

# Hamburger Hochbahn AG

## Key Rating Drivers

**Rating Derivation Summary:** Fitch Ratings classifies Hamburger Hochbahn AG (HOCHBAHN) as a government-related entity (GRE) of the State of Hamburg (AAA/Stable/F1+) and equalises its ratings with those of Hamburg. This reflects a 'Very Strong' assessment of the following rating factors: status, ownership & control, support track record & expectations and financial implications of the GRE's default. It also reflects a 'Moderate' assessment of socio-political implications of default.

**Legal Status Tantamount to a Guarantee:** The equalisation of the ratings reflects our view that HOCHBAHN's legal status is tantamount to a guarantee, based on its exclusion from competition, that there are no restrictions on it receiving support from its owner; the profit-and-loss transfer agreement ensuring annual deficit compensation by Hamburg, that the state has the same kind of control over the issuer's operations as would it of an administrative unit, and the issuer's final access to Hamburg's liquidity.

**Sustained State Control and Ownership:** HOCHBAHN is 100% owned by Hamburg via the Hamburger Gesellschaft für Vermögens- und Beteiligungsmanagement mbH (HGV) – a group holding of Hamburg that combines a large part of its GREs and shareholdings. However, we consider Hamburg to be ultimately liable for HOCHBAHN, which has a strategic role in local transportation and environmental planning policy, and Hamburg has a large amount of voting control via its presence on HOCHBAHN's supervisory board.

**Very Strong State Support:** There are no restrictions on government support, based on a direct service contract. A profit-and-loss agreement with Hamburg ensures annual deficit compensation. HOCHBAHN also receives support for a large amount of its investments, covering about 50% of its scheduled gross investment in 2023-2027. Finally, HOCHBAHN has a cash-pooling agreement with its owner and can access liquidity from HGV, which prevents the lack of liquidity if needed.

**Provider of Essential Services:** A disruption of HOCHBAHN's services would lead to significant political or economic repercussions for Hamburg, but a financial default by the GRE would not materially affect the provision of its essential services, although it would endanger its mission.

**State Proxy Funding Vehicle:** HOCHBAHN is core to the implementation of Hamburg's supply-driven public transportation strategy and achieving its climate goals; it receives subsidies for Hamburg-promoted investments. Given this, we assume Hamburg is very likely to support HOCHBAHN, if required. Also, in case of a default by HOCHBAHN, Hamburg's standing in the capital market would be significantly impaired.

**SCP of 'bb':** HOCHBAHN's Standalone Credit Profile (SCP) of 'bb' reflects a 'Stronger' assessment of revenue defensibility, a 'Midrange' operating risk and a leverage ratio (adjusted net debt/EBITDA) that we expect to increase to about 16.4x by 2027 under our rating-case scenario (2022: 11x), considering the GRE's investment plan.

**ESG Considerations:** ESG issues have a minimal impact on HOCHBAHN's ratings, as reflected in a score of '3'.

## Rating Sensitivities

**Hamburg's Ratings:** A change in Hamburg's ratings would be mirrored in HOCHBAHN's.

**Support Factors:** Weaker features of the legal status, or weakening confidence in the government's links between HOCHBAHN and Hamburg, including a perceived dilution of support could lead to a notching down from Hamburg's ratings.

## Ratings

Foreign Currency	
Long-Term IDR	AAA
Short-Term IDR	F1+

Local Currency	
Long-Term IDR	AAA

Outlooks	
Long-Term Foreign-Currency IDR	Stable
Long-Term Local-Currency IDR	Stable

Debt Ratings	
Senior Unsecured Debt - Long-Term Rating	AAA

## Issuer Profile Summary

HOCHBAHN provides local transportation services via its metro lines and buses, serving 1.85 million people in Hamburg and 3.5 million people in the metropolitan region. Its service area covers 755 sq km (Hamburg) and 8,616 sq km (metropolitan region).

It is one of Germany's leading local public transport companies. Its four metro lines and 114 bus lines carry 1.2 million passengers daily, covering 50% of all local public transport services, and it employs about 6,300 people.

## Financial Data Summary

Hamburger Hochbahn AG		
(EURm)	FY22rc	FY27rc
Net adjusted debt/EBITDA (x)	11.0	16.4
EBITDA/gross interest coverage (x)	9.1	2.4
Operating revenue	869	1,163
EBITDA	122	147
Net adjusted debt	1,340	2,415
Total assets	2,372	--

rc: Fitch's rating-case scenario  
Source: Fitch Ratings, Fitch Solutions, HOCHBAHN

## Applicable Criteria

[Government-Related Entities Rating Criteria \(September 2020\)](#)  
[Public Sector, Revenue-Supported Entities Rating Criteria \(April 2023\)](#)

## Related Research

[Fitch Affirms Hamburger Hochbahn AG at 'AAA'; Outlook Stable \(September 2023\)](#)  
[State of Hamburg \(December 2022\)](#)

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## Rating Synopsis

### Hamburger Hochbahn AG Rating Derivation Summary

GRE Key Rating Drivers and Support Score		
Status, Ownership and Control	Very Strong	10
Support Track Record	Very Strong	10
Socio-Political Implications of GRE Default	Moderate	5
Financial Implications of GRE Default	Very Strong	20
GRE Support Score		45
Score - Notching Guideline Table		>=45

Standalone Credit Profile (SCP) Derivation	
Revenue Defensibility	Stronger
Operating Risk	Midrange
Leverage Ratio (Rating Case Scenario)	16.4
Qualitative Factors Adjustments	Neutral
GRE SCP	bb
Distance - Notching Guideline Table	>4

Sponsor IDR	GRE SCP	GRE IDR
AAA	aaa	AAA
AA+	aa+	AA+
AA	aa	AA
AA-	aa-	AA-
A+	a+	A+
A	a	A
A-	a-	A-
BBB+	bbb+	BBB+
BBB	bbb	BBB
BBB-	bbb-	BBB-
BB+	bb+	BB+
BB	bb	BB
BB-	bb-	BB-
B+	b+	B+
B	b	B
B-	b-	B-
CCC/CC/C	ccc/cc/c	CCC/CC/C

Summary	
Sponsor IDR/CO	AAA
GRE SCP	bb
Distance Sponsor IDR/CO vs GRE SCP	11
GRE Support Score	45
Notching Approach	Equalised
GRE Suggested IDR/CO	AAA
Single Equalisation Factor	Yes
GRE IDR	AAA

### Notching Guideline Table

Distance \ Score	>=45	35-42.5	27.5-32.5	20-25	15-17.5	12.5	<=10
= or above	Capped	Capped	Capped	Capped	Capped	Capped	Capped
1,2,3	=	=	-1	+1	+1		SCP
4	=	-1	-1	-2	+1	+1	SCP
>4	=	-1	-2	-3	+2/+3	+1	SCP

Stylized Notching Guideline Table: refer to GRE criteria for details

Source: Fitch Ratings

Fitch rates HOCHBAHN according to its *Government-Related Entities Rating Criteria* and applies a top-down approach. We view HOCHBAHN as a government-related entity (GRE) credit-linked to Hamburg, as we believe HOCHBAHN's direct owner, HGV, has a neutral role in terms of extraordinary support provision. We have, therefore, looked beyond the chain of control, and the rating reflects HOCHBAHN's strong link to its ultimate government owner and the high likelihood of extraordinary state support in case of financial distress.

HOCHBAHN's ratings are equalised with those of Hamburg, reflecting our view that its legal status is tantamount to a guarantee. This is based on HOCHBAHN being shielded from competition based on the existing 10-year direct service agreement (Direktvergabe) with Hamburg (bus services) and 22.5-year agreement (metro services); there being no restrictions on HOCHBAHN receiving support from its owner; the profit-and-loss transfer agreement ensuring annual deficit compensation by Hamburg; the state having the same kind of control over HOCHBAHN's operations as it would over an administrative unit; and HOCHBAHN's access to Hamburg's liquidity via cash-pooling with HGV.

The assessment of the four extraordinary support factors under Fitch's GRE Rating Criteria, resulting in a score of 45 points out of a maximum of 60, led to the equalisation of the IDR with that of Hamburg, irrespective of HOCHBAHN's SCP. We assess the SCP at 'bb', applying the *Public Sector, Revenue-Supported Entities Rating Criteria*. The SCP does not affect HOCHBAHN's IDRs, as the notching discrepancy between its SCP and Hamburg's IDRs is more than four notches.

## Issuer Profile

HOCHBAHN was established 1911 as a stock-holding company according to German Law and is entirely owned by the city-state of Hamburg via HGV. HOCHBAHN provides local public transport services via its metro lines and buses, serving 1.81 people in Hamburg and 3.5 million people in the metropole region, covering a service area of 755 sq km and 8,616 sq km, respectively. It is one of the leading local public transport companies in Germany, with its four metro lines and 114 bus lines used by 1.2 million people on a daily basis, covering over 50% of all local public transport services and employing 6,389 people. Effective 27 November 2019, HOCHBAHN has signed a direct award of a service contract (Direktvergabe), allowing it to provide bus services for an additional 10 years and metro services for 22.5 years.

Hamburg sees HOCHBAHN as core to meeting the growing demand for public transport in the state and for achieving its climate goals by 2030. Hamburg aims to establish supply-driven local services, ensuring that its citizens have access to local public transport within five minutes. This should increase the share of local public transport in Hamburg to 30% from 22% by 2030, which may double the bus services provided within the transport association Hamburger Verkehrsverbund<sup>1</sup> (HVV). Of these, HOCHBAHN will have about 67%, corresponding to a 2,000 increase in staff.

<sup>1</sup> HVV is a transport association, comprising Hamburg, and neighbouring areas in the German States of Schleswig-Holstein (AAA/Stable) and Lower Saxony (AAA/Stable), founded on 29 November 1965. Within this association, transportation services are provided by 29 companies, such as HOCHBAHN, S-Bahn Hamburg AG, DB Regio und Start Unterelbe GmbH, VHH, HADAG etc. HVV is owned by its local and regional governments responsible for providing public transport in the service area. It is 85.5%

HOCHBAHN operates four metro lines with 93 stops, 929 trains covering 1,489 million kilometres and moving almost 250 million people annually. Bus services includes over 1,000 buses, 1,400 stations, 114 bus lines covering 676 kilometres and moving over 217 million people annually. Hamburg aims to have an emission-free bus fleet by 2030.

## HOCHBAHN – Ownership Structure



Source: Fitch Ratings, HOCHBAHN

## Support Rating Factors

### Hamburger Hochbahn AG - Assessment of Support

Status, ownership, and control	Support track record	Socio-political implications of default	Financial implications of default	GRE score
Very Strong	Very Strong	Moderate	Very Strong	45

Source: Fitch Ratings

### Status, Ownership and Control: Very Strong

HOCHBAHN is 100% owned by Hamburg via HGV. HGV is a group holding of Hamburg, which combines a large part of Hamburg’s GREs and shareholdings. We view HGV as an organisational unit, but that Hamburg is ultimately liable for HOCHBAHN. HOCHBAHN is the largest local public transport provider in Hamburg with a market share of almost 47.5% in 2022 (calculated by revenue distribution). HOCHBAHN provides bus and metro services almost entirely limited to the borders of Hamburg. HOCHBAHN has a market share of almost 87.3%, and its only competitor is Verkehrsbetriebe Hamburg-Holstein (VHH; another GRE 100% owned by Hamburg), which holds the remaining 12.7% (calculated by revenue distribution). HOCHBAHN is also manager of the local network infrastructure. It has a strategic role in Hamburg’s local transportation and environmental planning policy.

HOCHBAHN’s financial figures are consolidated in Hamburg’s group accounts. Based on a directive for public passenger transport services, Hamburg is the public transport provider and has control over HOCHBAHN, similar to its administrative units. In 2009, Hamburg put HOCHBAHN in charge of providing its public transport services. This was renewed in 27 November 2019, including metro and bus services with a tenor of 22.5 years and 10 years, respectively.

HOCHBAHN’s management board consists of four members that are appointed by the supervisory board. Hamburg has eight members in the 16-member supervisory board, including one representative of HGV and one from Hamburg’s finance department. This ensures Hamburg largely controls HOCHBAHN.

As the company operates under private/commercial law, HOCHBAHN could be subject to bankruptcy proceedings. However, based on its control and the profit-and-loss transfer agreement between HGV and HOCHBAHN, this is very

owned by the State of Hamburg, 3% by Schleswig-Holstein, 2% by Lower Saxony and the remainder is owned by counties in the neighbouring areas of Hamburg.

unlikely. In case of bankruptcy, the contract would need to be terminated and, based on German equity law, HGV would need to provide security to HOCHBAHN's creditors. Consequently, we view a liquidation of HOCHBAHN as very unlikely and assume additional support prior to a default as highly likely.

### Support Track Record: Very Strong

HOCHBAHN is not subject to EU competition rules and there are no restrictions on government support.

Hamburg prompted HOCHBAHN and VHH to meet the requirements for a direct award of a service contract (Direktvergabe) in line with the EU provision No. 1370/2007 in 2014. HOCHBAHN and VHH are both in compliance with this provision and the agreement was signed with HOCHBAHN on 27 November 2019. The respective passenger transport act further ensures that HOCHBAHN is protected from competition for the entire duration of this contract. This means that local public transport in Hamburg is provided by consolidated GREs based on exclusive special provisions for services for the public and is in line with the law for granting aid and EU competition law.

HOCHBAHN is the most important transport provider in Hamburg, ensuring mobility even in remote areas, providing essential services for the public (Daseinsvorsorge). To ensure mobility in Hamburg and its metropolitan area, HOCHBAHN needs to operate lines that are not profitable. Due to this, HOCHBAHN and Hamburg agreed on a profit-and-loss transfer agreement, which ensures annual deficit compensation (Fehlbetragsausgleich) by Hamburg. Under this agreement, HOCHBAHN is eligible for and receives consistent support from its owner covering its losses.

HOCHBAHN further receives funding for its investments. According to HOCHBAHN's business plan, it will invest EUR2,958 million in 2023-2027. Investment grants may differ in their purpose, but according to HOCHBAHN, about 50% of its overall investments are supported.

Finally, HOCHBAHN has a cash pooling agreement with its owner. This means HOCHBAHN is not reliant on credit lines with financial institutions, but can access liquidity from HGV, preventing HOCHBAHN from lacking liquidity in case of need.

### Socio-Political Implications of Default: Moderate

We believe it would be difficult for HOCHBAHN to be substituted by a private company, as the services provided include non-profitable services, and HOCHBAHN reports ongoing deficits that are covered by the profit-and-loss agreement with HGV.

A disruption of HOCHBAHN's services would lead to significant political or economic repercussions for Hamburg, as the former is the main local public transport provider for one of the largest cities in Germany. However, this factor is driven by the financial implications of HOCHBAHN's default, in our view, which would not materially affect the provision of the GRE's essential public services or endanger its mission.

### Financial Implications of Default: Very Strong

HOCHBAHN provides essential public services. It is key for one of the city's most important projects, Hamburg-Takt, which aims to move to supply-driven public transport from demand-driven. With this project, Hamburg aims to ensure that its citizens are able to reach transport within five minutes and to reduce private transport. Hamburg aims to increase the share of public transport by 8% to 30% in 2030 from 22% in 2017. According to HOCHBAHN, this would mean a 50% increase in its annual customers.

HOCHBAHN is core to Hamburg achieving its climate goals, including the conversion of its transport fleet to emission-free. HOCHBAHN is leading a central government-supported project to test digital mobility solutions. HOCHBAHN receives subsidies for Hamburg-promoted investments, which requires it to increase its debt; we believe Hamburg will very likely support HOCHBAHN, if needed. HOCHBAHN has also expanded its funding sources and successfully issued its first green bond in 2021.

Hamburg reports by group accounting and all its GREs are grouped under HGV. If a GRE defaulted on its obligations, the borrowing capacity of Hamburg and its other GREs would be significantly impaired. Hamburg is one of the 16 German states, which are the largest subnational borrowing group with frequent needs to tap the capital market. Any doubts about Hamburg's capacity to service its own debt as well as that of its GREs would lead to severe negative repercussions of its creditworthiness and borrowing capacity.

### Single Factors Leading to Equalisation

The assessment of HOCHBAHN's rating factors leads to a score of 45 points under our *GRE Rating Criteria*. However, HOCHBAHN's ratings are equalised with those of Hamburg, reflecting our view that its legal status is tantamount to a guarantee.

## Standalone Credit Profile Assessment

### Hamburger Hochbahn AG - Assessment of SCP

Revenue defensibility	Operating risk	Reference leverage ratio (x)	Liquidity profile assessment	Asymmetric risks	Counterparty risk	SCP
Stronger	Midrange	16.4	Weak	Neutral	No	bb

Source: Fitch Ratings

The SCP is assessed at 'bb', under Fitch's Public Sector, Revenue-Supported Entities Rating Criteria and does not affect the IDRs, as they are more than four notches away from Hamburg's rating. The 'bb' is based on 'Stronger' revenue defensibility, 'Midrange' operating risk and a 'Weaker' financial profile.

#### Revenue Breakdown (Excl. non-Cash Items), 2022

	(EURm)	% of operating revenue
Turnover	488	59
Other capitalised services	40	5
Other operating revenue	300	36
<b>Operating revenue</b>	<b>828</b>	<b>100</b>
Interest revenue	-	-
Capital revenue	115	-
Memo: Non-cash operating revenue	41	-

Source: Fitch Ratings, Fitch Solutions, HOCHBAHN

#### Expenditure Breakdown (Excl. Non-Cash Items), 2022

	(EURm)	% of operating expenditure
Staff costs	411	58
Goods & services and maintenance costs	228	32
Other operating expenditure	67	10
<b>Operating expenditure</b>	<b>706</b>	<b>100</b>
Interest expenditure	13	-
Capital expenditure	335	-
Memo: Non-cash operating expenditure	140	-

Source: Fitch Ratings, Fitch Solutions, HOCHBAHN

### Revenue Defensibility: Stronger

#### Demand Attributes

HOCHBAHN had over 326 million passengers in 2022 (metro and bus), which is a significant increase from 243 million in 2021, although still less than the number of passengers pre-Covid-19 (2019: 466 million). HOCHBAHN expects the number of its passengers to return to the level seen in 2019 by 2025. We do not believe that passenger numbers will fluctuate, and, we believe demand for public transport is increasing, given the dynamics of the city, its goal to reduce the number of cars and its ongoing extension of services.

We expect demand to grow in the longer term, in light of Hamburg's plans to expand local public transport and the region's economic prospects. Also, demand is not affected by competition from other providers. HOCHBAHN is not subject to EU competition rules and there are no restrictions on government support.

#### Pricing Characteristics

There is a contractual framework in place enabling HOCHBAHN to adjust prices depending on changes in costs for staffing and maintenance. These adjustments are subject to political discussions, but HOCHBAHN is usually compensated for inflationary trends. We assume tariff changes are unlikely to drive demand. We also assume that the regulatory regime will continue to compensate HOCHBAHN for its services, supporting its solvency, especially considering the profit-and-loss transfer agreement.

### Operating Risk: Midrange

#### Operating Costs

HOCHBAHN has well-identified cost drivers and low potential volatility in major items. In 2022, about 58% of its operating expenditure consisted of staff costs and 32% of maintenance costs (including energy consumption).

Under the city's Hamburg-Takt strategy and due to the construction of its new metro line U5, HOCHBAHN has to spend about EUR3 billion on investments in 2023-2027. However, the issuer expects to receive a minimum of 50% of investment grants (U5 is supported by about 75%); we also assume HOCHBAHN has some flexibility in realising these investments, and that it would receive adequate compensation for them. Growing operating and maintenance costs are covered by annual tariff price adjustments.

### Resource Management

HOCHBAHN operates in one of the most dynamic regions in Germany, with an ample workforce. The local infrastructure is excellent and Hamburg has one of the largest harbours in Germany. HOCHBAHN, through its long operating history, is well-experienced in managing contract renewals, such as energy. Based on the profit-and-loss transfer agreement with its owner, we assume a full pass-through of supply price and volume risk to a financially strong counterparty, if necessary.

### Capital Planning and Management: Neutral

HOCHBAHN applies an annual accounting and a comprehensive medium-term financial plan fully detailing investments by project. HOCHBAHN has a history of effective cost and capital management and its debt maturity is well within the expected economic life of the debt-financed investments. The GRE's technology in metro services is up-to-date, while for bus services, it is subject to renewal towards an entirely emissions-free fleet.

### Financial Profile: Weaker

We expect HOCHBAHN's passenger volume to increase back to levels seen prior to the pandemic. This should translate to an increase of its EBITDA to EUR147 million in 2027 according to our rating case (2022: EUR122 million). However, we expect HOCHBAHN's debt to increase to over EUR2.4 billion by 2027 from its current 1.35 billion, considering the company's high spending needs, reflected in its medium-term investment plan 2023-2027. This will increase the leverage to 16.4x by 2027 from 11x in 2022, though remaining in line with the current assessment.

### Fitch's Base and Rating Cases Main Assumptions

#### Fitch's Base and Rating Cases - Main Assumptions

Assumptions	5-year historical average	2023 - 2027 average	
		Base case	Rating case
Operating revenue growth (%)	7.1	7.2	7.0
Transfers from public sector growth (%)	29.3	21.8	21.8
Operating expenditure growth (%)	6.9	7.4	7.6
Net capital expenditure (average per year; bn)	-188	-296	-296
Apparent cost of debt, 2022 (%)	1.0	2.2	2.2

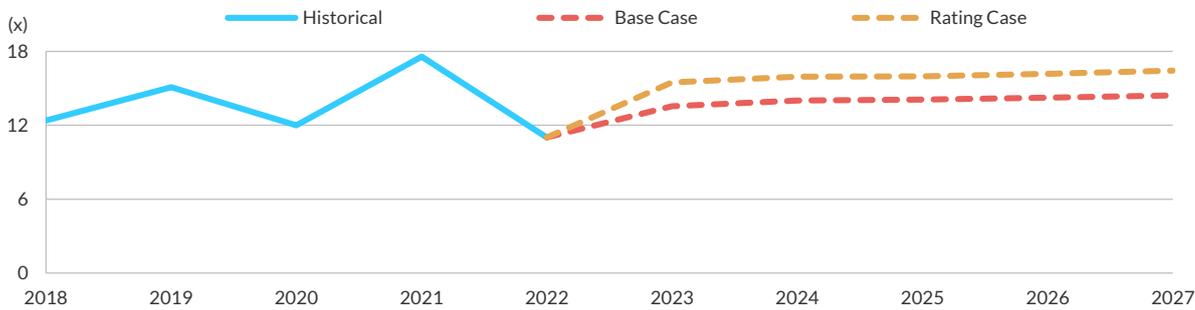
5-Year historical average	2022	2027	
		Base case	Rating case
EBITDA (bn)	122	163	147
CFADS (bn)	122	163	147
Net adjusted debt (bn)	1,340	2,343	2,415
Net adjusted debt/EBITDA (x)	11.0	14.4	16.4
Net adjusted debt/CFADS (x)	11.0	14.4	16.4

Source: Fitch Ratings, Fitch Solutions, Hamburger Hochbahn AG

Fitch's rating-case scenario is based on prudent assumptions. HOCHBAHN is loss-making and receives annual compensation from its owner. HOCHBAHN's debt increased to EUR1,349 million in 2022 from EUR652 million in 2017, due to the expansion of the transport network and the modernisation of its fleet; this corresponded to an increase in leverage to 11x from 9.5x.

For 2023-2027, HOCHBAHN faces high annual net investments needs of between EUR500 million and over EUR700 million. Therefore, debt is likely to increase largely to over EUR2.4 billion in 2027. HOCHBAHN should receive full compensation for the losses envisaged in its medium-term plan owing to the profit-and-loss-making transfer agreement, thereby limiting the increase in leverage. However, according to our rating case, HOCHBAHN's leverage is likely to grow to 16.4x in 2027 from 11x in 2022, as we expect revenue to improve following the pandemic-related decline in 2020-2021, supporting the company's EBITDA.

Net Adjusted Debt/EBITDA - Fitch's Base - and Rating-Case Scenarios



Source: Fitch Ratings, Fitch Solutions, Hamburger Hochbahn AG

Asymmetric Risk and Other Considerations

Asymmetric Risk Considerations

Debt Structure and Contingent Liabilities	Management and Governance	Legal and Regulatory	Information Quality	Country Ceiling and Legal Regime	Liquidity Profile Assessment	Asymmetric Risk and Liquidity Profile Assessment
Neutral	Neutral	Neutral	Neutral	Neutral	Weak	Neutral

Source: Fitch Ratings

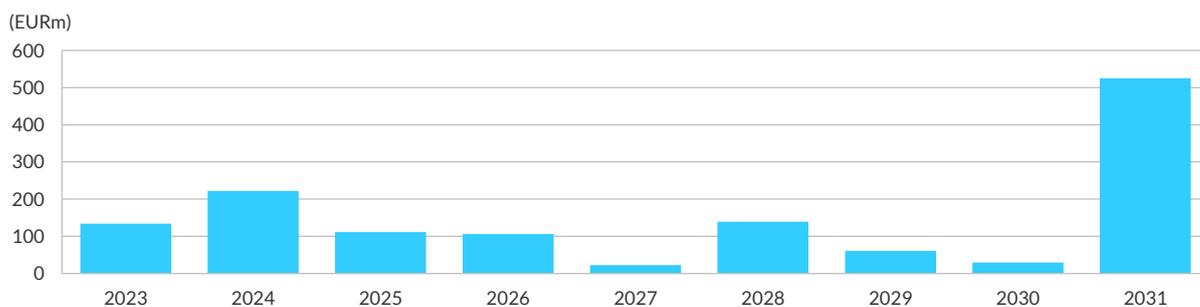
HOCHBAHN's SCP is not affected by any asymmetric risk. Debt structure is sound. At end-2022, 100% of the reported debt was fixed-rated. The average maturity was 5.7 years and the debt amortisation schedule is relatively smooth until 2031, when its EUR500 million Green Bond will need to get refinanced. HOCHBAHN is not exposed to foreign-exchange risk. Fitch also believe HOCHBAHN benefits from good management and governance, a strong regulatory framework and good information quality, making related risks neutral to the rating.

Debt and Liquidity Analysis

HOCHBAHN's total debt increased considerably to EUR1,349 million in 2022 from EUR458 million in 2015 and the corresponding leverage ratio weakened to 11x from 6x. The high leverage is likely to persist considering the amount of investments HOCHBAHN has to undertake to fulfil the aforementioned goals by Hamburg. HOCHBAHN's current debt is entirely made of amortising bank loans with no concentration, currency and interest-rate risk. In order to diversify its funding mix and its increasing funding needs, HOCHBAHN issued its first green bond (EUR500 million) in 2021. The issue received high demand and was oversubscribed seven times. The 10-year issue changed HOCHBAHN's maturity profile towards some refinancing risk; previously, its debt consisted entirely of amortising loans. The bond has a low interest rate of 0.125%; we view this issue as positive because it further expands HOCHBAHN's access to funding.

HOCHBAHN has a low level of liquidity with unrestricted cash amounting to just EUR9 million at end-2022. Also, a large amount of its annual debt maturities is uncovered, with available credit lines amounting to EUR8 million only. However, we believe this low level of liquidity is not a risk, as HOCHBAHN has access to Hamburg's liquidity via cash-pooling with HGV.

Direct Debt Maturity Profile, End-2022



Source: Fitch Ratings, Fitch Solutions, Hamburger Hochbahn AG

## Debt Analysis

	End-2022
Reported debt <sup>a</sup> (EUR)	1,349
Debt in foreign currency (% of reported debt)	0
Fixed rate (% of reported debt)	100.0
Issued debt (% of reported debt)	37.1
Apparent cost of debt (%)	1.0
Weighted average life of debt (years)	5.7

<sup>a</sup> Sum of outstanding short-term and long-term bonds, loans and notes payable  
Source: Fitch Ratings, Fitch Solutions, HOCHBAHN

## Liquidity

(EURm)	
Cash and liquidity available for debt service, end-2022 (a)	9
Undrawn committed credit lines, end-2022 (b)	8
EBITDA, 2023 (c)	99
Debt service, 2023 (d)	167
Cash operating expenditure, 2023 (e)	879
Liquidity cushion, 2023 (x): (a+b+c-d)/e	-0.1

Source: Fitch Ratings, Fitch Solutions, HOCHBAHN

HOCHBAHN's relatively weak liquidity cushion is mitigated by its access to Hamburg's liquidity via cash pooling with HGTV.

## Short-Term Rating Derivation

HOCHBAHN's Long-Term IDR of 'AAA' corresponds to a Short-Term IDR of 'F1+'.

## Debt Ratings

The senior unsecured rating of 'AAA' is at the same level as HOCHBAHN's Long-Term IDR.

## Peer Analysis

### Peers

	Sponsor	GRE score	Reference leverage (x)	SCP	IDR	Rating Approach
Hamburger Hochbahn AG	State of Hamburg	45	16.4	bb	AAA	Equalised
Regie Autonome des Transports Parisiens (RATP)	France	45	11.1	a-	AA-	Equalised
Ile-de-France Mobilites	France	35	13.5	bbb	A+	Top down -1
Azienda Trasporti Milanese SpA	City of Milan	25	3.3	a-	BBB	Capped
Transport for London	United Kingdom	40	9.8	a-	AA-	Top down -1

rc: Fitch's rating-case scenario  
Source: Fitch Ratings, Hamburger Hochbahn AG

HOCHBAHN's IDR benefits from its legal status tantamount to a guarantee, its monopolistic position and a solid revenue framework, all of which help to explain the rating approach difference from the peers. HOCHBAHN's closest peers are RATP, Transport for London (AA-/Negative) and Azienda Trasporti Milanese (BBB/Stable). Transport for London's lower GRE score is mostly due to the lower expectation of support. Azienda Trasporti Milanese's lower GRE score is due to its private law status and the weaker financial implications of default for its sponsor.

## Criteria Variation

N/a

## Financial Adjustments

Fitch's adjusted debt includes HOCHBAHN's short-term debt (EUR136 million at end-2022) and long-term debt (EUR1,213 million).

Fitch's net adjusted debt corresponds to the difference between Fitch-adjusted debt and the cash at the end of the year viewed as unrestricted by Fitch (2022: EUR9 million).

## ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit <https://www.fitchratings.com/topics/esg/products#esg-relevance-scores>.

## Appendix A: Financial Data

### Hamburger Hochbahn AG

(EURm)	FY18	FY19	FY20	FY21	FY22
<b>Income statement</b>					
Operating revenue	640	687	734	776	869
Operating expenditure	-630	-673	-717	-762	-846
Interest revenue					
Interest expenditure	-24	-23	-22	-20	-13
Other non-operating items	14	10	6	7	1
Taxation	0	0	-1	-1	-2
Profit (loss) after tax	0	0	0	0	9
Memo: Transfers and grants from public sector	51	69	113	151	162
<b>Balance sheet summary</b>					
Long-term assets	1,234	1,410	1,499	1,648	2,045
Stock	24	25	27	33	54
Trade debtors	69	60	67	370	239
Other current assets	2	24	23	20	25
Total cash, liquid investments, sinking funds	11	10	86	17	9
Total assets	1,340	1,529	1,701	2,088	2,372
Long-term liabilities	1,039	1,266	1,254	1,636	1,936
Trade creditors	109	81	264	269	336
Other short-term liabilities	24	15	16	15	23
Charter capital	167	167	167	167	162
Reserves and retained earnings	0	0	0	0	-87
Minority interests	0	0	0	0	2
Liabilities and equity	1,340	1,529	1,701	2,088	2,372
<b>Debt statement</b>					
Short term debt	0	0	0	0	136
Long term debt	817	1,065	1,051	1,455	1,213
Finance leases					
Subordinated debt					
Total debt	817	1,065	1,051	1,455	1,349
Unfunded pension liabilities					
Other Fitch-classified debt					
Adjusted debt	817	1,065	1,051	1,455	1,349
Unrestricted cash, liquid investments, sinking funds	11	10	86	17	9
Net adjusted debt	806	1,055	965	1,438	1,340
<b>EBITDA reconciliation</b>					
Operating balance	10	14	17	14	23
+ Depreciation	77	85	93	101	140
+ Provision and impairments					
+/- Other non-cash operating expenditures/revenues	-23	-29	-29	-33	-41
= EBITDA	65	70	81	82	122

Source: Fitch Ratings, Fitch Solutions, HOCHBAHN

## Appendix B: Financial Ratios

### Hamburger Hochbahn AG

	FY18	FY19	FY20	FY21	FY22
<b>Income statement ratios</b>					
Operating revenue growth (annual % change)	3.7	7.2	6.9	5.7	12.0
Operating expenditure growth (annual % change)	4.2	6.8	6.6	6.3	11.0
EBITDA/operating revenue (%)	10.5	10.6	11.4	11.0	14.7
Personnel costs/operating expenditure (%)	48.2	46.7	52.7	50.0	58.2
Total transfers from public sector/operating revenue and ad-hoc transfers (%)	8.3	10.5	16.1	20.3	19.6
<b>Balance sheet ratios</b>					
Current assets/adjusted debt (%)	12.9	11.2	19.3	30.2	24.2
Current assets/total assets (%)	7.9	7.8	11.9	21.1	13.8
Total assets/adjusted debt (%)	164.0	143.6	161.9	143.5	175.8
Return on equity (%)	0.0	0.0	0.0	0.1	11.2
Return on assets (%)	0.0	0.0	0.0	0.0	0.4
<b>Debt ratios</b>					
Net adjusted debt/EBITDA (x)	12.4	15.1	12.0	17.6	11.0
EBITDA/gross interest coverage (x)	2.7	3.0	3.6	4.0	9.1
Net adjusted debt/operating revenue (%)	125.8	153.7	131.6	185.3	154.2
Net adjusted debt/equity (%)	481.2	630.4	576.7	858.8	1,777.2
Debt in foreign currency/total debt (%)					
Debt at floating interest rates/total debt (%)					
Issued debt/total debt (%)	0.0	0.0	0.0	34.4	37.1
<b>Liquidity ratios</b>					
Liquidity cushion (x)	0.1	0.1	0.1	0.2	0.2
Coverage ratio (x)	4.7	5.4	5.4	17.6	4.8

Source: Fitch Ratings, Fitch Solutions, HOCHBAHN

## Appendix C: Fitch's Rating Case Scenario

### Hamburger Hochbahn AG

(EURm)	FY23rc	FY24rc	FY25rc	FY26rc	FY27rc
<b>Cash-adjusted income statement</b>					
Operating revenue	977	1,020	1,075	1,123	1,163
Operating revenue growth (annual % change)	18.1	4.3	5.5	4.4	3.6
Operating expenditure	-879	-907	-946	-983	-1,016
Operating expenditure growth (annual % change)	24.4	3.2	4.2	4.0	3.4
EBITDA	99	113	130	139	147
Other funds available for debt service	0	0	0	0	0
CFADS	99	113	130	139	147
Interest revenue	2	0	1	0	1
Interest expenditure	-31	-33	-49	-55	-60
Financial balance	-29	-33	-48	-55	-59
Net capital expenditure	-257	-349	-359	-263	-251
Capital injection and other cash-items	0	0	0	0	0
Dividend paid	0	0	0	0	0
Other cash-items (net)	0	0	0	0	0
Net debt movement	433	78	385	186	61
Change in cash	246	-191	109	7	-102
<b>Debt and liquidity</b>					
Adjusted debt	1,783	1,860	2,246	2,432	2,493
Memo: Non-cash movement in adjusted debt	0	0	0	0	0
Unrestricted cash	255	64	173	180	78
Net adjusted debt	1,527	1,796	2,073	2,252	2,415
<b>Financial and liquidity ratios</b>					
Net adjusted debt/EBITDA (x)	15.5	16.0	16.0	16.2	16.4
Net adjusted debt/CFADS (x)	15.5	16.0	16.0	16.2	16.4
EBITDA/gross interest coverage (x)	3.2	3.4	2.6	2.5	2.4
CFADS/gross interest coverage (x)	3.2	3.4	2.6	2.5	2.4
Liquidity cushion (x)	-0.1	0.2	-	-	-
Liquidity coverage ratio (x)	0.4	6.4	-	-	-

rc - Fitch's rating-case scenario: a through-the-cycle scenario that incorporates a combination of revenue, cost or financial risk stresses.  
Source: Fitch Ratings, Fitch Solutions, HOCHBAHN

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