Transportation

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SWEDAVIA AB

Debt expansion set to continue

Swedavia's debt expansion is set to continue for the next few years to fund the cash shortfall expected as a consequence of capacity expansion projects at its two largest airports, Arlanda and Landvetter. Its interest-bearing debt increased by SEK2.3bn, or 53% in 2017 compared to 2016, and is expected to increase further by cSEK7bn, or 106%, from end-2017 to 2021, according to the company.

Low to moderate overall credit risk assessment, but credit quality has deteriorated. The overall credit risk assessment of Swedavia, Sweden's main airport operator, has migrated from the strong end of the 'low' category to the strong end of the 'moderate' category since 2015, in our view. The transition in credit risk can be explained primarily by the higher debt level, but also by the negative evolution of operating margins. We do not see any changes with respect to the likelihood for government support in the near term.

Moderately high likelihood of government support. We assess the likelihood of extraordinary government support to be moderately high (category 5 out of 7) due to the strong link and importance of the company to the Swedish government. Swedavia is 100% directly owned by the Swedish state, and all of its 10 airports are identified as national basic infrastructure by the government.

Strong competitive position. The strong competitive position is based primarily on Swedavia's near monopoly position in Sweden, predictable regulatory framework, and positive macroeconomic economic outlook. On the negative side is the limited diversification highlighted by the fact that a high share of the revenues is concentrated among a few airlines and a few airports that face competition from other Nordic airports, primarily in intercontinental traffic. In addition, Copenhagen airport draws some traffic from southern parts of Sweden.

Core credit ratios deteriorated significantly since 2015. The two most important credit metrics, adjusted debt to EBITDA and adjusted FFO to debt, have changed from 2.6x in 2015 to 4.4x in 2017 and from 29.4% in 2015 to 18% in 2017, respectively. On this basis, it will take 5.6 years to repay all adjusted debt from the adjusted operating cash flow compared to 3.4 years in 2015.

Frequent bond issuance expected in 2018–2021. We expect that the majority of the new debt issuance going forward will be in the form of new bonds as the MTN programme was recently expanded from SEK5bn to SEK15bn.

Key financial figures - Swedavia AB (EOY in SEKm)

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	2011	2012	2013	2014	2015	2016	2017
Total revenues		4,965	5,233	5,538	5,537	5,691	5,926
EBITDA	0	1,681	1,887	2,004	1,732	1,662	1,703
TIBD		7,674	8,525	6,907	3,727	4,331	6,618
Cash & cash equivalents		129	52	112	6	170	58
Total assets	0	14,788	16,134	15,266	13,258	14,716	17,587
EBITDA margin (adj.) (%)	nm	35.1	36.1	36.2	31.3	30.8	30.3
TIBD/EBITDA (adj.) (x)	nm	4.4	4.5	3.4	2.2	3.0	4.2
TIBD/total (adi.) (%)	nm	64 1	63 4	55.3	35.2	41.5	49.3

Source: Company (historical figures), DNB Markets (estimates)

ISSUER RATING

 Moody's
 Not rated

 S&P
 Not rated

 Fitch
 Not rated

BLOOMBERG IDENTIFIERS

Equity ticker
Bond ticker SWEDAV Corp

CAPITAL STRUCTURE

Market cap. (SEKm)
NIBD (SEKm) 6,560
Enterprise value (SEKm)
Bond debt outstanding (SEKm) 4,900

MANAGEMENT

CEO Jonas Abrahamsson CFO Mats Påhlson

RISK ASSESSMENT (1-6)

Country	Very low (1)
Industry	Low (2)
Country & Industry	Low (2)
Competitive position	Strong (2)
Business risk	Strong (2)
Financial risk	Significant (4)

ANALYSTS

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DNB Markets | Swedavia AB

22 June 2018

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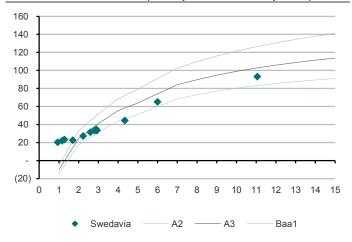
Investment case

Figure 1: Outstanding bonds

Description	Currency	Amount (m)	Outstanding (m)	Balloon (m)	Maturity	Coupon	Ranking	Price (mid)	Remarks
SWEDA 110	SEK	400	400	400	31-May-19	STIBOR+65bp	Unsecured	100.42	
SWA 116	SEK	250	250	250	21-Aug-19	STIBOR+75bp	Unsecured	100.63	Zero-floor
SWEDA 107	SEK	200	200	200	02-Oct-19	00-Jan-00	Unsecured	104.05	
SWA 118	SEK	300	300	300	06-Mar-20	0.075%	Unsecured	100.14	
SWEDA 111	SEK	250	250	250	14-Sep-20	0.435%	Unsecured	100.67	
SWEDA 113	SEK	250	250	250	25-Jan-21	STIBOR+70bp	Unsecured	101.02	Zero-floor
SWA 119	SEK	500	500	500	12-Apr-21	00-Jan-00	Unsecured	100.16	
SWA 114	SEK	350	350	350	17-May-21	0.7125%	Unsecured	101.08	
SWA 115	SEK	200	200	200	24-May-21	STIBOR+100bp	Unsecured	101.98	Zero-floor
SWA 117	SEK	2,000	2,000	2,000	24-Oct-22	00-Jan-00	Unsecured	100.97	
SWEDAV FRN 2024	SEK	100	100	100	19-Jun-24	STIBOR+80bp	Unsecured	100.90	Zero-floor
SWEDAV FRN 2029	SEK	100	100	100	10-Jul-29	STIBOR+97bp	Unsecured	100.44	Zero-floor

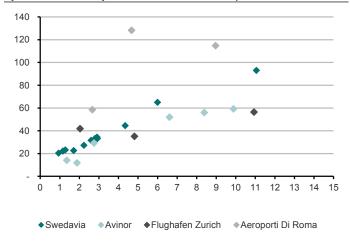
Source: Company (2017 annual report), Bloomberg (amounts outstanding), DNB Markets/Bloomberg (indicative mid prices as per 21 June 2018)

Figure 2: Swedavia bonds versus selected Moody's MIR curves over 3m STIBOR (mid-spreads in basis points)



Source: Moody's Investor Service (18 June 2018), Bloomberg (21 June 2018)

Figure 3: Swedavia versus selected peer bonds (midspreads in basis points over 3m STIBOR)



Source: Bloomberg (21 June 2018)

Key assumptions and risk factors

Key risk factors to our base case and low case assumptions

- Low case: In our low case, we assume zero revenue growth and 6% lower EBITDA margin relative to 2017.
- Potential high-impact event risk: In general, these tend to have a low probability due to the low industry risk and limited competition. Potential high impact events could be terrorist attacks (9/11), major disease outbreaks (SARS) etc. that could significantly affect global air travel for a period of time.

DNB Markets low case and base case assumptions 2018–2019e

- Annual revenue growth: 4.4% in 2018, 4.9% in 2019, and 5.8% in 2020. Total revenue growth in 2017 was 4.1%, while the 2013–2017 average was 3.6%.
- EBITDA margin: We assume an EBITDA margin of 29.9% in 2018, 31.5% in 2019, and 33.7% in 2020. Average EBITDA margin in 2013-2017 was 32.3%.
- **Debt:** We forecast a net increase of SEK7bn over the 2018–2021 period.
- Capex: SEK15.6bn is expected over the 2018–2021 period based on guidance from the company.

Source: Company (annual reports), DNB Markets

Upside potential to our base case assumptions

- Margin improvement.
- Improved commercial revenue growth.
- Debt reduction due to better cash flow than expected and/or lower dividend payouts.

Source: DNB Markets

Summary of key credit considerations

Overall credit risk assessment is low to moderate

In our view, the overall credit risk assessment associated with Swedavia is low to moderate, while it is moderate on a stand-alone basis, without any implicit support from the Swedish government. Our overall credit risk assessment is a combination of the strong business risk, significant financial risk assessment, and moderately high likelihood of extraordinary support from the Swedish government, the debt of which is rated AAA and Aaa1 by Standard & Poor's and Moody's, respectively.

Swedavia's overall credit risk assessment is low to moderate in our view

Figure 4: Stand-alone credit risk profile

	Category 1	Category 2	Category 3	Category 4	Category 5	Category 6		
Business risk:	Excellent	Strong	Satisfactory	Fair	Weak	Vulnerable		
Financial risk:	Minimal	Modest	Intermediate	Significant	Aggressive	Highly leveraged		
Source: Standard & Poor's (Corporate Methodology; November 2013, Key Credit Factors for the Transportation Infrastructure Industry:								
November 2013), DNB Markets (estimates)								

Strong competitive position in a low-risk industry

Swedavia has a strong competitive position in a low-risk industry as the main airport operator with a near-monopoly position in Sweden with respect to passenger traffic and cargo volume. Swedavia is 100% owned directly by the Swedish state and all of the ten airports operated by Swedavia are identified as national basic infrastructure by the Swedish government.

Key credit strengths

Source: DNB Markets

- Low volatility industry characteristics with high entry barriers. However, some cyclicality is associated with passenger traffic and cargo volume.
- Strong competitive position as the operator of the 10 largest airports by traffic in a wealthy country like Sweden. The other airports, which are not owned by Swedavia, are in general owned by the city/municipality concerned.
- Owns Arlanda Airport, the third-largest airport by traffic in the Nordic region after Copenhagen and Oslo. Most air routes inside Sweden go to and from Stockholm. For international travel, Arlanda is the hub for the Stockholm region and places north of Stockholm.
- The share of origin and destination traffic is high, but is concentrated among a small number of airlines and airports.
- Wholly owned by the Swedish state with a strong link to the government in addition to important infrastructure assets for the Swedish government.

Key credit weaknesses

- Limited investor protection in the bond loan agreements with respect to financial leverage and subordination risk.
- The majority of revenues are generated by a small number of airlines and airports.
- A sizeable development programme will continue to weigh on its credit metrics as a considerable part of the SEK15.6bn investments guided for 2018–2021 are expected to be funded with additional debt (around SEK7bn in that period compared to end-2017, according to the company).
- Below-industry average operating margins, which are being weighed down by the smaller airports.
- Small domestic market in Sweden compared to e.g. Norway, which has a considerable domestic market.
- High competition from the largest Nordic airports for intercontinental routes in addition to competition from Kastrup for southbound or westbound international travel from places in Sweden well south of Stockholm.
- Less than adequate liquidity according to Standard & Poor's rating methodology (Liquidity Descriptors for Global Corporate Issuers December 2014).

Source: DNB Markets

Important infrastructure assets owned by the Swedish state

Our assessment of the likelihood of government support is based on Standard & Poor's methodology of rating government related entities (GREs). We assess that the link to the government is strong (category 3 out of 4) and that the importance of Swedavia's role to the government is important (category 3 out of 4). Swedavia is wholly owned by the Swedish state and owns and operates eight commercial airports in Sweden in addition to managing the commercial traffic on two airports partially owned by the Swedish armed forces (Ronneby and

Moderately high likelihood of extraordinary government support, in our view

Luleå). Swedavia was established when the ownership of 14 airports was transferred from Luftfartsverket to the new company in 2010. All of Swedavia's 10 airports are identified as national basic infrastructure by the Swedish government.

Figure 5: Likelihood of extraordinary government support

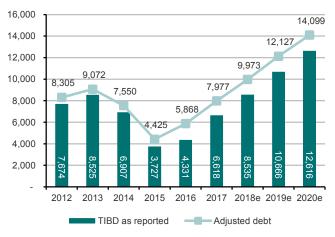
Category 1	Category 2	Category 3	Category 4	Category 5	Category 6	Category 7			
Almost certain	Extremely high	Very high	High	Moderately high	Moderate	Low			
Source: Standard & Poor's (Rating Government-Related Entities: Methodology and Assumptions; March 2015), DNB Markets (estimate)									

Debt set to increase for the next few years

Total interest-bearing debt has increased by SEK2.9bn from its low in 2015 to 2017 and is set to increase by an additional SEK7bn to 2021, according to the company. The net proceeds from the expected new debt would be used together with cash flow from operations to fund the expected SEK15.6bn development programme between 2018 and 2021. The development programme is related to major passenger and cargo expansion projects at Arlanda and Landvetter.

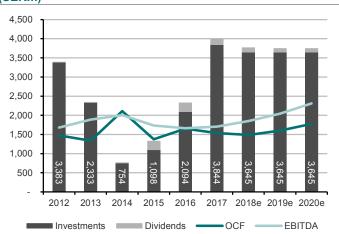
Of the SEK15.6bn of investments in 2018-2021e, SEK7bn is expected to be funded with additional debt

Figure 6: Interest-bearing debt (SEKm)



Source: Company (annual reports), DNB Markets (estimates)

Figure 7: Operating cash flow, investments, and dividends (SEKm)

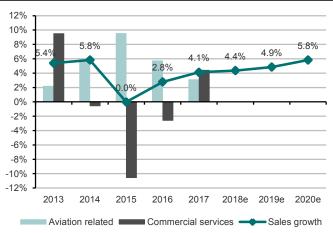


Source: Company (annual reports), DNB Markets (estimates)

Operating margins and revenue growth

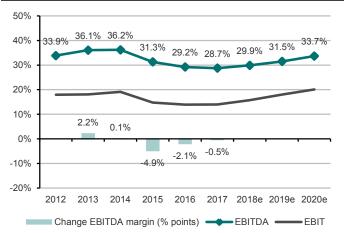
Revenues increased 4.1% in 2017 compared to 2.8% in 2016 and 0% in 2015, while the EBITDA margin has declined each year since 2014, but at a slowing pace. We expect to see a positive development in operating margins and revenue growth rates going forward.

Figure 8: Revenue growth rates



Source: Company (annual reports), DNB Markets (estimates)

Figure 9: Operating margins



Less than adequate liquidity position

At end Q1 2018, unused committed borrowing facilities totalled SEK1.8bn, while cash and cash equivalents totalled SEK121m. We consider the liquidity to be less than adequate (level 4) with sources divided by uses of 1.1x for 2018e and 0.7x for 2019e, including committed shareholder distributions of SEK122m in 2018e.

The liquidity scores ranges from exceptional (1, the best score) to weak (5, the weakest score)

Figure 10: Liquidity sources (SEKm)

	2017	2018e	2019e
Funds from operations (FFO)		1,490	1,608
Change net working capital, if positive		-	-
Available long-term credit lines	2,200	n.a	n.a
Cash at hand	58	n.a	n.a
Sale of assets		350	-
Completed new debt financing		800	-
Sum accumulated sources		4,898	6,506
Available liquidity (end of year)	2,258	401	-

Source: Company (annual report 2017, quarterly report Q1 2018), DNB Markets (estimates)

Figure 11: Liquidity uses (SEKm)

	2018e	2019e
FFO, if negative	-	-
Change net working capital, if negative	-	-
Investments	3,645	3,645
Committed shareholder distributions	122	-
Acquisitions	-	-
Debt maturities	730	850
Sum accumulated uses	4,497	8,992
Liquidity shortfall (end of year)	-	2,486

Source: Company (annual report 2017), DNB Markets (estimates)

Limited adjustments of reported financial figures

We have adjusted the debt for pension obligations and operational lease commitments.

Figure 12: Highlights of key adjustments (SEKm)

	2012	2013	2014	2015	2016	2017	2018e	2019e	2020e
Total interest-bearing debt as reported	7,674	8,525	6,907	3,727	4,331	6,618	8,535	10,666	12,616
Adj. for operational leases	-	-	-	-	879	841	841	841	841
Adj. for pension obligations	631	547	643	698	658	518	597	620	641
Adj. for surplus cash	-	-	-	-	-	-	-	-	-
Adjusted debt	8,305	9,072	7,550	4,425	5,868	7,977	9,973	12,127	14,099

Source: Company (annual reports), DNB Markets (estimates)

Figure 13: Key adjusted credit metrics

	2012	2013	2014	2015	2016	2017	2018e	2019e	2020e
FFO/debt (%)	18.0	17.5	22.2	29.4	24.2	18.0	15.3	13.5	13.0
Debt/EBITDA (x)	4.8	4.8	3.8	2.6	3.3	4.4	5.1	5.7	5.9
FFO/cash interest (x)	6.0	6.2	7.8	4.4	9.8	10.6	7.9	6.2	5.3
EBITDA/interest (x)		9.0	10.5	32.1	14.3	15.9	21.3	23.4	26.4
CFO/debt (%)	17.8	14.8	27.9	31.1	28.6	19.7	15.3	13.5	13.0
FOCF/debt (%)	-22.5	-10.1	22.9	75.0	-3.0	-27.5	-17.8	-16.5	-12.9
DCF/debt (%)	-22.6	-10.2	22.8	69.8	-7.0	-29.3	-19.0	-17.4	-13.6

Source: Company (annual reports), DNB Markets (estimates)

Negative credit outlook due to the increased leverage

We expect FFO/debt and debt/EBITDA to migrate from intermediate (category 3) and significant (category 4) in 2017 to significant (category 4) and highly leveraged (category 6) by 2020 based on our assumptions highlighted in the table below. We expect the metrics to improve gradually when the expansion projects are completed and hopefully will increase revenues.

Figure 14: Credit outlook assumptions

	2013-2017 (avg.)	2015	2016	2017	2018e	2019e	2020e	Low case vs. 2017
Revenue growth	3.6%	0.0%	2.8%	4.1%	4.4%	4.9%	5.8%	0.0%
EBITDA margin	32.3%	31.3%	29.2%	28.7%	29.9%	31.5%	33.7%	27.0%
Change debt (SEKm)		(3,180)	604	2,287	1,917	2,131	1,950	5,998

Source: Company (annual reports), DNB Markets (estimates)

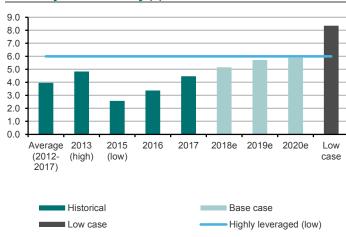
In our low case, we assume a 0% drop in revenues versus 2017 and 27% EBITDA margin, 6% below the EBITDA margin for 2017. Companies in the transportation infrastructure industry had average peak-to-trough declines in 2007–2009 of 0.4% for revenues and 6.1% for EBITDA margins, according to Compustat data,

Figure 15: Adjusted FFO to debt and 'significant' boundaries – low volatility (%)



Source: Company (annual reports), Standard & Poor's, DNB Markets (estimates)

Figure 16: Adjusted debt to EBITDA and 'highly leveraged' boundary – low volatility (x)



Source: Company (annual reports), Standard & Poor's, DNB Markets (estimates)

Business risk summary

Swedavia's strong business risk assessment is a product of the company's very low country risk, low industry risk, and strong competitive position. The industry risk assessment is based on Standard & Poor's Key Credit Factors for the Transportation Infrastructure Industry from November 2013. The industry risk assessment is a combination of the low cyclicality and low competitive risk and growth assessment. According to Standard & Poor's, there have been only two defaults in the transportation infrastructure industry since 2002, both in emerging markets.

Figure 17: Business risk summary

	Category 1	Category 2	Category 3	Category 4	Category 5	Category 6
Country risk:	Very low	Low	Intermediate	Mod. High	High	Very high
Industry risk:	Very low	Low	Intermediate	Mod. High	High	Very high
Competitive position:	Excellent	Strong	Satisfactory	Fair	Weak	Vulnerable
Source: Standard & Poor's (Con November 2013, Key Credit Fac						

Competitive position

The strong competitive position score is primarily based on Swedavia's near monopoly position in Sweden and high share of origin and destination traffic. On the negative side is the limited diversification highlighted by a high share of the revenues being concentrated among a few airlines operating in the largest airports (Arlanda and Landvetter).

Figure 18: Competitive position assessment

	Weight	Score	Assessment
Competitive advantage	60%	1	Strong
Scale, scope and diversity	20%	2	Strong/adequate
Operating efficiency	20%	4	Adequate/weak
Weighted preliminary score	100%	1.80	
Preliminary competitive position assessment		>1.5 up to 2.25 = 2	Strong
Profitability assessment (level and volatility) adj.		No adjustment	
Final competitive position score		2	Strong

Source: Standard & Poor's (Corporate Methodology: November 2013, Key Credit Factors for the Transportation Infrastructure Industry: November 2013), DNB Markets (estimates)

Financial risk summary

Our overall financial risk assessment for Swedavia is significant, based on our forecast for 2018–2020 using Standard & Poor's low volatility benchmark levels for industries with low volatility characteristics.

Business risk: Strong

Competitive position: Strong

The competitive position score is based on the combination of: 1) competitive advantage; 2) scale, scope, and diversity; and 3) operating efficiency. The three sub-factors are scored on a scale from 1 to 5, where 1 is the best possible score and only used for companies with an exceptionally strong market position

Financial risk: Significant

Figure 19: Financial risk assessment (low volatility)

	Category 1	Category 2	Category 3	Category 4	Category 5	Category 6				
Overall assessment:	Minimal	Modest	Intermediate	Significant	Aggressive	Highly leveraged				
Cash flow/leverage:	Minimal	Modest	Intermediate	Significant	Aggressive	Highly leveraged				
Source: Standard & Poor's (Corporate Methodology: November 2013, Key Credit Factors for the Transportation Infrastructure Industry:										
November 2013), DNB Markets (estimates)										

We prefer FFO/debt as our core ratio and FFO/cash interest as our preferred supplementary ratio as both these ratios reflect the low cost of debt financing. In our view, a transportation infrastructure company's inability to meet its cash interest payment or a debt maturity is the most likely cause of a cash default. In addition, we are also looking at cash flow from operations to debt as this ratio takes into account other operational cash flow elements, such as e.g. working capital.

Figure 20: Summary of cash flow/leverage assessment (low volatility)

	FFO/debt	Debt/EBITDA	FFO/cash interest	EBITDA/interest	CFO/debt	FOCF/debt	DCF/debt		
Assessment:	Significant	Highly leveraged	Modest	Modest	Significant	Highly leveraged	Highly leveraged		
Source: DNB Markets (estimates), Standard & Poor's (Corporate Methodology; November 2013)									

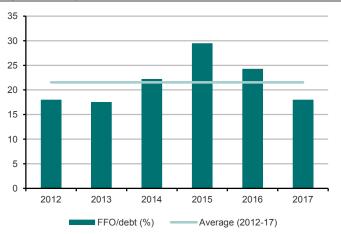
Historically, we would characterise the financial risk as intermediate with both FFO/debt and debt/EBITDA falling within the intermediate level in 2014–2017 (average).

Figure 21: Historical cash flow/leverage ratios (low volatility)

		•	· • • • • • • • • • • • • • • • • • • •				
	- Core ratios -		- Supplementa	ry coverage ratios -		- Supplementary	payback ratios -
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	35+	Less than 2	More than 8	More than 13	More than 30	20+	11+
Modest	23-35	2-3	5-8	7-13	20-30	10-20	7-11
Intermediate	13-23	3-4	3-5	4-7	12-20	4-10	3-7
Significant	9-13	4-5	2-3	2.5-4	8-12	0-4	0-3
Aggressive	6-9	5-6	1.5-2	1.5-2.5	5-8	(10)-0	(20-)-0
Highly leveraged	Less than 6	Greater than 6	Less than 1.5	Less than 1.5	Less than 5	Less than (10)	Less than (20)
Swedavia (2017)	18.0	4.4	10.6	15.9	19.7	-27.5	-29.3
Score	Intermediate	Significant	Minimal	Minimal	Modest	Highly leveraged	Highly leveraged
Swedavia (2016)	24.2	3.3	9.8	14.3	28.6	-3.0	-7.0
Score	Modest	Modest	Minimal	Minimal	Minimal	Aggressive	Aggressive
Swedavia (2012-17)	21.5	3.9	7.5	16.4	23.3	5.8	3.9
Score	Intermediate	Intermediate	Modest	Minimal	Modest		J

Source: Company (annual reports), Standard & Poor's (Corporate Methodology: November 2013, Key Credit Factors for the Transportation Infrastructure Industry: November 2013), DNB Markets (estimates)

Figure 22: Adjusted funds from operations to debt (%)



Source: Company (annual reports), DNB Markets (estimates)

Figure 23: Adjusted debt to EBITDA (x)

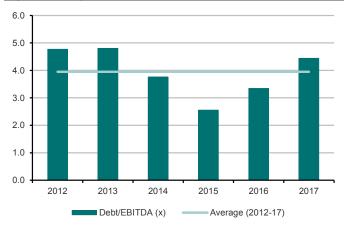
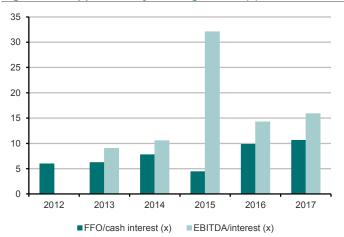
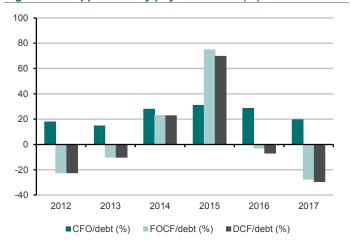


Figure 24: Supplementary coverage ratios (x)



Source: Company (annual reports), DNB Markets (estimates)

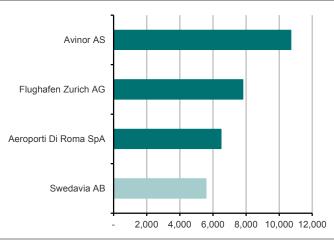
Figure 25: Supplementary payback ratios (%)



Peer group – airport operators

We have selected three European airport operators with official credit ratings: Avinor (AA-/Neg, A1) in Norway; Flughafen Zurich (AA-) in Switzerland; and Aeroporto Rome (BBB+/Neg) in Italy.

Figure 26: Revenues (SEKm)



Source: Companies (annual reports)

Figure 27: EBITDA margin (adjusted)



Source: Companies (annual reports), Standard & poor's

Figure 28: Peers (adjusted average 2013–2016) (SEKm)

	Swedavia AB	Avinor AS	Flughafen Zurich AG	Aeroporti Di Roma SpA
Country:	SWEDEN	NORWAY	SWITZERLAND	ITALY
Markets:	Sweden (10 airports)	Norway (39 airports)	Zurich airport	Rome (Fiumicino and
				Ciampino)
Stock exchange:	100% state-owned	100% state-owned	SIX Swiss Ex	Not listed
Issuer ratings (S&P, Moody's):	Not rated	AA-/Neg, A1	AA-	BBB+, Baa1/Neg
Competitive position:	Strong (2)	Strong (2)	Strong (2)	Strong (2)
Financial risk:	Significant (4)	Intermediate (3)	Modest (2)	Modest (2)
Likelihood of gov, support:	Very high (+4)	Very high (+4)	Moderate (+1)	None (-3 notches)
Functional currency:	SEK	NOK	CHF	EUR
Exchange rate:	1.00	1.00	0.13	0.13
Revenues:	5,589	10,719	7,820	6,494
EBITDA:	1,799	3,483	4,323	2,986
Debt:	5,656	18,566	6,737	5,991
EBITDA margin:	32.2%	32.5%	55.3%	46.0%
Return on capital:	7.0%	6.2%	9.9%	16.4%
Debt/EBITDA (%):	3.1	5.3	1.6	2.0
FFO/debt (%):	26	14	54	33
FOCF/debt (%):	29	-11	28	7
Debt/capital:	46%	57%	28%	41%

Source: Bloomberg (exchange rates), Companies (annual reports), Standard & Poor's (adjusted accounting figures, credit ratings), Moody's (credit ratings), DNB Markets (estimates)

Avinor (AA-/Neg, A1)

Together with its subsidiaries, Avinor owns, develops, and manages aviation infrastructure and systems. It is the primary operator of 46 state-owned airports in Norway. The company also operates air traffic control towers, control centers, and technical infrastructure for aircraft navigation serving the civil and military aviation. In addition, it engages in letting space for shops, duty-free shops, cafés, and restaurants; and space for airport hotels and parking facilities, as well as provides other services. Avinor AS was founded in 2003 and is headquartered in Oslo, Norway.

Main airport operator in Norway owned by the Norwegian state

Flughafen Zürich (AA-)

Flughafen Zürich owns and operates the Zürich Airport in Switzerland. It provides infrastructure and services related to flight operations, including the runway system, apron zones, passenger zones in the terminals, freight operations, passenger handling and services, and safety; support for passengers with reduced mobility; and check-in areas and facilities, the baggage sorting and handling system, aircraft power supply system, handling apron areas, and the related services. The company also offers passenger and aircraft security measures with systems and their operation and maintenance designed to prevent actions of various kind that affect the security of commercial civil aviation, primarily facilities for checks on passengers, hand luggage, checked baggage, and freight. In addition, it provides air security-related equipment and services comprising relevant systems and their operation and maintenance; and airport policing duties, such as surveillance patrols and other security-related tasks. Further, the company develops, markets, and operates the commercial infrastructure at Zurich Airport, including retail and restaurant/catering operations at the airport, renting premises, parking services, and various commercial services. Flughafen Zürich AG is based in Zurich, Switzerland.

Publicly listed company that owns and operates the Zürich Airport in Switzerland

Aeroporti di Roma (BBB+, Baa1/Neg)

Aeroporti di Roma., together with its subsidiaries, engages in the construction and management of airports; and activities related or complementary to air traffic in Italy. It operates and manages Leonardo da Vinci at Fiumicino and G.B. Pastine at Ciampino. The company also provides assistance services to passengers with reduced mobility in Fiumicino and Ciampino airports; creates and manages the computerised and telecommunication systems in the Roman airport system; offers airport security services, such as passenger control, related carry-on baggage, checked baggage, and goods and express courier parcels, as well as on-demand services comprising surveillance of airport perimeter; and manages the parking areas of Ciampino and Fiumicino airports. In addition, it offers cleaning and minor maintenance services at Fiumicino airport; collects and distributes luggage racks at Fiumicino airport; and cleans the areas at Ciampino airport. The company was formerly known as Leonardo S.p.A. and changed its name to Aeroporti di Roma S.p.A. in May 2001. The company was founded in 1974 and is based in Rome, Italy. Aeroporti di Roma S.p.A. is a subsidiary of Atlantia S.p.A.

Owns and operates two airports in Rome, Italy

Business risk

Swedavia operates in what we would characterise as a low volatility environment due to the nature of the transportation and infrastructure business with very high entry barriers and limited competition. According to Standard & Poor's there have been only two defaults in the transportation infrastructure industry since 2002, both in emerging markets. In addition, Sweden is a wealthy country with a relatively predictable regulatory framework.

Swedavia operates in a low-risk industry in a wealthy country with a predictable regulatory environment

Competitive advantage

We have assigned a strong (level 1) competitive advantage score to Swedavia, which is the best possible score on the scale from 1 to 5. The competitive score is based on its near-monopoly position in Sweden with respect to passenger traffic and cargo volume as the operator of the 10 most important airports in Sweden, all identified as national basic infrastructure by the Swedish government.

The strong competitive advantage score based on Swedavia's near-monopoly position in Sweden

Figure 29: Airports (* owned in cooperation with Sweden armed forces)

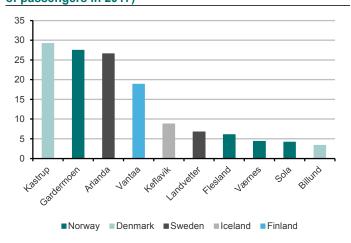
Airport	Domestic routes	Int. routes	Pax (million, 2017)	Aircract mov. (avg. no/day)	Most popular destinations
Bromma Stockhom	12	13	2.5	131	Malmø, Gøteborg
Goteborg Landvetter	20	157	6.8	188	Stockholm, London
Kiruna	5	1	0.3	8	Stockholm, Umeå, London
Luleå*	5	13	1.2	35	Stockholm, Gøteborg, Gran Canaria
Malmø	15	57	2.2	74	Stockhom, Gdansk, Skopje
Ronneby*	2	-	0.2	12	Stockholm
Stockholm Arlanda	43	284	26.6	672	London
Umeå	15	12	1.1	44	Stockholm
Visby	18	5	0.5	30	Stockholm
Åre Østersund	7	6	0.5	21	Stockholm, Umeå, London

Source: Company

Some competition from other major Nordic airports

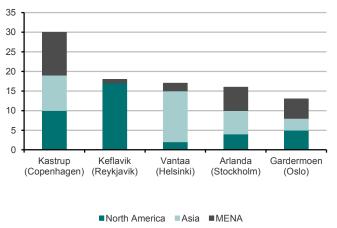
Some of Swedavia's airports face competition from Copenhagen for southbound and westbound international travel from places in Sweden well south of Stockholm. For intercontinental routes, Arlanda is facing strong competition from other major Nordic airports, in particular from Kastrup (Copenhagen). In addition, several Asian routes are being served from Vantaa (Helsinki), while several North American routes are being served from Keflavik (Iceland). In addition, Gardermoen (Oslo) has successfully attracted several new intercontinental routes over the last years.

Figure 30: Largest Nordic airports by traffic (million number of passengers in 2017)



Source: Respective airport operators Source: Respec

Figure 31: Number of intercontinental destinations from Nordic airports



Source: Respective airport operators

Scale, scope and diversity

We have assigned a scale, scope, and diversity score of strong/adequate (level 2) to Swedavia, based on its dominant position in Sweden. The score is negatively affected by its exposure to a small domestic market and relatively low share of intercontinental routes relative to the company's Nordic peers.

Scale, scope, and diversity: Strong/adequate (one level above the average score)

Figure 32: Revenues form airport activities (2017)

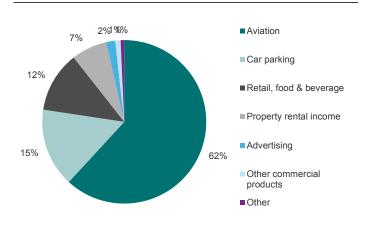
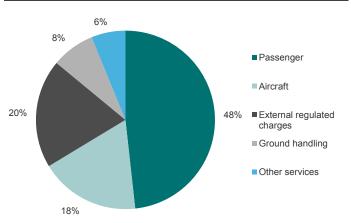
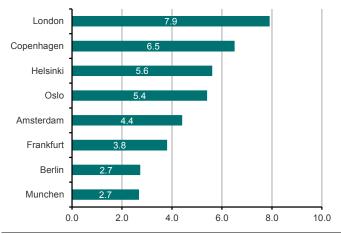


Figure 33: Aviation related revenues (62% of airport activities in 2017)



Source: Company (annual report 2017)

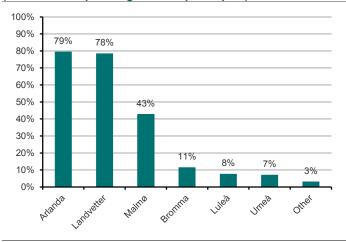
Figure 34: Most popular destinations (% share of total passenger traffic in 2017)



Source: Company

Figure 35: Share of passengers travelling international (share of total passenger traffic per airport)

Source: Company (annual report 2017)



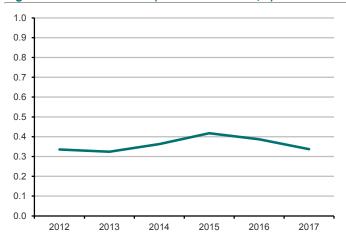
Source: Company

Operating efficiency

We have assigned an operating efficiency score of adequate/weak (level 4) to Swedavia, one level below the average score of 3. The score is based primarily on the below-industry average operating margins and return on capital, both trending negative since 2014.

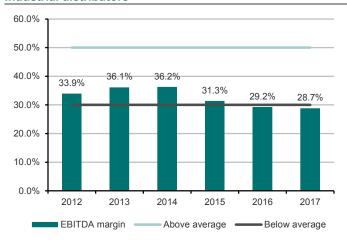
Operating efficiency: Adequate/strong (one level below the average score)

Figure 36: Asset turnover (sales/total assets, x)



Source: Company (annual reports), DNB Markets (calculations)

Figure 38: EBITDA margin and industry average for Industrial distributors



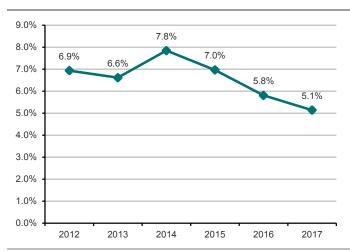
Source: Company (annual reports), DNB Markets (estimates), Standard & Poor's (Key Credit Factors for the Transportation Infrastructure Industry: November 2013)

Figure 37: Cash conversion ratio (average number of days)



Source: Company (annual reports), DNB Markets (calculations)

Figure 39: Return on capital (EBIT/Capital)



Source: Company (annual reports), DNB Markets (calculations)

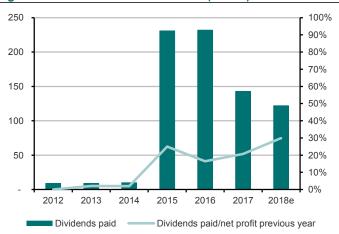
Financial risk

Total interest-bearing debt at end-Q1 2018 was SEK7,092m, of which SEK1,200m is a loan from the Nordic Investment Bank. The remaining amount is split across 10 bond loans with an average maturity of 4.5 years.

Financial policy

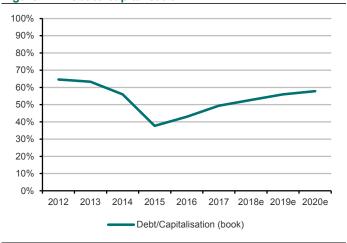
The owner's financial targets for Swedavia are a 6% return on operating capital and a debt/equity ratio of 1.0–1.5 times. Furthermore, in accordance with the company's dividend policy, the dividend shall be between 30% and 50% of the profit for the year, excluding capital gains from property sales.

Figure 40: Shareholder distributions (SEKm)



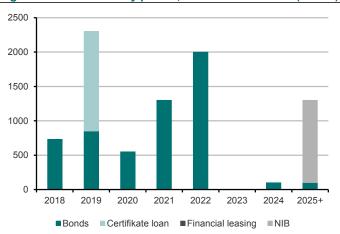
Source: Company (annual reports), DNB Markets (estimates)

Figure 42: Debt to capitalisation



Source: Company (annual reports), DNB Markets (estimates)

Figure 41: Debt maturity profile, excl. undrawn debt (SEKm)



Source: Company (annual report 2017, quarterly report Q1 2018))

Figure 43: Debt to equity ratio (x)



Summary of financial accounts - Swedavia AB (EOY in SEKm)

Profit & Loss	2012	2013	2014	2015	2016	2017
Total operating revenues	4,965	5,233	5,538	5,537	5,691	5,926
Total operating costs	-3,284	-3,346	-3,534	-3,805	-4,029	-4,223
EBITDA	1,681	1,887	2,004	1,732	1,662	1,703
Depreciation & amortisation	-850	-940	-946	-915	-930	-933
EBIT	831	947	1,058	817	732	770
Income from associates	19	8	0	22	41	37
Sale of assets	0	0	347	938	266	0
One-offs, write-downs, impairments	0	0	0	0	-58	-119
Net interest	-234	-206	-188	-52	-29	-20
Net other financials	-61	-62	-55	-178	-109	-93
Pre-tax profit	555	687	1,162	1,547	843	575
Tax	-108	-185	-236	-136	-152	-167
Net profit	447	502	926	1,411	691	408
•				•		
Polones about	2042	2042	2014	2045	2046	2047
Balance sheet	2012	2013	2014	2015	2016	2017
Tangible fixed assets Investments in associates	12,949 79	14,438	10,539 0	10,696	11,813 0	14,652 0
Intangible assets	457	1 452	621	0 615	632	618
Other non-current assets	223	233	194	1,073	1,175	1,177
Cash & cash equivalents	129	233 52	112	1,073	1,175	58
•	951				926	
Other current assets Total assets	14,788	958 46 434	3,800	868 43.259		1,082
Interest-bearing long-term debt	3,013	16,134 6,308	15,266 3,107	13,258 2,412	14,716 3,321	17,587 4,426
Other non-current liabilities	1,399	1,417	1,736	1,610	1,664	1,593
Interest-bearing short-term debt	4,661	2,217	3,800	1,315	1,004	2,192
Other current liabilities	1,414	1,276	1,050	1,057	1,010	1,711
Total liabilities	10,487	11,218	9,693	6,394	7,366	9,922
Equity	4,301	4,916	5,573	6,864	7,350	7,665
Total equity and liabilities	14,788	16,134	15,266	13,258	14,716	17,587
• •	·	·	•	·	•	·
Net interest-bearing debt	7,545	8,473	6,795	3,721	4,161	6,560
Total interest-bearing debt	7,674	8,525	6,907	3,727	4,331	6,618
Cash flow	2012	2013	2014	2015	2016	2017
EBITDA	1,681	1,887	2,004	1,732	1,662	1,703
Dividends from associates	60	0	0	0	0	0
Net cash tax	0	-45	-115	-137	-125	-167
Net cash interest	-249	-255	-215	-293	-145	-135
Funds from operations (FFO)	1,492	1,587	1,674	1,302	1,392	1,401
Changes in working capital	305	-158	344	-24	167	207
Other cash flow from operations	-322	-90	91	97	90	-72
Cash flow from operations (CFO)	1,475	1,339	2,109	1,375	1,649	1,536
Investments	-3,383	-2,333	-754	-1,098	-2,094	-3,844
Divestments	0	0	0	2	19	9
Other cash flow investments	42	75	376	3,039	220	70
Free operating cash flow (FOCF)	-1,866	-919	1,731	3,318	-206	-2,229
Debt instalments	0	0	0	0	0	0
Debt principal	-2,290	-11,642	-6,663	-7,748	-1,548	-5,148
Dividends	-9	-9	-10	-231	-232	-143
Funding surplus	-4,165	-12,570	-4,942	-4,661	-1,986	-7,520
New debt	4,135	12,493	5,001	4,563	2,141	7,383
New equity	0	0	0	0	0	0
Other cash from financing	0	0	1	-8	9	25
Net cash flow	-30	-77	60	-106	164	-112
Other adjustments	18	0	0	0	0	0
Change in cash	-12	-77	60	-106	164	-112
Source: Company (historical figures), DNR Markets (actimates)						

Source: Company (historical figures), DNB Markets (estimates)

Key credit metrics (adjusted) - Swedavia AB (EOY)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
FFO/TIBD (%)					19.4	18.6	24.2	34.9	26.7	19.2
TIBD/EBITDA (x)					4.4	4.5	3.4	2.2	3.0	4.2
NIBD/EBITDA (x)					4.3	4.5	3.4	2.1	2.9	4.1
EBITDA/interest (x)					7.0	7.4	9.3	5.9	12.1	9.1
CFO/TIBD (%)					19.2	15.7	30.5	36.9	31.6	21.0
FOCF/TIBD (%)					-24.3	-10.8	25.1	89.0	-4.0	-29.5
DCF/TIBD (%)					-24.4	-10.9	24.9	82.8	-8.4	-31.4
TIBD/total capital (%)					64.1	63.4	55.3	35.2	41.5	49.3

Source: Company (historical figures), DNB Markets (estimates)

Profitability (adjusted) - Swedavia AB (EOY)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
EBITDA margin (%)					35.1	36.1	36.2	31.3	30.8	30.3
EBIT margin (%)					16.7	18.1	19.1	14.8	12.9	14.0
Profit margin (%)					9.0	9.6	16.7	25.5	12.1	6.9
EBIT/assets (%)					5.6	5.9	6.9	6.2	4.7	4.5

Source: Company (historical figures), DNB Markets (estimates)

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22 June 2018

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Alberta: Blake, Cassels & Graydon LLP, 855 - 2nd Street S.W., Suite 3500, Bankers Hall East Tower, Calgary, AB T2P 4J8. British Columbia: Blakes Vancouver Services Inc., 595 Burrard Street, P.O. Box 49314, Suite 2600, Three Bentall Centre, Vancouver, BC V7X 1L3. Manitoba: Aikins, MacAulay & Thorvaldson LLP, 30th Floor, Commodity Exchange Tower, 360 Main Street, Winnipeg, MB R3C 4G1. New Brunswick: Stewart McKelvey, Suite 1000, Brunswick House, 44 Chipman Hill, PO Box 7289, Station A, Saint John, NB E2L 2A9. Newfoundland and Labrador: Stewart McKelvey, Suite 1100, Cabot Place, 100 New Gower Street, P.O. Box 5038, St. John's, NL A1C 5V3. Nova Scotia: Stewart McKelvey, Purdy's Wharf Tower One, 1959 Upper Water Street, Suite 900, P.O. Box 997, Halifax, NS B3J 2X2. Northwest Territories: Gerald Stang, Suite 201, 5120-49 Street, Yellowknife, NT X1A 1P8. Nunavut: Field LLP, P.O. Box 1779, Building 1088C,

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