

CREDIT OPINION

22 August 2023

Update



Send Your Feedback

RATINGS

Avinor AS

Domicile	Norway
Long Term Rating	A1
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Joanna Fic +44.20.7772.5571
Senior Vice President
joanna.fic@moody's.com

Jonathan Dolbear +44.20.7772.1099
Associate Analyst
jonathan.dolbear@moody's.com

Andrew Blease +33.1.5330.3372
Associate Managing Director
andrew.blease@moody's.com

Avinor AS

Update to credit analysis

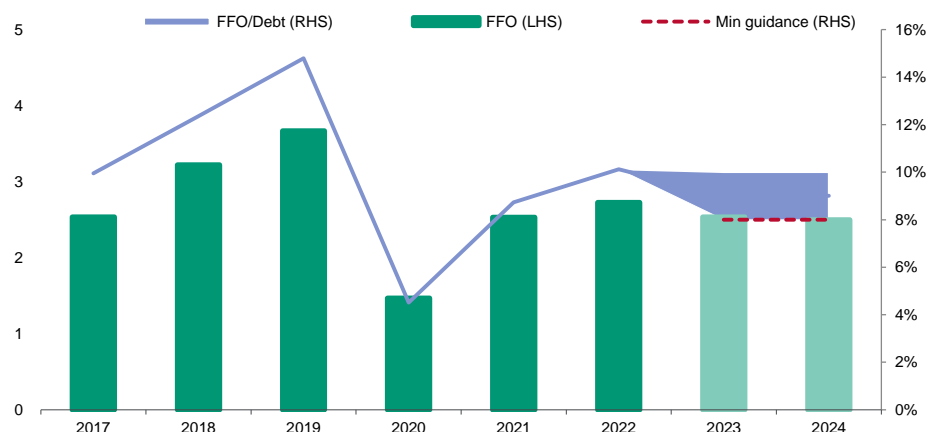
Summary

[Avinor AS](#) (Avinor)'s credit quality takes account of (1) the company's near-monopoly position and modest transmodal competition for medium and long distance travel within Norway; (2) a supportive strategic framework established by the State, highlighting the importance of Avinor's operations to achieve societal objectives; (3) a high share of origin and destination traffic with a material share of domestic traffic; (4) the company's exposure to a heavily concentrated and weak carrier base; and (5) significant capital expenditure programme in the context of the company's leveraged financial profile. Avinor's credit quality further benefits from support from the [Government of Norway](#) (Aaa, stable), which is the company's 100% shareholder.

Following the severe reduction in passenger volumes during 2020-21, Avinor's traffic grew to 83% of pre-pandemic levels in 2022 and 89% in the first six months of 2023. Passenger volumes are up on the last year, which reflects strong demand for travel, but the recovery in Avinor's traffic is decelerating. We expect those trends to persist, given the weak macroeconomic environment, cost of living pressures, characteristics of the company's airports and the profile of carriers they serve. Nevertheless, and despite the company's high investments and rising operating costs, we expect Avinor to maintain a financial profile consistent with its current ratings.

Exhibit 1

We expect Avinor to maintain financial ratios above the guidance Funds from operations (FFO) in NOK billion, and FFO/debt



The estimates represent Moody's forward view; not the view of the issuer.
Source: Avinor's reports, Moody's Investors Service

Credit strengths

- » Monopolistic position and modest transmodal competition
- » High share of origin and destination traffic
- » Supportive strategic framework underpinned by government policy
- » 100% ownership by the Government of Norway and track record of state support

Credit challenges

- » Downside risks to further traffic recovery stemming from weak macroeconomic conditions and cost of living pressures
- » Exposure to a weak and highly concentrated carrier base
- » Significant capital expenditure programme

Rating outlook

The stable outlook reflects our expectation that Avinor's financial profile will be consistent with the current ratings, while the government support will remain high.

Factors that could lead to an upgrade

An upgrade of Avinor's ratings is unlikely in the near term and would require an upgrade of the company's BCA as well as an enhanced view of the level of government support. Avinor's BCA could be upgraded if the company were able to improve its operational and financial performance such that its FFO/debt ratio were comfortably in the low double digits in percentage terms on a sustainable basis.

Factors that could lead to a downgrade

Avinor's ratings could be downgraded if the company's FFO/debt ratio were below 8% on a sustained basis or if our assessment of high support for the company was to be revised downward.

Key indicators

Exhibit 2

Avinor AS

Historical and projected key credit metrics

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23e	Dec-24e
(FFO + Interest Expense) / Interest Expense	5.0x	5.9x	3.0x	4.4x	3.9x	3-4x	3-4x
FFO / Debt	12.4%	14.8%	4.5%	8.7%	10.1%	8-10%	8-10%
Debt Service Coverage Ratio	5.2x	6.9x	3.0x	6.1x	4.3x	4-5x	4-5x
RCF / Debt	11.4%	12.4%	4.5%	8.7%	10.1%	8-10%	8-10%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] Estimates represent Moody's forward view; not the view of the issuer.

Source: Moody's Financial Metrics, Moody's estimates

Note: For definitions of Moody's most common ratio terms please see the accompanying [User's Guide](#).

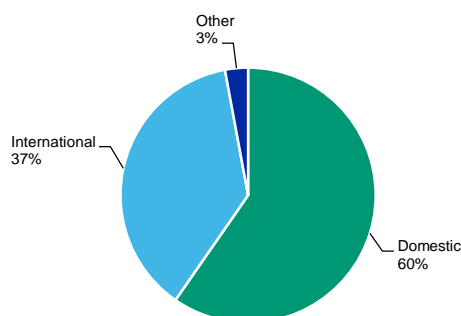
This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody.com> for the most updated credit rating action information and rating history.

Profile

Avinor AS owns and operates 43 airports in Norway and is the sole provider of air navigation services to both civilian and military flights within Norwegian airspace. Oslo airport is by far the largest and accounts for around half of total traffic and some 73% of international traffic. Other large airports with a sizeable share of international traffic are Bergen, Stavanger and Trondheim.

Exhibit 3

Traffic breakdown by type Data for 2022

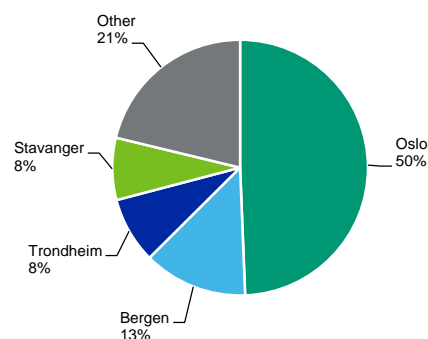


Total passenger traffic of 45.5 million.

Source: Company's reports, Moody's Investors Service

Exhibit 4

Traffic breakdown by airport Data for 2022



Total passenger traffic of 45.5 million.

Source: Company's reports, Moody's Investors Service

Avinor is 100% owned by the [Government of Norway](#) (Aaa, stable).

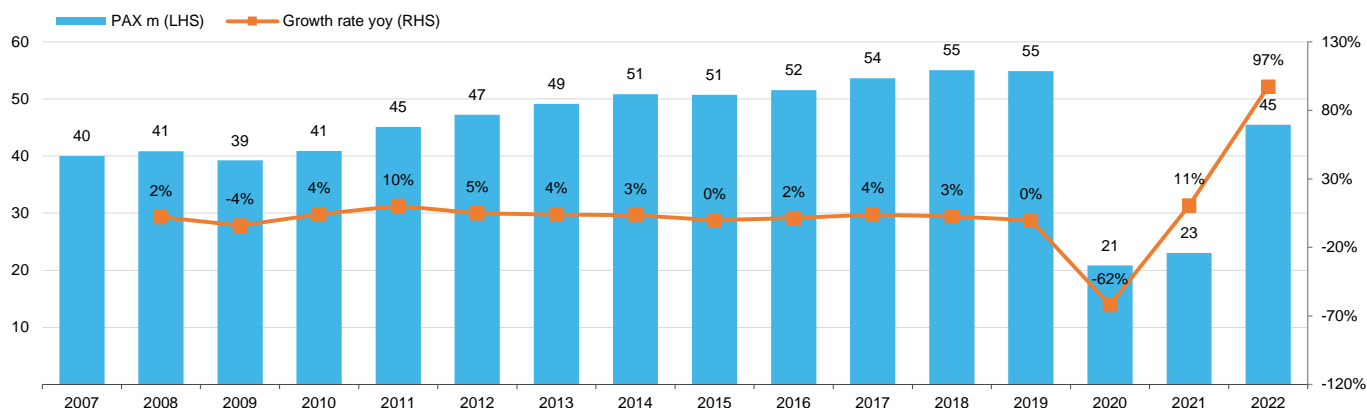
Detailed credit considerations

Key infrastructure provider subject to limited competition

Avinor owns and operates 43 airports and controls all key aviation infrastructure in Norway. At its peak, in 2018-19, the company's airports handled around 55 million passengers (PAX) a year. While domestic traffic of some 31 million accounted for the bulk of the total, growth in traffic in the last decade was primarily driven by the international segment.

Exhibit 5

Avinor's network passenger volumes Traffic in million PAX, growth rate YoY (%)



Source: Company's website, Moody's Investors Service

Avinor's airports face limited competition from rail and road. Although main population centres are linked by road and rail services, the topography of the country and large distances mean that air travel is the most efficient mode of travel. Fast rail connections are limited

to the Oslo region and cover relatively short distances. Also, the location of Norway on the periphery of Europe means that air travel is largely required when traveling internationally.

Strong recovery in traffic following the end of travel restrictions but growth trends are softening

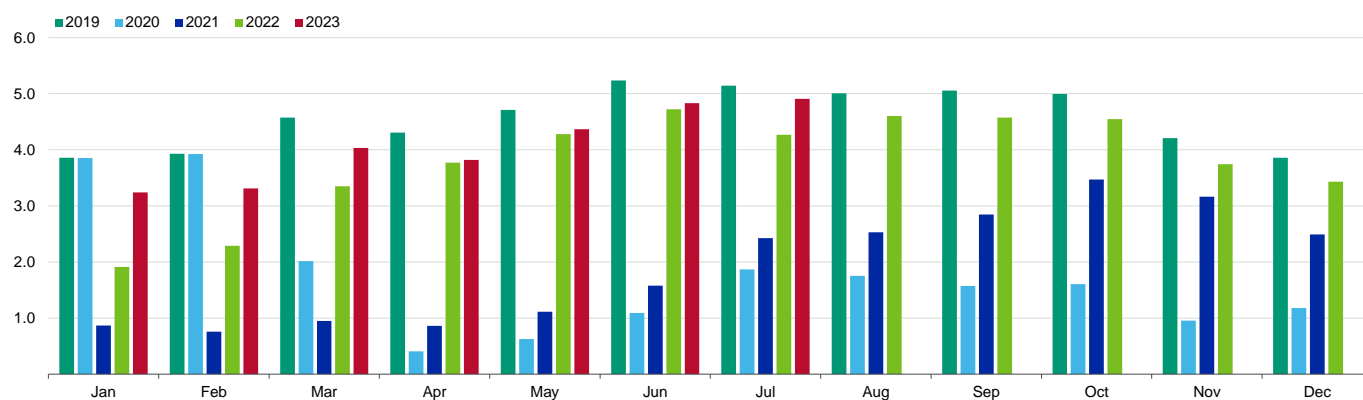
Similarly to other European airports, Avinor was severely impacted by the COVID-19 pandemic and the associated travel restrictions. Passenger volumes fell to 20.8 million in 2020 (62% below 2019 level) and 23.1 million in 2021 (58% below 2019 level). Avinor's traffic performance was stronger than that of many European airports because of its relatively high share of domestic traffic.

Traffic started to pick up more strongly last year as global travel restrictions eased. In 2022, Avinor's traffic amounted to 45.5 million passengers, which is 17% below 2019 volumes. The increase in traffic was driven primarily by strong leisure demand – both domestic and international. In the six months to June 2023, Avinor's volumes reached 23.6 million, which represents 89% of 2019 traffic over the same period. This compares with a 91% recovery rate reported by our rated European airports in the first half of this year. (See [Airports – Europe: Passenger volumes will continue to rise this summer, but regional differences persist](#), July 2023).

Exhibit 6

Avinor's traffic recovery has decelerated in 2023

Monthly traffic, in million PAX



Data available to July 2023.

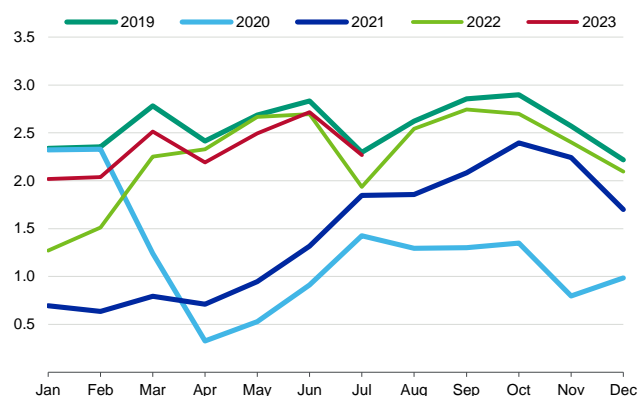
Source: Company's website, Moody's Investors Service

Traffic recovery continues not to be uniform cross the domestic and international segments. International segment is lagging behind. In the six months to June 2023, international passenger traffic reached 85% of 2019 volumes. This compares with 91% reported for the domestic segment. Recovery rates improved in July, which is a peak summer month, but there is some volatility on a weekly basis.

Exhibit 7

Domestic traffic has exhibited strong recovery

Passenger volumes, in million PAX

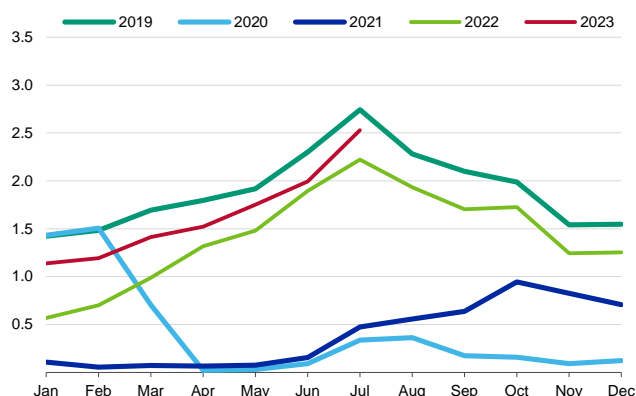


Source: Company's website, Moody's Investors Service

Exhibit 8

Recovery in international traffic has been slower

Passenger volumes, in million PAX



Source: Company's website, Moody's Investors Service

Pent-up demand for travel is high, but growth trends in Avinor's traffic are softening. Higher inflation and interest rates, rising air fares, as well as weaker Norwegian krona are contributing factors as they weigh on outbound demand for air travel. This is not offset by the increase in inbound tourism.

Against this backdrop, we assume that Avinor's traffic will reach around 90-92% of 2019 volumes this year and will continue to recover only gradually in the medium term. Specifically, our assumption is that traffic will remain some 5-7% below pre-pandemic levels in 2024 and 0-3% below in 2025. Nevertheless, there remain some uncertainties around the traffic recovery path, given weak macroeconomic conditions in Europe and the Russia - Ukraine military conflict. Strikes and aircraft capacity shortages are a further risk factor. Still, traffic could be stronger than we currently assume as, for example, consumers may tap to their savings.

High exposure to the domestic macroeconomic environment; business travel strongly linked to the performance of the oil and gas sector

Avinor has a relatively high share of domestic traffic compared with other airports we rate in Europe. (See [Airports – Europe: Pace of recovery in traffic uncertain after unprecedented coronavirus hit](#), July 2020). This makes it fairly exposed to the macroeconomic environment in Norway.

Norway has a population of around 5.4 million. The economy is wealthy and well-developed, with very high standards of living, as indicated by high GDP per capita figures. However, the Norwegian economy is heavily dependent on natural resources, most significantly oil and gas, but also hydropower generation and fishing. Changes in commodity markets can thus have an impact on the country's economic performance and its exchange rate, which can both weigh on demand for air travel.

The performance of the oil and gas industry is an important driver of business travel, which accounts for around a third of Avinor's total traffic. This linkage makes the business travel segment less exposed to changes in working patterns and use of technology (see [Airlines – Global: Business travel faces higher substitution risk post-COVID, but airlines will adapt](#), March 2021). Still, companies' focus on reducing costs and carbon footprint will be a factor weighing on business travel.

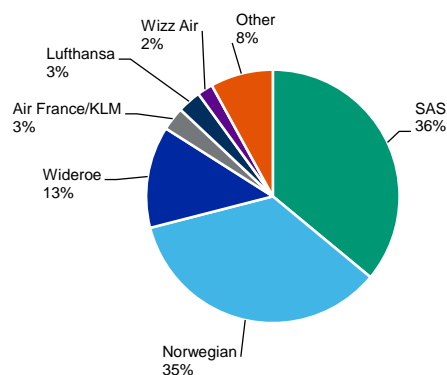
High share of origin and destination traffic, albeit serviced by few airlines with a weak credit profile

We view Avinor as an origin and destination (O&D) airport system. Although total transfer and transit at Avinor represent some 17% of total traffic, more than half of the transfer and transit traffic is internal to the Avinor network (i.e., trips between two Norwegian airports with a stopover, typically at Oslo airport). Given the geographic characteristics of Norway and the importance of air transport for internal mobility, the domestic intra-network transfer traffic behaves more like O&D traffic.

Avinor's carrier base is, however, highly concentrated with fairly weak airlines. SAS AB, which initiated a voluntary Chapter 11 filing in July 2022, and Norwegian Air are two main carriers accounting for around 70% of total traffic. Their market share has fluctuated only slightly over the last few years.

Exhibit 9

Avinor's carrier base is highly concentrated Estimated traffic breakdown in 2023



Source: Company, Moody's Investors Service

We do not expect any major shift in Avinor's carrier base, but the share of SAS is likely to decrease slightly, given its difficulties and greater concentration on services to/from Copenhagen airport. The weak profile of airlines is a relevant consideration and we note that Flyr, which was a new low cost carrier that started operations in 2021, has already suspended operations given its bankruptcy.

Limited changes in airport charges deliver on the broader government policies

Norway is not a member of the EU, although the government has transposed the EU's Airport Charges Directive into Norwegian law. The directive sets out minimum requirements in terms of transparency, consultation with airlines and nondiscrimination of charges, and mandates the setting up of an independent supervisory authority.

At present, the state has effectively a direct role in setting aeronautical charges, with the regulatory oversight exercised by the Ministry of Transport and Communications (MoTC), which owns 100% of the share capital of Avinor. In practice, charges are set after consultation with airlines, given the company's and the Ministry's objective to encourage airlines to develop their route strategies in Norway rather than in nearby countries, such as Denmark and Sweden.

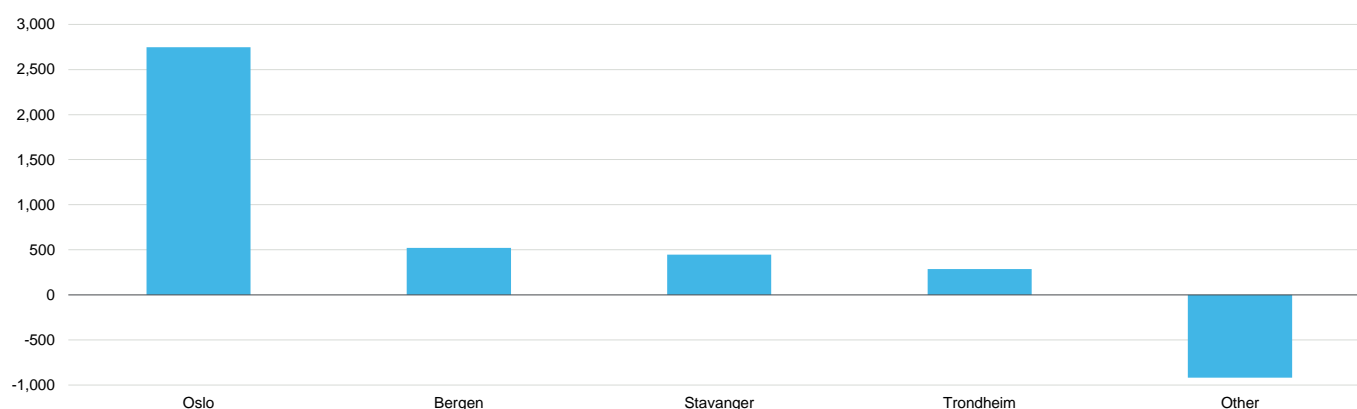
As a general principle, Avinor's tariffs are determined through the use of a price cap formula based on a fair return on a regulated asset base (RAB). Charges are determined to include allowances for operating costs, depreciation, return on the RAB and taxation. From this revenue requirement the non-aeronautical revenue is subtracted to determine the aeronautical revenue requirement (i.e., a "single till" approach), which is divided by anticipated volumes to determine the level of the anticipated unit price. In periods of high investments, not all the commercial profit may be used to subsidise airports charges.

Notwithstanding the above principles, Avinor's charges have not increased as provided under the revenue requirement. The company did not collect aviation charges for around three months until June 2020 and kept commercial aviation tariffs flat in nominal terms in 2021. While airport tariffs were increased by 2% in 2022 and 3.5% in 2023, the level of charges is not sufficient for Avinor to reach its revenue requirement under the price cap model. We understand that increases in charges are subject to ongoing discussions with the owner.

More generally, as the state requires Avinor to establish a uniform set of aviation charges across its network, this effectively leads to cross-subsidisation of the marginal rural airports by larger airports such as Oslo, Bergen, Stavanger and Trondheim.

Exhibit 10

Larger airports support loss-making regional airports Reported EBITDA in 2022, in NOK million



Source: Company's reports, Moody's Investors Service

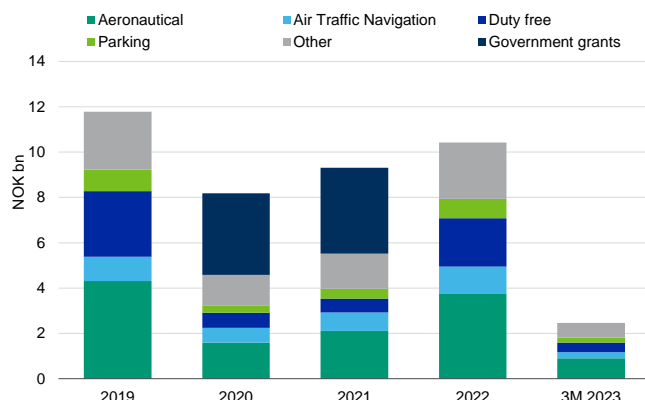
Traffic will support revenue but rising operating costs will hinder growth in EBITDA

Avinor's revenue was severely affected by the pandemic, given lower traffic volumes. Revenue dropped significantly in 2020-21 although not all the revenue segments were equally hard hit. The duty free segment reported the biggest decline in revenue, given weaker international traffic and temporary closure of some of the stores. The decline in Avinor's total revenue was, however, smaller than that for other European airports, given the receipt of government grants that amounted to NOK3.6 billion in 2020 and NOK3.8 billion in 2021.

Revenue has been recovering on the back of growing passenger volumes. In 2022, Avinor's revenue reached NOK10.4 billion and was some 12% lower than in 2019. Aeronautical revenue accounted for 36% of the total.

Exhibit 11

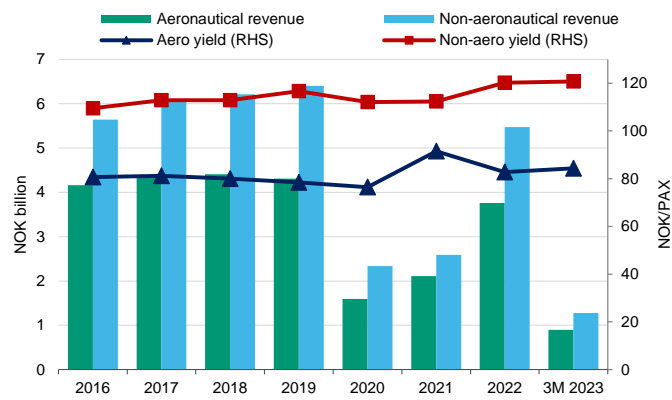
Government grants supported revenue during the pandemic Revenue breakdown, in NOK billion



Source: Company's reports, Moody's Investors Service

Exhibit 12

Yield performance impacted by traffic levels and mix Evolution of revenue and yields



Aeronautical revenue does not include air traffic services.

Source: Company's reports, Moody's Investors Service

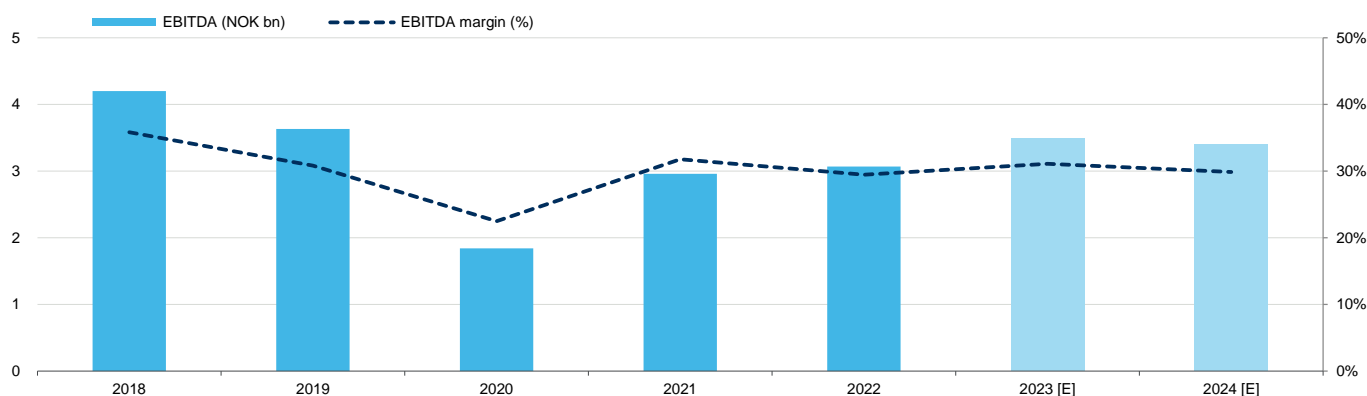
Evolution of aeronautical and commercial yields has varied given different sensitivity to passenger volumes. Commercial yields decreased in 2020-21 as domestic traffic accounted for the bulk of total, which impacted, *inter alia*, revenue from duty free. Aeronautical yields were driven by the tariff freeze and modest adjustments to charges but also a traffic mix and load factors in the context of the airline capacity.

We expect Avinor's average yields to remain under pressure in the medium term despite high inflation. This partly reflects the company's traffic mix and load factors. Expiry and renewal of certain commercial contracts will be also a factor. In addition, revenue from duty free will be negatively impacted by the government's decision to reduce by 50% the quota on imported tobacco products.

Avinor seeks to adapt its operations to match passenger volumes. However, operating costs are under pressure from the high inflation environment. Rising operating costs will hinder growth in Avinor's EBITDA over the medium term.

Exhibit 13

We expect Avinor's EBITDA to be under pressure from rising operating costs EBITDA in NOK billion and EBITDA margin (%)



[1] Reported EBITDA includes government grants. [2] The estimates represent Moody's forward view; not the view of the issuer.

Source: Company's reports, Moody's Investors Service

Shareholder support has limited increase in net debt burden; higher investments will drive borrowings up

Avinor's adjusted net debt has increased since 2019 despite a cut in investments and the receipt of equity injections from the government. Some of the increase in the adjusted net debt was, however, due to the rise in pension liabilities.

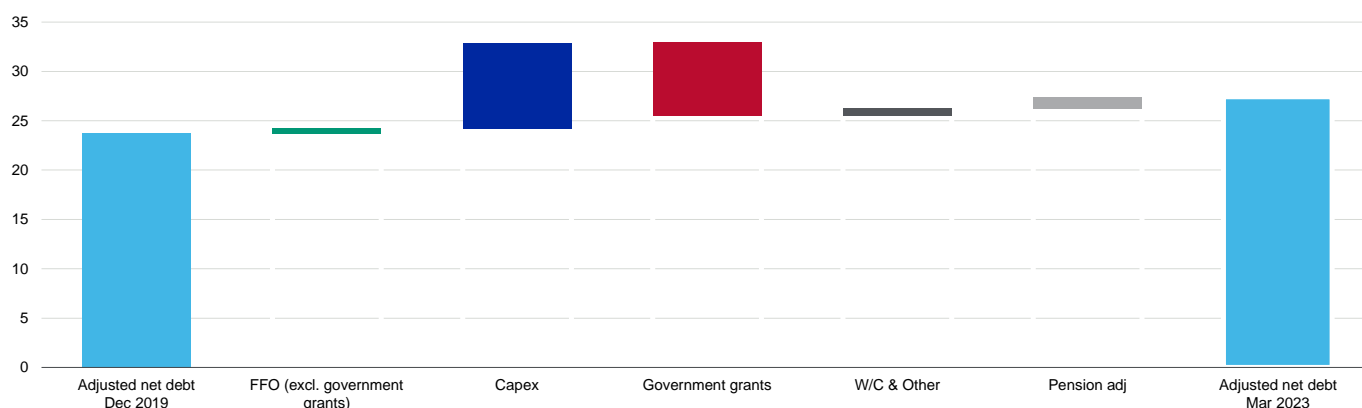
The company's capital expenditure (capex) amounted to around NOK4.9 billion in 2020-21. The actual spend was some NOK3.6 billion lower than planned before the pandemic as some of the projects were deferred. Investments were, however, still significantly higher than cash flow from operations and government grants.

In 2022, Avinor's funds from operations (FFO) improved on the back of higher traffic. However, operating cash flows were negatively impacted by working capital outflow. Capex increased to NOK3.1 billion and high levels of investments continued into the first quarter of this year. Sizeable capex is the primary driver behind an increase in Avinor's adjusted net debt to NOK27.4 billion as of end-March 2023.

Exhibit 14

Avinor's net debt has risen despite government grants

Evolution of Moody's adjusted net debt, in NOK billion



Source: Company's reports, Moody's Investors Service

Avinor plans an increase in investments over the medium term to around NOK4 billion a year, on average. A significant part of investments will be related to the construction of new airports in Bodø and Mo i Rana. Around NOK1.7 billion of the cost will be funded by the state grants, with the potential for additional funding to be agreed at a later stage. A new baggage handling system at Oslo airport and FAS project as well as new tower system related to the air traffic services are also big drivers of investments.

Sizeable investments will drive an increase in Avinor's borrowings reducing any material deleveraging prospects over the medium term.

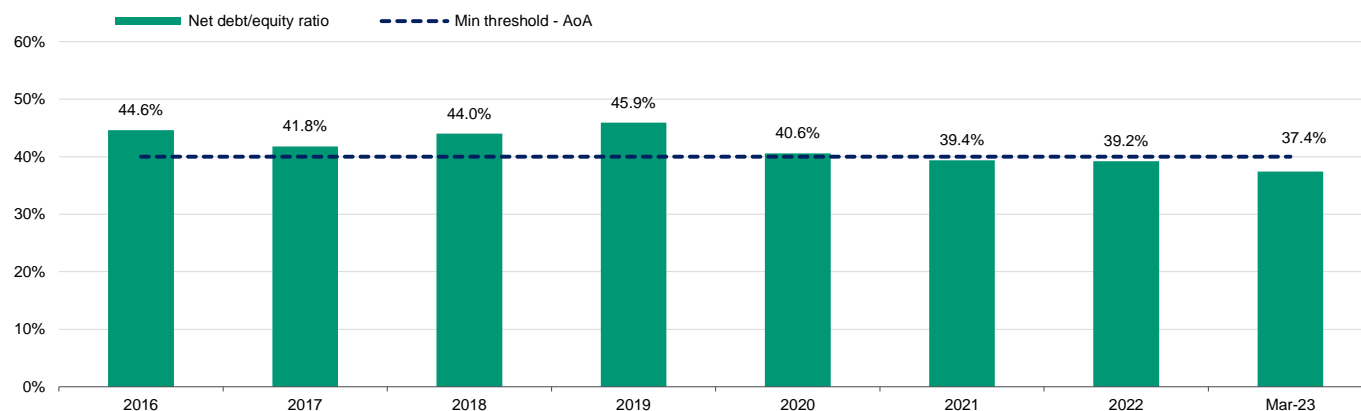
Track record of support from the Government of Norway

Avinor's credit quality takes account of the company's central role in the provision of air travel in Norway. Given the patterns of population distribution in Norway and certain geographical features, air travel is an essential facilitator of domestic mobility, and the government therefore sees Avinor as strategically important to meet some of its key economic, social and political objectives. While the state aims to ensure the state-owned entities make a fair return on capital employed, this is not the primary objective of Avinor as it has to fulfil "national sectoral political" objectives.

There is a track record of the government's supportive stance to the company. In 2020-21, Avinor received a total of NOK7.4 billion in operating state subsidies. The level of support was high in absolute and relative terms. While the amount of government grants was initially tailored to allow the company to meet its minimum equity ratio requirement of 40% included in the company's bylaws, the Ministry of Transport has subsequently decided to grant Avinor a temporary permission to deviate from the minimum equity ratio requirement of 40%. Such permission was recently extended until 31 December 2023.

Exhibit 15

Avinor has been permitted by its owner to deviate from the minimum 40% equity ratio requirement
Equity ratio as defined in the Articles of Association



Source: Company's reports, Moody's Investors Service

ESG considerations

Avinor AS' ESG Credit Impact Score is Moderately Negative CIS-3

Exhibit 16

ESG Credit Impact Score

CIS-3

Moderately Negative

For an issuer scored CIS-3 (Moderately Negative), its ESG attributes are overall considered as having a limited impact on the current rating, with greater potential for future negative impact over time. The negative influence of the overall ESG attributes on the rating is more pronounced compared to an issuer scored CIS-2.



Source: Moody's Investors Service

Avinor's **CIS-3** indicates that ESG considerations have a limited impact on the current rating with potential for greater negative impact over time. This considers the risk of carbon transition, while recognising that policy response may impact the company only gradually. Its score reflects moderately negative environmental, social and governance risk.

Exhibit 17

ESG Issuer Profile Scores

ENVIRONMENTAL

E-3

Moderately Negative



SOCIAL

S-3

Moderately Negative



GOVERNANCE

G-3

Moderately Negative



Source: Moody's Investors Service

Environmental

Avinor's **E-3** score considers that evolving decarbonisation policies around the globe and regulations may increase operating costs for airlines and result in higher airfares that reduce the demand for air travel. Further, the desire by some to reduce carbon emissions may lead to reduced travel, in particular corporations seeking to reduce their carbon footprints. At the company level, Avinor is committed to fossil-free operations by 2030. The company is exposed to the waste pollution risks, which include noise pollution. Avinor is required to remove PFAS chemicals (per- and polyfluoroalkyl substances) at contaminated sites at two airports every year and 14 airports in total. The company has set up a provision to cover these costs but it is uncertain whether such provision will be sufficient. Avinor's exposure to water management and natural capital is low.

Social

Avinor's **S-3** score takes account of its exposure to social risks related to demographic and societal policies moving to reduce carbon emissions. There is a risk that such policies and/or trend may lead to lower travel volumes or higher costs. While the lack of viable alternatives is a mitigating factor, Avinor is exposed to global trends that may affect international traffic. These risks are balanced by neutral to low risks to customer relations, human capital, health and safety and responsible production.

Governance

Avinor's **G-3** score takes into account neutral to low scores on financial strategy and risk management, management credibility and track record, organizational structure and company's compliance and reporting. These considerations are somewhat counterbalanced by the moderate risk associated with board structure, resulting from having the Government of Norway as the sole owner of the company and the tariff evolution that considers broader policy objectives.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

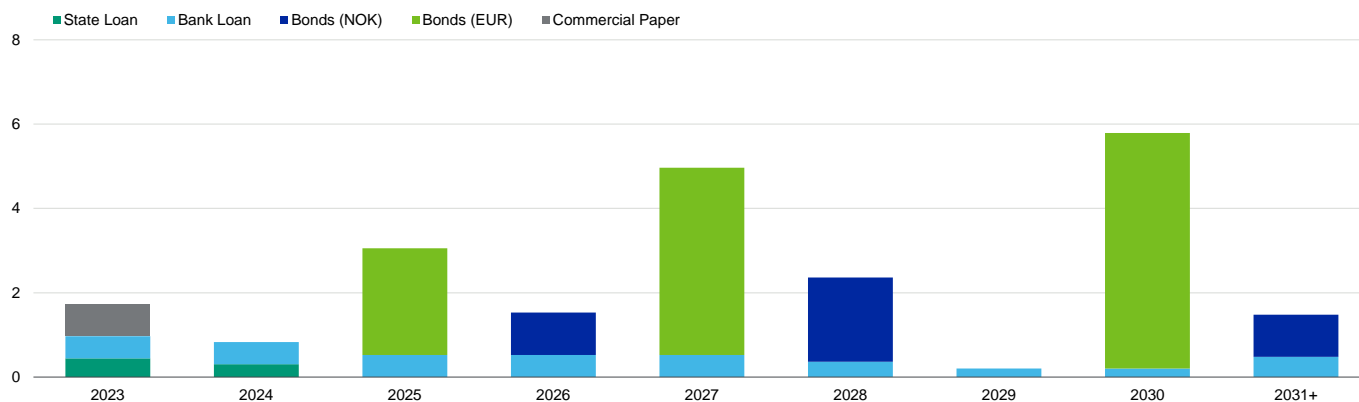
Liquidity

As of end-March 2023, Avinor had cash on balance sheet of around NOK1.4 billion, NOK300 million of available overdraft facility and NOK4 billion availability under credit facilities due in June 2026. The company has around NOK1.5 billion in refinancing needs this year but its liquidity needs will also depend on the pace of execution of the capex plans.

Exhibit 18

Avinor has fairly modest debt maturities until 2025

As of end-March 2023, in NOK billion



Source: Company, Moody's Investors Service

Avinor's borrowings from European Investment Bank, Nordic Investment Bank and the commercial banks, are subject to a financial covenant defined as an equity ratio of at least 30%. We expect the company to remain compliant with this ratio.

The company uses hedging to reduce its exposure to foreign currency and interest rate risks.

Rating methodology and scorecard factors

Avinor is rated in accordance with the rating methodology for [Privately Managed Airports and Related Issuers](#), published in September 2017. Given the 100% ownership by the Government of Norway, Avinor is considered a Government-Related Issuer (GRI) under Moody's methodology for [Government-Related Issuers](#), published in February 2020. The high support assumption takes into account Avinor's role as key infrastructure provider in Norway and its role in delivering the government's policy objectives.

Exhibit 19

Rating factors

Avinor AS

Privately Managed Airports and Related Issuers Industry [1][2]			Current FY 12/31/2023		Moody's 12-18 Month Forward View As of August 2023 [3]	
Factor 1: Concession and Regulatory Frameworks (15%)	Measure	Score	Measure	Score	Measure	Score
a) Ability to Increase Tariffs	Baa	Baa	Baa	Baa	Baa	Baa
b) Nature of Ownership / Control	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa
Factor 2: Market Position (15%)						
a) Size of Service Area	Aa	Aa	Aa	Aa	Aa	Aa
b) Economic Strength & Diversity of Service Area	Aa	Aa	Aa	Aa	Aa	Aa
c) Competition for Travel	Aaa	Aaa	Aaa	Aaa	Aaa	Aaa
Factor 3: Service Offering (15%)						
a) Passenger Mix	Aa	Aa	Aa	Aa	Aa	Aa
b) Stability of traffic performance	Baa	Baa	Baa	Baa	Baa	Baa
c) Carrier Base	Ba	Ba	Ba	Ba	Ba	Ba
Factor 4: Capacity and Capital (5%)						
a) Ability to accommodate expected traffic growth	Baa	Baa	Baa	Baa	Baa	Baa
Factor 5: Financial Policy (10%)						
a) Financial Policy	Baa	Baa	Baa	Baa	Baa	Baa
Factor 6: Leverage and Coverage (40%)						
a) (FFO + Cash Interest Expense) / (Cash Interest Expense)	3.9x	Baa	3x - 4x	Baa	3x - 4x	Baa
b) FFO / Debt	10.1%	Baa	8% - 10%	Baa	8% - 10%	Baa
c) Moody's Debt Service Coverage Ratio	4.3x	Baa	4x - 5x	A	4x - 5x	A
d) RCF / Debt	10.1%	A	8% - 10%	Baa	8% - 10%	Baa
Rating:						
Scorecard-Indicated Outcome Before Notch Adjustment		Baa1				A3
Notch Lift	0	0	0	0	0	0
a) Scorecard-Indicated Outcome		Baa1				A3
b) Actual Rating Assigned						A1
Government-Related Issuer	Factor					
a) Baseline Credit Assessment	baa2					
b) Government Local Currency Rating	Aaa, Stable					
c) Default Dependence	Moderate					
d) Support	High					
e) Actual Rating Assigned	A1					

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 31 December 2022. [3] This represents Moody's forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Investors Service

Ratings

Exhibit 20

Category	Moody's Rating
AVINOR AS	
Outlook	Stable
Issuer Rating -Dom Curr	A1
Senior Unsecured	A1

Source: Moody's Investors Service

Appendix

Exhibit 21

Peer Comparison table

(in USD million)	Avinor AS A1 Stable			Copenhagen Airports A/S Baa2 Stable			Brussels Airport Company NV/SA Baa1 Stable		
	FYE Dec-20	FYE Dec-21	FYE Dec-22	FYE Dec-20	FYE Dec-21	FYE Dec-22	FYE Dec-20	FYE Dec-21	FYE Dec-22
Revenue	240	340	517	241	280	500	248	348	544
EBITDA	206	360	360	2	39	200	33	110	226
EBITDA margin %	86.1%	105.7%	69.8%	0.6%	13.9%	39.9%	13.5%	31.8%	41.4%
Funds from Operations (FFO)	157	295	285	(51)	7	166	(17)	52	159
Total Debt	3,800	3,291	2,733	1,576	1,602	1,423	2,070	2,005	1,795
(FFO + Interest Expense) / Interest Expense	3.0x	4.4x	3.9x	-0.8x	1.2x	7.0x	0.7x	1.9x	3.5x
FFO / Debt	4.5%	8.7%	10.1%	-3.5%	0.4%	11.9%	-0.9%	2.5%	9.0%
RCF / Debt	4.5%	8.7%	10.1%	-3.5%	0.4%	11.3%	-0.9%	2.5%	9.0%
Debt Service Coverage Ratio	3.0x	6.1x	4.3x	-0.6x	1.1x	6.1x	0.8x	2.5x	3.5x

All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR* = Ratings under Review, where UPG = for upgrade and DNG = for downgrade.

Source: Moody's Financial Metrics™

Exhibit 22

Avinor AS — Adjusted Debt Breakdown

(in NOK million)	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21	FYE Dec-22
As Reported Total Debt	21,741	21,295	27,599	22,977	22,259
Pensions	4,067	3,489	4,935	6,047	4,665
Leases	269	0	0	0	0
Moody's Adjusted Total Debt	26,077	24,784	32,534	29,024	26,924

All figures are calculated using Moody's estimates and adjustments.

Source: Moody's Financial Metrics™

Exhibit 23

Avinor AS — Adjusted FFO Breakdown

(in NOK million)	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21	FYE Dec-22
As Reported Funds from Operations (FFO)	4,007	3,331	1,706	3,011	3,231
Pensions	24	136	96	143	177
Leases	34	0	0	0	0
Capitalized Interest	(38)	(45)	0	0	0
Alignment FFO	(155)	(35)	297	67	(52)
Cash Flow Presentation	0	(627)	(630)	(689)	(630)
Non-Standard Adjustments	(650)	905	0	0	0
Moody's Adjusted Funds from Operations (FFO)	3,222	3,666	1,469	2,533	2,726

All figures are calculated using Moody's estimates and adjustments.

Source: Moody's Financial Metrics™

© 2023 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan K.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1371892