

Company Update

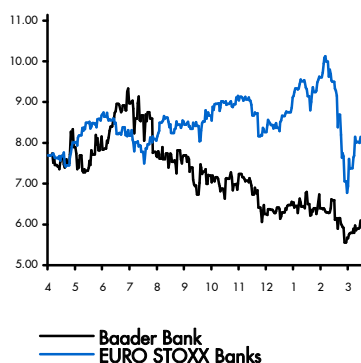
Baader Bank

March 23, 2022

Banks/Global

Buy

Price 22.03.22*	6.10
Price target	8.20
Volatility risk	medium
Year high/low	9.34/5.56
Currency	EUR
EUR/EUR	1.00
GDR rate	n.a.
Shares outstanding eoy in mn	46.69
Market capitalisation (total shares) in EUR mn	284.8
Free float	30.5%
Free float in EUR mn	87.0
Avg. daily turnover (12 m) in EUR mn	0.10
Index	EURO STOXX Banks
ISIN code	DE0005088108
Bloomberg	BWB GY
Reuters	BLMG.DE
www.baaderbank.de	



Source: RBI/Raiffeisen Research

Good hedge against market shocks and play on volatility

We confirm our BUY call but revise our 12m TP downwards from EUR 10.3 to EUR 8.2. Since the breakout of RU/UA war the shares have outperformed European banks index by ~11% due to the business model's alignment to capital markets and hence less of a classical linkage to adverse macro scenarios. Although there might be only a marginal reference to RU clients/markets, we reckon that this should not lead to any meaningful financial impact. As a market maker offering an execution platform and services for various brokers/asset managers it remains a good play on market uncertainty but foremost on the further pickup of new clients' volumes and monetisation of the existing base. We continue applying a Dividend Discount Gordon Growth valuation model (70% weight) additionally supported by several peer group multiples (30% weight). After robust 2021 profitability, the management will propose a DPS of EUR 0.35 either in cash or by offering a scrip dividend (AGM date not known) at a yield of 6%.

While the effect of sharply rising global trading euphoria since the pandemic breakout was depicted in a soaring ROE of 42% in 2020, in 2021 Baader Bank (Baader) managed to even top such an impressive performance delivering a 10% higher bottom line (ROE of 34%) but the main letter of appreciation goes to a record quarterly trading result in Q1 21. Thereafter subsequent quarters were more a factor of lower market volatility, the absence of positive one-off effects on individual stocks but steadily growing client accounts (nearly 3x yoy). Based on preliminary 2021 data the trading result went up 10% yoy, whereas costs, highly tied to trading turnover, remained well under control with a minor C/I improvement to 65% (excl. Fund for General Banking Risks).

Financial outlook mid-term: We have slashed our previous, admittedly too demanding, mid-term EPS forecasts for 2022e and 2023e by nearly 50%. Nevertheless, the period ahead should reflect more normalising trading volumes vs. the special circumstances of 2020/21, but still rock-solid years and a relatively attractive valuation within the peer group. Unlike our previous model, trading revenues forecasts for 2022 might even be negative due to adjustment for an extraordinary Q1 21 but afterwards we now incorporate 5% annual growth being mainly a factor of existing clients' activity and new customer generation dynamics. The pending decision on the payment for order flow regulation determines the biggest (upside) risk for the F&CI line although we have to a minor extent reflected the potential ban as a positive item. Cost wise, higher inflation in EA could have its toll not allowing large-scale C/I improvement but rather a retraction towards 70% territory. At this stage Baader's ROE may stay at elevated levels though at a decelerating trajectory towards high teens magnitude.

Upside risks: Negative real interest rates for longer supporting brokerage market/asset management, market volatility, M&A (from both sides), ban on "payment for order flow"

Downside risks: Regulation, competitive pressure, higher risk costs

Key figures and ratios

EUR	12/2019	12/2020	12/2021e	12/2022e	12/2023e
Total operating income	77.4	196.6	196.9	191.5	201.0
Earnings before taxes	0.1	56.2	57.4	49.1	46.5
Net profit after minorities	-0.7	42.2	46.5	36.9	34.9
Earnings per share (adj.)	-0.01	0.92	1.00	0.79	0.75
EPS growth	97.0%	n.a.	8.4%	-20.7%	-5.4%
Adjusted PE	-85.09	4.90	6.51	7.73	8.17
Dividend per share	0.00	0.08	0.35	0.24	0.22
Dividend yield	0.00%	1.83%	5.38%	3.88%	3.67%
Return on equity adjusted	-0.9%	43.5%	33.8%	22.3%	18.6%
Price book value	0.75	1.72	1.95	1.62	1.43
Price/NAV (ex. goodwill)	0.93	1.87	2.09	1.73	1.52

Source: Baader Bank, RBI/Raiffeisen Research estimates

Analyst: Jovan Sikimic
 Tel.: +43 1 71707 - 5601
 e-mail: jovan.sikimic@rbinternational.com
 Published by: Raiffeisen Bank International AG,
 A-1030 Vienna, Am Stadtpark 9
 Bloomberg: RCBR <GO>

Disclosures:
<https://equityresearch.rbinternational.com>
 European Central Bank (ECB) within Single Supervisory Mechanism, Austrian Financial Market Authority and Austrian National Bank
 * The indicated price is the last price as available at 6:30 AM on 23.03.22, Source: Reuters/Bloomberg



Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures. This material has not been prepared in accordance with the legal and regulatory rules applicable to research reports as stipulated under US law. Please refer to the references at the end of the report on Russian Equity Materials for additional information.

Q4 21 in a nutshell

Baader Bank has released the preliminary 2021 results with no full P&L and no balance sheet data. The audited results are scheduled for April 1, when the bank will also give some guidance on its 2022 outlook. The pre-tax profit of Q4 of EUR 8.4 mn remains clearly south of RBlE of EUR 25.6 mn.

The main revenue source, trading income, continued its rising trend in cumulative yoy terms (+10%); however, the growth rate decelerated from +36% in H1 and +23% after Q1-3 21 reflecting normalisation from an extraordinarily strong 2020. The Q3 trading income of EUR 38.7 mn clearly underperformed our, admittedly, too optimistic forecasts. The good point is that the performance depicts the dynamics observed at some international peers like Virtu Financial (+30% qoq) and Flow Traders (+19% qoq). Baader notes in the releases that the market volatility has come down from an exceptional 2020. At the same time, the net F&CI somewhat recovered from the low Q3 21, still affected by the consequences of an increasing fee expenses (we calculate that it increased from EUR 63 mn in 2020 to EUR 99 mn in 2021), in our view mainly owing to an elevated level of trading related fee expenses (payment for order flow, settlement costs).

On the opex front, Baader Bank surprised positively coming in significantly below our estimates, which is largely related to our demanding trading results forecasts and the high linkage to the development of expenses, particularly visible on the staff cost line (on top, the depreciation line was also better). When speaking about costs, contributions to the Fund for General Banking Risks also remained below RBlE due to lower trading turnover. Nevertheless, the cumulative C/I ratio (excl. Fund for General Banking Risks) has deteriorated from 50% after H1 and 56% after Q3 21 to 60% as of year-end 2021.

Business wise, the bank highlighted a further increase in new custody accounts from 380k after Q3 21 to 500k in Q3 implying +32% qoq, i.e. an acceleration vs. the Q3 growth rate of 21%.

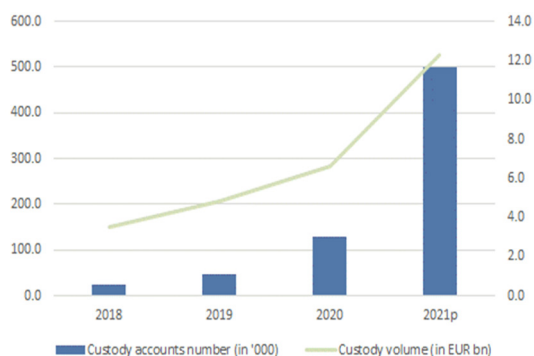
Quarterly earnings development

in EUR mn	Q3 19	Q4 19	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21p
Revenues	26.2	19.0	61.0	51.0	43.6	57.0	91.8	43.8	36.1	43.7
Interest income	-0.2	-0.5	-0.6	-0.9	-0.7	-0.4	-0.3	-0.2	-0.5	na
Net F&CI	7.5	6.9	14.6	7.6	4.5	4.3	8.4	1.3	0.9	2.3
Trading result	11.4	11.5	43.4	41.3	35.1	48.4	76.8	38.3	32.0	37.9
Sales	3.5	3.1	3.2	2.4	3.3	3.1	3.1	2.6	2.8	na
Other	3.9	-2.0	0.4	0.6	1.4	1.7	3.8	1.8	0.9	na
Associated entities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Na
Expenses	-28.0	-27.6	-35.4	-37.6	-29.6	-37.1	-40.6	-32.8	-30.9	-35.2
Staff costs	-11.5	-11.6	-11.3	-22.0	-15.4	-22.5	-24.9	-17.4	-15.0	-16.2
Administrative costs	-11.0	-11.4	-11.9	-10.8	-11.8	-13.6	-12.6	-12.9	-13.1	-17.3
Depreciation/risk costs	-3.6	-6.5	-12.17	-4.83	-2.4	-1	-3.06	-2.54	-2.8	-1.7
o/w depreciation	-2.2	-2.4	-2.0	-2.0	-2.2	-4.9	-2.0	-2.2		
o/w risk costs	-1.4	-4.1	-10.2	-2.8	-0.2	3.9	-1.1	-0.3		
Associated entities	-1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Allocation to "Fund for general banking risks"	0.0	10.5	-15.0	0.0	0.0	-1.8	-18.4	0.1	-0.1	-0.1
Pre-tax profit	-1.8	1.9	10.7	13.4	14.0	18.0	32.8	10.9	5.1	8.4
Income tax	0.5	-0.5	-3.6	-2.6	-1.6	-1.9	-5.9	-1.8	-0.8	-1.6
Net profit	-1.3	1.4	7.1	10.8	12.4	16.1	26.9	9.1	4.3	6.8

Source: Company data, RBI/Raiffeisen Research; * approximation on income tax line during 2021 due to lack of reported quarterly data

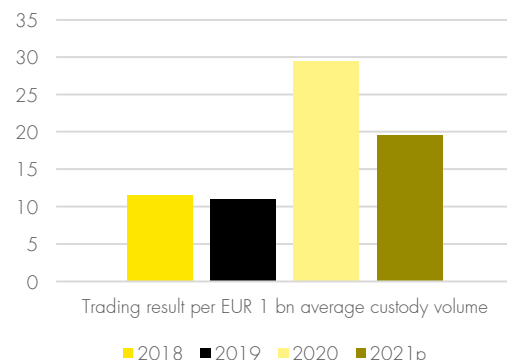
Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Business development (1)



Source: Baader Bank

Business development (2)



Source: Baader Bank, RBI/Raiffeisen Research estimates

Extraordinary result of Q1 21 not likely to be repeated despite strong signs in Jan/Feb data

Earnings outlook 2022e-2024e

Since the trading result of H2 21 came in visibly below our initial expectations, we need to revise our mid-term projections downwards as well. Our new scenarios imply a decline in 2022, which is purely a result of the extraordinarily high level reported in Q1 21. In our view, that might not be repeated in 2022, although monthly statistics data on trading volumes from Deutsche Börse point to still strong January and February. The whopping increase of new clients in 2022 has led to a decreasing trading margin (calculated as trading result in relation to average client accounts and volumes, see chart below); however, in our view, the ratio may rather stabilise going forward as the existing (retail) clients' activity on stock exchanges might not necessarily accelerate considerably compared to 2021.

With regards to the 2022 F&CI outlook, two issues are important to mention: 1) weaker fee income from the Equity Capital Markets segment amid geopolitical uncertainty and 2) somewhat lower F&CI expenses (mainly PFOF related) as a result of an expected lower trading volume.

Changes in mid-term estimates

in EUR mn	2021p	2022e new	2023e new	2024e new	2021e old	2022e old	2023e old
Revenues	215.4	209.0	218.7	228.9	249.2	270.4	282.9
Interest income	-1.0	-1.1	-1.1	-1.2	-1.3	-1.4	-1.4
Net F&CI	12.9	26.0	27.3	28.7	18.6	20.5	21.5
Trading result	185.0	166.5	174.8	183.6	210.3	231.3	242.8
Sales	12.0	12.6	13.2	13.9	12.6	13.2	13.9
Other	6.5	4.9	4.4	3.9	9.0	6.8	6.1
Associated entities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenses	139.5	143.2	154.7	163.7	148.3	162.5	176.8
Staff costs	73.5	70.6	73.4	76.3	81.9	90.1	99.1
Administrative costs	55.9	61.5	66.4	71.7	52.9	58.2	62.9
Depreciation/risk costs	10.1	11.1	14.9	15.6	13.5	14.2	14.9
depreciation	11.7	12.2	12.8	13.5	11.7	12.2	12.8
risk costs	1.9	2.0	2.1	2.2	1.9	2.0	2.1
Associated entities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C/I	65%	69%	71%	71%	60%	60%	63%
ROE	34%	22%	19%	17%	41%	35%	27%
Net profit	46.5	36.9	34.9	35.2	58.6	67.3	65.9

Source: Company data, RBI/Raiffeisen Research estimates

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Payment for order flow regulation to determine the F&CI outlook in mid-term

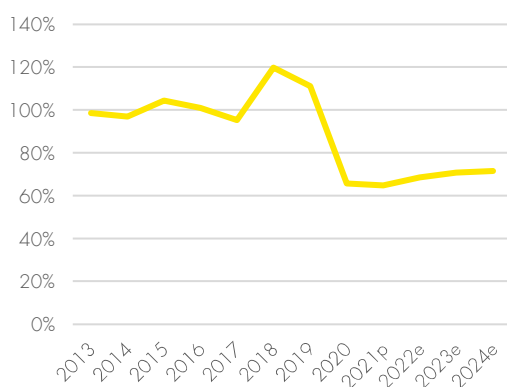
Beyond 2022, the F&CI outlook is heavily dependent on the final outcome of PFOF regulation, which according to current consensus may rather result in a PFOF ban. Currently there are different opinions from various market participants. Baader Bank believes that the ban on PFOF will reduce the F&CI expenses burden and should not trigger a loss of clients; gettex, its main exchange platform, should be able to continue offering a low-cost trading model in the new environment as well. The key unknown here is to which extent the order flow might be affected and how the competition among market makers and stock exchanges might evolve in such a new environment without a "financial component" paid to brokers as flow providers. The PFOF ban scenario may rather be an issue for low-cost brokers, such as Trade Republic, which may be forced to reconsider their pricing model towards retail investors. At the same time, classic stock exchanges reckon that they might be among the beneficiaries of the PFOF ban on the expectations that order flow will be re-shifted to them.

Upcoming regulation in Europe to ban PFOF

Regarding payment for order flow in Europe, a MIFID2/MIFIR draft regulation was published in November 2021 to prohibit any payment of that type. The draft states that there will be a "Ban on payment for forwarding client orders for execution". More specifically, it is noted that "Investment firms acting on behalf of clients shall not receive any fee or commission or non-monetary benefits from any third party for forwarding client orders to such third party for their execution". It will be necessary to see how the interpretation will be set out in the final law and what consequences it will have for brokers and market makers. In any case, it could endanger the zero-fee broker models, which would have to reconsider their pricing strategies going forward. However, it is not expected that the final law will still be implemented before end-2022. Baader Bank's management expects that the new regulation could come into force – if at all - at the beginning of 2023.

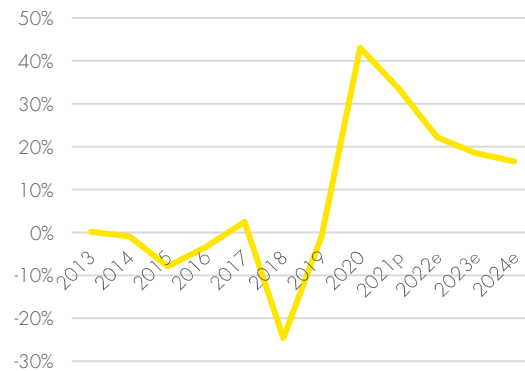
Despite some minor deterioration vs. the extraordinarily strong years 2020 and 2021, the cost efficiency should remain strong with a CIR in the range of 65-71%. Overall, underlying ROE is expected to normalise towards 18-20% territory assuming a robust 35% average dividend payout.

Cost/Income ratio



Source: Baader Bank, RBI/Raiffeisen Research

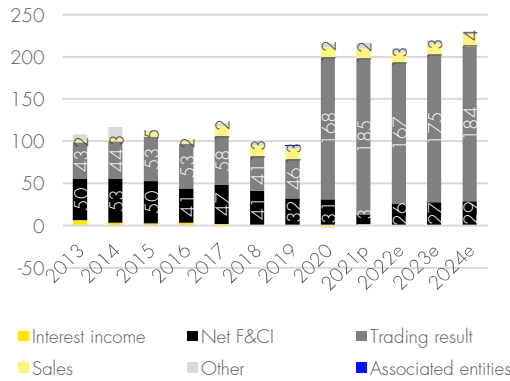
Return on equity



Source: Baader Bank, RBI/Raiffeisen Research

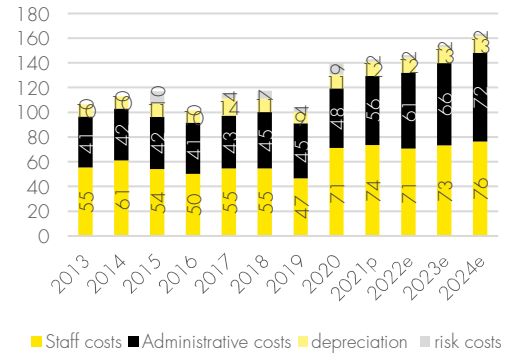
Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Revenues split (nominal)



Source: Baader Bank, RBI/Raiffeisen Research

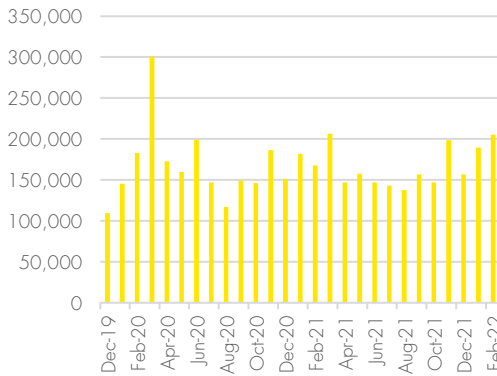
Opex split



Source: Baader Bank, RBI/Raiffeisen Research

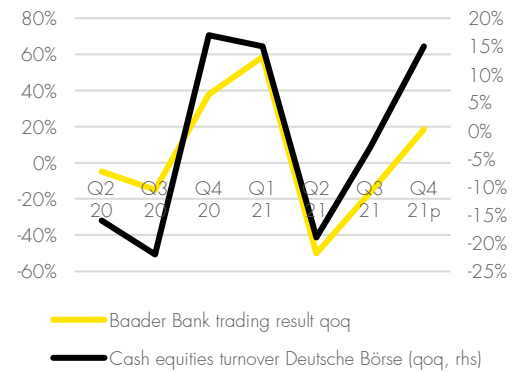
Market trends - charts

Deutsche Börse: monthly trading volume



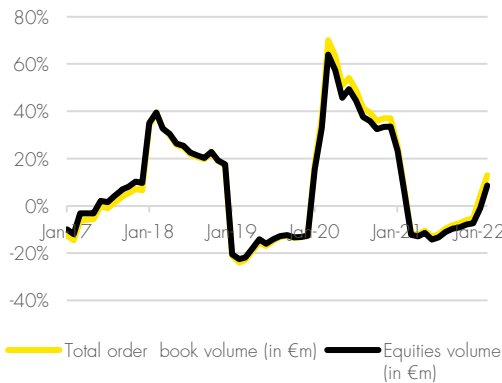
Source: Bloomberg

Correlation between Baader and market (qoq)



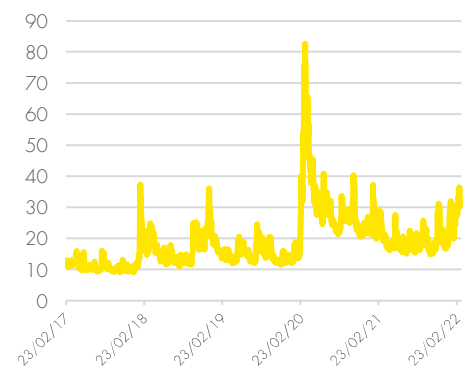
Source: FlatexDegiro

Deutsche Börse: order book, equities vol. (yoy)



Source: Deutsche Börse

Volatility index (VIX)



Source: Bloomberg

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Peer group screening

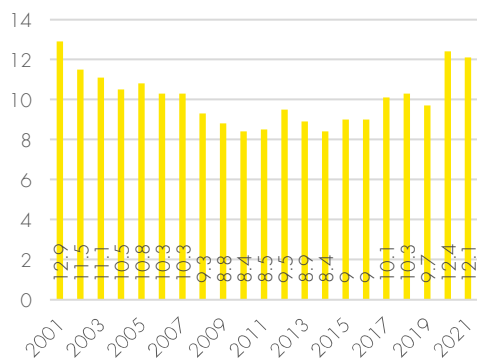
Berliner Effektenges. (Tradegate AG)

Berliner Effektengesellschaft/Tradegate AG is a German market maker specialist on the Frankfurt Stock Exchange and a major shareholder of Tradebank AG, which is listed separately. Tradegate was able to further improve revenues in 2021 after a record year in 2020. With a total volume of 62 mn trades, the number of transactions increased by 14% yoy pushing revenues up by 16.5% yoy in 2021. However, the operating result in 2021 could not reach the level of 2020 (EUR 177 mn vs. EUR 182 mn in 2020). The company was generous in sharing profits with shareholders increasing its DPS from EUR 1.80 to EUR 4.00. The new year started solidly with a very high monthly trade volume of EUR 37 bn in January 2022 (higher volume than in 9 out of 12 months in 2021) despite a yoy drop of 15%. Despite the extraordinarily strong January 2021 (which was one of the three months in 2021 with higher volumes), the company does not provide any guidance for FY22 yet.

Lang & Schwarz AG

Lang & Schwarz acts as a market maker and holds its own trading platform "LS Exchange", which is a competitor to Baader's gettex, as well as an OTC platform. Besides that, in contrast to Baader, one of the main business lines for L&S is the origination and sale of structured products. The trading result for 2021 was EUR 112.1 mn representing a more than 40% yoy increase. However, net profit (before adjusting for the Fund for General Banking Risks) dropped to EUR 20.7 mn vs. EUR 37.6 mn in 2020 due to a EUR 45.5 mn one-off risk provision related to allegations of involvement in cum-ex transactions in 2007-11. L&S was able to increase the number of trades by 85% yoy. The company has recently indicated that it performed very positively in the first few weeks of 2022.

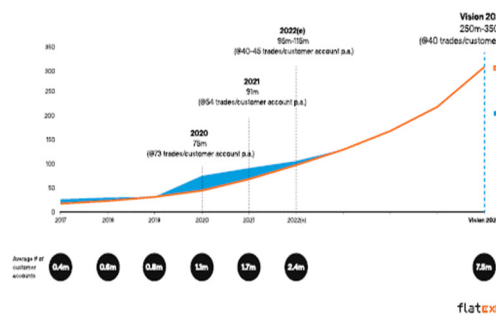
Equity market investors in Germany (in mn)



Source: Deutsche Börse, Baader Bank, RBI/Raiffeisen Research

Brokers are still bullish on long-term outlook

Trading activity adds to long term growth - but doesn't determine it



Source: FlatexDegiro

FlatexDEGIRO

FlatexDegiro is the fastest-growing online brokerage platform and the largest retail online broker in Europe with over 91 mn security transactions in 2021. It had a successful FY 21 with total revenues increasing by 60% yoy. Also, the number of customer accounts soared by 55% to 2.1 mn. An essential driver of the strong performance apart from the strong customer/revenue growth was an improvement in margins per transaction (approx. EUR 4.59 per transaction in 4Q 21, +31.5% yoy). For 2022 Flatex expects that the average customer will trade less than in 2021, while the company aims to increase its customer base by 30-40% to 2.7-2.9 mn. Nevertheless, the board only predicted an increase from 91 mn transactions in 2021 to 95-115 mn for this calendar year in a press release in January. These forecasts are based on the expectation of lower market volatility, which could lead to an average customer trading activity of 40-45 transactions (vs. 55 in 2021). Regarding the consequences of the Russian invasion, Flatex stated that the sanctions should not significantly weigh on its business owing to the insignificant

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

number of trades and products related to Russia. On the other hand, Flatex's business model could benefit from the higher volatility.

What is going on internationally?

Virtu Financial

Virtu Financial is a global leader in market making and execution services from the US, specialised in equity trading. Virtu's total revenues for FY 21 amounted at USD 28 bn of which almost 75% originated from trading income, with the second most important source of revenue being commissions and technology services. Virtu had a very successful 4Q 21 with an increase of almost 50% qoq in market making business (volumes were up 10% and volatility 26%) benefiting a lot from macroeconomic tailwinds such as the changes in global monetary policies and social & geopolitical uncertainty. Also, zero commission trading emerged as an enormously important trend leading to a rise in interest in equity and options trading. Based on consensus expectations (source: Bloomberg, before the RU/UA war outbreak), Virtu's net trading income is expected to fall by 18% yoy in 2022 and to flatten in 2023. Also, based on normalised trading and less volatility boosting events, the EBITDA margin and ROIC should decline by quite a bit compared to the highly volatile 2021.

Flow Traders

Flow Traders is a leading market maker and liquidity provider specialised in ETPs and expanding into other asset classes with headquarters in Amsterdam. It holds the leading position in equity, fixed income, cryptocurrency and commodity ETFs in the EMEA region in this regard. After the exceptionally strong year 2020 with an outstanding trading income of > EUR 900 mn, Flow Traders was able to show a solid NTI of EUR 384 mn in 2021 under normalising conditions. Flow Traders distinguishes four market trends that could shape the future of its business model: the growing acceptance and relevance of ETPs as well as the increasing electronification in fixed income instruments, currencies and commodities are the first two of these trends. The rise of digital assets is also a strong emerging potential seen by Flow Traders (EUR 6.1 bn of digital asset ETP market value traded in 4Q 21). Especially the rise of crypto and DeFi products speaks for this trend. As a final point given its strong presence in the EU the regulations towards PFOF and requirements for liquidity providers might have a visible effect on the business model.

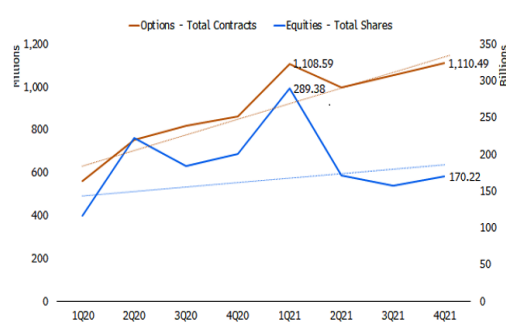
US market trends

According to market data, retail investors accounted for 18.5% of the total US equity trading volume in 4Q 21 compared to the peak of 24% in Q1 21 with the likelihood that such development could continue in the future, especially if volatility persists. After the start of the pandemic and the consequent high volatility, the market shifted from being flooded by self-directed unexperienced traders to a huge increase in option trading on a semi-professional level (in Europe it is mainly done via certificates, not the business segment in which Baader operates in). As a result, the share of equity trading has been gradually reduced. The largest brokers generated up to 60-70% of the respective PFOF during 2021 (payment for order flow) revenues from options trading.

High volatility in 2021 driven by the ongoing pandemic effects and meme-stock hypes resulted in a growing number of retail equity investors in 2021 vs. the already extraordinary growth in 2020. Triggered by those effects, the total PFOF payments from wholesale market makers to the largest brokers increased by 33.4% yoy in 2021 to USD 3.8 bn, while according to a Bloomberg survey, the 2021 level is not expected to be reached in 2022, especially if there is not another pandemic wave or something similar to the meme-stock hype in Q1 2021 and 2020. From a market maker's perspective, it will be important to keep an eye on options trading in 2022 since it was a massive elevating factor for the PFOF volume increase. The impact of the first quarter remains to be observed, as the Russian invasion has enormously driven volatility on the stock market. The consequences of this further increase in volatility will have to be monitored, but it typically could result in an increase in trading activities and therefore in increased transactions by brokers and market makers.

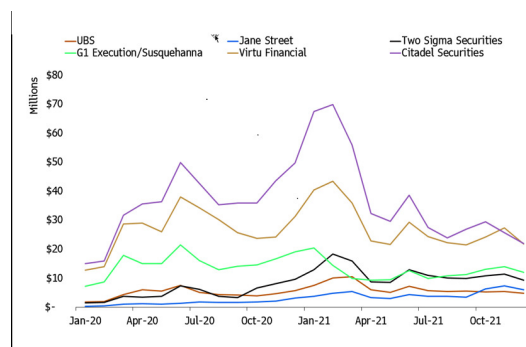
Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Equity trading vs. options trading trend



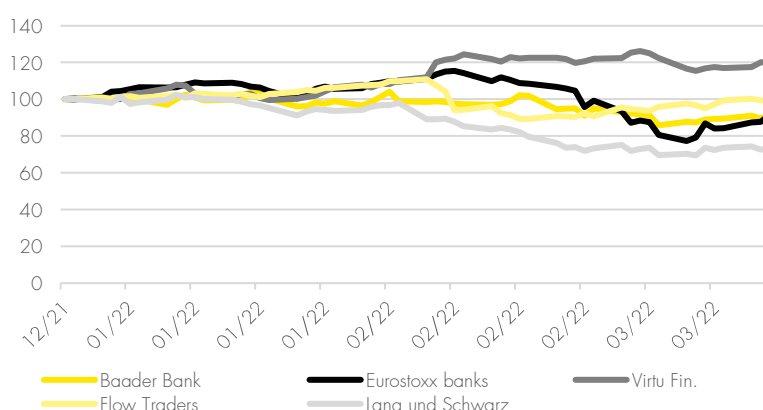
Source: Bloomberg

PFOF developments



Source: Bloomberg

Baader Bank shares vs. selected peers (rebased to 100)



Source: Bloomberg

Valuation

We derive our new target price of EUR 8.2 vs. EUR 10.30 before as an average of the below depicted intrinsic (70% weight) and peer-based valuation methods (30% weight).

Intrinsic valuation method

Dividend Discount Gordon Growth

A DDGG model is our preferred method to value banks in our coverage universe. We employ a two-stage model. In the first stage, we explicitly forecast bank earnings and dividend payments and also account for the return of excess capital to shareholders. The second stage comprises a terminal value determined by a fair value price/book ratio based on assumed sustainable cost of equity, normalised profitability and long-term potential growth rates.

We assume trading revenues to reach the 2021 level again in 2024 and to stay flattish afterwards, a normalisation of F&CI income to pre-PFOF burdened level around 2024-25e, a cost/income ratio in the range of 67-70% and a 25% tax rate. On the COE front, we continue using an equity risk premium of 6.0% and a company beta of 1.2.

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Dividend Discount Gordon Growth model

in EUR	2021p	2022e	2023e	2024e	2025e	2026e	2027e	2028e	TV
BVPS	3.4	3.8	4.3	4.8	5.4	6.0	6.6	7.3	7.3
EPS growth*	10.3%	-20.7%	-5.4%	0.9%	2.5%	7.4%	7.1%	6.9%	2.0%
ROE adj.	33.4%	22.0%	18.4%	16.4%	15.1%	14.6%	14.1%	13.6%	12.7%
EPS	0.99	0.79	0.75	0.75	0.77	0.83	0.89	0.95	
DPS	0.35	0.24	0.22	0.23	0.23	0.25	0.27	0.28	
LT risk free rate	0.05%	0.15%	0.25%	0.35%	0.40%	0.50%	1.00%	1.25%	2.00%
Equity risk premium	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Company beta	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Cost of equity	7.3%	7.4%	7.5%	7.6%	7.6%	7.7%	8.2%	8.5%	9.2%
Target P/B									1.5
Terminal value									10.9
DPS	0.35	0.24	0.22	0.23	0.23	0.25	0.27	0.28	
Discounted DPS/TV	0.35	0.24	0.21	0.20	0.19	0.19	0.18	0.18	6.34
Sum of discounted values	8.06								
12m TP	8.06								

Source: RBI/Raiffeisen Research

Peer-based valuation methods

We have used a sample of nine banks with similar business models mainly operating as market makers and brokers. It is important to stress that there is no 100% overlap between selected competitors given the various types of revenue streams split. In addition, due to the lack of official forecasts, we have not taken into account the relevant multiples of Baader's main peers on the domestic market.

Peer group comparison

	P/E			Div. yield			P/B			ROE		
	1FY	2FY	3FY	1FY	2FY	3FY	1FY	2FY	3FY	1FY	2FY	3FY
Virtu	10.20	10.18	10.22	2.7%	2.7%	2.7%	2.52	2.27	1.58	29.3%	25.5%	23.0%
Cowen Inc	4.13	3.60	3.18	1.8%	2.2%	2.7%	0.68	0.62	0.60	20.1%	20.5%	15.0%
Jefferies Fin. Group	8.81	7.84	6.67	3.7%	4.1%	3.0%	0.78	0.74	0.80	8.9%	11.1%	12.0%
Tradeweb Markets Inc	47.51	41.55	36.64	0.4%	0.5%	0.5%	3.74	3.55	3.36	8.0%	9.5%	12.0%
Flow Traders	12.86	11.56	13.86	5.3%	5.2%	5.6%	2.55	2.33	2.24	22.3%	21.1%	17.0%
ABC Arbitrage	17.51	12.76	10.91	4.6%	6.2%	7.3%	2.94	2.69	2.49	16.9%	21.9%	23.8%
Swissquote Group Holding	12.54	12.40	11.42	1.9%	2.0%	2.1%	4.15	3.35	2.78	37.5%	30.1%	25.1%
FlatexDegiro	23.17	11.60	8.50							11.9%	22.1%	23.1%
Median	12.70	11.58	10.57	2.7%	2.7%	2.7%	2.55	2.33	2.24	18.5%	21.5%	20.0%
Baader Bank	7.49	7.92	7.85	4.0%	3.8%	3.8%	1.56	1.38	1.23	22.2%	18.5%	16.5%

Source: Bloomberg, RB I/Raiffeisen Research, based on closing prices as of March 15, 2022

Price/Book – ROE Regression: Our peer group displays a relatively low correlation of Price/Book multiples and consensus ROE expectations (R-squared 0.2 on 2022e and 2023e estimates). We therefore apply only 5% weight of the resulting regression equations to derive a fair value.

Price/Book – ROE Regression

	2022e	2023e	2024e	Average
Baader Bank ROE	22.2%	18.5%	16.5%	
BVPS	3.77	4.28	4.81	
PB/-ROE equation				
x	4.710922	3.374435	4.887602	
y intercept	1.520726	1.548806	1.08705	
Target P/B	2.56	2.17	1.90	
Implied	9.68	9.30	9.11	9.21

Source: Bloomberg, RBI/Raiffeisen Research

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Price/earnings: P/E multiples have been historically used to value banks with solid balance sheets and healthy capital generation and comparable dividend policies. We have excluded the two highest peer multiples (thus adding a bit of conservatism to our methodology) to derive our peer-based valuation range and applied our mid-term bottom-line projections. We attach 15% weight.

Price/Earnings

	2022e	2023e	2024e	Average
Baader Bank EPS	0.79	0.75	0.75	
Peer group	12.70	11.58	10.57	
Implied	10.00	8.62	7.94	8.28

Source: Bloomberg, RBI/Raiffeisen Research

Dividend yield: A fair value derived from the dividend yield assumes the average peer dividend yield as a proxy for the asset to be valued. We consider a 10% weight.

Dividend yield

	2022e	2023e	2024e	Average
Baader Bank DPS	0.24	0.22	0.23	
Peer group	2.7%	2.7%	2.7%	
Implied	8.66	8.19	8.26	8.22

Source: Bloomberg, RBI/Raiffeisen Research

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

<i>Income statement (EUR mn)</i>	<i>12/2018</i>	<i>12/2019</i>	<i>12/2020</i>	<i>12/2021e</i>	<i>12/2022e</i>	<i>12/2023e</i>
Total interest income	0.5	-0.8	-2.6	-1.0	-1.1	-1.1
Total interest expense	0.0	0.0	0.0	0.0	0.0	0.0
Net interest income	0.5	-0.8	-2.6	-1.0	-1.1	-1.1
Net fee & commission	40.5	32.1	31.0	12.9	26.0	27.3
Net trading result	40.9	46.1	168.2	185.0	166.5	174.8
Other banking operations	0.0	0.0	0.0	0.0	0.0	0.0
Total operating income	81.9	77.4	196.6	196.9	191.5	201.0
Losses on loans and adv.	0.0	0.0	0.0	0.0	0.0	0.0
Personnel expenses	-54.7	-46.5	-71.2	-73.5	-70.6	-73.4
Other adm. expenses	-45.4	-44.6	-48.1	-55.9	-61.5	-66.4
Depreciation of PPE	-17.4	-13.1	-20.4	-10.1	-11.1	-14.9
Depreciation of intangible assets	0.0	0.0	0.0	0.0	0.0	0.0
Administrative expenses	-117.5	-104.2	-139.7	-139.5	-143.2	-154.7
Other operating profit/loss	16.1	26.9	-0.7	0.0	0.8	0.1
Earnings from ordinary activities	-19.5	0.1	56.2	57.4	49.1	46.5
Adj. profit from ordinary activities	-19.5	0.1	56.2	57.4	49.1	46.5
Gain/loss on net monetary position	0.0	0.0	0.0	0.0	0.0	0.0
Earnings before taxes	-19.5	0.1	56.2	57.4	49.1	46.5
Taxes on income	-1.6	-0.5	-14.1	-10.9	-12.3	-11.6
Extraordinary result	0.0	0.0	0.0	0.0	0.0	0.0
Net profit before minorities	-21.1	-0.5	42.2	46.5	36.9	34.9
Minority interests held outside the group	-0.3	-0.2	0.0	0.0	0.0	0.0
Net profit after minorities	-21.4	-0.7	42.2	46.5	36.9	34.9
Adjusted net profit	-21.4	-0.7	42.2	46.5	36.9	34.9
<i>Balance sheet (EUR mn)</i>	<i>12/2018</i>	<i>12/2019</i>	<i>12/2020</i>	<i>12/2021e</i>	<i>12/2022e</i>	<i>12/2023e</i>
Cash & central bank	209.1	237.8	488.8	939.3	1,038.3	1,148.2
Financial institutions	99.2	78.6	163.0	179.3	197.2	217.0
Loans & advances to customers	26.8	38.5	47.3	59.1	65.0	71.5
Credit provisions	0.0	0.0	0.0	0.0	0.0	0.0
Trading assets	49.4	37.9	36.8	40.5	44.5	49.0
Other current fin. assets (AFS)	207.7	109.3	45.6	50.2	55.2	60.7
Investments (HTM & strat. partic.)	8.0	7.3	9.6	10.6	11.6	12.8
Property and equipment	81.7	77.4	74.5	82.0	90.1	99.2
Goodwill	17.6	14.2	9.3	10.2	11.3	12.4
Other intangible assets	0.0	0.0	0.0	0.0	0.0	0.0
Deferred tax assets	7.5	8.6	7.7	8.5	9.3	10.2
Other assets	6.2	7.8	5.9	6.5	7.1	7.9
Total assets	713.2	617.4	888.5	1,386.1	1,529.7	1,688.8
Due to financial institutions	98.8	61.8	82.6	90.9	99.9	109.9
Customer deposits	487.2	444.1	593.6	1,038.8	1,142.7	1,256.9
Debt securities issued	0.0	0.0	0.0	0.0	0.0	0.0
Trading liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Provisions	0.0	0.0	0.0	0.0	0.0	0.0
Deferred taxes	0.0	0.0	0.0	0.0	0.0	0.0
Accruals and def. income	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities	51.2	36.7	91.3	100.5	110.5	121.6
Subordinated capital	0.0	0.0	0.0	0.0	0.0	0.0
Minority interests (BS)	1.7	0.8	1.0	1.0	1.0	1.0
Shareholders' equity	74.3	73.9	119.9	154.9	175.5	199.3
Liabilities & shareholders' equity	713.2	617.3	888.4	1,386.0	1,529.6	1,688.8
<i>Other ratios (x)</i>	<i>12/2018</i>	<i>12/2019</i>	<i>12/2020</i>	<i>12/2021e</i>	<i>12/2022e</i>	<i>12/2023e</i>
Loan growth	n.a.	43.7%	22.9%	25.0%	10.0%	10.0%
Deposit growth	n.a.	-8.8%	33.7%	75.0%	10.0%	10.0%
Loans/deposits	5.5%	8.7%	8.0%	5.7%	5.7%	5.7%
Tier 1 ratio	n.a.	12.8%	14.6%	17.3%	21.2%	23.9%
Equity/total assets	10.7%	12.1%	13.6%	11.2%	11.5%	11.9%
NII growth	n.a.	-260.0%	225.0%	-61.5%	5.0%	5.0%
Net F&C growth	n.a.	-20.7%	-3.4%	-58.4%	101.7%	5.0%
NIM on total assets	0.1%	-0.1%	-0.3%	-0.1%	-0.1%	-0.1%
Cost income ratio	143.5%	134.6%	71.1%	70.8%	74.8%	76.9%
NPL/customer loans	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NPL coverage	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
LLP /customer loans	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Baader Bank, RBI/Raiffeisen Research estimates

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

SWOT Analysis

Strengths/Opportunities

- Shareholder structure allowing for smooth adaption to the changing regulatory environment and competitive markets
- Integrated business model adequate to seize most benefits from the current market environment
- Dividend capacity owing to solid profitability outlook and negligible credit risks with a 5-6% yield
- As a banking partner for FinTechs well positioned to participate in the fast growing segment (incl. digital asset managers, Robo-advisory)
- Diversified operational model (even with non-core activities) enriching the revenue base

Weaknesses/Threats

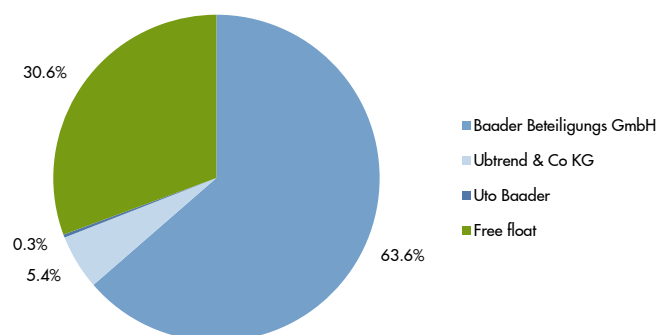
- Relatively high correlation of bank's profitability with the adverse market conditions
- Sharp reduction of market volatilities could be somewhat detrimental to ROE
- Return to monetary tightening cycle could dampen the growth of retail brokerage accounts and impact trading activities
- Unforeseen regulatory risks

Fact Sheet

Company description

Baader Bank Group is a highly specialised German investment bank based in Unterschleißheim near Munich with more than 35 years of experience on the capital markets. The bank runs an integrated business model combining Market Making, Brokerage incl. Capital Markets, Asset Management, Banking and Research and as such offers trading, settlement and banking services. Germany is the core market and through its network of subsidiaries it is also present in the DACH region as well as in London and New York with a various number of international institutional clients.

Shareholder structure



Income statement (EUR mn)	12/2020	12/2021e	12/2022e	12/2023e
Net interest income	-2.6	-1.0	-1.1	-1.1
Net fee & commission	31.0	12.9	26.0	27.3
Losses on loans and adv.	0.0	0.0	0.0	0.0
Earnings before taxes	56.2	57.4	49.1	46.5
Net profit after minorities	42.2	46.5	36.9	34.9
Adjusted net profit after minorities	42.2	46.5	36.9	34.9

Balance sheet	12/2020	12/2021e	12/2022e	12/2023e
Customer loans	47.3	59.1	65.0	71.5
Customer deposits	593.6	1,038.8	1,142.7	1,256.9
Shareholders' equity	119.9	154.9	175.5	199.3
Total equity	120.9	155.9	176.5	200.3

Ratios	12/2020	12/2021e	12/2022e	12/2023e
NPL/customer loans	0.0%	0.0%	0.0%	0.0%
Loans/deposits	8.0%	5.7%	5.7%	5.7%
Cost/income	71.1%	70.8%	74.8%	76.9%

Source: Baader Bank, RBI/Raiffeisen Research estimates

Per share data (EUR mn)	12/2020	12/2021e	12/2022e	12/2023e
EPS reported	0.92	1.00	0.79	0.75
Earnings per share (adj.)	0.92	1.00	0.79	0.75
EPS growth	n.a.	8.4%	-20.7%	-5.4%
Book value per share	2.6	3.3	3.8	4.3
Dividend per share	0.08	0.35	0.24	0.22
Payout ratio	9.0%	35.0%	30.0%	30.0%

Valuation (x)	12/2020	12/2021e	12/2022e	12/2023e
PE reported	4.90	6.51	7.73	8.17
Adjusted PE	4.90	6.51	7.73	8.17
Price book value	1.72	1.95	1.62	1.43
Return on equity adjusted	43.5%	33.8%	22.3%	18.6%
Dividend yield	1.83%	5.38%	3.88%	3.67%
Tier 1 ratio	14.6%	17.3%	21.2%	23.9%
Equity/total assets	13.6%	11.2%	11.5%	11.9%
Price/NAV	1.87	2.09	1.73	1.52
Equity/total assets	13.6%	11.2%	11.5%	11.9%

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Publication schedule

Date	Publication
01.04.2022	Annual report publication
28.04.2022	Q1 Earnings release
07.07.2022	Annual General Meeting
28.07.2022	Q2 Earnings release
27.10.2022	Q3 Earnings release

Recommendation history

17.09.2021 (Initiation date)	Rating	Target Price	Prev. day's close	Upside	Analyst
17.09.2021	Buy	10.30	6.96	48.0%	J. Sikimic
18.01.2021	No Rating		5.55	%	J. Sikimic

Coverage universe recommendation overview

The distribution of all recommendations relating to the 12 months prior to the publications date (column A), as well as the distribution of recommendations in the context of which services of investment firms set out in Sections A (investment services and activities) and B (ancillary services) of Annex I of Directive 2014/65/EU of the European Parliament and of the Council ("special services") have been provided in the past 12 months (column B).

	Column A	Column B
Investment recommendation	Basis: All recommendations for all financial instruments (last 12 months)	Basis: Recommendations for financial instruments of all issuers, for which special services were rendered in the last 12 months
Buy recommendations	58.0%	61.1%
Hold recommendations	24.2%	23.0%
Sell recommendations	17.7%	15.9%

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Acknowledgements

Date of completion of this report: 23.03.2022 10:44 UTC+1

Date of email-distribution of this report: 23.03.2022 10:56 UTC+1

DISCLAIMER FINANCIAL ANALYSIS

Publisher and responsible for this publication: Raiffeisen Bank International AG (hereinafter "RBI")

RBI is a credit institution according to §1 of the Austrian Banking Act (Bankwesengesetz) with its registered office Am Stadtpark 9, 1030 Vienna, Austria. Raiffeisen Research is an organisational unit of RBI.

Supervisory authorities: As a credit institution (acc. to §1 Austrian Banking Act; Bankwesengesetz), RBI is subject to the supervision by the Austrian Financial Market Authority (FMA, Finanzmarktaufsicht), 1090 Vienna, Otto-Wagner-Platz 5, Austria and the National Bank of Austria (OeNB, Oesterreichische Nationalbank, 1090 Vienna, Otto-Wagner-Platz 3, Austria). Additionally, RBI is subject to the supervision by the European Central Bank (ECB), 60640 Frankfurt am Main, Germany, which undertakes such supervision within the Single Supervisory Mechanism (SSM), which consists of the ECB and the national responsible authorities (Council Regulation (EU) No 1024/2013 - SSM Regulation). Unless otherwise explicitly set out herein, references to legal acts refer to acts which have been enacted by the Republic of Austria.

This research report (hereinafter, "Report" or "Document") is for information purposes only and may not be reproduced or distributed to other persons without RBI's permission. This Document neither constitutes a solicitation of an offer nor is it a prospectus in the sense of the Regulation (EU) 2017/1129 (EU Prospectus Regulation) or the Austrian Stock Exchange Act 2018 (Börsegesetz 2018) or any other comparable foreign law.

Any investment decision in respect of securities, financial products or investments may only be made on the basis of (i) an approved and published prospectus or (ii) the complete documentation that will be or has been published in connection with the securities, financial products or investments in question, and must not be made on the basis of this Document. This Document does not constitute a personal recommendation in the sense of the Austrian Securities Supervision Act 2018 (Wertpapieraufsichtsgesetz 2018) to buy or sell financial instruments.

Neither this Document nor any of its components shall form the basis for any kind of contract or commitment whatsoever. This Document is not a substitute for the necessary advice on the purchase or sale of securities, investments or other financial products. In respect of the sale or purchase of securities, investments or financial products, a banking advisor may provide individualised advice which might be suitable for investments and financial products. This Document is fundamentally based on generally available information and not on any confidential information which the author that has prepared this Document has obtained exclusively on the basis of his/her client relationship with a third person. Unless otherwise expressly stated in this Document, RBI deems all of the information included herein to be reliable but does not make any warranties regarding its accuracy and completeness.

In emerging markets, there may be higher settlement and custody risk as compared to markets with an established infrastructure. The liquidity of stocks/financial instruments may be influenced by the number of market makers. Both of these circumstances may result in a higher risk in relation to the safety of the investments that will be, or may have been, made on the basis of the information contained in this Document. This Report constitutes the current judgment of the analyst as of the date of this Report and is subject to change without notice. It may be outdated by future developments, without the Document being changed or amended.

Unless otherwise expressly stated (www.raiffeisenresearch.com/special_compensation), the analyst that has drafted (or contributed to) this Report, is not compensated by RBI for specific investment banking transactions. Compensation of the analyst or analysts of this Report is based (among other things) on the overall profitability of RBI, which includes, inter alia, earnings from investment banking and other transactions of RBI. In general, RBI prohibits its analysts and persons contributing to the Report to acquire securities or other financial instruments of any company which is covered by the analysts (and contributing persons), unless such acquisition is authorised by RBI's Compliance Department in advance.

RBI has established the following organisational and administrative agreements, including Chinese walls, to impede or prevent conflicts of interest in relation to recommendations: RBI has designated fundamentally binding confidentiality zones. Confidentiality zones are units within credit institutions, which are isolated from other units by organisational measures governing the exchange of information, because compliance-relevant information is continuously or temporarily processed in these zones. Compliance-relevant information must not leave a confidentiality zone and is to be treated as strictly confidential in internal business operations, including interaction with other units. This is not applicable to the transfer of information necessary for usual business operations. Such transfer of information is limited, however, to what is absolutely necessary (need-to-know principle). The exchange of compliance-relevant information between two confidentiality zones must only be conducted with the involvement of the Compliance Officer. RBI may have effected a proprietary transaction in any investments mentioned herein or in related investments and or may have a position or holding in such investments as a result. RBI may have acted, or might be acting, as a manager or co-manager in a public offering of any securities mentioned in this Report or in any related security.

REGULATION NO 833/2014 CONCERNING RESTRICTIVE MEASURES IN VIEW OF RUSSIA'S ACTIONS DESTABILISING THE SITUATION IN UKRAINE

Kindly note that research is done and recommendations are given only in respect of financial instruments which are not affected by the sanctions under EU regulation no 833/2014 as amended, i.e. financial instruments which have been issued before 1 August 2014. We may remind you that the acquisition of financial instruments with a term exceeding 30 days issued after 31 July 2014 is prohibited under EU regulation no 833/2014 as amended.

RISK NOTIFICATION AND EXPLANATIONS

No opinion is given with respect to such prohibited financial instruments. Figures on performance refer to the past. Past performance is not a reliable indicator for future results and developments of a financial instrument, a financial index or a securities service. This is particularly true in cases when the financial instrument, financial index or securities service has been offered for less than 12 months. In particular, this very short comparison period is not a reliable indicator for future results. Performance of a financial instrument, a financial index or a securities service is reduced by commissions, fees and other charges, which depend on the individual circumstances of the investor. The return on an investment can rise or fall due to exchange rate fluctuations. Forecasts of future performance are based solely on estimates and assumptions. Actual future performance may deviate from the forecast. Consequently, forecasts are not a reliable indicator for future results and development of a financial instrument, a financial index or a securities service.

Please follow this link for viewing RBI's concepts & methods: <https://equityresearch.rbinternational.com/concepts.php>

Please follow this link for viewing RBI's distribution of recommendations: <https://equityresearch.rbinternational.com/distribution.php>

RBI's RATING AND RISK CLASSIFICATION SYSTEM

Risk ratings: indicators of potential price fluctuations are: low, medium, high. Risk ratings take into account volatility. Fundamental criteria might lead to a change in the risk classification. The classification may also change over the course of time. Investment rating: Investment ratings are based on expected total return within a 12-month period from the date of the initial rating.

Buy: Buy stocks are expected to have a total return of at least 15% (for low and medium volatility risk stocks; 20% for stocks with a high volatility risk) and are the most attractive stocks in the coverage universe of RBI in a 12 month horizon.

Hold: Hold stocks are expected to deliver a positive total return of up to 15% (for low and medium volatility risk stocks; 20% for stocks with a high volatility risk) within a 12-month period.

Reduce: Reduce stocks are expected to achieve a negative total return up to -10% within a 12-month period.

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Sell: Sell stocks are expected to post a negative total return of more than -10% within a 12-month period.

UR: The recommendation and/or the target price and/or financial estimates are under review.

Suspended: No further research for a certain stock will be published for the time being.

Price targets are determined by the fair value derived from commonly used valuation methods (inter alia peer group comparison, DCF model and/or dividend discount). Other fundamental factors (M&A activities, capital markets transactions, share buybacks, sector sentiment etc.) are taken into account as well. Upon the release of a Report, investment ratings are determined by the ranges described above. Interim deviations from the above mentioned ranges will not cause a change in the recommendation automatically but will become subject to review. Save as otherwise stated, the indicated prices are the closing prices of the relevant stock exchanges as available at 6.30 a.m. as of the date of this Report. Indicated prices refer to the stock exchange according to the Bloomberg/Reuters code stated. Research reports are updated at least annually unless the coverage of a stock has been terminated or temporarily suspended in the meantime.

Disclosure und Regulation (EU) No 596/2014

1. RBI or a natural person involved in the preparation of the financial analysis owns a net long or short position exceeding the threshold of 0.5% of the total issued share capital of the issuer; in the case the threshold is exceeded a statement to that effect specifying whether the net position is long or short is provided.
2. The issuer holds more than 5% of the entire issued share capital of RBI.
3. RBI or one of its affiliated legal entities is a market maker or specialist or designated sponsor or stabilisation manager or liquidity provider in the financial instruments of the issuer.
4. During the last 12 months, RBI or one of its affiliated legal entities played a major role or was co-leader (e.g. as lead manager or co-lead manager) in any publicly disclosed offer of financial instruments of the issuer.
5. An agreement relating to the provision of services of investment firms set out in Sections A (investment services and activities) and B (ancillary services) of Annex I of Directive 2014/65/EU of the European Parliament and of the Council has been in effect during the previous 12 months between RBI or one of its affiliated legal entities and the issuer or such agreement has given rise during the same time period to the payment of a compensation or to the promise to get compensation paid for such services; in such cases, a disclosure will only be made if it would not entail the disclosure of confidential commercial information.
6. RBI or one of its affiliated legal entities has entered into an agreement with the issuer on the provision of investment recommendations.
7. The responsible analyst or a person involved in the production of the financial analysis or a natural person from Raiffeisen Research owns financial instruments of the issuer which she/he analyses.
8. The responsible analyst or a person involved in the production of the financial analysis is a member of the executive board, the board of directors or supervisory board of the issuer which she/he analyses.
9. The responsible analyst or a natural or legal person involved in the production of the financial analysis, received or acquired shares in the issuer she/he analyses prior to the public offering of such shares. The price at which the shares were acquired and the date of acquisition will be disclosed.
10. The compensation of the responsible analyst or a natural or legal person involved in the production of the financial analysis is (i) linked to the provision of services of investment firms set out in Sections A (investment services and activities) and B (ancillary services) of Annex I of Directive 2014/65/EU of the European Parliament and of the Council provided by RBI or one of its affiliated legal entities resp. is (ii) linked to trading fees, that RBI or one of its affiliated legal entities receives.

Applicable disclosures: 6

If not already disclosed in 1-10: RBI or one of its affiliated legal entities resp. the relevant analyst or a natural or legal person involved in the production of the financial analysis discloses all relationships, circumstances or interests that may reasonably be expected to impair the objectivity of the financial analysis, or which represent a substantial conflict of interest concerning any financial instrument or the issuer to which the recommendation directly or indirectly relates. The relationships, circumstances or interests include for example significant financial interests with respect to the issuer or other received incentives for taking into consideration third party interests. Interests or conflict of interests (as described in the preceding paragraph) of persons belonging to one of RBI's affiliated legal entities are known or could reasonably have been known to the persons involved in the production of the financial analysis. The same applies to interests or conflict of interests of persons who, although not involved in the production of the financial analysis, have or could reasonably be expected to have access to the financial analysis prior to its publication.

SPECIAL ADDITIONAL REGULATIONS FOR THE UNITED STATES OF AMERICA:

This report and any recommendation (including any opinion, projection, forecast or estimate; hereinafter referred to as "Report" or "Document") contained herein have been prepared by Raiffeisen Bank International AG (a non-US affiliate of RB International Markets (USA) LLC) or any of its affiliated companies (Raiffeisen Bank International AG shall hereinafter be referred to as "RBI") and are distributed in the United States by RBI's corporate subsidiary, RB International Markets (USA) LLC ("RBIM"), a broker-dealer registered with FINRA® and RBI. This Report constitutes the current judgment of the author as of the date of this Report and is subject to change without notice. RBI and/or its employees have no obligation to update, modify or amend or otherwise notify a recipient of this Report if the information or recommendation stated herein changes or subsequently becomes inaccurate. The frequency of subsequent reports, if any, remains in the discretion of the author and RBI. This Report was prepared outside the United States by one or more analysts who may not have been subject to rules regarding the preparation of reports and the independence of research analysts comparable to those in effect in the United States. The research analyst or analysts who prepared and identified on the cover of this research report (i) are not registered or qualified as research analysts with the Financial Industry Regulatory Authority ("FINRA") in the United States, and (ii) are not allowed to be associated persons of RBIM and are therefore not subject to FINRA regulations, including regulations related to the conduct or independence of research analysts.

The research analyst or analysts identified on the cover of this report certify that (i) the views expressed in the research report accurately reflect his or her respective personal views about any and all of the subject securities or issuers; and (ii) no part of his or her respective compensation was, is, or will be, directly or indirectly, related to the recommendation or views expressed by him or her in the research report.

RBI'S RATING AND RISK CLASSIFICATION SYSTEM (PLEASE CONSIDER THE DEFINITION GIVEN BEFORE)

This Report does not constitute an offer to purchase or sell securities and neither shall this Report nor anything contained herein form the basis of, or be relied upon in connection with, any contract or commitment whatsoever. The information contained herein is not a complete analysis of every material fact regarding the respective company, industry or security. This Report may contain forward-looking statements, which involve risks and uncertainties, does not guarantee future performances whatsoever and is, accordingly, subject to change. Though the information and opinions contained in this Report are based on sources believed to be reliable, neither RBI nor RBIM has independently verified the facts, assumptions and estimates contained in this report. Accordingly, no representation or warranty, expressed or implied, is made to, and reliance should not be placed on, the fairness, accuracy, completeness or correctness of the information and opinions contained in this Report. Although the opinions and estimates stated reflect the current judgment of RBI and RBIM, opinions and estimates are subject to change without notice. This Report is being furnished to you for informational purposes only and investors should consider this Report as only a single factor in making their investment decision. Investors must make their own determination of the appropriateness of an investment in any securities referred to in this Report based on the tax, or other considerations applicable to such investor and its own investment strategy.

INVESTMENT RISK

Investments in securities generally involve various and numerous risks and may even result in the complete loss of the invested capital. This Report does not take into account the effect of fluctuations in interest rates on the value of investments. Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Acknowledgements

account the investment objectives, financial situation or particular needs of any specific client of RBIM. Before making an investment decision on the basis of this Report, the recipients of this Report should consider whether this Report or any information contained herein are appropriate or suitable with regard to their own investment needs, objectives and suitability. Any recommendation contained in this Report may not be suitable for all investors. Past performance of securities and other financial instruments are not indicative of future performance. RBIM can be neither a price guarantor nor an insurer of market conditions.

Given the cyclical nature of the banking sector in which this company, Baader Bank, operates, banking can be one of the most volatile industries within the financial sector. However, also other financial companies (insurances, stock exchanges, asset management operations) can be regarded as volatile. The main risks are the overall health of the global economy as well as the macroeconomic conditions of the countries the companies operate in. This also includes currency, interest rate and political risks. The risk of natural catastrophes and investment related risks are among industry specific risks. In addition, changes in the regulatory environment may limit the scope and profitability of the business and require additional expenditures or capital. Finally, given the volatility in asset prices, currencies and interest rates, it is crucial to evaluate counterparty risk to mitigate default risk.

This Report may cover numerous securities, some of which may not be qualified for sale in certain states and may therefore not be offered to investors in such states. This Document should not be construed as providing investment advice. Investing in non-U.S. securities, including ADRs, involves significant risks such as fluctuation of exchange rates that may have adverse effects on the value or price of income derived from the security. Securities of some foreign companies may be less liquid and prices more volatile than securities of U.S. companies. Securities of non-U.S. issuers may not be registered with or subject to Securities and Exchange Commission reporting requirements; therefore, information regarding such issuers may be limited. Securities which are not registered in the United States may not be offered or sold, directly or indirectly, within the United States or to U.S. persons (within the meaning of Regulation S under the Securities Act of 1933 [the 'Securities Act']), except pursuant to an exemption under the Securities Act. This Report and the contents therein are the copyright product, and property of, RBIM or RBI. It is intended solely for those to whom RBIM directly distributes this Report. Any reproduction, republication dissemination, and/or other use of this Report by any recipient of it, or by any third party, without the express written consent of RBIM, is strictly prohibited.

U.S. persons receiving the research and wishing to effect any transactions in any security discussed in the Report should do so through RBIM, and not the issuer of the research. RBIM can be reached at 1177 Avenue of the Americas, 5th Floor, New York, NY 10036, 212-600-2588.

SPECIAL ADDITIONAL REGULATIONS FOR THE UNITED STATES OF AMERICA REGARDING ANY MATERIALS DISCUSSING RUSSIAN EQUITIES (HEREINAFTER REFERRED TO AS "RUSSIAN EQUITIES MATERIALS")

Any Russian Equities Materials are distributed for informational purposes only and do not constitute a solicitation for, or an offer to buy, any of the financial instruments discussed. The Russian Equities Materials do not provide financial analysis, do not constitute investment advice and are not intended to provide a sufficient basis on which to make an investment decision. The Russian Equities Materials have not been prepared by financial analysts in accordance with the legal and regulatory rules applicable to research reports as stipulated under US law. The author(s) of the Russian Equities Materials has(have) not necessarily complied with the legal and regulatory rules concerning analyst independence as stipulated under US law, and its author(s) is(are) only paid a salary and not any form of transaction-action based compensation, directly or indirectly. The author(s) of the Russian Equities Materials may be contacted solely to answer questions concerning their content, but will not solicit or accept orders for any financial instruments. Opinions, projections, forecasts and estimates in this report referring to any Russian Equities Materials constitute the current judgement of the author(s) as of the date of this report and are subject to change without notice. RBI and its affiliated companies and employees have no obligation to update, modify or amend or to otherwise notify a recipient in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein changes or subsequently becomes inaccurate. Facts and views presented in the Russian Equities Materials have not been reviewed by, and may not reflect information known to, other professionals of RBI. RB International Markets (USA) LLC assumes responsibility for the content of the Russian Equities Materials. U.S. persons receiving the Russian Equities Materials and wishing to effect any transactions in any security discussed in the Russian Equities Materials should contact RB International (USA) LLC, and not the respective author(s) of the Russian Equities Materials.

RBI is a stock corporation, incorporated under the laws of the Republic of Austria and registered in the companies register of the commercial court in Vienna, Austria. The principal executive office of RBI is at, Am Stadtpark 9, 1030 Vienna, Austria. The shares of RBI are listed on the Vienna stock exchange (ISIN: AT0000606306 / Vienna Stock Exchange; ticker RBI AV). RBI is a corporate investment bank and domiciled in Austria. For many years RBI has been operating in Central and Eastern Europe (CEE), where it maintains a network of subsidiary banks, leasing companies and numerous financial service providers in several markets. As a result of its position within Austria and CEE, RBI has an established course of dealing, stretching in some cases over many decades, with participants in the following industries: oil & gas, technology, utilities, real estate, telecommunications, financials, basic materials, cyclical and noncyclical consumers, healthcare and industrials. It strives to offer a wide spectrum of services and products including services and products associated with stock, derivatives, and equity capital transactions. RBI's institutional equity research department covers Austrian and Eastern European companies from the business fields: utilities, information technology, banks, insurance, transportation & logistics, real estate, capital goods, construction & building materials, basic materials, oil & gas, consumer staples and consumer cyclicals, communication.

Supervisory authorities: Austrian Financial Market Authority (FMA), 1090 Vienna, Otto-Wagner-Platz 5, Austria and Oesterreichische Nationalbank, 1090 Vienna, Otto-Wagner Platz 3, Austria, as well as the European Central Bank (ECB), 60640 Frankfurt am Main, Germany, the latter within the context of the Single Supervisory Mechanism (SSM), which consists of the ECB and the national responsible authorities (Council Regulation (EU) No 1024/2013 of the Council of the European Union).

DISCLOSURE ASPECTS

The following disclosures apply to the security when stated under the applicable disclosures section (RB International Markets (USA) LLC is hereinafter being referred to as "RBIM"):

21. RBIM, or an affiliate, has acted as manager, co-manager, or underwriting participant of a public offering for this company in the past 12 months.
22. RBIM, or an affiliate, has performed investment banking, capital markets, or other comparable services for this company or its officers in the past 12 months.
23. RBIM, or an affiliate, expects to receive or intends to seek compensation for investment banking services from the subject company in the next 3 months.
24. Securities, or derivatives thereof, of this company are owned either directly by the securities analyst or an affiliate, covering the stock, or a member of his/her team, or indirectly by the household family members.
25. An officer, or a household family member of an officer, of RBIM, or an affiliate, is a director or an officer of the company.
26. RBIM, or an affiliate, beneficially owns 1% or more of any class of this company(ies) common equity.

Applicable disclosures: No disclosures

RBIM's ultimate parent company is Raiffeisen Bank International AG ("RBI"). Although RBI or its affiliated entities may have concluded transactions for products or services (including but not limited to investment banking services) with the subject company, Baader Bank, or companies in the past 12 months, no employee of RBI or of its affiliates has the ability to influence the substance of the research reports prepared by the research analysts of RBI. RBIM is a broker-dealer registered with the SEC, FINRA and SIPC.

SPECIAL REGULATIONS FOR THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND (UK)

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

This Document does neither constitute a public offer in the meaning of the Regulation (EU) 2017/1129 ("EU Prospectus Regulation") nor a prospectus in the meaning of the EU Prospectus Regulation or of the Austrian Stock Exchange Act 2018 (Börsegesetz 2018). Furthermore this Document is not intended to recommend the purchase or the sale of securities or investments in the meaning of the Austrian Securities Supervision Act 2018 (Wertpapieraufsichtsgesetz 2018). This Document does not replace the necessary advice concerning the purchase or the sale of securities or investments. For any advice concerning the purchase or the sale of securities of investments kindly contact Raiffeisen Bank International AG (Equity Sales). Special regulations for the United Kingdom of Great Britain and Northern Ireland (UK): this Document has either been approved or issued by RBI in order to promote its investment business. Raiffeisen Bank International AG ("RBI"), London Branch is authorised by the Austrian Financial Market Authority and subject to limited regulation by the Financial Conduct Authority ("FCA"). Details about the extent of its regulation by the FCA are available on request. This Document is not intended for investors who are Retail Customers within the meaning of the FCA rules and should therefore not be distributed to them. Neither the information nor the opinions expressed herein constitute or are to be construed as an offer or solicitation of an offer to buy (or sell) investments. RBI may have effected an Own Account Transaction within the meaning of FCA rules in any investment mentioned herein or related investments and or may have a position or holding in such investments as a result. RBI might have acted, or might be acting, as a manager or co-manager of a public offering of any securities mentioned in this Report or in any related security.

INFORMATION REGARDING THE PRINCIPALITY OF LIECHTENSTEIN

COMMISSION DIRECTIVE 2003/125/EC of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards the fair presentation of investment recommendations and the disclosure of conflicts of interest has been incorporated into national law in the Principality of Liechtenstein by the Finanzanalyse-Marktmisbrauchs-Verordnung.

If any term of this disclaimer is found to be illegal, invalid or unenforceable under any applicable law, such term shall, insofar as it is severable from the remaining terms, be deemed omitted from this disclaimer; it shall in no way affect the legality, validity or enforceability of the remaining terms.

Imprint

Information requirements pursuant to the Austrian E-Commerce Act

Raiffeisen Bank International AG

Registered Office: Am Stadtpark 9, 1030 Vienna

Postal address: 1010 Vienna, POB 50

Phone: +43-1-71707-0; Fax: + 43-1-71707-1848

Company Register Number: FN 122119m at the Commercial Court of Vienna

VAT Identification Number: UID ATU 57531200

Austrian Data Processing Register: Data processing register number (DVR): 4002771

S.W.I.F.T.-Code: RZBA AT WW

Supervisory Authorities: Supervisory authority: As a credit institution (acc. to §1 Austrian Banking Act; Bankwesengesetz) Raiffeisen Bank International AG is subject to the supervision by the Austrian Financial Market Authority (FMA, Finanzmarktaufsicht) and the National Bank of Austria (OeNB, Oesterreichische Nationalbank). Additionally, RBI is subject to the supervision by the European Central Bank (ECB), which undertakes such supervision within the Single Supervisory Mechanism (SSM), which consists of the ECB and the national responsible authorities (Council Regulation (EU) No 1024/2013 - SSM Regulation). Unless set out herein explicitly otherwise, references to legal norms refer to norms enacted by the Republic of Austria.

Membership: Austrian Federal Economic Chamber, Federal Bank and Insurance Sector, Raiffeisen Association

Statement pursuant to the Austrian Media Act

Publisher and editorial office of this publication: Raiffeisen Bank International AG, Am Stadtpark 9, A-1030 Vienna

Media Owner of this publication: Raiffeisen Research - Verein zur Verbreitung von volkswirtschaftlichen Analysen und Finanzmarktanalysen, Am Stadtpark 9, A-1030 Vienna

Executive Committee of Raiffeisen Research - Verein zur Verbreitung von volkswirtschaftlichen Analysen und Finanzmarktanalysen: Mag. Peter Brezinschek (Chairman), Mag. Helge Rechberger (Vice-Chairman)

Raiffeisen Research - Verein zur Verbreitung von volkswirtschaftlichen Analysen und Finanzmarktanalysen is constituted as state-registered society. Purpose and activity are (inter alia), the distribution of analysis, data, forecasts and reports and similar publications related to the Austrian and international economy as well as financial markets.

Basic tendency of the content of this publication

Presentation of activities of Raiffeisen Bank International AG and its subsidiaries in the area of conducting analysis related to the Austrian and international economy as well as the financial markets.

Publishing of analysis according to various methods of analyses covering economics, interest rates and currencies, government and corporate bonds, equities as well as commodities with a regional focus on the euro area and Central and Eastern Europe under consideration of the global markets.

Producer of this publication: Raiffeisen Bank International AG, Am Stadtpark 9, A-1030 Vienna

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.

Raiffeisen Bank International AG - Your contacts
A-1030 Vienna, Am Stadtpark 9, Internet: <https://www.rbinternational.com>

Equity Sales

Tel.: +43/1717 07-0

Klaus della Torre (Head)

ext. 3636 klaus.della-torre@rbinternational.com

Reinhard Haushofer
 reinhard.haushofer@rbinternational.com ext. 3899

Simon Huber
 simon.huber@rbinternational.com ext. 3664

Sebastien Leon
 christian-sebastien.leon@rbinternational.com ext. 3531

Tomislav Pasalic
 tomislav.pasalic@rbinternational.com ext. 3178

Anita Thurnberger
 anita.thurnberger@rbinternational.com ext. 3638

US Equity Sales

Tel.: +1/212-600-2588

Stefan Gabriele (Head)

stefan.gabriele@rbimusa.com

Stefan Niton
 stefan.niton@rbimusa.com

Electronic Sales Trading

Günter Englhart (Head)

ext. 3524 guenter.englhart@rbinternational.com

Tanja Braunsberger
 tanja1.braunsberger@rbinternational.com ext. 3770

Adrian Ene
 adrian.ene@rbinternational.com ext. 3235

Wojciech Kolacz
 wojciech.kolacz@rbinternational.com ext. 3262

Oliver Schuster
 oliver.schuster@rbinternational.com ext. 3630

Theodor Till
 theodor.till@rbinternational.com ext. 3641

Christof Wallner
 christof.wallner@rbinternational.com ext. 3791

Institutional Equity Research

Austria

Bernd Maurer (Head)

ext. 3863 bernd.maurer@rbinternational.com

Oleg Galbur
 oleg.galbur@rbinternational.com ext. 5610

Jakub Krawczyk
 jakub.krawczyk@rbinternational.com ext. 5617

Markus Remis
 markus.remis@rbinternational.com ext. 8577

Teresa Schinwald
 teresa.schinwald@rbinternational.com ext. 3820

Jovan Sikimic
 jovan.sikimic@rbinternational.com ext. 5601

Oliver Simkovic
 oliver.simkovic@rbinternational.com ext. 3858

Tel.: +43/1717 07-0

ext. 3863

Croatia

Silvija Kranjec

silvija.kranjec@rba.hr

Ana Turudic
 ana.turudic@rba.hr ext. 401

Romania

Tiberiu Nicolae

tiberiu.nicolae@raiffeisen.ro

Adrian Cosmin Patruti
 adrian-cosmin.patruti@raiffeisen.ro ext. 1229

Russia

Sergey Garamita

sergey.garamita@raiffeisen.ru

Sergey Libin
 sergey.libin@raiffeisen.ru ext. 9838

Egor Makeev
 egor.makeev@raiffeisen.ru ext. 9851

Andrey Polischuk
 andrey.polischuk@raiffeisen.ru ext. 9849

Mikhail Solodov
 mikhail.solodov@raiffeisen.ru ext. 9852

Andrey Zakharov +7/4957219900.5520
 andrey.a.zakharov@raiffeisen.ru

Tel.: +385/16174-0

ext. 335

Tel.: +40/21306-0

ext. 1239

Tel.: +7/495 221

ext. 9842

Important: Please read the references at the end of this report to possible conflicts of interest and disclaimers/disclosures.