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Ratings

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Danfoss A/S

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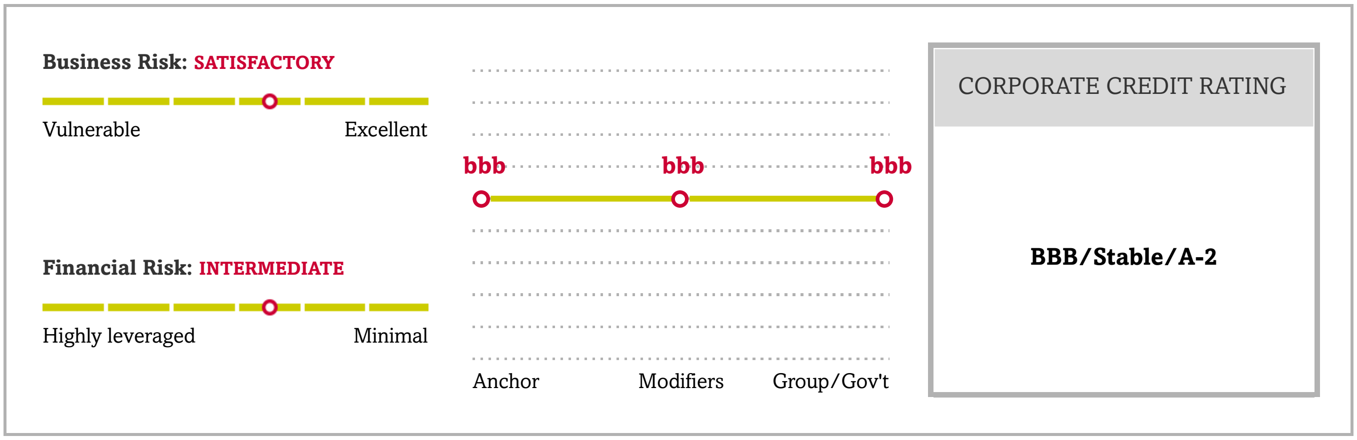


Rationale

Business Risk

- With its leading market positions in the supply of electrical and mechanical components for power solutions, cooling, drives, and heating, we expect Danfoss to be able to benefit from global market trends of increasing needs for food, cooling and heating systems, urbanization, and electrification.
- In our view Danfoss has good degree of customer, end market, and geographic diversity, which should lead to continued stable operating performance over the cycle.
- We expect profitability to continue to be well positioned in the mid-teens in 2018-2019, showing some resilience over the cycle as well as tight cost management, notwithstanding higher R&D costs than its peers.
- Exposure to cyclical demand and pricing competition.

Financial Risk

- Two-tier growth strategy (70% organic, 30% through acquisitions), which we expect will lead to 10% annual revenue growth over the cycle.
- Credit metrics leaving sound headroom for the rating, with funds from operations to debt reaching about 50% at year-end 2017. We expect Danfoss to use funds for bolt-on acquisitions, without having an impact on the current rating.
- An ambitious capital expenditure (capex) and development plan to boost company technologies and enable Danfoss to be a forerunner of digitalization and electrification.
- Strong liquidity and well-spread debt maturity profile.

Outlook

The stable outlook on Denmark-headquartered capital goods company Danfoss A/S reflects S&P Global Ratings' expectation that the company will keep delivering profitable growth during the next 24 months while maintaining a balanced approach toward organic and external growth, showing funds from operations (FFO) to debt well above 30%.

Under our base case for 2018 and 2019, we forecast a stable adjusted EBITDA margin at 16% as the company focuses on delivering on its innovation projects. This will translate into FFO to debt of about 40%-45%, incorporating cash acquisition spending of about Danish krone (DKK) 2 billion per year.

Downside scenario

We could consider a negative rating action if there was a significant deterioration in Danfoss' credit metrics due to weakening operating performance or an aggressive debt-financed acquisition, resulting in adjusted FFO to debt below 30% on a sustained basis.

Upside scenario

We see limited prospects for a higher rating currently. This reflects Danfoss' financial policy, which is aimed at maintaining a credit rating positioned well within the 'BBB' level, as well as the company's aspiration to sustain profitable 10% growth (including through acquisitions) over the cycle.

That said, an upgrade could become more likely if we became convinced that company's business risk profile has been strengthening progressively without FFO to debt deteriorating toward 30%. This could materialize if, for example:

- Danfoss were able to further widen its end markets, covering additional industries in which it holds a primary market position; or
- EBITDA margins were to improve on a sustained basis above 20% thanks to continuous improvement of the cost base; or
- A very material acquisition led us to revise upwards our assessment of Danfoss' business risk.

Finally, if there are no larger acquisitions over the next two years, this could build up significant rating headroom and potentially trigger an upgrade.

Our Base-Case Scenario

Assumptions

- The pace of U.S. economic expansion will likely continue over the next year, and we expect real GDP growth of 2.9% this year and 2.6% in 2019. We anticipate eurozone GDP growth to strengthen to 2.3% this year and to 1.9% in 2019, supporting some increased spending in Danfoss' key segments.
- We expect 2018 revenue growth to stabilize at around 4%-5%, reaching more than DKK45 billion. This follows a huge revenue jump in 2017 to DKK45.3 billion, a 10.4% increase over 2016. For 2019, we forecast softer revenue growth of 3%-4%. This excludes the impact of any potential larger acquisitions.
- We expect EBITDA in 2018 of around DKK6.8 billion-DKK7.3 billion, led by the power solution divisions, which we expect will have revenue growth of 10% year-on-year (below the 19% increase recorded in 2017). We expect 2.5% to 5% growth in each of the other divisions of cooling, drives, and heating.
- We expect EBITDA margins to remain stable at around 16% as we consider that a great portion of the benefits of productivity improvements will go toward digitalization costs and be partly absorbed by integration costs from acquisitions.
- We see research and development (R&D) costs representing 4% of Danfoss' revenues.
- Tax rate at 27% absorbing more than DKK1.3 billion per year.
- We expect negative changes in working capital of about DKK300 million per year.
- Capex in excess of DKK2.2 billion per year, representing about 4.5% of annual revenues, reflecting the group's continuous investment in growth initiatives and digitalization.
- Shareholder returns of about DKK2.6 billion in 2018 through a mix of dividends and a share repurchase program in 2018, decreasing to about 30% of profits in 2019.
- Bolt-on acquisitions reaching DKK2.0 billion per year.

Key Metrics

	2017A	2018E	2019E
EBITDA margin* (%)	16	~16	~16
FFO/debt* (%)	51.2	40-45	40-45
Debt/EBITDA* (x)	1.5	1.5-2.0	1.5-2.0

*Note: All figures are adjusted by S&P Global Ratings. A--Actual. E--Estimate.

• Danfoss to keep its commitment to maintain financial performance in line with its 'BBB' rating, notably including FFO to debt well in excess of 30%.	

Company Description

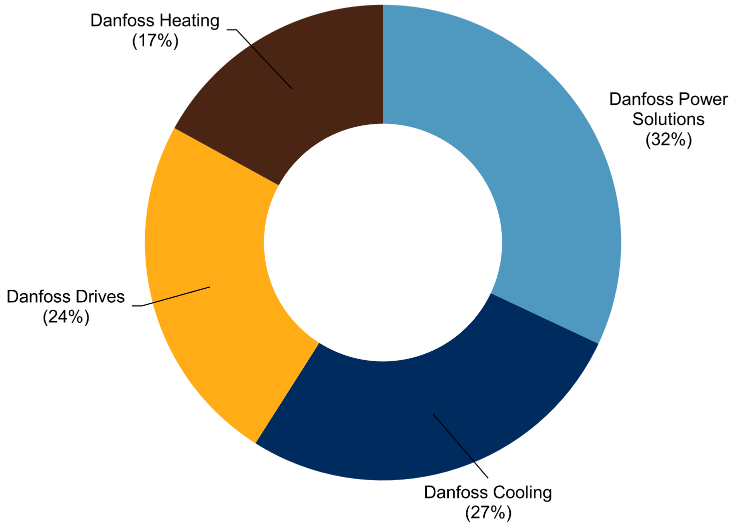
Danfoss is a leading producer of electrical and mechanical components in a number of industry segments: power solutions, cooling, drives, and heating. With revenues of about DKK43.3 billion (about €5.8 billion) and unadjusted EBITDA of DKK6.6 billion (approximately €880 million) in 2017, Danfoss is a midsize European capital goods company.

Danfoss' operations are divided into four segments:

- Danfoss Power Solutions: Hydraulic systems and electronic components. End markets include cyclical end markets such as agriculture, construction, and material handling, and specialty equipment. As of year-end 2017, the power solutions division represented 32% of group's revenues or DKK13.9 billion (about €1.9 billion).
- Danfoss Cooling: Components for the air conditioning and refrigeration industry. End markets include air conditioning and commercial and industrial refrigeration. As of year-end 2017, the cooling division represented 27% of group's revenues or DKK11.9 billion (about €1.6 billion).
- Danfoss Drives: Development and production of low-voltage drives and power modules. End markets are diverse, comprising several industrial sectors, including heating, ventilation, air conditioning, mining, lifts and elevators, food and beverage, automotive, and wind. As of year-end 2017, the drives segment represented 24% of the group's revenues or DKK10.3 billion (about €1.4 billion).
- Danfoss Heating: Heating components for residential and commercial heating and district energy for cities. End markets including heating, ventilation, and air-conditioning systems. As of year-end 2017, the heating division represented 17% of the group's revenues or DKK7.3 billion (about €1.0 billion).

Chart 1

Sales Split By Segment In 2017 (DKK43.3 billion)



e--Estimate. Source: S&P Global Ratings.

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From the first quarter of 2018, Danfoss has changed its reporting currency from the Danish krone to the euro. The transition reflects that the main part of the group's revenue is generated outside Denmark, and that the euro is the prevailing functional currency within the group.

Danfoss is a privately held company controlled by the Bitten and Mads Clausen Foundation. The foundation and the Clausen family hold 99.8% of the voting shares.

Business Risk

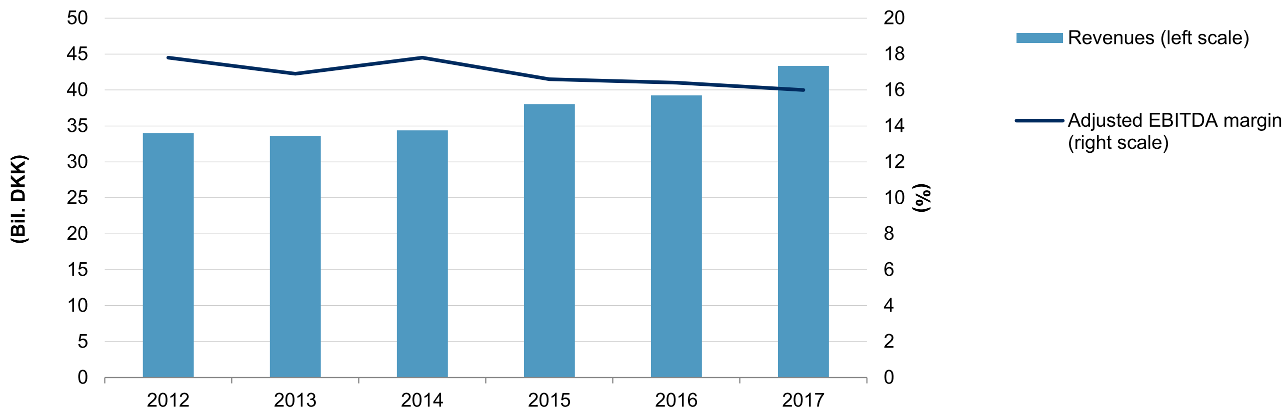
Leading market positions in the supply of electrical and mechanical components for power solutions, cooling, drives and heating

Danfoss' business risk profile is supported by the company's leading market positions for electrical and mechanical components in a number of industry segments. The company has a primary market position in all the niches in which it operates, being either the market leader or among the first three solution providers.

During 2017, Danfoss delivered positive organic growth of 9%, supported by the good market momentum its end markets are experiencing. As of year-end 2017, revenues grew by 10.4% jumping to DKK43.3 billion from DKK39.3 billion at year-end 2016. Although at lower pace, we expect this trend to continue in 2018 and 2019, supported by Danfoss' two-tier gain growth strategy, backed by acquisitions that should allow for more diversification and further market penetration along with profitable growth.

Chart 2

Danfoss A/S - Revenues And Adjusted EBITDA Margin 2012-2017



e--Estimate. Source: S&P Global Ratings.

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Good degree of customer, end market, and geographic diversity

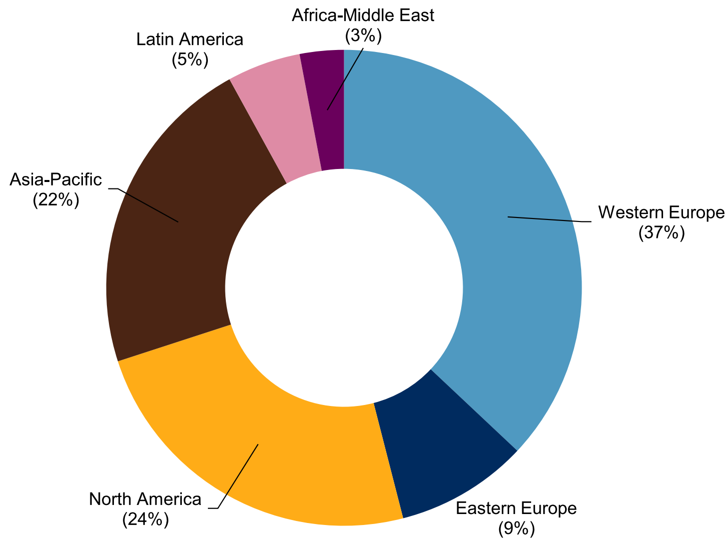
We view positively the company's good degree of customer end-market diversification such as agricultural, construction, material handling, and specialty equipment, for example forestry machines, energy sector, food and beverage, renewables, automotive, district energy solutions. We expect it to lead to stability in earnings over time, as they are not materially exposed to any one end market.

Moreover, the fairly good geographic diversification further supports company's business resilience in a potential low point of the business cycle, given its presence in more than 100 countries across Europe (46% of revenues in 2016), North America (24%), Asia Pacific (22%), and Africa, the Middle East, and Latin America (8% in aggregate).

The company benefited from the good demand environment from China in 2017, recording revenue growth of more than 30% to €750 million in the country. The biggest overall market remains Europe, where revenues totaled €2.7 billion. The developed region where Danfoss recorded the highest growth in 2017 was North America. Revenues from North America increased by 12% in 2017 to €1.4 billion at year-end 2017. The first-quarter of 2018 suggests these trends are persisting.

Chart 3

Sales Split By Region In 2017 (DKK43.3 Billion)



e--Estimate. Source: S&P Global Ratings.

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Profitability is well-positioned in the mid-teens and shows some resilience over the cycle

We believe company's adjusted EBITDA margins will remain stable at around 16% for the following 24 months in line with 2017 and 2016 operating results. This is notwithstanding some increasing costs in absolute value aimed at strengthening the company's digitalization and innovation processes, which we see absorbing on average 1% of the company's revenues, as reducing slightly profitability.

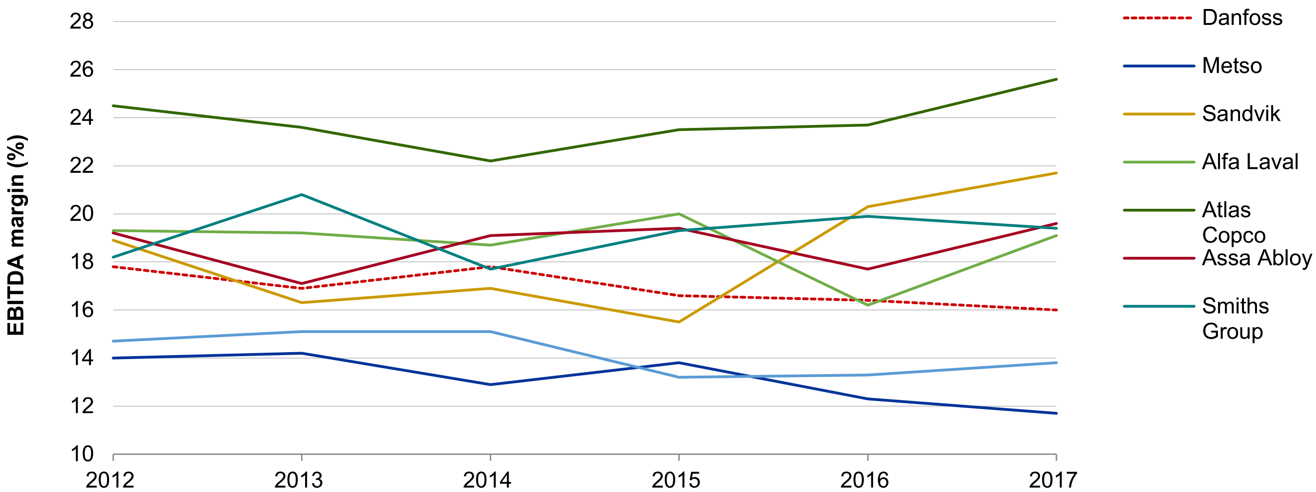
We believe that Danfoss' focus on improving its technology base will help to curtail operating costs and will also to defend Danfoss' market position, with potential capabilities to offer products at the forefront of technology, which will be an important driver for revenue growth and the company's competitive position over the medium term.

We expect the group to continue its constant focus on cost efficiency and sustaining and streamlining integration processes in case of external acquisitions, as it has done in the past.

The group maintained its adjusted EBITDA margin at around 16%, thereby positioning Danfoss in the upper end of the 11%-18% range that we view as average in the capital goods sector.

Chart 4

Adjusted EBITDA Margin: Danfoss And Selected Peers 2012-2017



e--Estimate. Source: S&P Global Ratings.

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Exposure to cyclical demand and pricing competition.

Notwithstanding its high diversification by end market, Danfoss' strengths are tempered by its exposure to cyclical demand in a number of its segments. In the past, the power solutions segment showed the most significant decline in the 2008-2009 global financial crisis, with demand being dependent on fairly cyclical end markets. That said, the company was able to restore the power solution segment's sales and margins. Other segments also showed volatility, but to varying degrees. We understand that the cooling and heating segments are also somewhat dependent on inventory stocking cycles, which exaggerates underlying cyclicality. However, heating has shown the least cyclicality among Danfoss' businesses in the past. Danfoss is also exposed to pricing competition in a number of its segments, notably in China and India.

Peer comparison

Table 1

Danfoss A/S -- Peer Comparison

Industry Sector: Capital Goods/Diversified

	Danfoss A/S	**Metso Corp.**	**Sandvik AB**	**Alfa Laval AB**	**Atlas Copco AB**
Rating as of June 7, 2018	BBB/Stable/A-2	BBB/Stable/A-2	BBB+/Positive/A-2	BBB+/Stable/--	A+/Stable/A-1
(Mil. DKK)	**--Fiscal year ended Dec. 31, 2017--**				
Revenues	43,342.0	20,147.3	68,879.0	26,757.5	87,953.4
EBITDA	6,923.0	2,353.2	14,921.2	5,107.8	22,502.8
Funds from operations (FFO)	5,166.1	1,643.7	11,146.7	3,747.9	16,984.3
Net income from cont. oper.	3,005.0	759.4	10,038.8	2,254.9	12,683.9
Cash flow from operations	5,860.1	1,620.8	11,239.9	3,603.2	16,800.9
Capital expenditures	2,269.0	282.9	3,117.2	511.4	1,708.6
Free operating cash flow	3,591.1	1,337.9	8,122.7	3,091.7	15,092.3

Table 1

Danfoss A/S -- Peer Comparison (cont.)					
Industry Sector: Capital Goods/Diversified					
	Danfoss A/S	**Metso Corp.**	**Sandvik AB**	**Alfa Laval AB**	**Atlas Copco AB**
Discretionary cash flow	2,876.1	169.0	5,502.6	1,730.1	8,837.5
Cash and short-term investments	219.0	6,157.4	9,641.0	3,292.2	18,560.7
Debt	10,086.3	2,183.2	12,682.9	10,504.0	4,249.6
Equity	19,125.0	10,051.3	36,826.2	15,532.9	45,594.8
Adjusted ratios					
EBITDA margin (%)	16.0	11.7	21.7	19.1	25.6
Return on capital (%)	15.7	13.8	21.0	13.3	35.3
EBITDA interest coverage (x)	17.9	9.9	8.6	16.3	37.5
FFO cash int. cov. (X)	16.6	10.5	12.4	25.1	70.5
Debt/EBITDA (x)	1.5	0.9	0.8	2.1	0.2
FFO/debt (%)	51.2	75.3	87.9	35.7	399.7
Cash flow from operations/debt (%)	58.1	74.2	88.6	34.3	395.3
Free operating cash flow/debt (%)	35.6	61.3	64.0	29.4	355.1
Discretionary cash flow/debt (%)	28.5	7.7	43.4	16.5	208.0

Financial Risk

Growth strategy aims at 10% annual revenue growth over the cycle

Danfoss aims to sustain 10% profitable growth over the cycle, thanks to a balanced mix of organic (70%) and acquisition (30%) deals. The company has a long track record of successful acquisitions, testified among the other things by sound EBITDA margin contributions notwithstanding integration cost and execution risk. That said, we acknowledge that, as of year-end 2017, the company had ample of headroom under the current 'BBB' rating, achieving FFO to debt of slightly more than 50%. Given company's financial policy to stay comfortably at a 'BBB' rating, we believe that this cushion will be used to releverage Danfoss as soon as new transactions are available.

In our base case, FFO to debt over the next couple of years will lie between 40% and 45% after accounting for small bolt-on acquisitions of around DKK2 billion per year. That said, we cannot rule out more material and onerous acquisitions that could take FFO to debt below 40% but above 30% to maintain the company's stated financial policy.

An ambitious capex and development plan to boost technologies, sustained by strong cash flow

Danfoss delivered robust operating results in 2017, recording revenues increasing by 10.4% to DKK43.3 billion. We expect Danfoss to continue improving its business as well as its financial performance, over the coming two years, supported by internal operating cash flow generation, after changes in working capital, amounting to about DKK5 billion.

The company will use cash to sustain its ambitious investment plan, which we see as representing on average 4.5% of turnover per year. Danfoss' proven ability to deliver sustainably robust adjusted free operating cash flow represents in our view a credit supportive factor. We anticipate that Danfoss will continue to generate solid free operating cash flow to debt that, absent huge acquisitions, should be comfortably above 20%.

Dividend distribution is fairly moderate. The company's stated policy is to pay up to 30% of net profit as cash dividends and share buybacks. In 2018, we expect an extraordinary share buyback of about €200 million, resulting in a shareholder distribution totaling €360 million. This is a result of very low leverage and the divestment of Thermia--a noncore asset-- in first-quarter 2018. Also, when accounting for this extraordinary cash out, discretionary cash flow to debt should be comfortably above 10%.

Finally, we consider Danfoss' access to equity as limited, owing to its status as a privately held company. This is somewhat balanced by shareholder remuneration levels--with dividend payouts to Danfoss' shareholders of no more than 30% of net income in addition to minority dividends--which are lower than most of Danfoss' public Scandinavian peers.

Financial summary

Table 2

Danfoss A/S -- Financial Summary				
Industry Sector: Capital Goods/Diversified				
	--Fiscal year ended Dec. 31--			
(Mil. DKK)	**2017**	**2016**	**2015**	**2014**
Revenues	43,342.0	39,247.0	38,031.0	34,375.0
EBITDA	6,923.0	6,435.5	6,314.0	6,135.0
Funds from operations (FFO)	5,166.1	5,023.2	4,997.9	4,758.6
Net income from continuing operations	3,005.0	2,672.0	2,381.0	2,104.0
Cash flow from operations	5,860.1	5,511.2	5,053.9	4,689.6
Capital expenditures	2,269.0	1,762.0	1,300.0	1,224.0
Free operating cash flow	3,591.1	3,749.2	3,753.9	3,465.6
Discretionary cash flow	2,876.1	3,059.2	3,012.9	2,518.6
Cash and short-term investments	219.0	509.0	319.0	716.0
Debt	10,086.3	11,976.2	11,755.1	14,258.4
Equity	19,125.0	17,286.0	15,424.0	13,242.0
Adjusted ratios				
EBITDA margin (%)	16.0	16.4	16.6	17.8
Return on capital (%)	15.7	14.6	14.4	16.1
EBITDA interest coverage (x)	17.9	16.6	15.7	20.1
FFO cash int. cov. (x)	16.6	19.1	18.9	23.0
Debt/EBITDA (x)	1.5	1.9	1.9	2.3
FFO/debt (%)	51.2	41.9	42.5	33.4
Cash flow from operations/debt (%)	58.1	46.0	43.0	32.9
Free operating cash flow/debt (%)	35.6	31.3	31.9	24.3
Discretionary cash flow/debt (%)	28.5	25.5	25.6	17.7

Liquidity

The short-term rating is 'A-2' and we assess Danfoss' liquidity as strong. We expect sources of liquidity to exceed uses by at least 1.9x over the 12 months started April 1, 2018, and to be above 2x over the following 24 months.

We also expect that liquidity sources would exceed uses even if EBITDA declined by 30%. We view Danfoss' bank relationships as well established, its credit market standing as high, and its risk management as very prudent. For example, the company has to maintain an internal liquidity reserve of minimum DKK3 billion in committed credit facilities and cash and, thanks to its pro-active liability management, enjoys a very smooth maturity profile. The first material maturities come due in 2022 only, when the euro notes will come due. Finally, the company does not have any financial covenants.

Principal Liquidity Sources	Principal Liquidity Uses
• About DKK131 million of total unrestricted cash as of March 31, 2018. • About DKK7.5 billion available under a number of long-term committed credit lines as of March 31, 2018. • Cash FFO generation of about DKK5 billion per year in 2018-2019.	• Seasonal working capital outflows of DKK1.2 billion. • Capex of roughly DKK2 billion-DKK2.1 billion annually. • Dividend payouts of DKK1.1 billion annually. • Extraordinary share buybacks of DKK1.5 billion in 2018.

Debt maturities

Unadjusted debt maturities as of Dec. 31, 2017, excluding finance leases:

- 2018: DKK836 million
- 2019-2022: DKK 6.1 billion (of which €500 million senior unsecured notes coming due in February 2022)
- Thereafter: DKK1.6 billion

Ratings Score Snapshot

Corporate Credit Rating

BBB/Stable/A-2

Business risk: Satisfactory

- **Country risk:** Intermediate
- **Industry risk:** Intermediate
- **Competitive position:** Satisfactory

Financial risk: Intermediate

- **Cash flow/Leverage:** Intermediate

Anchor: bbb

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Strong (no impact)
- **Management and governance:** Satisfactory (no impact)
- **Comparable rating analysis:** Neutral (no impact)

Issue Ratings--Subordination Risk Analysis

Capital structure

- Danfoss' consolidated unadjusted debt at Dec. 31, 2017, amounts to DKK7,994 million, of which about 6.5% represents mortgage loans that we see as secured.
- The remainder of the debt comprises finance leases excluded from our subordination analysis amounting to about DKK311 million.
- Finally, we note that only a residual part of the unsecured debt is held at a subsidiary. We assess this at about DKK450 million.

Analytical conclusions

We rate Danfoss' notes 'BBB', the same as the issuer credit rating, as there are no significant elements of subordination risk present in Danfoss' capital structure.

Reconciliation

Table 3

Reconciliation Of Danfoss A/S Reported Amounts With S&P Global Ratings' Adjusted Amounts (Mil. DKK)

	--Fiscal year ended Dec. 31, 2017--						
Danfoss A/S reported amounts							
	Debt	**Shareholders' equity**	**EBITDA**	**Operating income**	**Interest expense**	**EBITDA**	**Cash flow from operations**
Reported	8,305.0	18,278.0	6,569.0	4,797.0	303.0	6,569.0	5,521.0
S&P Global Ratings' adjustments							
Interest expense (reported)	--	--	--	--	--	(303.0)	--
Interest income (reported)	--	--	--	--	--	16.0	--
Current tax expense (reported)	--	--	--	--	--	(1,367.0)	--

Table 3

Reconciliation Of Danfoss A/S Reported Amounts With S&P Global Ratings' Adjusted Amounts (Mil. DKK) (cont.)

Operating leases	832.7	--	341.0	61.1	61.1	279.9	279.9
Postretirement benefit obligations/deferred compensation	639.0	--	--	--	22.0	(41.8)	59.3
Surplus cash	(103.4)	--	--	--	--	--	--
Capitalized development costs	--	--	--	20.0	--	--	--
Dividends received from equity investments	--	--	22.0	--	--	22.0	--
Non-operating income (expense)	--	--	--	16.0	--	--	--
Non-controlling Interest/Minority interest	--	847.0	--	--	--	--	--
Debt - Put options on minority stakes	386.0	--	--	--	--	--	--
Debt - Other	27.0	--	--	--	--	--	--
EBITDA - Income (expense) of unconsolidated companies	--	--	(13.0)	(13.0)	--	(13.0)	--
EBITDA - Gain/(Loss) on disposals of PP&E	--	--	4.0	4.0	--	4.0	--
EBIT - Income (expense) of unconsolidated companies	--	--	--	13.0	--	--	--
Total adjustments	1,781.3	847.0	354.0	101.1	83.1	(1,402.9)	339.1

S&P Global Ratings' adjusted amounts

	Debt	Equity	EBITDA	EBIT	Interest expense	Funds from operations	Cash flow from operations
Adjusted	10,086.3	19,125.0	6,923.0	4,898.1	386.1	5,166.1	5,860.1

Related Criteria

- Criteria - Corporates - General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- Criteria - Corporates - Industrials: Key Credit Factors For The Capital Goods Industry, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012

- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	**Intermediate**	Significant	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	**bbb/bbb-**	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

Ratings Detail (As Of June 12, 2018)

Danfoss A/S	
Corporate Credit Rating	BBB/Stable/A-2
Senior Unsecured	BBB
Corporate Credit Ratings History	
10-Nov-2014	BBB/Stable/A-2

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

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