



Issuer Profile – Jefferies Financial Group

Markets Strategy & Floor Research

27 March 2023

Marketing communication (see disclaimer on the last pages)

Issuer Profile – Jefferies Financial Group

Author: Melanie Kiene

Credit Ratings

	LT	Outlook
Fitch	BBB	Positive
Moody's	Baa2	Stable
S&P	BBB	Stable

As at: 27 March 2022
Source: Bloomberg

Key Facts

Homepage:

www.jefferies.com

Bloomberg-Ticker:

JEF US

As at: 27 March 2023

Source: Bloomberg, Jefferies

Jefferies Group merged with Jefferies Financial Group

Jefferies Financial Group (JFG; headquarters New York) is an internationally active investment bank and securities company. The bank offers its clients a broad portfolio of products and services from the areas of investment banking, equity, fixed income and asset management. Founded in the USA in 1962, Jefferies opened its first international subsidiary in the UK in 1986. Alongside New York as the global headquarter, regional headquarters are operated out of London and Hong Kong. In order to simplify and streamline its corporate structure, Jefferies Group LLC (previously the largest subsidiary) was merged with JFG effective from 01 November 2022. As a result, Jefferies Group LLC is no longer obligated to prepare periodic reports, which in turn allows potential cost savings. JFG is pursuing the corporate goal of gaining further market shares, increasing its competitiveness and developing into the best full-service investment bank in the world. The long-term strategy is centred on strengthening the investment banking, capital market and asset management businesses as well as reducing the merchant banking portfolio. Following two corporate transactions worth USD 1.6bn (31 May 2022), the merchant banking portfolio was reduced by around USD 550m. Following the successful corporate restructuring, this will no longer be reported as a separate business segment. In Q3 2022, JFG decreased its merchant banking portfolio by USD 122m after concluding the sale of Idaho Timber. A further reduction of USD 427m took place on 17 January 2022 with the successful spin-off of Vitesse Energy (oil and gas company) as a new independent listed stock corporation.

Jefferies offers broad product portfolio

In financial year 2022, the number of employees at Jefferies Financial Group decreased by 175 to 5,381 (November 2022). The sale of Idaho Timber was a decisive factor in this development, which reduced the number of employees by 561. The opposite trend can be seen in investment banking, technology and other core segments, where a growth in staff numbers has been registered. The employees are split between the global and regional headquarters in addition to more than 30 national and international locations. In the "Investment Banking and Capital Markets" segment, JFG focuses on the sub-segments Investment Banking (incl. Advisory), Equities and Fixed Income. Asset Management, which comes under the umbrella of Leucadia Asset Management (LAM), covers activities related to Investment Management Services via Jefferies Investment Advisors and Partnerships. In our previous publications, business activities were also divided into the segments "Merchant Banking" and "Corporate". However, this segmentation will no longer be applied in the annual financial statements, as they are set to be liquidated at some point in the future. Following the reduction in the merchant portfolio in 2022, the remaining business activities were mainly allocated to the Asset Management segment. Clients are offered a broad product portfolio, ranging from shares to fixed income and currency products. The portfolio is rounded off by research services. Clients have at their disposal around 1,400 investment bankers in the USA, Europe and Asia with profound industry expertise.

Business focus

The majority of income is generated in the institutional clients business, which reflects the firm's heavily client-oriented approach. Jefferies Investment Banking covers a number of different industries: Consumer, Energy, Financial Services, Healthcare, Industrials, Technology, Media & Telecommunications, Real Estate, Gaming & Lodging, Financial Sponsors and Public Finance. In terms of products, Jefferies offers services in the field of equity capital markets, debt capital markets and advisory (including M&A transactions, restructuring and recapitalisation).

Balance Sheet

(USDm)

	2019Y	2020Y	2021Y	2022Y
Cash and Cash Equivalents	11,978	14,152	18,398	14,250
Investments	3,856	3,941	5,195	4,756
Total Assets	49,460	53,118	56,107	51,058
Total Debt*	19,461	21,306	22,829	19,326
Capital: Equity	9,602	9,439	10,580	10,295
Net Leverage Ratio	4.64	5.02	4.53	4.46

Income Statement

(USDm)

	2019Y	2020Y	2021Y	2022Y
Total Revenue	4,009	5,851	8,014	5,979
Total Expenses	3,530	4,783	5,760	4,923
Operating Revenue	3,529	5,851	8,014	5,660
Operating Income	-2	1,076	2,267	752
Pre-tax Profit	479	1,067	2,254	1,056
Net Profit	963	768	1,677	782

* total debt includes repurchase agreements and stock loans

Balance sheet date for financial year 30 November; as at 27 March 2023; source: S&P Global Markets, NORD/LB Markets Strategy & Floor Research

Stable development continues: following a rating upgrade by Moody's in 2021, Fitch upgrades rating outlook to “positive” in 2022

In July 2021, Moody's confirmed the rating of Baa3 (outlook: positive) for Jefferies Financial Group, having earlier raised the outlook from stable to positive (03/2021). In November 2021, Moody's then upgraded the rating to Baa2 with a stable outlook, recently confirming this in November 2022. The agency carried out this latest confirmation after Jefferies Group was merged into Jefferies Financial Group. Moody's sees the merger as a consistent implementation of its corporate strategy, which consists of simplifying business operations, reducing the merchant banking portfolio and focusing on its core business (investment banking, capital markets and asset management). In August 2022, S&P Global confirmed its BBB rating for the company with a stable outlook. In its analysis, Fitch also offers a rating of BBB, recently raising the outlook from stable to positive in January 2022.

Regulatory capital requirements in the USA

With the merger of Jefferies Group LLC into JFG, all regulatory requirements of Jefferies Group were transferred to JFG. As a result, JFG is registered both as a broker-dealer and as a Futures Commission Merchant (FCM) and is therefore subject to various capital requirements. As a broker-dealer, Jefferies is obliged to comply with the net capital rule of the Securities and Exchange Commission (SEC) and the minimum requirements of the Commodity Futures Trading Commission (CFTC). As part of the Net Capital Rule, Jefferies had the option of being able to decide in favour of a calculation in accordance with the “Alternative Net Capital” requirement. This stipulates that net capital must not total less than 2% of the aggregated debit balance (primarily receivables attributable to customers) or USD 250,000 (USD 1.5m for prime brokers). Potential loans, dividends and other types of payments to be made are also limited. As an FCM without clearing function, Jefferies is required to maintain adjusted minimum net capital of USD 1.0m. Jefferies Financial Services Inc. (JFSI; 100% subsidiary of JFG) is also subject to the SEC and CFTC requirements as a registered swap trader. Moreover, JFSI is obligated to meet the net capital requirements as defined by the National Futures Association (NFA). Jefferies Financial Group is not subject to any banking supervisory capital requirements.

Regulatory requirements have been fulfilled

In contrast to other investment banks, Jefferies is not obliged to meet strict requirements for risk-based capital and liquidity ratios, although it does not benefit from access to central bank liquidity either. Jefferies is only obliged to calculate its net capital in line with SEC requirements. Following the successful merger of Jefferies Group LLC into JFG, key metrics pertaining to net capital and surplus net capital, which are relevant to the financial supervisory authorities, were reported for Jefferies LLC and JFSI as at 01 November 2022. As at the end of November 2022, the net capital of Jefferies LLC stood at USD 903.3m and the surplus net capital came in at USD 806.2m. Total equity stood at USD 10,295.5m, equating to a reduction of around USD -284m compared with November 2021. The leverage ratio fell by 30bp year on year to 5.0% (FY 2022; according to the annual report).

Specialised offerings via subsidiaries and capital investments

Jefferies Financial Group is active in a wide range of business segments via its three main capital investments. These include its 50/50 joint venture Jefferies Finance (JFIN) which, in cooperation with the Mass Mutual Life Insurance Company, primarily underwrites and syndicates secured corporate loans. Furthermore, JFIN manages internal and external investments for syndicated and direct loans. The Berkadia Commercial Mortgage Holding LLC is another 50/50 joint venture, in which JFG hold a stake. Berkadia offers its customers capital solutions, investment consulting and mortgage services for apartment buildings and commercial properties. In financial year 2022, net income from the stake in Berkadia fell by 4.7% to USD 124.4m. This was due to a switch to products with lower margins and higher borrowing costs. JFG is active in the purchase and management of car loans via its 100% subsidiary Foursight Capital LLC. This generates net interest and service income, which Foursight Capital realises by transferring the car loans to a trust company for securitization.

Regulatory capital requirements for international subsidiaries

In every country in which Jefferies conducts business via subsidiaries, these subsidiaries are subject to the respective national laws and regulations. These include capital adequacy and consumer protection requirements, anti-money laundering and anti-corruption laws as well as adhering to regulations that govern trading and investment banking. Relevant international authorities include, among others, the European Commission, the European Banking Authority, the European Securities and Market Authority, the UK Financial Conduct Authority, the Hong Kong Securities and Futures Commission, the Japan Financial Services Agency and the Monetary Authority of Singapore. Jefferies has also been subject to MiFID II requirements since the start of 2018. As part of the final implementation of the capital requirements in accordance with Basel III in EU and UK law, securities companies will be subject to new supervisory regulations as of financial year 2023. These apply to the UK-based Jefferies International Limited and its European subsidiary Jefferies GmbH. Among other aspects, the new requirement stipulates that a certain amount of variable remuneration is to be paid for key risk bearers.

Income development in the demanding underwriting business

Compared with the record year 2021, income in 2022 fell to just under of the level recorded shortly before the Covid-19 pandemic. In financial year 2022, net income at JFG decreased by 53.4% from USD 1,677.4m (FY 2021) to USD 777.2m (FY 2022). As a result, net income stood 19.3% below the level from 2019 (USD 963m). A significant slump was also recorded in the pre-tax earnings, which, at USD 1,056m versus USD 2,254m (FY 2021), fell by 53.2% in the previous year. This trend is, in particular, reflected in the low net income from the underwriting business, which fell from USD 2,492m (FY 2021) to USD 1,030m. While the issuance business was dominated by unusually high levels of activity across all segments in 2021, particularly in connection with new issues of leveraged loans and the refinancing of high-yield bonds, the market cooled down significantly in 2022.

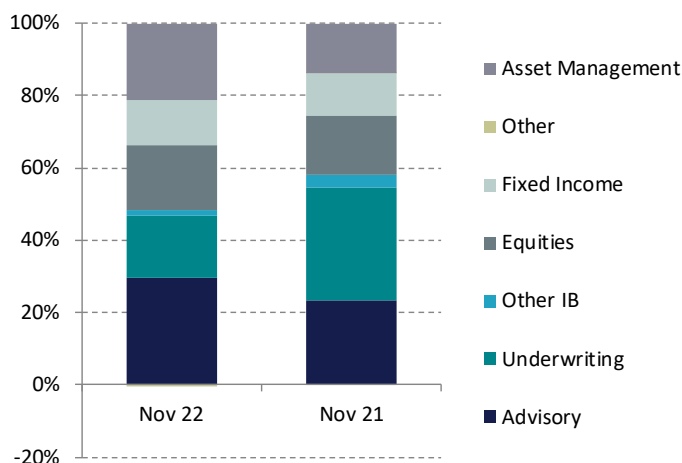
A challenging market environment: declines recorded by almost all segments, although “Advisory” remains stable

As at 30 November 2022, net revenues in Investment Banking amounted to USD 2,900.0m. This compares with the record value of USD 4,657.1m recorded as at 30 November 2021. In the Advisory segment (part of Investment Banking), Jefferies achieved net revenues of USD 1,778.0m compared with USD 1,873.2m in the same period of the previous year. As a result, net revenues in the Advisory segment remained largely stable, which can be attributed to the continued high activity levels on the M&A market. In contrast, revenue in the Underwriting segment reduced by 58.7% compared with the record year 2021. In this context, both Equity Underwriting (decline in net revenues in 2022 by USD 1,018m down to USD 539m) and Debt Underwriting (decline of USD 444m to USD 491m) were impacted negatively. Revenues from other investment banking business activities also declined in financial year 2022 by USD 199.3m to USD 92.2m. The main factors in this development were lower market activity levels and higher provisions for the loan portfolio of the Jefferies Finance joint venture, as well as non-realised net losses from different investments. Net revenues from the equity business fell by 18.5% (USD 1,061m). According to Jefferies, these results were compromised by challenging market conditions for equity trading as a result of a declining new issue business and reduced activities in connection with special purpose acquisition companies. Reduced client activity levels across most products and regions was therefore also a pivotal factor in the decline in the fixed income result (FY 2022: -20.2% to USD 756.6m). In contrast to all other business segments, the Asset Management segment registered income growth of 15.1% in 2022. This is due to higher income levels from certain merchant banking positions as well as the sale of certain other items, including the shares in Oak Hill. Total asset management fees and revenues and asset management investment returns fell by 26.2% and 39.8% respectively on a year-on-year basis.

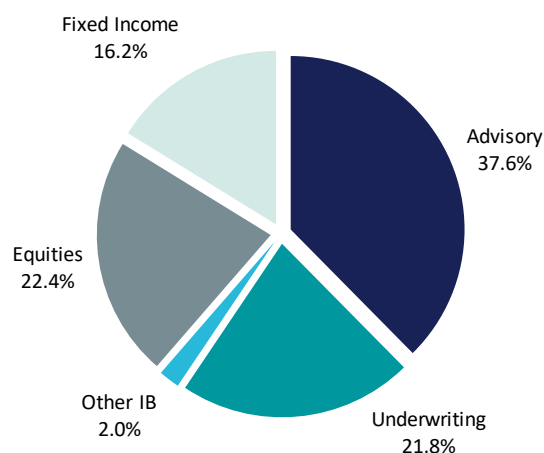
Decline in expenses

In financial year 2022, non-interest expenses of USD 4,923m were reported. In comparison with the previous year, this value has reduced by 14.5%. At USD 2,589.0m, the largest cost item was personnel expenses (comprising expenses in relation to remuneration and social security contributions), although this has also fallen significantly versus the prior year period, when it amounted to USD 3,554.8m as at 30 November 2021. Jefferies puts this development down to the decline in staff numbers in the wake of corporate disposals and the high share of variable remuneration linked to the net revenues.

Net Revenues FY/2022 vs FY/2021



Net Revenues FY/2022



Source: Jefferies, NORD/LB Markets Strategy & Floor Research

Decline in expenses

In the twelve months to 31 November 2022, expenses unrelated to remuneration rose by USD 129.3m to USD 2,334.2m, compared with USD 2,205.0m in the same period of the previous year. This increase is mainly due to higher expenditure levels for business development: during the COVID-19 pandemic, business trips, conferences and other events were significantly limited, which in turn led to a decrease in expenditure in this area. Once all restrictions were lifted, these costs have started to rise again. In addition, there were higher floor brokerage and clearing fees in line with increased technology and communication costs that are associated with the development of various trading and administrative systems, as well as higher market data costs. Other expenses incurred during the reporting period included expenses in connection with a comparison between JFG and the supervisory authorities SEC and CFTV as well as donations to charitable causes. As a result, net income of USD 777.2m was recorded for 2022, reflecting a decline of 53.4% compared with the previous year, with a return on average equity of 7.5%.

Average VaR shaped by market volatility

To measure the risk in the trading portfolio, Jefferies uses a value-at-risk (VaR) model to calculate potential profits and losses. A one-day VaR for a historic period of one year is calculated with a confidence level of 95%.

Value-at-Risk in the Trading Portfolio* (USDm)

Risk categories	November 30 th , 22	November 30 th , 21	Daily VaR for the Three Months Ended Nov 30 th , 2022		
			Average	High	Low
Interest Rates and Credit Spreads	6.26	4.60	5.93	9.01	3.63
Equity Prices	7.91	9.85	7.83	17.59	3.55
Currency Rates	0.22	0.12	0.12	0.34	0.02
Commodity Prices	0.09	0.15	0.29	0.83	0.09
Diversification Effect	(3.12)	(2.06)	(3.13)	N/A	N/A
Firmwide	11.36	12.66	11.04	18.94	5.90

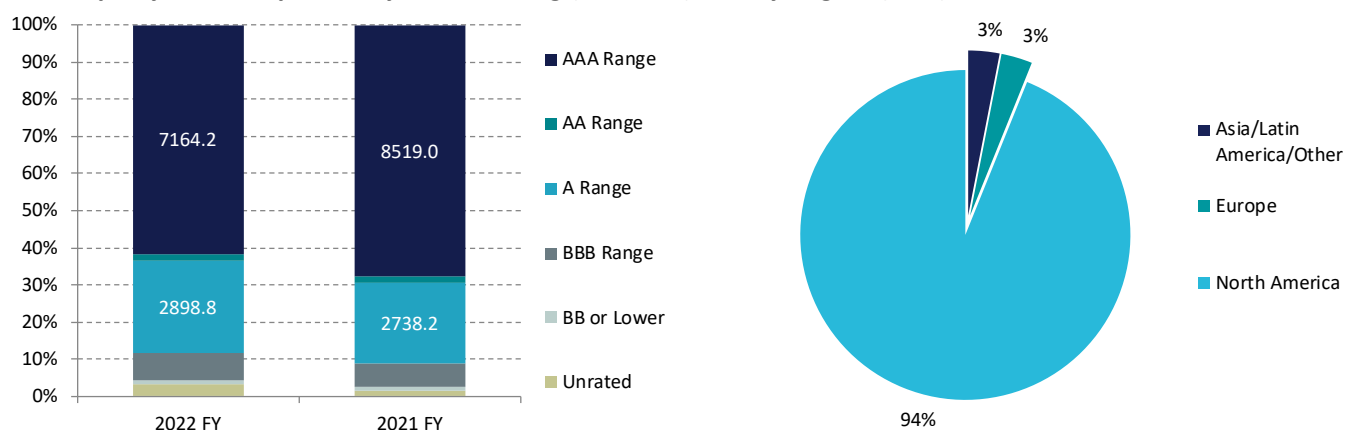
*Average daily VaR for the past three months

Source: Jefferies, NORD/LB Markets Strategy & Floor Research

Average VaR at the end of FY 2022 totals USD 11.04m

The average daily VaR of USD 11.04m as at the end of November 2022 decreased against the value recorded in the prior year (USD 13.63m). This movement is mainly due to lower risks from asset management activities. At times, the opposite effect was recorded with the average VaR due to periodic residual risks from share block transactions. During the period under review, the share exposure was often the cause of stronger VaR movements. From January to February 2022, the VaR fell slightly, a development which reflects the reduction in exposure due to market volatility from inflation, expectations of rising interest rates and the Russian invasion of Ukraine. The higher equity exposure was a pivotal factor behind an increased VaR in March 2022. A subsequent reduction in the equity exposure in combination with a defensive positioning led to lower values in June to mid-July 2022. High VaR values from mid-July 2022 are due to subsequently reduced risks as a result of a share block transaction. The VaR remained relatively stable for the rest of the year. The VaR is also to be interpreted against the backdrop of the coronavirus pandemic in 2021 in addition to the war in Ukraine and resultant ramifications here at present. Since the last twelve months are considered in each case, high values during the COVID-19 crisis are not included in later calculations and must be evaluated accordingly against this backdrop. As the VaR model does not take into account certain financial instrument positions, various other procedures such as stress tests (including scenario analyses) and profit/loss analyses are also used to supplement it.

Counterparty Credit Exposure by Credit Rating (in USDm) and by Region (in %)



Source: Jefferies, NORD/LB Markets Strategy & Floor Research

In total, 62% of the counterparty credit exposure with AAA rating

In financial year 2022, the counterparty credit exposure (with cash and cash equivalents) stood at USD 11,617.2m (FY 2021: USD 12,554.4m). The share of exposures with the extremely high credit rating of AAA stood at 62% compared with 68% as at the end of November 2021. The reduction in the percentage of AAA exposures (-15.9% versus FY 2021) went hand in hand with growth in all other ratings. Exposures categorised as AA and A grew by 16.6% and 5.9% respectively. It is worth noting that, as previously stated, the total exposure has dropped significantly. The share of BBB exposures rose by 70 basis points, equating to absolute growth of 2.1% (as against FY 2021). Overall, only a marginal (albeit growing) share of 4.4% is categorised in the non-investment grade area/not rated at all (FY 2021: 2.4%). When viewed in relative terms, the unrated category stands out with sharp growth of 114.5% in comparison with FY 2021.

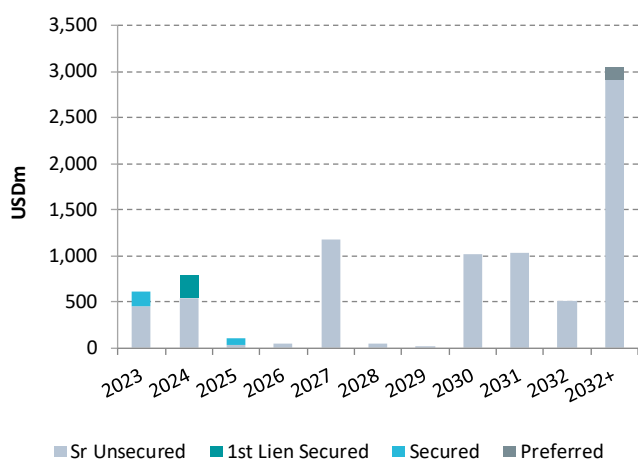
North America accounts for 94% of the counterparty credit exposure

Despite rising from USD 177.5m (FY 2021) to USD 380.7m, the unrated category constitutes only 3.3% of the total exposure. As far as the geographical breakdown is concerned, North America is by far the most important region, accounting for 93.9% of total exposure. At 80.5% or USD 4,815.4m, North America also dominates in terms of net income (FY 2021: 84.2%; USD 6,784.8m). Europe and the Middle East generated 15.5% (FY 2021: 13.0%) of the net income, with 4.0% (FY 2021 2.7%) attributable to Asia.

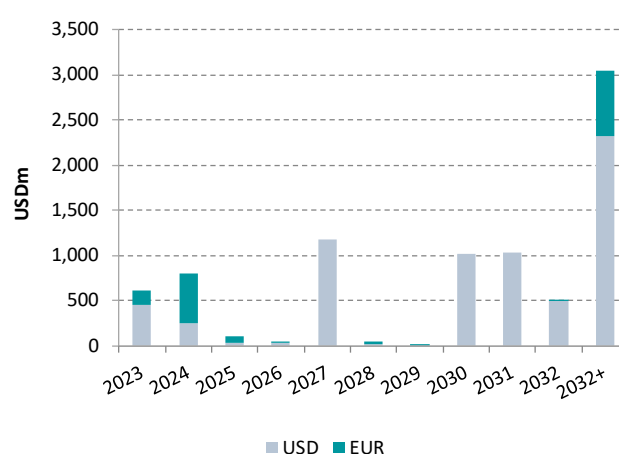
High liquidity pool

The business model of Jefferies is to a large extent based on trust. An above-average degree of customer orientation together with prudent risk management ensures that Jefferies has carved out an impressive competitive position in the fiercely contested investment banking sector and has successfully increased its market share here. The firm's basic principles include, among others, maintaining a solid liquidity buffer (liquidity pool as at 30 November 2022: USD 11,641.0m; 30 November 2021: USD 12,687.9m; this equates to 22.8% and 22.6% of total assets respectively) in tandem with a balance sheet structure which, overall, can be described as risk-off. According to Jefferies, around 78.2% of the financial instruments held can be repo-financed with haircuts of 10% and below, which reflects the high level of liquidity, while the asset portfolio is composed almost exclusively of level 1 and level 2 assets.

Redemption profile: payment rank



Redemption profile: currency



As at: 27 March 2023 10:06 Uhr (CET); Source: Bloomberg (DDIS), NORD/LB Markets Strategy & Floor Research

Funding predominantly via senior unsecured bonds

Jefferies Group LLC primarily conducts refinancing activities via the capital markets, making significant use of unsecured bonds in the process. According to Bloomberg, the outstanding nominal volume of senior unsecured bonds as at 27 March 2023 amounted to the equivalent of USD 7,804.8m spread across 134 separate bond deals. Of this outstanding volume, a total of USD 6,846.0m or around 80% is denominated in USD, with the remaining 20% (USD 1,549.1m) denominated in EUR. The average weighted residual maturity amounts to 9.6 years. Of the bonds denominated in EUR, just one benchmark bond (EUR ≥500m) is still outstanding, which is set to fall due in July 2024. Overall, the funding structure is conservative, with the funding plan providing for regular private placements and periodic benchmark bond deals. In so doing, Jefferies actively pursues a policy of broadening its investor basis.

Strengths / Opportunities

- + Business model and client focus
- + Market position in leveraged finance
- + Leverage ratio, liquidity and capitalisation
- + Risk management across many markets
- + Reduction of the merchant banking portfolio

Weaknesses / Risks

- Fiercely competitive market
- Diversification of the business model
- Risks in the area of leveraged loans
- Risk of earnings volatility in the investment banking segment
- Dependency on secured short-term funding

Appendix

Contacts at NORD/LB

Markets Strategy & Floor Research



Dr Frederik Kunze

Covered Bonds/Banks

+49 172 354 8977

frederik.kunze@nordlb.de



Melanie Kiene

Covered Bonds/Banks

+49 172 169 2633

melanie.kiene@nordlb.de



Stefan Rahaus

Covered Bonds/Banks

+49 172 6086 438

stefan.rahaus@nordlb.de



Dr Norman Rudschuck

SSA/Public Issuers

+49 152 090 24094

norman.rudschuck@nordlb.de



Jan-Phillipp Hensing

SSA/Public Issuers

+49 172 425 2877

jan-phillipp.hensing@nordlb.de

Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

Origination & Syndicate

Origination FI	+49 511 9818-6600
Origination Corporates	+49 511 361-2911

Treasury

Collat. Management/Repos	+49 511 9818-9200
Liquidity Management	+49 511 9818-9620 +49 511 9818-9650

Trading

Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Länder/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

Sales Wholesale Customers

Firmenkunden	+49 511 361-4003
Asset Finance	+49 511 361-8150

Relationship Management

Institutionelle Kunden	rm-vs@nordlb.de
Öffentliche Kunden	rm-oek@nordlb.de

Disclaimer

The present report (hereinafter referred to as “information”) was drawn up by **NORDEUTSCHE LANDESBANK GIROZENTRALE (NORD/LB)**. The supervisory authorities responsible for NORD/LB are the European Central Bank (ECB), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority in Germany (Bundesanstalt für Finanzdienstleistungsaufsicht; BaFin), Graurheindorfer Str. 108, D-53117 Bonn and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. The present report and the products and services described herein have not been reviewed or approved by the relevant supervisory authority.

The present information is addressed exclusively to Recipients in Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Portugal, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter referred to as “Relevant Persons” or “Recipients”). The contents of the information are disclosed to the Recipients on a strictly confidential basis and, by accepting such information, the Recipients shall agree that they will not forward it to third parties, copy and/or reproduce this information without the prior written consent of NORD/LB. The present information is addressed solely to the Relevant Persons and any parties other than the Relevant Persons shall not rely on the information contained herein. In particular, neither this information nor any copy thereof shall be forwarded or transmitted to the United States of America or its territories or possessions, or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

The present information does not constitute financial analysis within the meaning of Art. 36 (1) of the Delegate Regulation (EU) 2017/565, but rather represents a marketing communication for your general information within the meaning of Art. 36 (2) of this Regulation. Against this background, NORD/LB expressly points out that this information has not been prepared in accordance with legal provisions promoting the independence of investment research and is not subject to any prohibition of trading following the dissemination of investment research. Likewise, this information does not constitute an investment recommendation or investment strategy recommendation within the meaning of the Market Abuse Regulation (EU) No. 596/2014.

This report and the information contained herein have been compiled and are provided exclusively for information purposes. The present information is not intended as an investment incentive. It is provided for the Recipient’s personal information, subject to the express understanding, which shall be acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this information, NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of the employees of the Markets Strategy & Floor Research division of NORD/ LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily provide an indication of its future performance.

The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient’s individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient’s personal investment strategies and objectives, financial situation or individual needs.

Moreover, the present report in whole or in part is not a sales or other prospectus. Accordingly, the information contained herein merely constitutes an overview and does not form the basis for any potential decision to buy or sell on the part of an investor. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this report is given in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB’s own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB’s relevant registration form, all of which are available for download at www.nordlb.de and may be obtained free of charge from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Furthermore, any potential investment decision should be made exclusively on the basis of such (financing) documentation. The present information cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies subject to this information as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks in addition to political, fair value, commodity and market risks. The financial instruments could experience a sudden and substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor’s assessment of his or her individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the "Customer Information on Securities Business" brochure, which is available to download at www.nordlb.de.

The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct.

By making use of this information, the Recipient shall accept the terms and conditions outlined above.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at www.dsgv.de/sicherungssystem.

Additional information for Recipients in Australia:

NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY. NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

Additional information for Recipients in Austria:

None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient. For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for Recipients in Belgium:

Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada:

This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for Recipients in Cyprus:

This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product.

Additional information for Recipients in the Czech Republic:

There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

Additional information for Recipients in Denmark:

This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for Recipients in Estonia:

It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

Additional information for Recipients in Finland:

The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

Additional information for Recipients in France:

NORD/LB is partially regulated by the “Autorité des Marchés Financiers” for the conduct of French business. Details concerning the extent of our regulation by the respective authorities are available from us on request. The present information does not constitute an analysis within the meaning of Article 24 (1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code, but does represent a marketing communication and does qualify as a recommendation pursuant to Directive 2003/6/EC and Directive 2003/125/EC.

Additional information for Recipients in Greece:

The information contained herein gives the view of the author at the time of publication and may not be used by its Recipient without first having confirmed that it remains accurate and up to date at the time of its use. Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Investment funds have no guaranteed performance and past returns do not guarantee future performance.

Additional information for Recipients in Indonesia:

This report contains generic information and has not been tailored to the circumstances of any individual or specific Recipient. This information is part of NORD/LB’s marketing material.

Additional information for Recipients in the Republic of Ireland:

This information has not been prepared in accordance with Directive (EU) 2017/1129 (as amended) on prospectuses (the “Prospectus Directive”) or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or such measures and therefore may not contain all the information required for a document prepared in accordance with the Prospectus Directive or the laws.

Additional information for Recipients in Japan:

This information is provided to you for information purposes only and does not constitute an offer or solicitation of an offer to enter into securities transactions or commodity futures transactions. Although the actual data and information contained herein has been obtained from sources which we believe to be reliable and trustworthy, we are unable to vouch for the accuracy and completeness of this actual data and information.

Additional information for Recipients in South Korea:

This information has been provided to you free of charge for information purposes only. The information contained herein is factual and does not reflect any opinion or judgement of NORD/LB. The information contained herein should not be construed as an offer, marketing, solicitation to submit an offer or investment advice with respect to the financial investment products described herein.

Additional information for Recipients in Luxembourg:

Under no circumstances shall the present information constitute an offer to purchase or issue or the solicitation to submit an offer to buy or subscribe for financial instruments and financial services in Luxembourg.

Additional information for Recipients in New Zealand:

NORD/LB is not a bank registered in New Zealand. This information is for general information only. It does not take into account the Recipient’s financial situation or objectives and is not a personalised financial advisory service under the 2008 Financial Advisers Act.

Additional information for Recipients in the Netherlands:

The value of your investment may fluctuate. Past performance is no guarantee for the future.

Additional information for Recipients in Poland:

This information does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

Additional information for Recipients in Portugal:

This information is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. The present information does not constitute or form part of an offer to buy or sell any of the securities covered by the report, nor should it be understood as a request to buy or sell securities where that practice may be deemed unlawful. The information contained herein is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views contained herein relate solely to our research and analysis and are subject to change without notice.

Additional information for Recipients in Sweden:

This information does not constitute (or form part of) a prospectus, offering memorandum, any other offer or solicitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The present information has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under the EC Prospectus Directive (Directive (EU) 2017/1129), and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

Additional information for Recipients in Switzerland:

This information has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority (FINMA) on 1 January 2009). NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research (as amended). The present information does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. The information is published solely for the purpose of information on the products mentioned herein. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to supervision by FINMA.

Additional information for Recipients in the Republic of China (Taiwan):

This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice. NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Information for Recipients in the United Kingdom:

NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Time of going to press: 27 March 2023 (12:15h)