Baader Europe

Opinion	Buy
Upside (%)	80.5
Price (€)	27.3
Target Price (€)	49.3
Bloomberg Code	XTP GY
Market Cap (€M)	63.8
Enterprise Value (€M)	-59.5
Momentum	STRONG

Fundamental Strength	0/10
Sustainability	3/10

Analyst : Grégoire Hermann

EquitySales@baaderbank.de

Frankfurt	+49 69 1388 1357
London	+44 20 7054 7100
Munich	+49 89 5150 1850
Zurich	+41 43 388 9200
New York	+1 212 935 5150



sino AG

Trade Republic at a discount

PROS

- sino AG's main advantage is the exposure offered to the non-listed outstanding unicorn Trade Republic at a discount
- sino's upcoming partnership with Baader Bank as custodian partner will unlock the firm's potential of innovation, including in crypto
- Management circumvented sino's niche market with lucrative holdings in complementary businesses

CONS

- sino AG's core business remains very much bound to markets' volatility
- Much of the surge in the firm's valuation has been triggered by its 2.3% stake in Trade Republic
- sino's growth potential is limited to expanding its product offering (e.g. cryptos) or a management's masterstroke via an investment in another start-up

KEY DATA	09/20A	09/21A	09/22E	09/23E	09/24E
Adjusted P/E (x)	4.62	0.46	2.58	171	115
Dividend yield (%)	3.24	204	0.37	0.37	0.37
EV/EBITDA(R) (x)	-20.2	-84.5	ns	ns	ns
Adjusted EPS (€)	5.94	59.6	10.6	0.16	0.24
Growth in EPS (%)	n/a	904	-82.2	-98.5	48.4
Dividend (€)	0.89	56.0	0.10	0.10	0.10
Sales (€M)	8.50	11.1	7.87	7.25	8.00
EBIT margin (%)	15.6	-20.2	4.57	2.80	5.14
Attributable net profit (€M)	13.9	139	24.8	0.37	0.55
ROE (after tax) (%)	134	169	28.9	1.64	2.27
Gearing (%)	-0.05	-44.0	-321	-47.9	-44.4

sino AG (Buy)

Detailed financials at the end of this report

Detailed infancials at the end of this report					
Key Ratios		09/21A	09/22E	09/23E	09/24E
Adjusted P/E	х	0.46	2.58	171	115
EV/EBITDA	х	-84.5	ns	ns	ns
P/Book	х	0.43	2.88	2.73	2.52
Dividend yield	%	204	0.37	0.37	0.37
Free Cash Flow Yield	%	-67.7	17.7	0.30	0.48
ROE (after tax)	%	169	28.9	1.64	2.27
ROCE	%	284	14.3	3.66	7.01
Net debt/EBITDA	x	-50.7	-51.3	-83.2	-33.6
Consolidated P&L		09/21A	09/22E	09/23E	09/24E
Sales	€M	11.1	7.87	7.25	8.00
EBITDA	€M	2.59	0.22	0.13	0.34
Underlying operating profit	€M	2.34	0.00	-0.07	0.11
Operating profit (EBIT)	€M	-2.24	0.36	0.20	0.41
Net financial expenses	€M	0.00	0.01	0.00	0.00
Pre-tax profit before exceptional items	€M	-2.23	0.37	0.21	0.42
Corporate tax	€M	-3.59	-0.25	-0.05	-0.10
Attributable net profit	€M	139	24.8	0.37	0.55
Adjusted attributable net profit	€M	139	24.8	0.37	0.55
Cashflow Statement		09/21A	09/22E	09/23E	09/24E
Total operating cash flows	€M	-43.1	11.5	0.32	0.45
Capital expenditure	€M	-0.36	-0.24	-0.13	-0.15
Total investment flows	€M	149	-0.24	-0.13	-0.15
Dividends (parent company)	€M	-6.83	-131	-0.23	-0.23
New shareholders' equity	€M	0.00	0.00	0.00	0.00
Total financial flows	€M	-6.83	-131	-0.23	-0.23
Change in net debt position	€M	98.9	-120	-0.04	0.07
Free cash flow (pre div.)	€M	-43.4	11.3	0.19	0.31

Balance Sheet		09/21A	09/22E	09/23E	09/24E
Goodwill	€M				
Total intangible	€M	0.28	0.27	0.27	0.28
Tangible fixed assets	€M	0.36	0.34	0.34	0.36
WCR	€M	3.71	3.71	3.71	3.71
Total assets (net of short term liabilities)	€M	22.2	15.0	16.3	18.5
Ordinary shareholders' equity (group share)	€M	149	22.1	23.4	25.3
Provisions for pensions	€M		0.00	0.00	0.00
Net debt / (cash)	€M	-131	-11.2	-11.2	-11.3
Total liabilities and shareholders' equity	€M	22.2	15.0	16.3	18.5
Per Share Data		09/21A	09/22E	09/23E	09/24E
Adjusted EPS (bfr gwill amort. & dil.)	€	59.6	10.6	0.16	0.24
Net dividend per share	€	56.0	0.10	0.10	0.10
Free cash flow per share	€	-18.6	4.82	0.08	0.13
Book value per share	€	63.7	9.47	10.0	10.8
Number of diluted shares (average)	Mio	2.34	2.34	2.34	2.34

Baader Europe powered by AlphaValue sino AG (Buy)

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Businesses & Trends

In a nutshell

sino AG is one of the historical investors of Germany's most successful unicorn: Trade Republic. By holding 2.3% (plus cash options) in Trade Republic, sino AG offers a publicly-listed exposure to the privately-held FinTech, at a discount.

We believe that this offers a very attractive arbitrage opportunity and an appealing risk-return arbitrage while Trade Republic's valuation, driving most of sino AG's share price, is highly insensitive to market turmoil.

What is sino AG?

Founded in 1998 by Matthias Hocke and the current CEO Ingo Hillen, sino AG is a pioneer of online trading for retailers and, more precisely, heavy traders.

The firm has implemented a very user-friendly and extremely reliable tool, meeting the expectations of individuals trading around the clock thanks to the software expertise of its supplier, tick Trading Software.

But sino AG has become much more than this. It has to be considered as a holding company, counting stakes in six companies in total: sino (100%), Trade Republic GmbH (2.3% plus options), Quin Technologies (11.13%), tick Trading Software AG (5.73%), Captiq GmbH (3.96%) and Sub Capitals GmbH (3%). Thus, we rank sino AG as a holding company for the purpose of its valuation.

sino AG's main argument is its stake in Trade Republic. While the German FinTech is valued at \in 5.0bn according to the latest transaction in June 2022 (\notin 4.5bn according to our methodology) and makes the most of sino AG's valuation, the probable upcoming liquidity events (fund raising or IPO) could have a substantial impact on sino's share price and cash at hand for further investments or extraordinary distributions to shareholders.

In fact, in May 2021, Trade Republic raised c. \in 700m, which gave the opportunity for sino to sell some of its shares and cash-in c. \in 131m. Following this, management decided to distribute an extraordinary dividend of \in 56 per share.

sino, the business that gave birth to the holding

sino is an online broker dedicated to heavy traders (understand retailers trading at high frequency and volumes). Its product targets a very niche segment of the online retail-brokerage industry: with 301 accounts and an average deposit of \in 1.2m, sino is the European leader of this market, but also one of the sole players specifically targeting this investor profile.

Most of sino's clients are based in Germany with a few exceptions in Austria, South Korea, and Switzerland.

Its star product, sino MX-PRO, which is fully provided by tick Trading Software, enables the user to tailor his trading desk fully with several charts, statistics, and overviews as well as one of the best resilience in the online brokerage market (99.999%) – meaning a very rare number of outages on the platform.

Such a remarkable technological performance has been permitted by advanced APIs hosted in multiple independent data centres.

As a result, not only is sino's trading tool highly user-friendly, but also it is able to process up to 50 orders per second and only records a latency range of a

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low single-digit millisecond, enabling traders to place their orders at the effective price they wish to.

In fact, the MX-PRO tool also enables the user to integrate add-ins, automate trading and encompasses several features such as a mobile version and the GRID (innovative tool for the visualisation of market situations).

Additionally, sino provides its customers with a personal account manager who is entitled to place trades on their behalf and support them with various kinds of advice.

With this whole package, customers can trade over 50 trading places, trade before and after trading hours, using various derivative products as well as placing short-sell trades.

Baader Bank to unlock value...

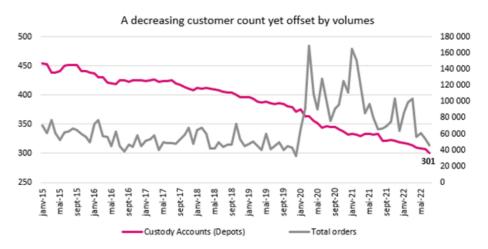
While HBSC Trinkaüs has been sino's provider of cash and deposit accounts for its customers over past years, the online broker is currently in the process of replacing the British bank with Baader Bank. We believe that this move is going to bring much more flexibility and unlock sino's potential for innovation.

In fact, various products such as crypto currencies, but also any customers not taxed in Germany, have been refused by HSBC to use sino, the bank, certainly, becoming conservative towards Know Your Customer (KYC) and crypto-asset risks.

HBSC's replacement by Baader Bank as a custodian is definitively aimed at unlocking growth prospects in this field, with a clear willingness from the German bank to be exposed to crypto assets. Also, sino says that c.10 customers from Middle East and other countries in Europe, initially denied by HSBC should then be authorised, each with a deposit ranging from \notin 500k to \notin 2m.

...while the number of accounts is worryingly shrinking

Furthermore, we believe that this partnership with Baader Bank is crucial for sino. Indeed, looking at the number of customers using the online broker, there is an urgent need to maintain trading volumes to compensate for the shrinking number of accounts.



So far, sino has been able to compensate for this shrinkage in customers by trading high volumes on the financial markets; however, volumes remain tied to

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the markets' health, which is volatile.

Nevertheless, sino states that most of the accounts progressively closing are those customers who have been inactive and do not materially impact the total volumes. As of now, sino estimates that c.80% of the current customer base is considered active.

Trade Republic the rising star, for a time only

From 12% to 2.3% plus options, sino AG's participation in the rising star of retail brokerage is being progressively wound down. These options are call options owned by sino AG's management that can be exercised until August 2029 and are considered to be very likely exercised, yielding a capital gain of \notin 4.9m after tax.

Initially, sino AG invested in Trade Republic as an "opportunity" as described by the firm's management who believed in its potential. However, sino AG has been diluted at every fund raising and, as it did not want to contribute its share of the required capital, it also had to sell its shares.

So far, as a holding company, this stake in Trade Republic has brought exposure to the wide retail market of online brokerage, complementary to sino's niche market of heavy retail traders. However, this participation is likely to be sold off at the next fundraising, certainly a Series-D or pre-IPO round.

Most of sino AG's valuation relies upon Trade Republic, which should bring quite some volatility on the stock as the FinTech engages in rounds of fundraising (or an IPO).

Trade Republic is considered to be one of the most promising retail brokers, offering customers to trade in stocks, ETFs, Cryptos, Derivatives but also Savings plans. Trade Republic's popular product is to offer customers to trade any stocks for €1.

On top of this, Germany is currently facing tensions in its pension system. To face the ageing-population issue, the government announced, amongst others, the incorporation of an equity pension fund to which Germany-based employees are contributing 18.6% of their gross salary and rising to 20% by 2025. Labour Minister Mr Hubertus Heil also announced the government's contribution of €10bn to be invested on the capital markets.

We believe that these efforts should support national firms as well as incentivise the population to invest money on the financial markets, which could be done through one of the local leaders: Trade Republic.

tick Trading Software AG, another segment of online brokerage

sino owns a 5.73% stake in tick Trading Software AG. The firm is specialised in providing software connecting to exchanges and processing orders; it is also a supplier to sino.

It works with professional traders such as those of HSBC and UniCredit.

The financial holdings, still very much at an early stage

The other stakes, Quin Technologies (11.13%), Captiq GmbH (3.96%) and Sub Capitals GmbH (3%) further enhance sino AG's exposure to online brokerage for retailers.

Quin Technologies is a social network in which everyone can comment on stock market movements. A social network very much like reddit.

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Sub Capitals is a Neo Investing platform. It uses artificial intelligence and machine learning in order to provide investment advice to private investors (retailers) and automate trades.

Industry trends and assumptions for growth

According to Statista, the number of users of online brokerage platform will grow at a 4% CAGR from 2021 to 2025 and revenues at a 5% CAGR over the same period.

Since 2018, these have more than doubled, triggered by improving technologies and the COVID-19 crisis, and enabling investors to invest their savings in the financial markets.

With unprecedented easy access to markets, the effect has been very strong, enabling incumbents as well as Neo Fintechs to boost their revenues and growth profiles. The question of sustainability of this industry remains an open one. Retail investments might only magnify cycles rather than provide continuous high volumes over cycles.

Our DCF valuation implies a c.8% decrease in commission income in FY 2022-23. In fact, H1 21 was outstandingly strong in terms of numbers of orders (770k), while H2 21, for which the number of orders has already been released (463k), was much lower. H1 22 slightly ramped up (531k orders), however, based upon the already available data, H2 22 should be drastically lower (we expect c.322k orders).

For FY 2023-24, we use very conservative forecasts with commission income growth of c.10%, pricing in a ramp-up in activity in the financial markets and traction from Baader's custody services bringing additional clients.

	Sector	09/21A	09/22E	09/23E	09/24E	Change	22E/21	Char 23E/2	
	300101	05/21A	03/22E	09/23E	05/24C	€M	of % total	€M	of % total
Total sales		11.1	7.87	7.25	8.00	-3+	100%	-1+	100%
Commission Income	Holding Companies	11.1	7.87	7.25	8.00	-3*	100%	-1*	100%
Other Operating Income	Holding Companies	0.00	0.00	0.00	0.00	0+	0%	0+	0%
Other		0.00	0.00	0.00	0.00	0+	0%	0+	0%

Divisional Breakdown Of Revenues

Key Exposures

Sales By Geography

	Revenues	Costs	Equity		
Dollar	0.0%	0.0%	0.0%	Europe	100.09
Emerging currencies	0.0%	0.0%	0.0%		
Long-term global warming	0.0%	0.0%	0.0%		

We address exposures (eg. how much of the turnover is exposed to the \$) rather than sensitivities (say, how much a 5% move in the \$ affects the bottom line). This is to make comparisons easier and provides useful tools when extracting relevant data.

Actually, the subject is rather complex on the ground. The default position is one of an investor managing in \in . An investor in \pounds will obviously not react to a \pounds based stock trading partly in \notin as would a \notin based investor. In addition, certain circumstances can prove difficult to unravel such as for eg. a \notin based investor confronted to a Swiss company reporting in \$ but with a quote in CHF... Sales exposure is probably straightforward but one has to be careful with deep cyclicals. Costs exposure is a bit less easy to determine (we do not allow for hedges as they can only be postponing the day of reckoning). How much of the equity is exposed to a given subject is rarely straightforward but can be quite telling In addition, subjects are frequently intertwined. A \$ exposure may encompass all revenues in \$ pegged currencies and an emerging currency exposure is likely to include \$ pegged

Exposure to global warming issues is frequently indirect and may require to stretch a bit imagination.

currencies as well.

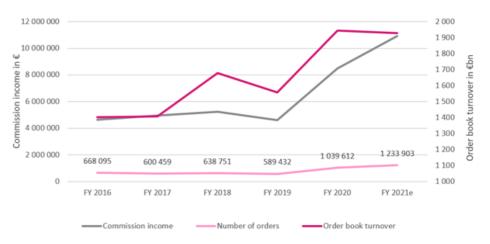
Baader Europe powered by AlphaValue sino AG (Buy)

Money Making

sino's money-making profile is divided into two pillars: that of sino's trading platform and that from its financial holdings.

The online trading platform

sino charges a percentage on orders. Hence, although there is a small, fixed fee in some cases, volumes matter most. While the number of accounts has been decreasing sharply since 2008, higher volumes largely compensate for these losses of customers.



Additionally, sino's main cost comes from its account managers. It is also one of the biggest firm's advantages, providing support to customers. The firm has been able to maintain a very stable number of account managers and we believe that it could sustain a ratio of 70 accounts per manager. The current level is c.43 accounts per manager. While the number of customers is going downwards, there is also a lever for accumulating new customers while keeping the same cost base.

The probable launch of the crypto trading functionality, which should come soon after Baader takes over HSBC's role as a custodian, is expected to raise traded volumes with a similar cost base.

Moreover, sino's management says that Baader's custody services should enable sino AG to sign 10 new customers from the Middle East and other countries in Europe with an average deposit ranging between \in 500k and \in 2m. With a similar cost base, this should bring strong traction to the firm's margins.

As such, we believe that sino will be able to maintain a decent cost:income ratio in the future.

The holding views

sino is not only a trading platform. It also accounts for the changes in value coming from its financial stakes.

The most lucrative, Trade Republic Bank GmbH, is yielding a strong stream of both cash (via sales of shares whenever the German FinTech raises money) and non-cash (via the revaluation of sino's shares).

Since sino AG holds less than 20% of Trade Republic, any source of income (whether share of profit, profit from the sale of shares and gains on the sale of shares) is accounted for by us below the EBIT line. It is crucial to distinguish

Baader Europe powered by AlphaValue sino AG (Buy)

such income from the firm's continuous business of sino software as Trade Republic's earnings are orders of magnitude above that of sino's core business. As at HY 2020/2021, the income from non-proportional capital increases of Trade Republic had yielded \in 1.8m, while the sale of shares had brought \in 14.2m. In comparison the commission income (\in 6.9m) was half that amount.

It is also key to bear in mind that sino is being diluted at every Trade Republic fundraising and that, despite the increased valuation of its shares in Trade Republic, it should no longer be able to count on this source of revenues after the next fundraising as sino AG now only holds 2.3% and some options, of Trade Republic, since it sold some of its shares in July 2021 and collected a €131m proceed (as announced on the company's website).

The other holdings remain less significant for now, although the sale of tick Trading Software shares (listed company) yielded €1.2m as at HY 2020/2021.

Trade Republic, being currently valued \in 5.0bn according to the latest transaction (\notin 4.5bn according to our methodology), the biggest question mark lies with how sino redeploys its gains on the disposal of its Trade Republic shares.

Divisional EBIT

	09/21A	09/22E	09/23E	09/24E	Change €M of	22E/21 f % total	Char 23E/2 €M of	
Total	-2.24	0.36	0.20	0.41	34	100%	0+	100%
Commission Income	-2.24	0.36	0.20	0.41	3+	100%	0*	100%
Other/cancellations								

Divisional EBIT margin

	09/21A	09/22E	09/23E	09/24E
Total	-20.2%	4.57%	2.80%	5.14%
Commission Income	-20.2%	4.57%	2.80%	5.14%

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Valuation

NAV

Trade Republic Bank GmbH: the last fundraising of Trade Republic occurred in June 2022, as an extended Series-C. The firm raised \in 250m on the basis of a valuation of \in 5.0bn. Hence, considering the sector's variation since then, we apply a c.10% discount on this price to estimate a \in 4.5bn valuation for Trade Republic. Note that, despite the correction seen on the financial markets of equivalent firms, the German FinTech has shown a strong resilience in its valuation.

We also provide another perspective to Trade Republic's valuation. In fact, there is quite an uncertainty with regards to its number of customers. While the firm's management stated "over 1m customers" in a presentation dated January 2022, rumours mentioned already 2m to 3m accounts by the end of 2021 according to a data aggregator which gathered the number of Trade Republic app downloads from September 2020 to August 2021. The source provided the same information for Robinhood which disclosed the number of accounts opened in the same time period enabling us to derive a proxy for a downloads conversion rate. With this, we derived an alternative valuation of Trade Republic at c. \in 3.9bn, using an industry P/Sales multiple of 6.12x applied to Trade Republic's estimated FY 2025 sales.

	DeGiro	Robinhood	Nordnet	Avanza		Average
Number of accounts	2,06	22,70	1,60	1,66		
Commision income (in €m)	340,00	1402,00	256,20	279,67		
Total revenue (in €m)	417,60	1815,00	340,46	309,79		
Average customer value	202,72	79,96	212,65	185,62		170,49
Market Cap (in €m)	1072,00	8050,00	3002,00	2682,21		
Price (in C)	9,75	9,14	12,04	16,78		
Price to Sales	2,57x	4,44x	8,82×	8,66x		6,12x
Figures in mittions						
lobinhood downloads Jan-Aug 21	15.7	Trade F	Republic estimated total n	umber of custo	1.26	
Monthly	1,9625					
Annually	23,55	Annua	I rate of new customer		0,38	
Actual number of new customers	10,00					YoY gr
Downloads to new customer rate	0.42		ited customers at FY 22		1,65	30,4
rade Republic downloads Sept-Dec 20	0.30148		ted customers at FY 23 ted customers at FY 24		2,03	23,3
					2,41	18,9
	0.07537					
Monthly	0,07537	Estima	ated customers at FY 25		2,80	
Monthly	0,07537				-,	
Ionthly			sted customers at FY 25 is from Germany's Pens		1,00	
fonthly nnually	0,90	Surplu		ion program	-,	
fonthly nnually stimated number of new customers in 2020	0,90	Surplu	s from Germany's Pens	ion program	1,00	
Aonthly ninually stimated number of new customers in 2020 rade Republic downloads Jan Aug 21	0,90 0,38 1,37844 1,67992	Surplu Total r	s from Germany's Pens	ion program	1,00	
rade regionic dominologis servicides 20 donthly Innually fistimated number of new customers in 2020 frade Republic downloads Jan-Aug 21 frade Republic downloads total donthly	0,90 0,38 1,37844 1,67992 0,172305	Surplu Total r Avg va	s from Germany's Pens number of customers at	ion program	1,00 3,80	
Nonthly Innually Estimated number of new customers in 2020 Trade Republic downloads Ian-Aug 21 Trade Republic downloads total	0,90 0,38 1,37844 1,67992	Surplu Total r Avg va	is from Germany's Pens number of customers at lue per customer (in €)	ion program	1,00 3,80 170,49	

One could very easily use its own assumptions and arbitrage different values for the average customer value (total income divided by number of customers) and download to conversion rate.



		Download-to-conversion rate						
	3962,75	0,25	0,30	0,35	0,42	0,50	0,60	0,70
	80,00	1605,38	1678,13	1750,88	1859,46	1969,13	2114,63	2260,13
ğ	100,00	2006,72	2097,66	2188,60	2324,33	2461,41	2643,29	2825,17
	130,00	2608,74	2726,96	2845,18	3021,63	3199,84	3436,28	3672,72
ge value customer	170,49	3421,26	3576,30	3731,34	3962,75	4196,46	4506,55	4816,63
age cust	185,00	3712,43	3880,67	4048,90	4300,01	4553,61	4890,09	5226,56
Jan Star	200,00	4013,44	4195,32	4377,19	4648,66	4922,83	5286,58	5650,34
4	215,00	4314,45	4509,97	4705,48	4997,31	5292,04	5683,07	6074,11

sino: we value sino's own operations using our DCF model, net from the impact of its multiple holdings (Trade Republic GmbH and others).

tick Trading Software AG: the company is listed, and the valuation used is the market's one.

The other stakes, being too small, are valued at best guess. Caution needs to be taken when considering stakes and investments in companies as these have been mentioned to be of note by management.

Peers

In our peers' panel, we include FlatexdeGiro, Swissquote, IG Group. We do not include Robinhood given the negative earnings.

DCF

Over the longer term, we expect growth to flatten materially, due to the very niche segment of sino, and the softening effect of cryptocurrency trading over time. We plan for 5% top-line growth and 8% EBITDA growth.

Valuation Summary

Benchmarks		Values (€)	Upside	Weight
DCF		53.9	97%	40%
NAV/SOTP per share		55.7	104%	40%
P/E	Peers	24.8	-9%	5%
EV/Ebitda	Peers	53.2	95%	5%
P/Book	Peers	22.0	-19%	5%
Dividend Yield	Peers	8.58	-69%	5%
Target Price		49.3	80%	



Calculate your Target Price Edit and modify weightings to match your valuation principles

Comparison based valuation

Computed on 18 month forecasts	P/E (x)	Ev/Ebitda (x)	P/Book (x)	Yield(%)
Peers ratios	9.96	6.05	2.21	1.17
sino AG's ratios	11.0	ns	2.73	0.37
Premium	0.00%	0.00%	0.00%	0.00%
Default comparison based valuation (€)	24.8	53.2	22.0	8.58
IG Group	ns	6.53	194	6.18
Swissquote Group Holding	8.37	4.93	1.76	2.32
flatexDEGIRO AG	11.8	6.34	2.79	n/a

sino AG (Buy)

DCF Valuation Per Share

WACC	%	8.36
PV of cashflow FY1-FY11	€M	1.14
FY11CF	€M	0.22
Normalised long-term growth"g"	%	2.00
Sustainability "g"	%	2.10
Terminal value	€M	3.53
PV terminal value	€M	1.58
PV terminal value in % of total value	%	58.2
Total PV	€M	2.72

6	Avg net debt (cash) at book value	€M	-11.2
4	Provisions	€M	4.04
2	Unrecognised actuarial losses (gains)	€M	0.00
C	Financial assets at market price	€M	116
C	Minorities interests (fair value)	€M	0.00
3	Equity value	€M	126
3	Number of shares	Mio	2.34
2	Implied equity value per share	€	53.9
2	Sustainability impact on DCF	%	0.02

Assessing The Cost Of Capital

Synthetic default risk free rate	%	3.50
Target equity risk premium	%	5.00
Tax advantage of debt finance (normalised)	%	30.0
Average debt maturity	Year	5
Sector asset beta	х	0.97
Debt beta	х	0.02
Market capitalisation	€M	63.3
Net debt (cash) at book value	€M	-11.2
Net debt (cash) at market value	€M	-11.2

10.0 3.60 3.85
) OF
1.05
17.7
21.6
7.76
2.52
3.36
3.36

DCF Calculation

		09/21A	09/22E	09/23E	09/24E	Growth	09/25E	09/32E
Sales	€M	11.1	7.87	7.25	8.00	5.00%	8.40	11.8
EBITDA	€M	2.59	0.22	0.13	0.34	8.00%	0.36	0.62
EBITDA Margin	%	23.3	2.78	1.86	4.20		4.32	5.26
Change in WCR	€M	-2.89	0.00	0.00	0.00	0.00%	0.00	0.00
Total operating cash flows (pre tax)	€M	-39.5	11.8	0.37	0.55		0.36	0.62
Corporate tax	€M	-3.59	-0.25	-0.05	-0.10	8.00%	-0.11	-0.19
Net tax shield	€M	0.00	0.00	0.00	0.00	8.00%	0.00	0.00
Capital expenditure	€M	-0.36	-0.24	-0.13	-0.15	5.00%	-0.15	-0.22
Capex/Sales	%	-3.22	-3.00	-1.83	-1.83		-1.83	-1.83
Pre financing costs FCF (for DCF purposes)	€M	-43.4	11.3	0.19	0.31		0.10	0.22
Various add backs (incl. R&D, etc.) for DCF purposes	€M							
Free cash flow adjusted	€M	-43.4	11.3	0.19	0.31		0.10	0.22
Discounted free cash flows	€M	-43.4	11.3	0.17	0.26		0.08	0.10
Invested capital	€	4.35	4.32	4.32	4.35		4.57	6.43

sino AG (Buy)

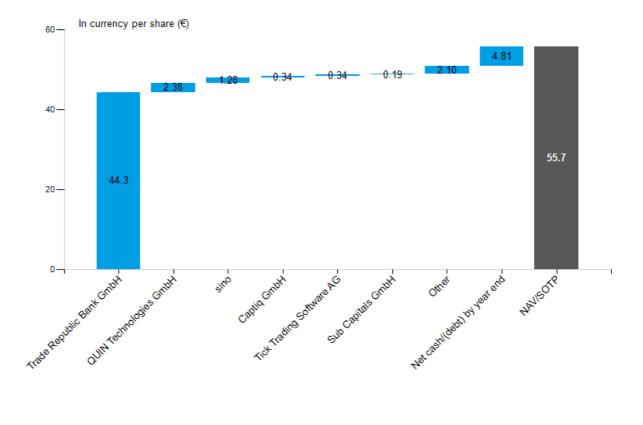


NAV/SOTP fine tuning



NAV/SOTP Calculation

	% owned	Valuation technique	Multiple used	Valuation at 100% (€M)	Stake valuation (€M)	In currency per share (€)	% of gross assets
Trade Republic Ban	2.30%	Adj. historical price		4,500	104	44.3	87.0%
QUIN Technologies	11.1%	AlphaValue valuation		50.0	5.57	2.38	4.68%
sino	100%	DCF		3.00	3.00	1.28	2.52%
Captiq GmbH	3.96%	AlphaValue valuation		20.0	0.79	0.34	0.67%
Tick Trading Softwar	5.73%	- Listed -		13.7	0.79	0.34	0.66%
Sub Capitals GmbH	3.00%	AlphaValue valuation		15.0	0.45	0.19	0.38%
Other					4.90 ⁽¹⁾	2.10	4.12%
Total gross assets					119	50.9	100%
Net cash/(debt) by year end					11.2	4.81	9.45%
Commitments to pay							
Commitments received							
NAV/SOTP					130	55.7	109%
Number of shares net of tre	asury sha	res - year end	l (Mio)		2.34		
NAV/SOTP per share (€)					55.7		
Current discount to NAV/SO	OTP (%)				51.0		



1. Cash options on Trade Republic

Baader Europe powered by AlphaValue sino AG (Buy)

Debt

sino AG has a net cash position. Its core business, retail brokerage, does not need any leverage. The only scenario that would make this gearing level materially change would be in the context of an acquisition.

Detailed financials at the end of this report

Funding - Liquidity

		09/21A	09/22E	09/23E	09/24E
EBITDA	€M	2.59	0.22	0.13	0.34
Funds from operations (FFO)	€M	-40.2	11.5	0.32	0.45
Ordinary shareholders' equity	€M	149	22.1	23.4	25.3
Gross debt	€M	0.00	0.00	0.00	0.00
+ Gross Cash	€M	131	11.2	11.2	11.3
= Net debt / (cash)	€M	-131	-11.2	-11.2	-11.3
Gearing (at book value)	%	-44.0	-321	-47.9	-44.4
Equity/Total asset (%)	%	672	148	143	137
Adj. Net debt/EBITDA(R)	X	-50.7	-51.3	-83.2	-33.6
Adjusted Gross Debt/EBITDA(R)	x	1.65	18.5	30.3	13.1
Adj. gross debt/(Adj. gross debt+Equity)	%	2.78	15.4	14.8	14.8
Ebit cover	x	-516	0.17	15.0	-24.1
FFO/Gross Debt	%	-945	285	7.94	10.3
FFO/Net debt	%	30.7	-102	-2.89	-4.03
FCF/Adj. gross debt (%)	%	-1,021	279	4.69	7.00

Baader Europe powered by AlphaValue sino AG (Buy)

Worth Knowing

sino AG is widely keen on distributing extra profits to shareholders. After the disposal of c. \in 131m worth of Trade Republic's shares, the firm distributed an extraordinary dividend of \in 56 per share (the whole proceedings).

Mr Karsten Müller, a member of the Management Board, was Managing Director at Trade Republic for many years.

Shareholders

Name	% owned	Of which % voting rights	Of which % free to float
Hsbc Trinkaus & Burkhardt	25.0%	25.0%	0.00%
Ingo Hillen	10.0%	10.0%	0.00%
Universal Investment Gesellschaft mbH	0.16%	0.16%	0.16%
Apparent free float			65.0%

Baader Europe powered by AlphaValue sino AG (Buy)

Sustainability

The firm's sustainable score is quite low given the lack of data available. As a reminder, sino AG is a small firm with very limited reporting. We believe that most of the weak score is explained by this lack of data rather than a poor contribution to society.

Sustainability score

Sustainability is made of analytical items contributing to the E, the S and the G, that can be highlighted as sustainability precursors and can be combined in an intellectually acceptable way. This is the only scale made available

	Score	Weight
Governance		
Independent directors rate	7/10	25%
Board geographic diversity	0/10	20%
Chairman vs. Executive split	✓	5%
Environment		
CO ² Emission	1/10	25%
Water withdrawal	1/10	10%
Social		
Wage dispersion trend	0/10	5%
Job satisfaction	3/10	5%
Internal communication	0/10	5%
Sustainability score	2.7/10	100%

Baader Europe powered by AlphaValue sino AG (Buy)

Governance & Management

What the numbers say

sino AG's governance score is above the sector's average. This is mainly due to our definition of Board independence.

On the other hand, it performs poorly on the domestic density with a 100% of the members coming from Germany.

Our analysis

We believe that the firm's governance has room for improvement. Founded c.25 years ago, the firm has never grown so much that it needed a stronger Board, nor did it consider diversifying its members. We believe that such items could change, for the best as the firm expands and grows in size and revenues.

Lastly, it is important to highlight that there is no documented stake-building strategy, as specified by management, since these stakes and this holding structure are the result of interesting opportunities.

Governance score

Company (Sector) 6.1 (5.6)



Parameters	Company	Sector	Score	Weight
Number of board members	3	9	10/10	5.0%
Board feminization (%)	0	32	1/10	5.0%
Board domestic density (%)	100	66	0/10	5.0%
Average age of board's members	60	58	5/10	5.0%
Type of company : Small cap, not controlled			10/10	25.0%
Independent directors rate	66	42	7/10	20.0%
One share, one vote			×	5.0%
Chairman vs. Executive split			<	5.0%
Chairman not ex executive				5.0%
Full disclosure on mgt pay			×	5.0%
Disclosure of performance anchor for bonus trigger			×	5.0%
Compensation committee reporting to board of directors			×	5.0%
Straightforward, clean by-laws				5.0%
Governance score			6.1/10	100.0%

Management

Name	Function	Birth date Date in Date out	Compensation, in k€ (year) Cash Equity linked
Ingo HILLEN	M 📕 CEO	1970	
Karsten MÜLLER	M 🧮 Partner		

sino AG (Buy)

Board of Directors

Name		Indep	. Function	Completion of current mandate	Birth date	Date in	Date out	Fees / indemnity, in k€ (year)	Value of holding, in k€ (year)
Marcus KRUMBHOLZ	Μ	 Image: A second s	President/Chairman of th			2020		18.0 (2021)	(2021)
Thomas DIERKES	Μ	 Image: A second s	Member		1965	2021		13.0 (2021)	(2021)
Detlef IRMEN	М	X	Member		1958	2022			

Baader Europe powered by AlphaValue sino AG (Buy)

Environment

What the numbers say

sino AG does not disclose any numbers about its environmental impact. This leaves a score of 0 as, despite the impact could actually be moderate, the lack of data is only worth the worst grade.

Our analysis

To the same extent as the governance score, sino AG lacks data mainly because of its size and the non-existent monitoring of such KPIs. While we believe that, brought to capital employed, the impact should be moderate and the score positive, our score lands at 0 as, again, ESG cannot wait and is an immediate matter.

Company (Sector) **1.00** (4.39)

Environmental score

Data sets evaluated as trends on rolling calendar, made sector relative

Parameters	Score	Sector	Weight
CO ² Emission	1/10	6/10	30%
Water withdrawal	1/10	3/10	30%
Energy	1/10	5/10	25%
Waste	1/10	4/10	15%
Environmental score	1.00		100%

Environmental metrics

Sector figures

Company	Country	Environment score	Energy (total, in GJ)	CO2 Emissions (in tons)	Water Withdrawal (in m3)	Waste (total, (in tons)
En+		2/10	326,400,000	52,100,000	872,100,000	213,300,000
DWS		4/10		4,329		
AURELIUS	-	4/10		507		
Adyen		5/10	49,969	2,443		
Nexi		5/10	95,571	6,471	974,300	751
HBM Healthcare Investments	+	1/10				
Wise		3/10	7,486	807		
Prosus		3/10	81,408	23,561	n/a	n/a
sino AG	-	1/10				
EdenRed		4/10	53,334	7,427	32,312	467
Vivendi		7/10	536,722	38,194		20,237
Deutsche Boerse		10/10	275,915	3,989	74,633	22
Porsche		1/10				
Bouygues		2/10	30,772,800	2,250,000	1,000,000	
GBL		4/10		200		
Investor	-	6/10	3,967	88		
Hal Trust	=	1/10				
Heineken Holding		6/10	25,458,200	1,516,000	92,800,000	4,352,600
London Stock Exchange Group		10/10	240,876	4,138	1,166	185
Eurazeo		6/10	10,062,709	790,076	37,181,108	41,600
Industrivärden	-	4/10		24		
Corporacion Financiera Alba	<u>6</u>	10/10	23,883	3,090	31,064	7,469
Kinnevik Investment	-	4/10		17		
Sonae	•	8/10	2,705,233	163,306	1,861,481	95,556

Ackermans & van Haaren		1/10		629	811	
Partners Group	•	4/10		578,076	2,374,472	
Exor		1/10				
Bolloré		10/10	1,017,954	395,260	1,484,073	31,710
Wendel		4/10		101		
MPC Capital		1/10				
Deutsche Beteiligungs AG	-	4/10		210		
VIEL & Cie		1/10				
Picanol		1/10				
Amundi		10/10	69,739	2,932	19,753	161
Euronext NV	=	6/10	23,522	4,660	253,892	
Worldline		10/10	336,781	8,993	16,826	1,501

Baader Europe powered by AlphaValue sino AG (Buy)

Social

By targeting wealthy clients (average deposit of €1.2m), sino cannot be given the social purpose of providing market access to any saver.

However, as a group and accounting for the participation in Trade Republic Bank such a purpose can be granted.

Social score

Company (Sector)



Quantitative metrics (67%)

Set of staff related numerical metrics available in AlphaValue proprietary modelling aimed at ranking on social/HR matters

Parameters	Score	Weight
Staffing Trend	5/10	20%
Average wage trend	9/10	35%
Share of added value taken up by staff cost	1/10	25%
Share of added value taken up by taxes	1/10	20%
Wage dispersion trend	0/10	0%
Pension bonus (0 or 1)	0	
Quantitative score	4.6/10	100%

Qualitative metrics (33%)

Set of listed qualitative criterias and for the analyst to tick

Parameters	Score	Weight
Accidents at work	10/10	25%
Human resources development	7/10	35%
Pay	7/10	20%
Job satisfaction	3/10	10%
Internal communication	0/10	10%
Qualitative score	6.7/10	100%

AlphaValue analysts tick boxes on essential components of the social/HR corporate life.

Decision about ticking Yes or No is very much an assessment that combines the corporate's communication on relevant issue and the analyst's better judgment from experience.

Qualitative score

Parameters	Yes <u> /</u> / No X	-
Accidents at work		25%
Set targets for work safety on all group sites?		10.0%
Are accidents at work declining?	✓	15.0%
Human resources development		35%
Are competences required to meet medium term targets identified?	×	3.5%
Is there a medium term (2 to 5 years) recruitment plan?	×	3.5%
Is there a training strategy tuned to the company objectives?	✓	3.5%
Are employees trained for tomorrow's objectives?	×	3.5%
Can all employees have access to training?	✓	3.5%
Has the corporate avoided large restructuring lay-offs over the last year to date?	<	3.5%
Have key competences stayed?	✓	3.5%
Are managers given managerial objectives?	×	3.5%
If yes, are managerial results a deciding factor when assessing compensation level?	×	3.5%
Is mobility encouraged between operating units of the group?		3.5%
Pay		20%
Is there a compensation committee?	×	6.0%
Is employees' performance combining group AND individual performance?	✓	14.0%
Job satisfaction		10%
Is there a measure of job satisfaction?	×	3.3%
Can anyone participate ?	×	3.4%
Are there action plans to prop up employees' morale?	✓	3.3%
Internal communication		10%
Are strategy and objectives made available to every employee?	×	10.0%
Qualitative score	6.7/10	100.0%

Baader Europe powered by AlphaValue sino AG (Buy)

Staff & Pension matters

sino AG's workforce is very stable. Indeed, the last record of employees counted 7 trade managers, 4 people in the back office, 5 in technology, 2 in controlling, 1 in accounting, 2 in Legal and 2 in "other".

This makes it a strength for the firm, as mentioned in Money Making, in that the aim is for costs to remain very stable. At the current rate, one trade manager can handle 43 accounts.

Baader Europe powered by AlphaValue sino AG (Buy)

Recent updates

30/08/2022 Trade Republic at a discount Initiation cov.

We initiate coverage of sino AG with a Buy recommendation. The German firm is a pioneer in brokerage for retail heavy traders and has its valuation carried by a lucrative holding in the famous Trade Republic. Despite this, the firm seems to be trading at a discount, offering an arbitrage opportunity.

sino AG was founded in 1998 by Matthias Hocke and current CEO Ingo Hillen, as a pioneer of online trading for retailers and, more precisely, heavy traders. The firm has implemented a very user-friendly and extremely reliable tool, meeting the expectations of individuals trading around the clock thanks to the software expertise of its supplier, tick Trading Software.

But sino AG has become much more than this. It has to be considered as a holding company, counting stakes in six companies in total: sino (100%), Trade Republic GmbH (2.3% plus options), Quin technologies (11.13%), tick Trading Software AG (5.73%), Captiq GmbH (3.96%) and Sub Capitals GmbH (3%).

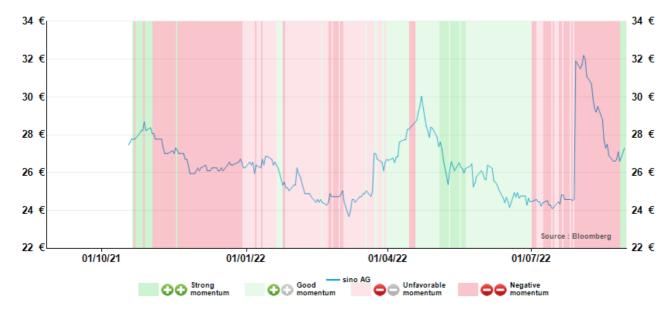
In fact, sino AG is one of the historical investors of Germany's most successful unicorn: Trade Republic. By holding 2.3% (plus cash options) in Trade Republic, sino AG offers a publicly-listed exposure to the privately-held FinTech, at a discount.

We believe that this offers a very attractive arbitrage opportunity and an appealing risk-return arbitrage while Trade Republic's valuation, driving most of sino AG's share price, is highly insensitive to market turmoil.

Proceedings from this lucrative holding might yield additional capital returns to shareholders.

sino AG (Buy)

Momentum



Momentum analysis consists in evaluating the stock market trend of a given financial instrument, based on the analysis of its trading flows. The main indicators used in our momentum tool are simple moving averages over three time frames: short term (20 trading days), medium term (50 days) and long term (150 days). The positioning of these moving averages relative to each other gives us the direction of the flows over these time frames. For example, if the short and medium-term moving averages are above the long-term moving average, this suggests an uptrend which will need to be confirmed. Attention is also paid to the latest stock price relative to the three moving averages (advance indicator) as well as to the trend in these three moving averages - downtrend, neutral, uptrend - which is more of a lagging indicator.

The trend indications derived from the flows through moving averages and stock prices must be confirmed against trading volumes in order to confirm the signal. This is provided by a calculation based on the average increase in volumes over ten weeks together with a buy/sell volume ratio.

) C) : Strong momentum corresponding to a continuous and overall positive moving average trend confirmed by volumes

C : Relatively good momentum corresponding to a positively-oriented moving average, but offset by an overbought pattern or lack of confirmation from volumes

: Relatively unfavorable momentum with a neutral or negative moving average trend, but offset by an oversold pattern or lack of confirmation from volumes

: Strongly negative momentum corresponding to a continuous and overall negative moving average trend confirmed by volumes

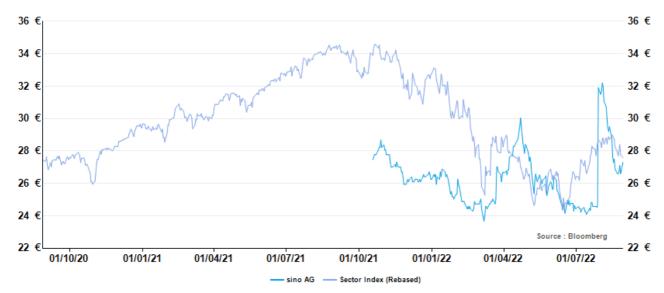
sino AG (Buy)

Moving Average MACD & Volume



sino AG (Buy)

Sector Other Financials



Baader Europe powered by AlphaValue sino AG (Buy)

Trading platforms

Opinion Change

Eps Change

UPGRADES	New	Old	Var.	Reco
30/08 sino AG	€ 10.6	€ 0.80	1,226%	Buy

Sector Overview

MARKET BASICS	SECTOR	AV UNIVERSE
COMPANIES	1	576
MARKET CAP	€M 63.8	€M 11,144,696
UPSIDE	237%	20.9%
PRICE MOMENTUM	Strong	UNFAVORABLE
PERF. YTD	4.00%	-9.96%
PE 2022	34.2 x	12.7 x
DIV. YIELD 2022	0.00%	3.50%
EARN GROWTH 2022/2021	-98.7%	5.55%

Recent publications & Updates

SINO AG - Aug 30 Trade Republic at a discount

SINO AG - Aug 30 Trade Republic at a discount

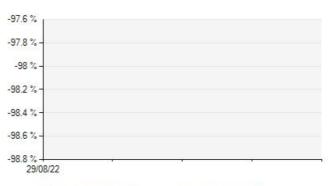
sino AG (Buy)

Trading platforms Charts

Sector Price

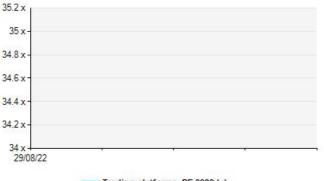


Sector Earning Growth 2022/2021



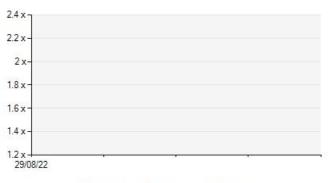
Trading platforms, Earning Growth 2022/2021 (%)

Sector PE 2022



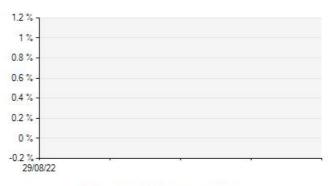
Trading platforms, PE 2022 (x)

Sector PBook 2022



Trading platforms, P/Book 2022 (x)

Sector Yield 2022



Trading platforms, Yield 2022 (%)

Baader Europe powered by AlphaValue

sino AG (Buy)

Aggregated sector data

sino AG (Buy)

Companies

Company	Sector	Р	Performances (%)			Mom.	Opinion	Upside	Market Cap (€M)	Country	
		1W	1M	3M	YTD						
sino AG	Trading platforms	2.63	-14.4	5.83	4.00	00	Buy 💿	80.5%	63.8	-	
	Sector	Ρ	erformai	nces (%)		Mom.	Opinion	Upside	Market Cap (€M)		
		1W	1M	3M	YTD						
Weighted average		2.63	-14.4	5.83	4.00	00	Buy 💿	237%			
Median		2.63	-14.4	5.83	4.00		Buy 💿	237%			
Total									63.8		
BD universe weighted avg		-2.26	-2.71	-3.46	-9.14	00		20.9%	11,144,696		

Valuation ratios

Company	Sector	P/E		Earning	s growth	P/Bc	ok	Yiel	ld	Market Cap (€M)
		2022	2023	2022/2021	2023/2022	2022	2023	2022	2023	
sino AG	Trading platforms	2.58 x	ns	-82.2%	-98.5%	2.88 x	2.73 x	0.37%	0.37%	63.8
	Sector	P/E		Earning	s growth	P/Bo	ok	Yiel	d	Market Cap (€M)
		2022	2023	2022/2021	2023/2022	2022	2023	2022	2023	
Weighted average		34.2 x	27.4 x	-98.7%	25.0%	1.37 x	1.24 x	0.00%	0.00%	
Median		34.2 x	27.4 x	-98.7%	25.0%	1.37 x	1.24 x	0.00%	0.00%	
BD universe weighted avg		12.7 x	12.5 x	5.55%	1.01%	1.63 x	1.54 x	3.50%	3.61%	11,144,696

Earnings

Company	Sector		Adjusted attr	ibutable net p	rofit (€M)		Market Cap (€M)
		2021	2022	2023	Chg. 22/21	Chg. 23/22	
sino AG	Trading platforms	139	24.8	0.37	-115	-24.4	63.8
	Sector		Adjusted attr	ibutable net p	rofit (€M)		Market Cap (€M)
		2021	2022	2023	Chg. 22/21	Chg. 23/22	
Total		139	1.87	2.33	-138	0.47	63.8

Risk ratios

Company	Sector	Gearin	9	Goodwill / I	Equity	Net Debt / I	Ebitda	Market Cap (€M)
		2022	2023	2022	2023	2022	2023	
sino AG	Trading platforms	-321%	-47.9%	0.00%	0.00%	-51.3 x	-83.2 x	63.8
	Sector	Gearin	Gearing		Goodwill / Equity		Net Debt / Ebitda	
		2022	2023	2022	2023	2022	2023	
Weighted average		-158%	-23.7%	0.00%	0.00%	-4.84 x	-4.35 x	
Median		-158%	-23.7%	0.00%	0.00%	-4.84 x	-4.35 x	

B/S data

Company	Sector	Equity (€M	I)	Net Debt (EM)	Goodwill (EM)	Market Cap (€M)
		2022	2023	2022	2023	2022	2023	
sino AG	Trading platforms	22.1	23.4	-11.2	-11.2	n/a	n/a	63.8
	Sector	Equity (€M	I)	Net Debt (EM)	Goodwill (EM)	Market Cap (€M)
		2022	2023	2022	2023	2022	2023	
Total		46.6	51.5	-11.7	-12.7	n/a	n/a	63.8

sino AG (Buy)

EV ratios

Company	Sector	Upside	Mom.	Ev/Ebit		Ev/Ebitda(R)		Market Cap (€M)
				2022	2023	2022	2023	
sino AG	Trading platforms	80.5%	00	ns	ns	ns	ns	63.8
	Sector			Ev/Ebit		Ev/Ebitda(R)		Market Cap (€M)
				2022	2023	2022	2023	
Weighted average				-44.5 x	-37.2 x	-40.1 x	-33.6 x	
Median				-44.5 x	-37.2 x	-40.1 x	-33.6 x	
BD universe weighted avg				13.3 x	12.1 x	8.12 x	7.68 x	11,144,696

sino AG (Buy)

Detailed Financials

Valuation Key Data		09/21A	09/22E	09/23E	09/24E
Adjusted P/E	х	0.46	2.58	171	115
Reported P/E	х	0.46	2.58	171	115
EV/EBITDA(R)	x	-84.5	ns	ns	ns
EV/EBIT	х	-93.4	ns	ns	ns
EV/Sales	х	-19.7	-7.56	-8.20	-7.39
P/Book	x	0.43	2.88	2.73	2.52
Dividend yield	%	204	0.37	0.37	0.37
Free cash flow yield	%	-67.7	17.7	0.30	0.48
Average stock price	€	27.5	27.3	27.3	27.3

Consolidated P&L		09/21A	09/22E	09/23E	09/24E
Sales	€M	11.1 ⁽¹⁾	7.87 ⁽²⁾	7.25 ⁽²⁾	8.00 ⁽²⁾
Sales growth	%	30.3	-28.9	-7.92	10.4
Sales per employee	€th	527	342	315	348
Purchases and external costs (incl. IT)	€M	-5.12	-4.33	-3.62	-4.00
Staff costs	€M	-3.37	-3.32	-3.49	-3.66
Operating lease payments	€M				
Cost of sales/COGS (indicative)	€M				
EBITDA	€M	2.59	0.22	0.13	0.34
EBITDA(R)	€M	2.59	0.22	0.13	0.34
EBITDA(R) margin	%	23.3	2.78	1.86	4.20
EBITDA(R) per employee	€th	123	9.52	5.85	14.6
Depreciation	€M	-0.07	-0.06	-0.06	-0.06
Depreciations/Sales	%	0.67	0.80	0.80	0.80
Amortisation	€M	-0.17	-0.16	-0.14	-0.16
Additions to provisions	€M	0.00	0.00	0.00	0.00
Reduction of provisions	€M	0.00	0.00	0.00	0.00
Underlying operating profit	€M	2.34	0.00	-0.07	0.11
Underlying operating margin	%	21.1	-0.02	-0.95	1.39
Other income/expense (cash)	€M	0.49	0.38	0.29	0.32
Other inc./ exp. (non cash; incl. assets revaluation)	€M	-5.07 ⁽³⁾	-0.02	-0.02	-0.02
Impairment charges/goodwill amortisation	€M				
Operating profit (EBIT)	€M	-2.24	0.36	0.20	0.41
Interest expenses	€M	0.00	0.00	0.00	0.00
of which effectively paid cash interest expenses	€M	0.00	0.00	0.00	0.00
Financial income	€M	0.00	0.01	0.00	0.00
Other financial income (expense)	€M	0.00	0.00	0.00	0.00
Net financial expenses	€M	0.00	0.01	0.00	0.00
of which related to pensions	€M	0.00	0.00	0.00	0.00
Pre-tax profit before exceptional items	€M	-2.23	0.37	0.21	0.42
Exceptional items and other (before taxes)	€M	131 ⁽⁴⁾	24.0	0.00	0.00
Current tax	€M	-3.59	-0.24	-0.05	-0.10
Deferred tax	€M	0.00	-0.01	0.00	0.00
Corporate tax	€M	-3.59	-0.25	-0.05	-0.10
Tax rate	%	ns	67.9	25.8	24.9
Net margin	%	-52.6	1.51	2.13	3.91
Equity associates	€M	14.3	0.63	0.22	0.24
Actual dividends received from equity holdings	€M				
Minority interests	€M	0.00	0.00	0.00	0.00
Income from discontinued operations	€M	0.00	0.00	0.00	0.00
Attributable net profit	€M	139	24.8	0.37	0.55
Impairment charges/goodwill amortisation	€M	0.00	0.00	0.00	0.00
Other adjustments	€M	0.00 (5)	0.00	0.00	0.00
Adjusted attributable net profit	€M	139	24.8	0.37	0.55
Interest expense savings	€M	0.00	0.00	0.00	0.00
Fully diluted adjusted attr. net profit	€M	139	24.8	0.37	0.55
NOPAT	€M	12.3	0.62	0.16	0.30

- 1. We only consider commission income in the firm's sales
- 2. We identify an acceleration in commission income via the enabling of crypto trading
- 3. Of which €819k related to transaction fees
- Sale of shares in Trade Republic reported at c.€14m in H1 21 + c. €125m of non-cash gain on the remaining shares (due to fundraising revaluing Trade Republic)
- 5. We estimate c.€125m to be a non-cash gain on share revaluations

Cashflow Statement		09/21A	09/22E	09/23E	09/24E
EBITDA	€M	2.59	0.22	0.13	0.34
Change in WCR	€M	-2.89	0.00	0.00	0.00
of which (increases)/decr. in receivables	€M	-2.77	0.00	0.00	0.00
of which (increases)/decr. in inventories	€M	0.00	0.00	0.00	0.00
of which increases/(decr.) in payables	€M	-0.03	0.00	0.00	0.00
of which increases/(decr.) in other curr. liab.	€M	-0.09	0.00	0.00	0.00
Actual dividends received from equity holdings	€M	0.00	0.00	0.00	0.00
Paid taxes	€M	-34.3	-0.25	-0.05	-0.10
Exceptional items	€M				
Other operating cash flows	€M	-8.48	11.5	0.24	0.22
Total operating cash flows	€M	-43.1	11.5	0.32	0.45
Capital expenditure	€M	-0.36	-0.24	-0.13	-0.15
Capex as a % of depreciation & amort.	%	146	107	65.3	65.3
Net investments in shares	€M	149	0.00	0.00	0.00
Other investment flows	€M	0.01	0.00	0.00	0.00
Total investment flows	€M	149	-0.24	-0.13	-0.15
Net interest expense	€M	0.00	0.01	0.00	0.00
of which cash interest expense	€M	0.00	0.01	0.00	0.00
Dividends (parent company)	€M	-6.83	-131	-0.23	-0.23
Dividends to minorities interests	€M	0.00	0.00	0.00	0.00
New shareholders' equity	€M	0.00	0.00	0.00	0.00
of which (acquisition) release of treasury shares	€M				
(Increase)/decrease in net debt position	€M	0.00	0.00	0.00	0.00
Other financial flows	€M				
Total financial flows	€M	-6.83	-131	-0.23	-0.23
Change in cash position	€M	98.9	-120	-0.04	0.07
Change in net debt position	€M	98.9	-120	-0.04	0.07
Free cash flow (pre div.)	€M	-43.4	11.3	0.19	0.31
Operating cash flow (clean)	€M	-43.1	11.5	0.32	0.45
Reinvestment rate (capex/tangible fixed assets)	%	99.3	69.2	38.5	40.4

Balance Sheet		09/21A	09/22E	09/23E	09/24E
Goodwill	€M				
Contracts & Rights (incl. concession) intangible assets	€M	0.28	0.27	0.27	0.28
Total intangible	€M	0.28	0.27	0.27	0.28
Tangible fixed assets	€M	0.36	0.34	0.34	0.36
Financial fixed assets (part of group strategy)	€M	0.00	0.00	0.00	0.00
Other financial assets (investment purpose mainly)	€M	5.58	5.58	5.58	5.58
of which available for sale	€M	5.58	5.58	5.58	5.58
WCR	€M	3.71	3.71	3.71	3.71
of which trade & receivables (+)	€M	4.16	4.16	4.16	4.16
of which inventories (+)	€M				
of which payables (+)	€M	0.45	0.45	0.45	0.45
of which other current liabilities (+)	€M				
Other current assets	€M	12.2	5.06	6.42	8.53
of which tax assets (+)	€M	0.02	0.02	0.02	0.02
Total assets (net of short term liabilities)	€M	22.2	15.0	16.3	18.5
Ordinary shareholders' equity (group share)	€M	149	22.1	23.4	25.3
Minority interests	€M				
Provisions for pensions	€M		0.00	0.00	0.00
Other provisions for risks and liabilities	€M	4.25	4.04	4.08	4.41
Deferred tax liabilities	€M				
Other liabilities	€M	0.03	0.03	0.03	0.03
Net debt / (cash)	€M	-131	-11.2	-11.2	-11.3
Total liabilities and shareholders' equity	€M	22.2	15.0	16.3	18.5
Average net debt / (cash)	€M	-65.5	-71.1	-11.2	-11.2

EV Calculations		09/21A	09/22E	09/23E	09/24E
EV/EBITDA(R)	x	-84.5	ns	ns	ns
EV/EBIT	х	-93.4	ns	ns	ns
EV/Sales	х	-19.7	-7.56	-8.20	-7.39
EV/Invested capital	х	-50.3	-13.8	-13.7	-13.6
Market cap	€M	64.2	63.8	63.8	63.8
+ Provisions (including pensions)	€M	4.25	4.04	4.08	4.41
+ Unrecognised actuarial losses/(gains)	€M	0.00	0.00	0.00	0.00
+ Net debt at year end (ex Right-of-use from 2019)	€M	-131	-11.2	-11.2	-11.3
+ Right-of-use (from 2019)/Leases debt equivalent	€M	0.00	0.00	0.00	0.00
- Financial fixed assets (fair value) & Others	€M	156 ⁽⁶⁾	116 ⁽⁶⁾	116 ⁽⁶⁾	116 ⁽⁶⁾
+ Minority interests (fair value)	€M				
= Enterprise Value	€M	-219 ⁽⁷⁾	-59.5 ⁽⁷⁾	-59.4 ⁽⁷⁾	-59.2 ⁽⁷⁾

- 6. Participations in Trade Republic, tick Trading Software AG & others
- 7. Enterprise Value is negative due to the financial assets outweighing the market capitalisation. Our model adjusts accordingly for the EV/EBITDA multiple valuation.

Per Share Data		09/21A	09/22E	09/23E	09/24E
Adjusted EPS (bfr gwill amort. & dil.)	€	59.6	10.6	0.16	0.24
Growth in EPS	%	904	-82.2	-98.5	48.4
Reported EPS	€	59.6	10.6	0.16	0.24
Net dividend per share	€	56.0	0.10	0.10	0.10
Of which exceptional pay out	€	56.0			
Free cash flow per share	€	-18.6	4.82	0.08	0.13
Operating cash flow per share	€	-18.4	4.92	0.14	0.19
Book value per share	€	63.7	9.47	10.0	10.8
Number of ordinary shares	Mio	2.34	2.34	2.34	2.34
Number of equivalent ordinary shares (year end)	Mio	2.34	2.34	2.34	2.34
Number of shares market cap.	Mio	2.34	2.34	2.34	2.34
Treasury stock (year end)	Mio				
Number of shares net of treasury stock (year end)	Mio	2.34	2.34	2.34	2.34
Number of common shares (average)	Mio	2.34	2.34	2.34	2.34
Conversion of debt instruments into equity	Mio				
Settlement of cashable stock options	Mio				
Probable settlement of non mature stock options	Mio				
Other commitments to issue new shares	Mio				
Increase in shares outstanding (average)	Mio	0.00	0.00	0.00	0.00
Number of diluted shares (average)	Mio	2.34	2.34	2.34	2.34
Goodwill per share (diluted)	€	0.00	0.00	0.00	0.00
EPS after goodwill amortisation (diluted)	€	59.6	10.6	0.16	0.24
EPS before goodwill amortisation (non-diluted)	€	59.6	10.6	0.16	0.24
Payout ratio	%	93.9	0.94	62.7	42.2
Capital payout ratio (div +share buy back/net income)	%	94.0	0.95	62.7	
Funding - Liquidity		09/21A	09/22E	09/23E	09/24E
EBITDA	€M	2.59	0.22	0.13	0.34
Funds from operations (FFO)	€M	-40.2	11.5	0.32	0.45
- - - - - - - - -					
Ordinary shareholders' equity	€M	149	22.1	23.4	25.3
Gross debt	€M	0.00	0.00	0.00	0.00
+ Gross Cash = Net debt / (cash)	€M €M	131 -131	11.2 -11.2	11.2 - 11.2	11.3 -11.3
Other financing	€M	0.00	0.00	0.00	0.00
Gearing (at book value)	%	-44.0	-321	-47.9	-44.4
Equity/Total asset (%)	%	672	148	143	137
Adj. Net debt/EBITDA(R)	x	-50.7	-51.3	-83.2	-33.6
Adjusted Gross Debt/EBITDA(R)	x	1.65	18.5	30.3	13.1
Adj. gross debt/(Adj. gross debt+Equity)	%	2.78	15.4	14.8	14.8
Ebit cover	x	-516	0.17	15.0	-24.1
FFO/Gross Debt	%	-945	285	7.94	10.3
FFO/Net debt	%	30.7	-102	-2.89	-4.03
FCF/Adj. gross debt (%)	%	-1,021	279	4.69	7.00

ROE Analysis (Dupont's Breakdown)		09/21A	09/22E	09/23E	09/24E
Tax burden (Net income/pretax pre excp income)	х	-62.5	66.9	1.80	1.33
EBIT margin (EBIT/sales)	%	-20.2	4.57	2.80	5.14
Assets rotation (Sales/Avg assets)	%	54.4	42.4	46.3	46.0
Financial leverage (Avg assets /Avg equity)	Х	0.25	0.22	0.69	0.71
ROE	%	169	28.9	1.64	2.27
ROA	%	-51.4	8.34	4.70	9.45
Shareholder's Equity Review (Group Share)		09/21A	09/22E	09/23E	09/24E
Y-1 shareholders' equity	€M	11.6	144	22.1	23.4
+ Net profit of year	€M	139	24.8	0.37	0.55
- Dividends (parent cy)	€M	-6.83	-131	-0.23	-0.23
+ Additions to equity	€M	0.00	0.00	0.00	0.00
o/w reduction (addition) to treasury shares	€M	0.00	0.00	0.00	0.00
- Unrecognised actuarial gains/(losses)	€M	0.00	0.00	0.00	0.00
+ Comprehensive income recognition	€M		-15.7	1.14	1.56
= Year end shareholders' equity	€M	144	22.1	23.4	25.3
Staffing Analytics		09/21A	09/22E	09/23E	09/24E
Sales per staff	€th	527	342	315	348
Staff costs per employee	€th	-160	-145	-152	-159
Change in staff costs	%	25.2	-1.37	5.00	5.00
Change in unit cost of staff	%	7.31	-9.94	5.00	5.00
Staff costs/(EBITDA+Staff costs)	%	56.6	93.8	96.3	91.6
Average workforce	unit	21.0	23.0	23.0	23.0
Europe	unit	21.0	23.0	23.0	23.0
North America	unit	0.00	0.00	0.00	0.00
South Americas	unit	0.00	0.00	0.00	0.00
Asia	unit	0.00	0.00	0.00	0.00
Other key countries	unit	0.00	0.00	0.00	0.00
Total staff costs	€M	-3.37	-3.32	-3.49	-3.60
Wages and salaries	€M	-3.37	-3.32	-3.49	-3.66
of which social security contributions	€М	-0.25	-0.25	-0.26	-0.2
Equity linked payments	€M	0.00	0.00	0.00	0.00
Pension related costs	€M	0.00	0.00	0.00	0.00
Benefits related payments	€M	0.00	0.00	0.00	0.00
Divisional Breakdown Of Revenues		09/21A	09/22E	09/23E	09/24E
Total sales	€M	11.1	7.87	7.25	8.00
Commission Income	€M	11.1	7.87	7.25	8.00
Other Operating Income	€M	0.00	0.00	0.00	0.00
Other	€M	0.00	0.00	0.00	0.00
Divisional Breakdown Of Earnings		09/21A	09/22E	09/23E	09/24E
EBIT Analysis					
Commission Income	€M	-2.24	0.36	0.20	0.41
Other/cancellations	€M				
Total	€M	-2.24	0.36	0.20	0.41
EBIT margin	%	-20.2	4.57	2.80	5.14

Revenue Breakdown By Country		09/21A	09/22E	09/23E	09/24E
Europe	%	100	100		
Other	%	0.00	0.00		
ROCE		09/21A	09/22E	09/23E	09/24E
ROCE (NOPAT+lease exp.*(1-tax))/(net) cap employed adjusted	%	284	14.3	3.66	7.01
CFROIC	%	-999	261	4.43	7.09
Goodwill	€M	0.00	0.00	0.00	0.00
Accumulated goodwill amortisation	€M	0.00	0.00	0.00	0.00
All intangible assets	€M	0.28	0.27	0.27	0.28
Accumulated intangible amortisation	€M	0.00	0.00	0.00	0.00
Financial hedges (LT derivatives)	€M	0.00	0.00	0.00	0.00
Capitalised R&D	€M	0.00	0.00	0.00	0.00
Rights of use/ Capitalised leases	€M	0.00	0.00	0.00	0.00
Other fixed assets	€M	0.36	0.34	0.34	0.36
Accumulated depreciation	€M	0.00	0.00	0.00	0.00
WCR	€M	3.71	3.71	3.71	3.71
Other assets	€M	0.00	0.00	0.00	0.00
Unrecognised actuarial losses/(gains)	€M	0.00	0.00	0.00	0.00
Capital employed after deprec. (Invested capital)	€M	4.35	4.32	4.32	4.35
Capital employed before depreciation	€M	4.35	4.32	4.32	4.35
Divisional Breakdown Of Capital Employed		09/21A	09/22E	09/23E	09/24E
Commission Income	€M				
Other	€M	4.35	4.32	4.32	4.35
Total capital employed	€M	4.35	4.32	4.32	4.35

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Fundamental Opinion

It is implicit that recommendations are made in good faith but should not be regarded as the sole source of advice.

There are different approaches and methodologies for determining and valuing stocks in research products, each provided by AlphaValue and Baader Helvea, as decribed below.

AlphaValue Research

Recommendations are geared to a "value" approach.

Valuations are computed from the point of view of a secondary market minority holder looking at a medium term (say 6 months) performance.

Valuation tools are built around the concepts of **transparency**, all underlying figures are accessible, and **consistency**, same methodology whichever the stock, allowing for differences in nature between financial and non financial stocks. A stock with a target price below its current price should not and will not be regarded as an Add or a Buy.

Recommendations are based on target prices with no allowance for dividend returns. The thresholds for the four recommendation levels may change from time to time depending on market conditions. Thresholds are defined as follows, ASSUMING long risk free rates remain in the 2-5% region.

Recommendation	Low Volatility 10 < VIX index < 30	Normal Volatility 15 < VIX index < 35	High Volatility 35 < VIX index
Buy 💿	More than 15% upside	More than 20% upside	More than 30% upside
Add 💿	From 5% to 15%	From 5% to 20%	From 10% to 30%
Reduce 🛛	From -10% to 5%	From -10% to 5%	From -10% to 10%
Sell 😐	Below -10%	Below -10%	Below -10%

There is deliberately no "neutral" recommendation. The principle is that there is no point investing in equities if the return is not at least the risk free rate (and the dividend yield which again is not allowed for).

Although recommendations are automated (a function of the target price whenever a new equity research report is released), the management of AlphaValue intends to maintain global consistency within its universe coverage and may, from time to time, decide to change global parameters which may affect the level of recommendation definitions and /or the distribution of recommendations within the four levels above. For instance, lowering the risk premium in a gloomy context may increase the proportion of positive recommendations.

Baader Helvea Research

Rating categories:

The following is an explanation of the ratings, if any, included in Baader Helvea research.

Interpretation matrix per risk category for each rating:

Expected total return based on forecast dividend and 12-month price targets.

Rating	Upside/downside to the target price		
Buy	>20%		
Add	5%-20%		
Reduce	-10% to 5%		
Sell	<-10%		

Research ratings key:

There are four possible ratings: Buy, Add, Reduce or Sell.

Examples of certain ratings:

Buy: A company that the analyst(s) named in this report deem(s) higher risk with a forecast dividend yield of 5% and price appreciation potential of 16%, generating a forecast total return of 21% over 12 months.

Reduce: A company with a forecast dividend yield of 7% and price appreciation potential of -5%, generating a forecast total return of +2% over 12 months.

Baader Helvea uses three further categorizations for stocks in our coverage:

Restricted: A rating and/or financial forecast and/or target price is not disclosed due to compliance or other regulatory considerations such as blackout period or conflict of interest.

Coverage in transition: Due to changes in the research team, the disclosure of a stock's rating and/or target price and/or financial information are

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temporarily suspended. The stock remains in the research universe and disclosures of relevant information will be resumed in due course.

Not rated: Suspension of coverage.

Valuation methodology

Company valuations are based on the following general valuation methods: Multiple-based models, peer-group comparisons, discount models, break-up value approaches, asset-based valuation methods as well as economic profit based models. Furthermore, recommendations are also based on the economic profit approach. Valuation models (including the underlying assumptions) are dependent on macroeconomic factors such as interest rates, exchange rates and raw material prices, and on assumptions about the economy. Furthermore, market sentiment affects the valuation of companies.

The valuation is also based on expectations that might change rapidly and without notice, depending on developments specific to individual companies or industries. Our analysts' recommendations and target prices are derived from the models we use and might therefore change as a result of the use or development of different models. Our analysts' investment ratings generally relate to a 12-month horizon. They are, however, also subject to market conditions and can only represent a snapshot. The ratings may in fact be achieved more quickly or slowly than expected and therefore a rating may need to be revised upward or downward. Further information on the valuation methodology can be found under

http://www.baaderbank.de/valuation_methodology.html.

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Valuation

Valuation processes have been organized around transparency and consistency as primary objectives.

Stocks belong to different categories that recognise their main operating features : Banks, Insurers and Non Financials.

Within those three universes, the valuation techniques are the same and in relation to the financial data available.

The weighting given to individual valuation techniques is managed centrally and may be changed from time to time. As a rule, all stocks of a similar profile are valued using equivalent weighting of the various valuation techniques. This is for obvious consistency reasons.

Within the very large universe of Non Financials, there are in effect 4 sub-categories of weightings to cater for subsets: 1) 'Mainstream' stocks; 2) 'Holding companies' where the stress is on NAV measures; 3) 'Growth' companies where the stress is on peer based valuations; 4) 'Loss making sectors' where peers review is essentially pointing nowhere (ex: Bio techs). The bulk of the valuation is then built on DCF and NAV, in effect pushing back the time horizon.

Valuation Issue	Normal industrials	Growth industrials	Holding company	Loss runners	Bank	Insurers
DCF	35%	35%	10%	40%	0%	0%
NAV	20%	20%	55%	40%	50%	15%
PE	10%	10%	10%	5%	10%	20%
EV/EBITDA	20%	20%	0%	5%	0%	0%
Yield	10%	10%	20%	5%	10%	15%
Book	5%	5%	5%	5%	10%	10%
Banks' instrinsic method	0%	0%	0%	0%	10%	0%
Embedded Value	0%	0%	0%	0%	0%	40%
Mkt Cap/Gross Operating Profit	0%	0%	0%	0%	10%	0%

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AlphaValue Research Disclaimer

A. GENERAL STATEMENTS

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