.6	-0.2	0.0	-2.1	0.0	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	2.3	2.5	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net cash provided by financing activities [3]</b>	<b>-0.6</b>	<b>2.1</b>	<b>2.5</b>	<b>-2.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Change in liquid funds [1]+[2]+[3]</b>	<b>1.4</b>	<b>1.3</b>	<b>0.1</b>	<b>5.7</b>	<b>19.7</b>	<b>3.6</b>	<b>1.4</b>
Effects of exchange-rate changes on cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalent at end of period	1.4	1.3	0.1	6.4	19.7	23.3	24.7

## Financial Ratios

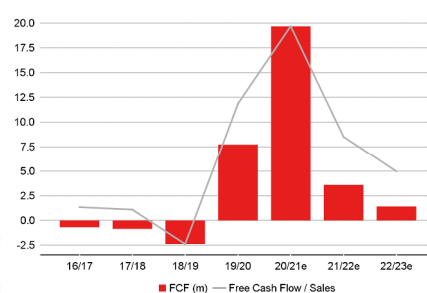
	2016/17	2017/18	2018/19	2019/20	2020/21e	2021/22e	2022/23e
<b>Cash Flow</b>							
FCF	-0.7	-0.9	-2.4	7.7	19.7	3.6	1.4
Free Cash Flow / Sales	-13.7 %	-16.2 %	-50.8 %	90.9 %	168.5 %	57.5 %	22.2 %
Free Cash Flow Potential	-0.4	-1.0	-2.2	0.9	3.0	1.2	1.2
Free Cash Flow / Net Profit	-30.4 %	87.8 %	146.3 %	55.5 %	119.9 %	287.3 %	111.7 %
Interest Received / Avg. Cash	0.5 %	0.1 %	0.5 %	33.3 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Management of Funds</b>							
Investment ratio	5.9 %	13.7 %	8.6 %	1.2 %	0.9 %	1.7 %	1.7 %
Maint. Capex / Sales	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Capex / Dep	168.7 %	274.0 %	111.6 %	36.8 %	22.7 %	42.3 %	41.7 %
Avg. Working Capital / Sales	77.3 %	94.6 %	77.8 %	56.5 %	53.5 %	59.1 %	41.0 %
Trade Debtors / Trade Creditors	32575.2 %	34370.0 %	103903.5 %	22554.0 %	n.a.	n.a.	n.a.
Inventory Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Receivables collection period (days)	338	373	149	332	150	152	149
Payables payment period (days)	n.a.	n.a.	3	n.a.	n.a.	n.a.	n.a.
Cash conversion cycle (Days)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

## CAPEX and Cash Flow

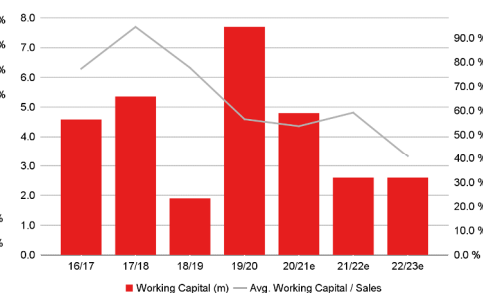
in EUR m



## Free Cash Flow Generation



## Working Capital



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

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-B-	<b>Buy:</b>	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	<b>Hold:</b>	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
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“-“	<b>Rating suspended:</b>	The available information currently does not permit an evaluation of the company.

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Rating	Number of stocks	% of Universe
Buy	136	65
Hold	62	30
Sell	5	2
Rating suspended	5	2
<b>Total</b>	<b>208</b>	<b>100</b>

## WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	37	79
Hold	7	15
Sell	0	0
Rating suspended	3	6
<b>Total</b>	<b>47</b>	<b>100</b>

## PRICE AND RATING HISTORY SINO AS OF 20.04.2021



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

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