Creditreform Corporate Issuer / Issue Rating

Deutsche Bahn AG

Creditreform Rating

Rating object	Rating information	
Deutsche Bahn AG	Corporate Issuer Rating: AA- / stable	Type: Update Unsolicited Public rating
Creditreform ID: 2010198197 Incorporation: 1994 as a joint stock company Based in: Berlin Main (Industry): Transport and logistics CEO: Dr. Richard Lutz	LT LC Senior Unsecured Issues: AA- / stable	Short-term rating: L1
Rating objects: Long- and short-term Corporate Issuer Rating: Deutsche Bahn AG Long-and short-term Corporate Issuer Rating: Deutsche Bahn Finance GmbH Long-term Local Currency (LT LC) Senior Unsecured Issues	Rating date: 5 December 2023 Monitoring until: withdrawal of the rating Rating methodology: CRA “Corporate Ratings“ CRA “Non-Financial Corporate Issue Ratings“ CRA “Corporate Short-Term Ratings“ CRA “Government Related Companies“ CRA “Rating Criteria and Definitions“ Rating history: www.creditreform-rating.de	

Content

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Summary

Company

Deutsche Bahn AG (hereinafter also referred to as DB or the Company), together with its subsidiaries and (major) shareholdings (hereinafter also referred to as DB Group), is one of the world's leading mobility and logistics companies. Its sole owner is the Federal Republic of Germany. The DB Group consists mainly of the Integrated Rail System (Systemverbund Bahn), which mainly covers passenger and freight transport in Europe and infrastructure activities in Germany, as well as the major shareholdings DB Schenker (approx. 49% of 2022 revenues, international logistics) and DB Arriva (approx. 7% of 2022 revenues, international passenger transport company). The focus of the Company’s business activities is on rail transport in Germany. Against this backdrop, and the implementation of the Strong Rail strategy, the sale of DB Arriva was contractually agreed in October 2023 (the transaction is expected to be completed in 2024). Sale options are also being examined for DB Schenker.

In the 2022 financial year, the DB Group employed approx. 340,000 people and generated record revenue of EUR 56.3 billion (2021: EUR 47.1 billion), which was attributable to a significant increase in freight rates at DB Schenker and a positive development in the rail system network, with a slightly negative annual result of EUR -0.2 billion (2021: EUR -0.9 billion). In the first half of 2023, the DB Group reported a decline in revenue and continued negative earnings after tax. The Group remains in the process of restructuring and change, coupled with an investment offensive aimed at improving sustainability, competitiveness and performance, whereby political objectives of the owner are significant.

Rating result

Creditreform Rating (CRA) has confirmed the unsolicited corporate issuer rating of Deutsche Bahn AG at AA-. With this rating, Deutsche Bahn AG continues to have very high creditworthiness and a very low default risk.

The main reason for the rating assessment is DB’s positive business development in 2022, to which all business segments were able to make a positive contribution and which is reflected in a slightly improved result of our financial ratio analysis. However, the positive effects will be offset by a decline in sales and earnings in the first half of 2023, meaning that we are unable to derive a sustainable improvement for the time being. Another dampening effect is that the rail system network is unable to generate positive EBIT despite the ongoing recovery in passenger transport and positive revenue development since the start of the coronavirus pandemic. This is due to cost increases and additional burdens in the course of infrastructure expansion and renewal. The growing investment and capital requirements continue to exceed the DB Group's earnings and internal financing power, which also has a dampening effect on our rating assessment.

The Company's close proximity to the state, and the social, economic and strategic importance of Deutsche Bahn AG for Germany, have a considerably positive and thus stabilizing effect on the rating. Deutsche Bahn AG plays an increasingly central role in meeting the German government's 2030 climate protection targets. We therefore continue to assume that the owner is highly willing to provide DB with sufficient financial support, even in a prolonged crisis scenario. The effects of the Federal Constitutional Court's ruling on the climate and transformation fund, from which part of the infrastructure refurbishment was to be financed, along with the resulting budget freeze, remain to be seen.

The unsolicited sovereign rating of the Federal Republic of Germany published by Creditreform Rating AG (as at March 21, 2023) is AAA / stable. Due to DB's close proximity to the state, and its systemic importance for Germany, we rate Deutsche Bundesbahn AG three notches below the sovereign rating, despite significant uncertainty with regard to the future business development as a result of the increasing geopolitical conflicts and the economic slowdown, especially in Germany, against the background of continued high inflation and interest rate levels. Meanwhile, there are still no significant, unconditional and irrevocable guarantees or sureties from the owner, which, in conjunction with the rating factors described, fundamentally explains the difference between DB's rating and the sovereign rating.

Outlook

The one-year outlook for the rating remains stable for the time being, reflecting the improvement in our financial ratio analysis as a result of good business performance in 2022, which helps to compensate for the decline in sales and earnings in the first half of 2023. Despite the high level of debt and the disproportionate capital requirement compared to the internal financing capability in connection with the strategic orientation "Strong Rail", we nevertheless consider the DB Group's capital market capability to be satisfactory in order to meet the strategic and financial challenges, due to its proximity to the state and its systemic relevance. However, if the agreed federal financing is not provided as planned due to the annulment of the Climate and Transformation Fund or the resulting budget freeze, negative effects on the net assets, financial position and results of operations of the DB Group and a related deterioration in the outlook or rating cannot be ruled out.

Reference:

The relevant rating factors (key drivers) mentioned in this section are predominantly based on internal analyses, evaluations from the rating process, the derived valuations of the analysts participating in the rating and, if applicable, other rating committee members. The fundamental external sources used are specified in the sections "Regulatory requirements" and "Rules on the presentation of credit ratings and rating outlooks".

Excerpts from the financial key figures analysis 2022:
+ Sales and EBIT growth
+ Increased equity ratio
+ Improved cash flow from operating activities
+ Improved net total debt / EBITDA adj.
+ Reduced net financial debt

- Negative EAT despite revenue growth
- Increase in balance sheet total
- Weak profitability ratios
- Weak liquidity ratios

General rating factors summarize the key issues which – according to the analysts as of the date of the rating – have a significant or long-term impact on the rating, whether positive (+) or negative (-).

Relevant rating factors

Table 1: Financials I Source: Deutsche Bahn AG Annual Report 2022, standardized by CRA

Deutsche Bahn AG Selected key figures of the financial statement analysis Basis: Annual accounts and report of 31.12. (IFRS)	CRA standardized figures[1]	
	2021	2022
Sales (billion EUR)	47.08	56.30
EBITDA (billion EUR)	3.33	5.33
EBIT (billion EUR)	-0.57	1.33
EAT (billion EUR)	-0.91	-0.23
EAT after transfer (billion EUR)	-0.95	-0.27
Total assets (billion EUR)	68.47	73.33
Equity ratio (%)	13.76	16.21
Capital lock-up period (days)	61.49	50.24
Short-term capital lock-up (%)	17.67	16.04
Net total debt / EBITDA adj. (Factor)	17.60	11.28
Ratio of interest expenses to total debt (%)	0.91	0.89
Return on investment (%)	-1.02	0.24

General rating factors

+ Wholly owned by the Federal Republic of Germany
+ Ongoing financial support from the public sector
+ High probability of financial support from the federal government in the event of a crisis
+ High political, structural, economic and social systemic importance
+ Sustainable business, including with regard to German and European climate protection targets
+ Unrestricted ability to access the capital market and very good access to the capital market
+ predominantly market-leading position in its main business areas
+ Owner of the German rail infrastructure
+ Diversified product and service portfolio and international business

– Economic sensitivity
– Increased dependence of the business on financing from the public sector
– Susceptibility to exogenous factors (regulation, pandemic, etc.) and influence from politics, the public and trade unions
– High and increasing intensity of competition in its core markets
– High and rising investment and capital requirements and high structural cost block
– Conditional currency risks and direct and indirect energy price risks
– Ongoing restructuring and personnel challenges

[1] For analytical purposes, CRA adjusted the original values in the financial statements in the context of its financial ratio analysis. For example, when calculating the analytical equity ratio, deferred tax assets, goodwill (entirely or partly), and internally generated intangible assets are subtracted from the original equity, whilst deferred tax liabilities are added. Net total debt considers all balance sheet liabilities. Therefore, the key financial figures shown often deviate from the original values of the company.

Current rating factors are the key factors which, in addition to the underlying rating factors, have an impact on the current rating.

Current rating factors

+ Increase in revenue in 2022 in all business units - especially DB Long Distance and DB Schenker
+ Improvement in operating result in 2022, mainly due to the strong performance of DB Schenker
+ Improved cash flow generation and cash inflows from federal capital measures (climate protection package and corona compensation payments) led to an increase in cash and cash equivalents, and consequently to a slight reduction in net financial liabilities
+ Planned sale of DB Arriva and thus stronger focus on environmentally friendly rail transport in the German core market
+ Positive revenue development in the rail system network due to ongoing recovery in demand and higher prices and order fees in H1 2023
+ Commitment by the federal government to provide additional funding for the modernization of the rail network from 2024

– Despite some noticeable improvements in individual business units, the Integrated Rail System still did not generate positive EBIT in 2022 and H1 2023
– Noticeable decline in revenue and earnings development in the first half of 2023, mainly due to a normalization of freight rates at DB Schenker
– Continued gradual increase in net investments that cannot be fully covered by internal financing
– Negative effects of the federal budget freeze on the (at least timely) financing of current infrastructure measures
– Economic slowdown - particularly in Germany - with inflation and interest rates remaining high

Prospective rating factors are factors and possible events which – according to the analysts as of the date of the rating – would most likely have a stabilizing or positive effect (+), or a weakening or negative effect (-) on future ratings if they occurred. This is not an exhaustive list of possible future events with potential relevance for future ratings. Circumstances can arise that are not included in the list of prospective factors, whose effects are impossible to assess at the time of the rating, either because these effects are uncertain or because the underlying events are deemed unlikely to occur.

Prospective rating factors

+ Substantial and qualitative expansion of infrastructure and rolling stock
+ Progress in achieving long-term operational goals (e.g. Deutschland-Takt) and thereby improving competitiveness compared to other modes of transport
+ Improved key financial figures based on higher profitability and internal financial strength with disproportionately low debt development
+ Additional support and funding measures from the public sector

- Noticeable increase in debt, e.g. as a result of the declaration of nullity of the Climate and Transformation Fund
- Change in our assessment of the owner's willingness to support the DB Group financially
- Deterioration of Germany's credit rating
- Sustained deterioration in the results of the financial ratio analysis
- Predominant focus on political and social goals at the expense of business development
- Deterioration in competitiveness due to lack of punctuality and reliability, ongoing strikes and train cancellations
– Negative effects, e.g., due to increasing geopolitical conflicts or a renewed pandemic situation

ESG-factors

ESG factors are factors related to environment, social issues and governance. For more information, please see the section "Regulatory requirements". CRA generally takes ESG relevant factors into account when assessing the rating object and discloses them when they have a significant influence on the creditworthiness of the rating object, leading to a change in the rating result or the outlook.

CRA generally takes ESG factors (environment, social and governance) into account within its rating decisions. In the case of Deutsche Bahn AG we have identified ESG factors with significant influence on the following categories, which is described in the sections below.

(E) Environment ☒ (S) Social ☐ (G) Governance ☐

(E): The business model and the DB Group itself make a significant contribution to reducing CO_2 emissions in the transportation of goods and passengers. In our opinion, DB will play a central role in German and European climate protection and transport policy in the future, which should lead to higher sales in the long term. In this context, the business model is particularly future-oriented.

The transport sector is responsible for almost a quarter of European greenhouse gas (GHG) emissions and is the only sector that has increased its emissions since 1990. Emissions caused by the transport sector have thus gained in relative importance. The intensity of GHG from rail transport is significantly lower per passenger kilometer (pkm) and per tonne kilometer (tkm) than from any other means of transport, with the exception of maritime transport, which, in contrast to rail freight transport, has higher air pollutant loads. We therefore assume that further legal measures will be taken at national and European levels to promote rail transport over other modes of transport.

One of the goals of the European Green Deal is a 90% reduction in transport-related greenhouse gas emissions by 2050. To achieve this goal, the European Commission published the Sustainable and Smart Mobility Strategy on December 9, 2020. The strategy contains the following milestones relating to rail transport:

- High-speed rail transport doubles across Europe by 2030 and triples by 2050
- Rail freight transport grows by 50% by 2030 and doubles by 2050
- Intermodal rail and water-based transport to be competitive with road transport by 2030

We expect that rail transport in general, and DB AG in particular, will most likely benefit from further initiatives and directives at European level. Although future Europe-wide measures, such as part of the "Fit for 55" package finalized in October 2023, which includes the promotion of alternative drives and fuels, could slow down the switch to rail.

In Germany, the national greenhouse gas reduction targets for 2030 were increased from -55% to -65% in 2021 following a ruling by the Federal Constitutional Court on the Climate Protection Act, which confirmed the admissibility of setting greenhouse gas reduction targets and emission caps. In addition, a reduction of -88% by 2040 was set for the first time, which should lead to climate neutrality by 2045 instead of 2050. On 21 June 2023, the German government launched the new version of the Climate Protection Act and presented a new, comprehensive climate protection program which reaffirms its ambitious climate targets. In future, the focus will be increasingly on the future development of greenhouse gas emissions and the overall responsibility of all sectors will be strengthened. In addition to rail transport and the strengthening of urban and regional transport, there will be a greater focus on other modes of transport such as cars, trucks and air and sea transport. Nonetheless, the federal government has reaffirmed its intention to provide considerable funding for the expansion and modernization of the rail network in the coming years. Specifically, roughly EUR 45 million has been earmarked for expanding the capacity of the core network by 2027, which will be covered by revenue from the truck toll and other sources.

In view of the overall low greenhouse gas intensity of rail transport compared to other means of transportation, we expect further political measures to support rail compared to other modes of transport. One example of this is the commitment to finance part of the infrastructure investments through pro rata revenue from the CO_2 surcharge on the truck toll.

To strengthen its own position, the DB Group decided in the first half of 2021 to become climate-neutral by 2040. In addition, the traction current mix is to be switched completely to green electricity by 2038. In 2022, the share was 65.2% (2021: 62.4%). It can be assumed that the associated financial challenges will increase significantly. Assuming sufficient regulatory and financial support from state institutions, we expect a positive ecological and economic effect overall.

A general valid description of Creditreform Rating AG, as well as a valid description of corporate ratings for understanding and assessing ESG factors in the context of the credit rating process, can be found here.

Best-case scenario: AA

Please note:

The scenarios are based on information available at the time of the rating. Within the forecast horizon, circumstances may occur that could lead to a change of the rating out of the indicated range.

In our best-case scenario, we believe an improvement in the rating is conceivable over the course of the year if the DB Group succeeds in increasing its operating earnings and internal financing power, reducing its debt and improving the result of our financial ratio analysis (at least to its pre-Covid level). The prerequisite for this is a continuation of DB Schenker's profitable business development and a sustainable turnaround in the rail system network. In this scenario, we also assume that Creditreform Rating AG will continue to confirm the unsolicited sovereign rating of the Federal Republic of Germany (as of April 8, 2022: AAA / stable), and that financial support from the owner will continue. In view of the exogenous risks and considerable structural and financial challenges, we consider the occurrence of the best-case scenario outlined here to be unlikely.

Worst-case scenario: A+

In our worst-case scenario for one year, we cannot rule out a deterioration of the rating to A+, but we also consider this to be less likely in this period. This could be induced by a sustained economic slowdown and/or by structural and strategic changes that lead to persistently weak earnings and an increase in debt. A significant limitation or reduction of the owner's financial support measures would also have a negative effect on our rating assessment. In this scenario, we also assume that Creditreform Rating AG will continue to confirm the unsolicited sovereign rating of the Federal Republic of Germany, and that financial support from the owner will continue.

Business development and outlook

In the financial year 2022, there was a significant recovery in rail passenger transport due to the extensive lifting of measures to contain the coronavirus pandemic. The number of rail passenger transport passengers rose by 567 million, or 40.1% year-on-year to 1,980 million (2021: 1,413 million). In bus transport, the number of passengers also increased significantly by 253 million or 16.7% to 1,771 million passengers (2021: 1,518 million). Despite the recovery and renewed growth in demand, however, the number of passengers was noticeably below the pre-coronavirus level of 2019 (rail passenger transport: 2,603 million; bus transport: 2,271 million). Rail freight transport, which was less affected by the coronavirus restrictions and still recorded growth in 2021, saw a decline in transported goods (-1.9% to 222.3 million tons) and transport performance (-0.5% to 84,468 million tkm) in 2022, primarily as a result of the Russia-Ukraine war.

Nevertheless, the DB Group was able to achieve significant revenue growth of 19.1% to EUR 56.3 billion in 2022 (2021: EUR 47.3 billion), to which all divisions made a positive contribution. The main revenue driver was the strong business performance of the freight forwarding and logistics subsidiary DB Schenker, which benefited from a general shortage of transport capacities, and high freight rates in 2022. In the Integrated Rail System, the recovery in demand at DB Long-Distance, higher order fees and new transports at DB Regional, as well as predominantly price-related growth at DB Netze Energy and DB Cargo increased revenue. DB Arriva also recorded slight revenue growth.

Table 2: Segment information DB AG I Source: Integrated Report DB Group 2022, own presentation

Deutsche Bahn AG	**2021**		**2022**	
In million EUR	**Revenue**	**EBIT**	**Revenue**	**EBIT**
DB Long-Distance	2,792	-1,790	4,845	-39
DB Regional	7,929	-417	8,921	-31
DB Cargo	4,713	-467	4,998	-665
DB Netze Track	1,975	334	2,035	601
DB Netze Solutions	520	1	593	29
DB Netze Energy	1,808	169	2,451	103
Other / Consolidation IRS	593	-545	696	-598
Integrated Rail System	**20,330**	**-2,715**	**24,539**	**-600**
DB Arriva	4,067	-73	4,212	12
DB Schenker	22,853	1,234	27,545	1,841
DB Group	**47,250**	**-1,552**	**56,296**	**1,253**
Margin		**-3.3**		**2.2**

Other operating income decreased to EUR 4.6 billion (2021: EUR 6.0 billion), largely due to reduced government subsidies compared to the previous year - primarily temporary train price subsidies granted to mitigate the effects of coronavirus. EBITDA adjusted for CRA improved by EUR 2.0 billion compared to the previous year, to EUR 5.33 billion (2021: EUR 3.33 billion). This was due to a disproportionately low increase in expenses for materials and personnel as compared to sales. At EUR 4.0 billion, depreciation and amortization were slightly above the previous year's level (2021: EUR 3.9 billion), meaning that EBIT adjusted for CRA improved to EUR 1.3 billion (2021: EUR -0.6 billion). However, the positive EBIT is entirely attributable to the operating result of DB Schenker. The Integrated Rail System continued to make a negative contribution to earnings overall, despite revenue growth in all divisions and an improvement in operations in some cases. With interest expenses remaining relatively constant at EUR 0.6 billion (2021: EUR 0.6 billion), EBT was positive again for the first time since the start of the pandemic at EUR 0.9 billion (2021: EUR -0.8 billion). However, deferred tax expenses increased compared to the previous year due to the significantly lower expected utilization of tax loss carryforwards, which led to an improved, but again negative, EAT of EUR -0.2 billion (2021: EUR -0.9 billion). Despite the negative result, the DB Group was able to exceed its forecast.

In the first half of 2023, the positive development compared to the same period of the previous year continued in rail passenger transport (+7.9% to 990.2 million passengers) and bus transport (+7.9% to 962.1 million passengers), but without reaching the pre-Covid level. In rail freight transport, the economic slowdown had a negative impact in the form of weaker transport demand, which was reflected in a decline in goods transported (-10.0% to 103.5 million tons) and transport performance (-11.2% to 38,644 million tkm).

According to the published Group Interim Report 2023, revenue had decreased to EUR 25.0 billion as of 30 June 2023 (H1 2023: EUR 28.0 billion), which corresponds to a year-on-year decline of 10.7%. This was primarily due to the normalization of freight rates, which had a negative impact on revenue and earnings development at DB Schenker. DB Arriva also recorded a decline in revenue, largely as a result of the sale of activities in non-core countries, lower government support measures and exchange rate effects. Compared to the major shareholdings, the Integrated Rail System was able to continue the positive development of the past financial year in 2023, achieving significant revenue growth, mainly as a result of the ongoing recovery in demand, higher order fees and positive price effects. This was offset, however, by disproportionately higher expenses for materials and personnel, largely due to additional burdens and cost increases in the course of infrastructure maintenance and expansion, with the result that adjusted EBIT in the Integrated Rail System was again negative, according to the interim report 2023.

Table 3: Segment information DB AG I Source: Interim Integrated Report 2023, own presentation

Deutsche Bahn AG	H1 2022		H1 2023	
In million EUR	Revenue	EBIT	Revenue	EBIT
DB Long-Distance	2,052	-195	2,791	-62
DB Regional	4,433	-104	4,683	-38
DB Cargo	2,521	-299	2,746	-195
DB Netze Track	995	496	1,068	-240
DB Netze Solutions	300	61	339	6
DB Netze Energy	1,051	35	961	310
Other / Consolidation IRS	314	-304	351	-120
Integrated Rail System	**11,666**	**-310**	**12,939**	**-339**
DB Arriva	2,174	-8	1,967	43
DB Schenker	14,129	1,186	10,067	626
DB Group	**27,969**	**876**	**24,973**	**331**
Margin (%)		**3,1**		**1,3**

Overall, the DB Group generated EBIT of EUR 0.3 billion as of 30 June 2023 (H1 2022: EUR 0.8 billion), largely as a result of to the reduced EBIT at DB Schenker, which was above the pre-Covid level. DB Arriva also made a slightly positive contribution to the operating result. At EUR -0.1 billion (H1 2022: EUR 0.4 billion), EAT was down on the same period of the previous year, and was primarily impacted by higher interest expenses as a result of the increased interest rate level.

Due to the weak performance in the current financial year, primarily as a result of falling freight rates, and the challenging conditions, the DB Group lowered its revenue forecast for 2023 from over EUR 56 billion to roughly EUR 51 billion in July 2023. The calculated operating loss is expected to be slightly better than the originally expected EUR -1 billion, which is subject to uncertainty in light of the current wage negotiations and strikes, and the financial and operational burdens from the further ramp-up of infrastructure maintenance measures. The uncertainty is also exacerbated by the economic slowdown, particularly in Germany, as well as the relatively high overall level of inflation and interest rates. We are also critical of the lack of punctuality, particularly in DB Long Distance and DB Cargo, which could affect competitiveness in intermodal competition, and consequently also future business development.

The DB Group's earnings and internal financing power therefore remains in need of improvement, particularly against the background of increasing investment and capital requirements in the course of implementing the Strong Rail strategy. It should be noted that a significant proportion of gross investment is financed by investment grants, primarily from the federal government. We continue to assume that the federal government will be highly willing to cover a significant part of the increasing capital requirements, which we believe is fundamentally confirmed by the federal government's preliminary commitments to provide additional funds, including those from the future CO_2 surcharge from the truck toll.

However, the costs estimated by Deutsche Bahn for additional investments in rail infrastructure (around EUR 45 billion between 2024-2027) are expected to receive significantly less funding from the federal government than originally anticipated. In addition, there are currently risks with regard to some of the federal government's planned funding as a result of the annulment of the Climate and Transformation Fund, and the resulting budget freeze. If the funds are not provided as planned, delays in investments and/or a noticeable increase in debt, and consequently negative effects on the net assets, financial position and results of operations of the DB Group cannot be ruled out.

The effects of the planned sale of DB Arriva or a possible sale of DB Schenker, and the structural and financial adjustments in the course of the planned merger of DB Station & Service AG with DB Netz AG to form an infrastructure company oriented towards the common good (future company name DB InfraGO AG), must also be observed.

Structural risk

Deutsche Bahn AG is wholly owned by the Federal Republic of Germany. With 501 Group companies and other shareholdings (as of 31 Dec. 2022), DB is a very complex company. The simplified organizational structure of the DB Group essentially consists of the Integrated Rail System and the two major international holdings DB Schenker and DB Arriva. The Integrated Rail System comprises the passenger and rail freight transport activities, the service units and the railroad infrastructure companies, and is divided into the business units DB Long Distance, DB Regional, DB Cargo, DB Netze Track, DB Netze Stations and DB Netze Energy.

As the parent company of the DB Group, DB AG performs central Group functions in the areas of legal affairs, Group development, accounting, taxes, insurance, finance and treasury. It also provides various administrative services, including recruitment, purchasing and various governance functions. Services are also provided for internal customers via operating service units in the form of legally independent subsidiaries of DB AG. Since January 1, 2023, the costs for various governance functions have been passed on via a Group allocation.

The focus of the DB Group's business activities is on rail transport in Germany, although in economic terms the DB Group is significantly dependent on the major subsidiary DB Schenker. In order to strengthen the focus on DB's core business, the Supervisory Board instructed the management in December 2022 to examine and prepare a possible sale of DB Schenker. A sale should only take place if it is financially advantageous as opposed to remaining in the DB Group. In our view, a one-off, short-term inflow of funds to reduce the DB Group's financial debt must be weighed against a long-term reduction in the DB Group's revenue, earnings and cash flow base. A final decision on the sale of DB Schenker and the resulting impact on net assets, financial position and results of operations, and consequently also on our rating assessment, remain to be seen for the time being. The same applies to the sale of DB Arriva to the infrastructure investor I Squared Capital, which has already been decided and is still subject to the usual closing conditions, including the approval of the DB Supervisory Board and the Federal Ministry of Digital and Transport of the Federal Republic of Germany. Even if DB believes that DB Arriva's contribution to the Strong Rail strategy is small, the sale, as with DB Schenker, would have a noticeable impact on the Group's structure and size, with a reduction in diversification. Compared to DB Schenker, however, the sale of DB Arriva seems (more) manageable for the DB Group.

We continue to see the ownership of the German rail network and the corresponding real estate as a positive factor. However, the declining reliability of the rail infrastructure, which DB itself describes as outdated and prone to disruption, poses an increased risk. In addition, ownership is coupled with a high structural cost base, as well as ongoing modernization and expansion requirements. For example, the rail network is to be expanded from the current 3,500 kilometers of track to over 9,000 kilometers. Substantial risks arise from the high investment and capital requirements, which represent a significant burden due to the DB Group’s lack of profitability, despite government support measures and financing. In order to transform the railways from a heavily loaded network to a high-performance network by 2023, in line with the strategy, and to create a needs-based, high-performance and efficient railroad infrastructure with high capacity, quality and resilience, the Supervisory Board of DB AG has decided to merge the two infrastructure divisions of the DB Group, DB Station&Service AG and DB Netz AG, into an infrastructure company (DB Infra-GO AG) oriented towards the common good. Above all, this should facilitate and accelerate targeted financing and funding by the federal government, which we welcome in principle. However, the separation of infrastructure from operations could also mean that the advantages of the previous group structure in connection with the financial and operational interdependencies are lost, and the competitive situation for operations intensifies. This would potentially make the goal of improving the profitability of the DB Group more difficult.

An integral part of the necessary transparent corporate governance is the informative public reporting system, which enables the adequate identification and assessment of relevant corporate risks in conjunction with other public information. Operational and financial aspects are given sufficient consideration in public reporting. In view of the many challenges, the DB Group relies on controlling, risk management and steering elements that we can assume are sufficiently structured to manage the business and changes in the Group in a targeted manner, both operationally and financially.

As of 30 June 2023, the DB Group employed around 325,000 people, roughly 67% of whom worked in Germany. Against the backdrop of the green and digital transformation of the DB Group, as well as demographic change and the associated high annual recruitment requirements, the shortage of skilled workers represents a core risk for the business.

The coronavirus pandemic has led to lasting changes in travel habits and traffic volumes, which have also impacted the rail business. This includes the ongoing trend towards working from home, and a reduction in work-related travel due to more online meetings, which affects all modes of transport. The owner and the general political and social trend towards nature and climate protection put the associated risks into perspective, which should benefit rail transport in the medium to long term. Due to its high capital requirements, the DB Group will continue to be dependent on subsidies and capital contributions from the public sector in the future. In view of the decision-making, success and potential factors resulting from the close relationship with the owner, the Federal Republic of Germany, the benefits of this for DB should be rated significantly higher than the associated restrictions in corporate governance.

Overall, we consider the structural risk of the DB Group to be increased due to the complexity of the organization, the rail infrastructure in need of modernization, the expected structural adjustments in the course of the reorganization of the infrastructure companies, as well as the announced or potential sales of the major international holdings.

Business risk

Embedded in a value-oriented mission statement with social and ecological responsibility, the DB Group's strategy "Strong Rail" is geared towards accelerated sustainable growth. We see the retention of the full or predominant shareholder majority of the Federal Republic of Germany in DB, which will continue to be a key driver for the Group, as a necessary basis for this fundamental objective. Against this backdrop, the increasing expectations of stakeholders in Germany, who are calling for the DB Group to focus more strongly on its core business of railroads in Germany, should also be mentioned. To this end, all structures and actions of the DB Group are measured against the value contribution to Strong Rail (see Structural risk).

The Strong Rail strategy pursues ten DB-specific targets which are essentially aimed at shifting traffic to rail, increasing the share of renewable energies, increasing customer and employee satisfaction, and improving the profitability and financial stability of the DB Group. These targets are based on the German government's climate protection goals and transport policy sector targets, which envisage a doubling of passenger rail traffic and an increase in rail freight traffic to 25%. The government's climate protection targets are to be supported above all by the complete conversion of the traction current mix to renewable energies.

We see risks in the non-fulfilment or delay of the aforementioned targets, which could impact the DB Group's competitiveness and hence its business development. The current high inflation and high interest rates, and the associated economic slowdown, particularly in Germany, have a negative effect in this regard. Rising and volatile fuel prices as a result of higher oil prices and CO_2 taxes will have a negative impact on the DB Group's profitability. On the other hand, however, they should lead to a stronger competitive situation for the railroads. However, motorized private transport continues to be preferred, which is also reflected in the passenger transport by rail, which has increased but remains below the pre-Covid level. We assume that means of transport such as long-distance buses, trucks, airplanes and cars will remain substitutes for rail services in the long term. This is due in particular to the appropriate state subsidies for all modes of transport as part of the implementation of climate policy goals. In addition, punctuality in rail freight and rail passenger transport, particularly in long-distance transport, has deteriorated significantly, which may impair the competitiveness of rail compared to other modes of transport.

Due to the predominant business activities in Germany and Europe, we do not derive any significant country risks for the DB Group, particularly as the international business should be reduced from 2024, assuming the successful completion of the sale of DB Arriva. Overall, we consider the remaining international business of DB Schenker to be sufficiently diversified and therefore not particularly risky.

Overall, we consider the risks arising from the business model, including the Group's market profile, to be moderate. The dominant market position and importance in German rail transport, the size of the company, certain unique selling points and competitive advantages, which are largely related to the overall transport policy of the Federal Republic of Germany in connection with the Federal Transport Infrastructure Plan and the Climate Protection Act, contribute to this. In general, we consider DB to be of high systemic importance. It remains to be seen whether the Group can maintain its partly dominant market position in the face of increasing competition in its main business areas.

Financial risk

For analytical reasons, CRA makes adjustments to the original balance sheet values. The following statements refer to the key figures calculated by CRA according to its methods, unless otherwise stated. Due to these adjustments, and the fact that CRA calculates its own key figures, they may differ from the original values and information provided by DB AG.

The result of our financial covenant analysis for the 2022 financial year improved slightly due to overall positive business development, despite the negative annual result, and states that the DB Group has satisfactory creditworthiness. Nevertheless, we consider the balance sheet capital structure and the financial ratios to be only average in relation to the present rating. The analytical equity ratio increased slightly to 16.21% as of December 31, 2022 (2021: 13.76%), but still remains in need of improvement. The increase is partly due to the revaluation of defined benefit pension plans, as a result of the rise in interest rates and the associated increase in consolidated other comprehensive income. Various capital injections, which were granted by the EU to compensate for coronavirus damage on the one hand, and from the climate protection package on the other, also had a positive effect. In addition, the hybrid capital raised in 2019 is largely recognized in equity. At 11.3 (2021: 17.6), the analytical key figure net total debt / EBITDA adj., which refers to total debt less cash and cash equivalents and marketable securities, showed an elevated value for the rating level. If the net financial liabilities of EUR 28.8 billion reported as of December 31, 2022 (2021: EUR 29.1 billion) are set in relation to EBITDA adj., this results in a value of 5.8 (2021: 9.1), which is also to be assessed as elevated with regard to the rating level.

As of June 30, 2023, the DB Group reported financial debt of EUR 36.4 billion, which corresponds to an increase of EUR 1.2 billion compared to December 31, 2022. The DB Group's main financing instruments include the European Debt Issuance Program with a volume of EUR 35 billion, and the Australian Debt Issuance Program with a volume of AUD 5 billion and EUR 3.1 billion, respectively, of which EUR 28.8 billion (31.12.2022: EUR 27.9 billion) and EUR 0.9 billion (31.12.2022: EUR 0.9 billion) had been drawn as of June 30, 2023. Lease liabilities decreased slightly to EUR 5.0 billion (31.12.2022: EUR 5.2 billion). Interest-free loans decreased to EUR 0.1 billion (31 Dec. 2022: EUR 0.3 billion) due to repayments. By contrast, other financial liabilities increased to EUR 1.7 billion (31.12.2022: EUR 1.0 billion) due to the raising of a bridge loan facility for the pre-financing of infrastructure measures in the amount of EUR 1.0 billion. The existing multi-currency commercial paper program of up to EUR 3 billion was fully available as of 30 June 2023.

In addition to the balance sheet liabilities, there are off-balance sheet obligations that need to be taken into account when assessing the Company's financial position. Of particular note here are the other financial obligations from purchase commitments in the amount of EUR 24.0 billion (31.12.2022: EUR 21.0 billion). Contingent liabilities and guarantee obligations are not material.

Due to the DB Group's asset intensity, access to the capital market at good conditions is essential and, in our view, is ensured, given the ownership structure. Nevertheless, the DB Group cannot escape the increased and expected further rise in interest rates. According to current company information, the average interest rate (weighted by volume) for the bonds issued in the current financial year of EUR 2.2 billion (2022: EUR 3.1 billion) has again risen significantly from 2.27% in 2022 to 3.59% (as of October 2023) - with a noticeably shorter average term of 10.3 years (2021: 12.5 years). We therefore expect interest expenses to rise in the coming years, with a corresponding impact on earnings. Nevertheless, even in the current interest rate environment, the Group is generally able to finance itself comparatively favorably - primarily via the subsidiary Deutsche Bahn Finance GmbH (DB Finance). We continue to view the maturity structure of debt financing as balanced.

We continue to view the liquidity situation of the DB Group as stable against the backdrop of sufficient liquidity and the available credit lines, in conjunction with an established capital market capability. In addition, despite the lack of guarantee commitments, we continue to assume that the German government will be willing to cover a significant part of the increasing investment and capital requirements, which we believe is fundamentally confirmed by various measures to promote and increase revenue. However, the federal government is expected to provide significantly less funding than originally anticipated for the costs estimated by Deutsche Bahn for additional investments in rail infrastructure (around EUR 45 billion between 2024-2027). In addition, there are currently risks with regard to some of the federal government's planned funding due to the annulment of the Climate and Transformation Fund and the resulting budget freeze. If the funds are not provided as planned, delays in investments and/or a noticeable increase in debt, and consequently negative effects on the net assets, financial position and results of operations of the DB Group cannot be ruled out.

The DB Group's financial management is organized on a Group-wide basis in Treasury, which we understand operates as an internal Group bank. We consider this organization to be both effective and efficient. We also believe that the use of derivatives adequately hedges the currency risks and interest rate risks to which the Group is potentially exposed in the financial area. Proceeds from senior bonds in foreign currencies are generally swapped into EUR.

In the short to medium term, we expect the investment program associated with the Strong Rail strategy to have a dampening effect on the Group's key figures due to the remaining considerable share of self-financing. We do not expect any significant effects from the planned sale of DB Arriva, as DB Arriva has not made a significant contribution to the operating result recently, despite the improvement, and the inflow should not result in a noticeable reduction in net financial debt.

Overall, despite current challenges, we infer from the higher financial support from the federal government that the owner is committed to rail transport in Germany in general and the DB Group in particular, which reinforces our assessment of systemic importance and proximity to the state, and also has a positive effect on our assessment of financial risk. In summary, we assess the financial risk of DB das as low.

Further ratings

In addition to the rating of Deutsche Bahn AG the following Issuer and its issues (see below), has been rated.

- Deutsche Bahn Finance GmbH

Due to the corporate, strategic, liability, financial, economic and performance-related interdependencies of the aforementioned subsidiary (100% subsidiary of Deutsche Bahn AG and consolidated into the group annual accounts) we derive the unsolicited issuer rating of these subsidiary from the unsolicited issuer rating of Deutsche Bahn AG and set it equal to its rating of AA- / stable.

Based on the long-term issuer rating and taking into account our liquidity analysis, the short-term rating of the Deutsche Bahn AG and the above-mentioned subsidiary was set at L1 (standard mapping), which corresponds to an extraordinarily high liquidity assessment for one year.

The rating objects of the issue rating are exclusively long-term senior unsecured issues, denominated in euro, issued by the above-mentioned subsidiary, which are included in the list of ECB-eligible marketable assets.

Deutsche Bahn AG is guarantor with respect to the issues that have been issued by the Deutsche Bahn Finance GmbH under the Debt Issuance Programme (DIP), with the last basis prospectus dated 21.07.2023 and the first supplement dated 07.08.2023.

We have provided the long-term local currency senior unsecured notes issued by Deutsche Bahn Finance GmbH with an unsolicited rating of AA- / stable. The rating is based on the corporate issuer rating.

Long-term local currency senior unsecured notes issued by Deutsche Bahn AG or Deutsche Bahn Finance GmbH, which have similar conditions to the current DIP programme, denominated in Euro and included in the list of ECB-eligible marketable assets, generally receive the same ratings as the current LT LC senior unsecured notes issued under the DIP programme. Notes issued in any currency other than euro, or other types of debt instruments, have not yet been rated by CRA. For a list of all currently valid ratings and additional information, please consult the website of Creditreform Rating AG.

Table 4: Overview of CRA Ratings I Source: CRA

Rating Category	Details	
	Date of rating committee	Rating
Deutsche Bahn AG	05.12.2023	AA- / stable / L1
Deutsche Bahn Finance GmbH	05.12.2023	AA- / stable / L1
Long-term Local Currency (LC) Senior Unsecured Issues issued by Deutsch Bahn Finance GmbH	05.12.2023	AA- / stable
Other	--	n.r.

Financial ratio analysis

Table 5: Financial key ratios |Source: Integrated Report DB Group 2022, structured by CRA

Asset structure	2019	2020	2021	2022
Fixed asset intensity (%)	77.86	77.69	74.33	72.86
Asset turnover	0.81	0.70	0.78	0.85
Asset coverage ratio (%)	63.76	61.07	67.86	70.43
Liquid funds to total assets	6.45	5.46	6.71	7.69
Capital structure				
Equity ratio (%)	22.61	12.62	13.76	16.21
Short-term debt ratio (%)	29.95	33.29	32.12	31.37
Long-term debt ratio (%)	27.03	34.83	36.69	35.11
Capital lock-up period (in days)	49.59	62.96	61.49	50.24
Trade-accounts payable ratio (%)	9.75	11.02	11.58	10.57
Short-term capital lock-up (%)	18.94	24.09	17.67	16.04
Gearing	3.14	6.49	5.78	4.70
Leverage	4.33	5.68	7.57	6.66
Financial stability				
Cash flow margin (%)	7.08	-1.05	5.20	4.13
Cash flow ROI (%)	5.44	-0.73	3.87	3.41
Total debt / EBITDA adj.	10.60	82.20	19.09	12.42
Net total debt / EBITDA adj.	9.71	77.06	17.60	11.28
ROCE (%)	2.46	-13.93	-2.00	2.53
Total debt repayment period	6.30	204.42	17.49	13.28
Profitability				
Gross profit margin (%)	57.02	51.90	47.88	47.61
EBIT interest coverage	1.79	-6.36	-0.97	2.25
EBITDA interest coverage	7.01	1.01	5.55	9.04
Ratio of personnel costs to total costs (%)	38.14	42.10	37.71	33.60
Ratio of material costs to total costs (%)	46.77	52.36	55.77	55.64
Cost income ratio (%)	104.02	118.86	108.39	104.60
Ratio of interest expenses to total debt (%)	1.37	1.05	0.91	0.89
Return on investment (%)	2.16	-8.15	-1.02	0.24
Return on equity (%)	5.00	-52.17	-10.53	-2.13
Net profit margin (%)	1.43	-13.13	-1.79	-0.38
Operating margin (%)	2.64	-10.67	-1.11	2.20
Liquidity				
Cash ratio (%)	21.54	16.40	20.87	22.33
Quick ratio (%)	59.39	50.74	61.12	64.26
Current ratio (%)	73.92	67.00	79.91	86.52

Appendix

Rating history

The rating history is available under https://www.creditreform-rating.de/en/ratings/published-ratings.html.

Table 6: Corporate Issuer Rating of Deutsche Bahn AG

Event	Rating created	Publication date	Result
Initial rating	07.10.2016	14.10.2016	AA / stable

Table 7: Corporate Issuer Rating of Deutsche Bahn Finance GmbH

Event	Rating created	Publication date	Result
Initial rating	19.07.2018	24.07.2018	AA / stable

Table 8: LT LC Senior Unsecured Issues issued by Deutsche Bahn Finance GmbH

Event	Rating created	Publication date	Result
Initial rating	19.07.2018	24.07.2018	AA / stable

Table 11: Short-term Issuer Ratings of Deutsche Bahn AG and Deutsche Bahn Finance GmbH

Event	Rating created	Publication date	Result
Initial rating	05.12.2023	www.creditreform-rating.de	L1

Regulatory requirements

The rating[2] was not endorsed by Creditreform Rating AG (Article 4 (3) of the CRA-Regulation).

The present rating is, in the regulatory sense, an unsolicited rating, which is public. The analysis was carried out on a voluntary basis by Creditreform Rating AG, which was not commissioned by the Issuer or any other third party to prepare the present rating.

The rating is based on the analysis of published information and on internal evaluation methods for the assessment of companies and issues. The rating object was informed of the intention of creating or updating an unsolicited rating before the rating was determined.

The rating object participated in the creation of the rating as follows:

Unsolicited Corporate Issuer / Issue Rating	
With rated entity or related third party participation	No
With access to internal documents	No
With access to management	No

[2] In these regulatory requirements the term "rating" is used in relation to all ratings issued by Creditreform Rating AG in connection to this report. This may concern several companies and their various issues.

A management meeting did not take place within the framework of the rating process.

The documents and information gathered were sufficient to meet the requirements of Creditreform Rating AG's rating methodologies.

The rating was conducted based on the following rating methodologies and the basic document.

Rating methodology	Version number	Date
Corporate Ratings	2.4	July 2022
Corporate Short-Term Ratings	1.0	June 2023
Government-related Companies	1.1	May 2023
Non-financial Corporate Issue Ratings	1.0	October 2016
Rating Criteria and Definitions	1.3	January 2018

The documents contain a description of the rating categories and a definition of default.

The rating was carried out by the following analysts:

Name	Function	Mail-Address
Artur Kapica	Lead-analyst	A.Kapica@creditreform-rating.de
Christian Konieczny	Analyst	C.Konieczny@creditreform-rating.de

The rating was approved by the following person (person approving credit ratings, PAC):

Name	Function	Mail-Address
Stephan Giebler	PAC	S.Giebler@creditreform-rating.de

On 5 December 2023, the analysts presented the rating to the rating committee and the rating was determined. The rating result was communicated to the company on 6 December 2023. There has not been a subsequent change to the rating.

The rating will be monitored until Creditreform Rating AG withdraws the rating. The rating can be adjusted as part of the monitoring, if crucial assessment parameters change.

In 2011, Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on this registration, Creditreform Rating AG is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

ESG-factors

You can find out whether ESG factors were relevant to the rating in the upper section of this rating report "Relevant rating factors".

A general valid description for Creditreform Rating AG, as well as a valid description of corporate ratings for understanding and assessing ESG factors in the context of the credit rating process, can be found here.

Conflict of interests

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or in approving credit ratings and rating outlooks.

Creditreform Rating AG ensures that the provision of ancillary services does not present conflicts of interest with its credit rating activities and discloses in the final rating reports any ancillary services provided for the rated entity or any related third party. The following ancillary services were provided for the rating entity or for third parties associated with the rated entity:

1.) No ancillary services in the regulatory sense were carried out for this rating object.

For the complete list of provided rating and credit service ancillaries please refer to the Creditreform Rating AG's website.

Rules on the presentation of credit ratings and rating outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our "Rating Committee Policy", all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, Creditreform Rating AG has used following substantially material sources:

Corporate issuer rating:

1. Annual report

2. Website

3. Internet research

Corporate issue rating:

1. Corporate issuer rating incl. information used for the corporate issuer rating

2. Documents on issues / instruments

There are no other attributes and limitations of the credit rating or rating outlook other than those displayed on the Creditreform Rating AG website. Furthermore, Creditreform Rating AG considers as satisfactory the quality and extent of information available on the rated entity. With respect to the rated entity, Creditreform Rating AG regarded available historical data as sufficient.

Between the time of disclosure of the credit rating to the rated entity and the public disclosure, no amendments were made to the credit rating.

The Basic Data Information Card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In cases where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating report and indicates how the different methodologies or other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings and best-case scenario credit ratings are explained.

The date at which the credit rating was initially released for distribution and the date when it was last updated, including any rating outlooks, is indicated clearly and prominently in the Basic Data Information Card as a "rating action"; initial release is indicated as "initial rating", other updates are indicated as an "update", "upgrade" or "downgrade", "not rated", "confirmed", "selective default" or "default".

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within the Basic Data Information Card.

In accordance with Article 11 (2) EU-Regulation (EC) No 1060/2009, a registered or certified credit rating agency shall make available, in a central repository established by ESMA, information on its historical performance data including the rating transition frequency and information about credit ratings issued in the past and on their changes. Requested data are available at the ESMA website.

An explanatory statement of the meaning of Creditreform Rating AG's default rates are available in the credit rating methodologies disclosed on the website.

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We have assumed that the documents and information made available to us by the client are complete and accurate and that the copies provided to us represent the full and unchanged contents of the original documents. Creditreform Rating AG assumes no responsibility for the true and fair representation of the original information.

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