

Recovery process will continue

Schaltbau is a leading supplier for the railway industry and is currently in a restructuring phase. We expect the company to have reached its own financial targets for FY 2018e. We expect a further moderate growth for the current year and of key importance will be the need to refinance a syndicated credit line of EUR 100m by year-end. Schaltbau remains as one of our top picks within the German small cap industrials universe. Buy, TP EUR 32.80 from EUR 32.70 per share.

Recovery of profitability

After two years of losses we expect the turnaround on EBIT adjusted-margin level for FY 2018e with 3.5%. Based on a solid order book, a further improvement is likely and mid- to long-term our sustainable margin amounted to 7% while Schaltbau's own ambitions are even higher, in our view.

Financial restructuring important

A significant improvement in the group's net financial debt was already achieved. In the course of FY 2019e, a syndicated credit line of EUR 100m has to be refinanced.

Financial guidance 2018e will be reached

We expect the group will reach its own financial targets for 2018e: Group sales of EUR 480-500m; EBIT adjusted-margin at around 3% (all based on continuing operations).

Valuation: DCF-model signals upside potential

Based on our updated TP of EUR 32.80 currently the shares offer a significant upside potential. Our current P/E 19e of 15.6 compares to the Industrial's sector P/E (GER) of 14.9. For FY 20e Schaltbau's P/E of 11.4 compares to the sector of 12.7. Based on our TP the implicit P/E 19e amounted to 27.1 and for 20e of 19.7.

EURm	2016	2017	2018e	2019e	2020e
Revenues	509	517	492	502	520
EBITDA	16	20	27	34	40
EBIT	(11)	(25)	4	25	31
EPS	(2.61)	(8.03)	(0.30)	1.21	1.66
EPS adj	(3.75)	(5.27)	0.84	1.21	1.66
DPS	-	-	-	-	0.30
EV/EBITDA	22.1	17.8	10.9	8.2	6.7
EV/EBIT	-	-	79.5	11.3	8.6
P/E adj	-	-	24.2	15.6	11.4
P/B	2.43	4.29	2.08	1.73	1.50
ROE (%)	-	-	-	11.7	14.1
Div yield (%)	-	-	-	-	1.6
Net debt	148	159	87	79	66

Source: Company data, Pareto; EBIT = EBIT reported

Target price (EUR)	33
Share price (EUR)	19

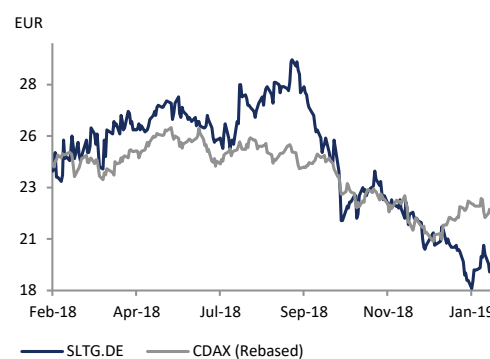
Forecast changes

%	2018e	2019e	2020e
Revenues	-	-	-
EBITDA	-	-	-
EBIT adj	-	-	-
EPS reported	-	-	-
EPS adj	-	-	-

Source: Pareto

Ticker	SLTG.DE, SLT GY
Sector	Industrials
Shares fully diluted (m)	6.6
Market cap (EURm)	125
Net debt (EURm)	87
Minority interests (EURm)	31
Enterprise value 18e (EURm)	297
Free float (%)	32

Performance



Source: Factset

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*A long-term restructuring investment idea***Investment case**

The overall macroeconomic picture became worse during the last months and a lot of economists have revised their GDP forecasts down. The IMF now expects for the Euro area for 2019 a GDP growth of only +1.6% yoy versus their former forecast from October last year of +1.9% yoy. For Schaltbau, on average of the last three reported fiscal years, Germany and Europe account for 71% of the group sales total. As a result we currently see no new trigger for a higher valuation level from this front. It is also worth to mention that investments in rail infrastructure and rolling stock are less volatile than it is in other industries. For Schaltbau this aspect is currently less relevant in our view, because the dominant triggers are internal factors. To mention a few, we see the group on track to reach this year's cost savings, financial debt reduction and solving problems with loss-making orders as they already did with the platform screen doors (PSD) project in Brazil.

Since the last AGM in summer 2018 the group has a partly changed management and supervisory board that are in our view clearly better for the overall restructuring process. In particular two aspects are important:

- ▶ The new Executive and Supervisory Boards now are much more competent with regard to the overall railway industry in addition to the existing financial and restructuring expertise.
- ▶ The relationship between Executive and Supervisory Board is now based more on arms-length principles than in history.

Looking forward, we expect a new and conservative new financial guidance for FY 2019e; our sales forecast assumes a growth rate of only 2% yoy to EUR 502m while the EBIT-margin is expected to rise to 4.9% from 0.7% a year earlier. Continuing reductions in the company's financial debt position also could become a positive share price trigger as well as a possible finalisation of the sale of Schaltbau Sepsa what is not an easy task.

Risks to the investment case

- ▶ The expected growth of the global railway markets will not meet Schaltbau's expectations with regard to their own targets
- ▶ The company will not meet all milestones fixed in the general restructuring plan, e.g. profitability improvement or working capital reduction targets
- ▶ Reduction of the group's financial debt might take longer than expected
- ▶ General inherent risks of the project business could lead to cost overruns or other burdening factors
- ▶ Further impairment risks in the group's company portfolio

Valuation update

- ▶ Buy recommendation confirmed
- ▶ TP marginally up to rounded EUR 32.80 from EUR 32.70
- ▶ Current upside potential ~74%

Buy; TP EUR 32.80 per share

We value the Schaltbau shares and derive our target price from our DCF-model. Using peer group multiples in our view currently does not cope with Schaltbau's turnaround situation.

Following the nine months results publication as of now we continue to expect that Schaltbau will reach its own financial targets set for FY 2018e. In addition, and as outlined several times, our recommendation is not free of risks, in particular when looking to the stretched financial debt situation.

Exhibit 1: Schaltbau Holding: DCF valuation signals significant upside potential

EUR m	Phase I					Phase II					Phase III
	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	
Revenues	492.0	502.0	519.5	539.0	558.5	577.2	595.0	611.7	627.2	641.4	
growth rate	-4.7%	2.0%	3.5%	3.8%	3.6%	3.3%	3.1%	2.8%	2.5%	2.3%	
EBIT	17.3	24.4	30.6	34.7	37.4	39.0	40.6	42.1	43.5	44.9	
EBIT margin	3.5%	4.9%	5.9%	6.4%	6.7%	6.8%	6.8%	6.9%	6.9%	7.0%	
Tax	-5.2	-7.3	-9.2	-10.4	-11.2	-11.7	-12.2	-12.6	-13.1	-13.5	
Tax rate	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	
Depr. & Amort.	23.8	9.5	9.0	9.0	9.0	10.1	10.9	11.4	11.8	12.2	
% of sales	4.8%	19%	17%	17%	16%	18%	18%	19%	19%	19%	
Capex	-9.0	-9.0	-11.3	-11.6	-11.4	-11.7	-12.0	-12.3	-12.6	-12.8	
% of sales	18%	18%	2.2%	2.2%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Change in WC & P	-2.3	-2.0	-2.2	-2.1	-2.3	-2.4	-2.5	-2.6	-2.6	-2.7	
% of sales	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	
Free Cash Flow	24.6	15.7	16.9	19.6	21.4	23.4	24.8	26.0	27.1	28.1	541.9
growth rate	nm	-36.3%	7.9%	15.8%	9.6%	9.0%	6.3%	4.9%	4.1%	3.8%	2.0%
Present Value FCF	24.6	14.7	14.8	16.0	16.3	16.6	16.4	16.0	15.6	15.0	289.9

PV Phase I	86.4	Risk free rate	3.50%	Targ. equity ratio	65%
PV Phase II	79.6	Premium Equity	5.00%	Beta	1.1
PV Phase III	289.9	Premium Debt	2.00%	WACC	7.3%

Enterprise value	455.9	Sensitivity	Growth in phase III				
- Net Debt (Cash)	96.5		1.0%	1.5%	2.0%	2.5%	3.0%
- Pension Provisions	37.5	6.57%	33.4	36.8	41.0	46.2	52.8
- Minorities & Peripherals	31.3	6.93%	30.2	33.1	36.6	40.9	46.3
+ MV of financial assets		WACC 7.30%	27.4	29.9	32.8	36.4	40.8
- Paid-out dividends for last FY	0.0	7.66%	24.8	27.0	29.5	32.6	36.3
+/- Other EV items		8.02%	22.6	24.5	26.7	29.3	32.4

Equity value	290.6
Number of shares	8.85
Value per share (€)	32.83
Current Price (€)	18.90
Upside	73.7%

Source: FactSet (share price as of 12 Feb. 2019), Pareto

In our DCF-model we use EBIT adjusted figures and on that basis expect for FY 2018e an EBIT-margin of 3.5%, what compares to Schaltbau's own target of ~3%. The bridge calculation is seen in exhibit 4.

Exhibit 2: Schaltbau Holding: Peer-group comparison

Company	PE 2019e	PE 2020e	EV/EBIT 2019e	EV/EBIT 2020e	EV/Sales 2019e	EV/Sales 2020e
Vossloh AG	19.7	16.6	13.2	11.1	1.0	0.9
Ansaldo STS SpA	27.4	nm	nm	nm	1.5	nm
Construcciones y Auxiliar de Ferrocarriles, S.A.	16.4	13.3	9.2	7.9	0.7	0.6
Talgo SA	16.1	12.3	10.5	8.4	1.6	1.2
Westinghouse Air Brake Technologies Corporation	15.8	14.1	15.5	nm	2.2	nm
Greenbrier Companies, Inc.	9.6	9.2	4.2	3.5	0.4	0.3
Knorr-Bremse AG	19.9	18.8	12.3	11.3	1.9	1.8
Median	16.4	13.7	11.4	8.4	1.5	0.9
Schaltbau Holding AG	15.6	11.4	12.0	9.2	0.6	0.6

Source: FactSet (share prices as of 12 Feb. 2019), Pareto

Our expectations for FY 2018e

Financial guidance 2018e will be reached in our view

From today's point of view we expect that Schaltbau has reached its own financial guidance for FY 2018e. Based on a solid nine months order book volume of EUR 515m group sales should reach a corridor of EUR 480 – 500m, and we estimate EUR 492m. In order to make FY 2017 figures comparable we expect a change of the original reported figures, which are included in exhibit 2, due to divestments and a change with regard to discontinuing operations.

On EBIT reported level we expect the group to have managed the turnaround with a small positive EBIT of EUR 3.5m. By division, Components will continue to report solid profits in our view, while STT will come out slightly positive.

With regard to the new financial guidance for FY 2019e we expect Schaltbau management to take a conservative stance. Based on a moderate overall market growth we estimate a 2% sales growth to EUR 502m while our EBIT-margin will improve further to 4.9%, equal to EUR 24.4m.

As of 08 February 2019 the acting-in-concert shareholder group (Monolith N.V., Luxempart S.A., Hans-Jakob Zimmermann, Elrena GmbH) have informed Schaltbau Holding, that they have increased their stake from 28.90% to now 29.38% (according to §41 WpHG). Now their total number of voting rights amounted to 8,852,190 shares. As a consequence that has reduced the free float by 0.48% points to 32.2%.

Exhibit 3: Schaltbau will reach financial guidance for FY '18e

Schaltbau Holding AG EUR m	FY '17 reported	FY '18e Pareto	yoy	FY '18e Cons. *
Mobile Transportation Techn. (MTT)	333.4	285.0	-14.5%	
Stationary Transportation Techn. (STT)	114.3	73.0	-36.1%	
Components (COM)	146.3	150.0	2.5%	
Consolidation/Other	0.0	0.0		
Group Incoming orders	594.0	508.0	-14.5%	n.a.
Mobile Transportation Techn. (MTT)	269.1	285.0	5.9%	
Stationary Transportation Techn. (STT)	120.5	74.0	-38.6%	
Components (COM)	131.3	138.0	5.1%	
Consolidation/Other	-4.4	-5.0	13.6%	
Group sales	516.5	492.0	-4.7%	496.2
Mobile Transportation Techn. (MTT)	-26.4	-8.8	-66.7%	
Stationary Transportation Techn. (STT)	-5.5	0.5	-109.1%	
Components (COM)	21.4	24.1	12.6%	
Consolidation/Other	-12.5	-12.3	-1.9%	
Group EBIT reported	-23.0	3.5	n.m.	2.4
Group EBIT adjusted	2.4	17.3		
Mobile Transportation Techn. (MTT)	n.m.	n.m.		
Stationary Transportation Techn. (STT)	n.m.	0.7%		
Components (COM)	16.3%	17.5%	7.1%	
Consolidation/Other	n.m.	n.m.		
Group EBIT reported - margin, %	n.m.	0.7%		
Group EBIT adjusted - margin, %	0.5%	3.5%		
Net income after minorities	-51.7	-2.6	n.m.	-3.8
EPS, EUR	-8.04	-0.30	n.m.	-0.43
ANALYSIS GROUP				
Mobile Transportation Techn. (MTT)	1.24	1.00		
Stationary Transportation Techn. (STT)	0.95	0.99		
Components (COM)	1.11	1.09		
Book-to-bill-ratio Group	1.15	1.03		
Group Net income margin %	n.m.	n.m.		n.m.

Source: FactSet (prices as of 12 Feb. 2019), Company data, Pareto

Exhibit 4: Schaltbau Holding: EBIT-bridge

EUR m	2015	2016	2017	2018e	2019e	2020e	2021e	2022e
EBIT reported	33.4	-14.5	-23.0	3.5	24.4	30.6	34.7	37.4
one-off / extraordinary income (-)								
Revaluation of Albatros S.L.U. (Spain) "Sepsa"		-7.0						
Revaluation RDS (Poland)	-2.5							
Income related to prior periods	-3.5	-3.4		-7.1				
one-off / extraordinary expenses (+)								
impairment at Alte Technologies S.L.U. (Spain)				8.2				
depreciation of other assets at Alte Techn.				1.9				
impairment at Schaltbau Transportation U.K.				2.3				
Revaluation: Schaltbau Sepsa			24.2					
Revaluation: Pintsch Bubenzer			1.1					
Expenses related to prior periods	0.6	0.6	0.1	4.8				
IFRS 5 effect Sepsa real estate				3.8				
EBIT adjusted	28.0	-24.3	2.4	17.3	24.4	30.6	34.7	37.4
EBIT adjusted - margin, %	5.6%	n.m.	0.5%	3.5%	4.9%	5.9%	6.4%	6.7%

Source: Company data, Pareto

Exhibit 5: Schaltbau Holding: Mobile Transportation Technology (MTT)

Financial instrument	Volume (EUR m)	date of maturity
Syndicated credit line (bridge financing) + credit amortisation rate	32.5	28.02.2018
Syndicated credit line	100.0	31.12.2019
Bonded loan	28.5	30.06.2022
Bonded loan	41.5	30.06.2025
Total amount Schaltbau group	202.5	

Source: Company data, Pareto

Market / Competition / Companies

Selective news out of the railway industry:

- ▶ **New order for Talgo:** Rolling stock producer Talgo from Spain the 06 February 2019 has been awarded by Deutsche Bahn for a framework contract to deliver up to 100 trainsets. A firm order was placed for 23 train sets for EUR 550m. The first train sets are expected to enter operation in 2023.
- ▶ **Siemens – Alstom merger** in markets for railway signalling systems and very high-speed trains: With announcement from 06 February 2019 the European Commission prohibited Siemens' planned takeover of Alstom's railway business. The EU argued that the merger would have created a clear market leader in some relevant markets for signalling technology and very high-speed trains. In the commissions view that would have resulted in higher prices. Looking forward, Siemens in our view has various options, among to continue to run the business by its own, to consider a partial flotation comparable to the Siemens Healthineers case or to sell the activity.
- ▶ **GE – Wabtec merger:** After having modified some terms of the merger at 25 January 2019 the closing of the deal no is expected for end of February. Under these new terms Wabtec shareholders will own 50.8% of Wabtec on a fully diluted basis.

Appendix

Exhibit 6: Schaltbau Holding: Mobile Transportation Technology (MTT)

EUR m	2014	2015	2016	2017	2018e	2019e	2020e	2021e	2022e
Incoming orders	195.7	224.9	263.2	333.4	285.0	295.0	307.0	319.0	328.0
yoy %		14.9%	17.0%	26.7%	-14.5%	3.5%	4.1%	3.9%	2.8%
Divisional sales	186.0	225.5	222.9	269.1	285.0	290.0	302.0	313.0	323.0
yoy %		21.2%	-1.2%	20.7%	5.9%	1.8%	4.1%	3.6%	3.2%
EBIT reported	12.7	16.0	5.2	-26.4	-8.8	13.0	17.0	19.0	20.5
Analysis									
Book-to-bill ratio (x)	1.05	1.00	1.18	1.24	1.00	1.02	1.02	1.02	1.02
EBIT reported - margin	6.8%	7.1%	2.3%	-9.8%	-3.1%	4.5%	5.6%	6.1%	6.3%

Source: Company data, Pareto

Exhibit 7: Schaltbau Holding: Stationary Transportation Technology (STT)

EUR m	2014	2015	2016	2017	2018e	2019e	2020e	2021e	2022e
Incoming orders	138.9	155.5	157.8	114.3	73.0	77.5	81.0	84.0	87.0
yoy %		11.9%	1.5%	-27.6%	-36.1%	6.2%	4.5%	3.7%	3.6%
Divisional sales	139.5	144.2	149.4	120.5	74.0	75.0	76.0	79.0	82.0
yoy %		3.4%	3.6%	-19.4%	-38.6%	1.4%	1.3%	3.9%	3.8%
EBIT reported	2.5	1.2	-28.1	-5.5	0.5	2.5	3.0	4.0	4.2
Analysis									
Book-to-bill ratio (x)	1.00	1.08	1.06	0.95	0.99	1.03	1.07	1.06	1.06
EBIT reported - margin	1.8%	0.8%	-18.8%	-4.6%	0.7%	3.3%	3.9%	5.1%	5.1%

Source: Company data, Pareto

Exhibit 8: Schaltbau Holding: Components (COM)

EUR m	2014	2015	2016	2017	2018e	2019e	2020e	2021e	2022e
Incoming orders	114.7	131.5	130.1	146.3	150.0	153.5	157.0	161.0	167.0
yoy %		14.7%	-1.1%	12.5%	2.5%	2.3%	2.3%	2.5%	3.7%
Divisional sales	105.6	133.9	138.1	131.3	138.0	143.0	147.5	153.5	160.0
yoy %		26.7%	3.2%	-5.0%	5.1%	3.6%	3.1%	4.1%	4.2%
EBIT reported	18.9	23.4	17.2	21.4	24.1	20.5	21.0	22.5	23.3
Analysis									
Book-to-bill ratio (x)	1.09	0.98	0.94	1.11	1.09	1.07	1.06	1.05	1.04
EBIT reported - margin	17.9%	17.5%	12.4%	16.3%	17.5%	14.3%	14.2%	14.7%	14.6%

Source: Company data, Pareto

Schaltbau Holding AG

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PROFIT & LOSS (fiscal year) (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Revenues	391	430	502	509	517	492	502	520
EBITDA	45	38	46	16	20	27	34	40
Depreciation & amortisation	(9)	(11)	(13)	(31)	(43)	(24)	(10)	(9)
EBIT	36	40	35	(11)	(25)	4	25	31
Net interest	(5)	(4)	(5)	(5)	(11)	(7)	(6)	(6)
Other financial items	-	-	-	-	-	-	-	-
Profit before taxes	31	35	30	(16)	(36)	(3)	18	25
Taxes	(6)	(6)	(8)	4	(14)	1	(5)	(7)
Minority interest	(3)	(4)	(6)	(4)	(2)	(1)	(2)	(3)
Net profit	21	25	17	(16)	(52)	(3)	11	15
EPS reported	3.29	4.04	2.79	(2.61)	(8.03)	(0.30)	1.21	1.66
EPS adjusted	3.29	4.04	2.16	(3.75)	(5.27)	0.84	1.21	1.66
DPS	-	1.00	1.00	-	-	-	-	0.30
BALANCE SHEET (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Tangible non current assets	53	69	77	88	72	38	36	37
Other non-current assets	39	80	113	106	82	76	78	78
Other current assets	161	186	223	234	272	287	291	295
Cash & equivalents	14	26	32	30	25	40	50	65
Total assets	267	361	446	459	452	442	456	475
Total equity	89	113	125	107	71	117	128	143
Interest-bearing non-current debt	63	105	162	178	184	127	129	132
Interest-bearing current debt	-	-	-	-	-	-	-	-
Other Debt	82	104	122	134	160	161	162	163
Total liabilities & equity	267	361	446	459	452	442	456	475
CASH FLOW (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Cash earnings	27	42	59	37	(24)	16	26	30
Change in working capital	6	(15)	(29)	(11)	35	(2)	(2)	(2)
Cash flow from investments	(17)	(38)	(49)	(18)	(34)	17	(10)	(9)
Cash flow from financing	(1)	(14)	(18)	(10)	5	(16)	(4)	(4)
Net cash flow	6	11	7	(2)	(5)	15	10	15
CAPITALIZATION & VALUATION (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Share price (EUR end)	43.5	39.8	48.2	29.1	25.5	20.2	18.9	18.9
Number of shares end period	6	6	6	6	7	9	9	9
Net interest bearing debt	49	80	130	148	159	87	79	66
Enterprise value	342	344	460	360	358	297	277	265
EV/Sales	0.9	0.8	0.9	0.7	0.7	0.6	0.6	0.5
EV/EBITDA	7.6	9.0	9.9	22.1	17.8	10.9	8.2	6.7
EV/EBIT	9.5	8.7	13.0	-	-	79.5	11.3	8.6
P/E reported	13.2	9.8	17.3	-	-	-	15.6	11.4
P/E adjusted	13.2	9.8	22.3	-	-	24.2	15.6	11.4
P/B	3.6	2.6	3.2	2.4	4.3	2.1	1.7	1.5
FINANCIAL ANALYSIS & CREDIT METRICS	2013	2014	2015	2016	2017	2018e	2019e	2020e
ROE adjusted (%)	25.8	24.6	10.9	-	-	7.5	8.7	10.9
Dividend yield (%)	-	2.5	2.1	-	-	-	-	1.6
EBITDA margin (%)	11.4	8.9	9.3	3.2	3.9	5.6	6.8	7.6
EBIT margin (%)	9.2	9.2	7.1	-	-	0.8	4.9	5.9
NIBD/EBITDA	1.09	2.08	2.79	9.08	7.89	3.17	2.32	1.67
EBITDA/Net interest	8.92	8.91	8.61	3.13	1.84	4.07	5.23	6.31

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	"Hold"	Pareto Securities Research expects this financial instrument's total return to be between -10% and 10% over the next 12 months
	"Sell"	Pareto Securities Research expects this financial instrument's total return to be negative by more than 10% over the next 12 months

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Appendix A

Disclosure requirements pursuant to the Norwegian Securities Trading Regulations section 3-10 (2) and section 3-11 (1), letters a-b

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Companies	No. of shares	Holdings in %	Companies	No. of shares	Holdings in %
Helgeland Sparebank	1,988,203	9.53%	SpareBank 1Østfold Akersl	1,129,560	9.12%
Pareto Bank ASA	10,842,964	18.50%	Sparebanken Vest	4,506,060	7.63%

Pareto Securities AS or its affiliates own as determined in accordance with Section 13(d) of the US Exchange Act, 1 % or more of the equity securities of:

Companies	No. of shares	Holdings in %	Companies	No. of shares	Holdings in %
Helgeland Sparebank	1,988,203	9.53%	SpareBank 1Østfold Akersl	1,129,560	9.12%
NHST Media Group AS	21,475	1.85%	Sparebanken Møre	311,739	3.15%
Pareto Bank ASA	10,842,964	18.50%	Sparebanken Sør	460,589	2.94%
Selvaag Bolig ASA	2,174,147	2.32%	Sparebanken Vest	4,506,060	7.63%
SpareBank 1BV	1,549,440	2.46%	Totens Sparebank	78,246	1.28%
SpareBank 1SMN	1,879,292	1.45%			

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Please find below an overview of material interests in shares held by employees in Pareto Securities AS, in companies where a recommendation has been produced or distributed by Pareto Securities AS. "By material interest" means holdings exceeding a value of NOK 50 000.

Company	Analyst holdings*	Total holdings	Company	Analyst holdings*	Total holdings	Company	Analyst holdings*	Total holdings
AF Gruppen	0	1,675	Grieg Seafood	0	770	Prosafe	0	5,984
Aker	0	514	Helgeland Sparebank	0	1,700	Protector Forsikring	0	14,685
Aker BP	0	5,420	Høegh LNG	0	7,203	REC Silicon	0	159,249
Aker Solutions	0	1,825	Jæren Sparebank	0	500	SailMar	0	130
AKVA Group	0	1,500	Komplett Bank	0	99,934	Sandnes Sparebank	0	17,282
Archer	0	73,520	Kongsberg Gruppen	0	5,901	Scatec Solar	0	35,635
Atea	0	450	KWS Saat	15	15	Seadrill	0	7,384
Austevoll Seafood	0	5,780	Lerøy Seafood	0	33,795	Selvaag Bolig	0	5,000
Avance Gas	0	34,095	Magseis Fairfield	0	12,879	SpareBank 1BV	0	10,000
Axactor	0	15,933	Monobank	0	1,355,000	SpareBank 1Nord-Norge	0	30,000
Bonheur	0	45,209	Mowi	0	1,864	SpareBank 1SMN	0	16,590
Borr Drilling	0	4,415	NEXT Biometrics	0	2,621	SpareBank 1SR-Bank	0	39,187
BWLPG	0	5,569	Nordic Semiconductor	0	5,115	SpareBank 1Østlandet	0	4,041
DNB	0	35,072	Norsk Hydro	0	113,571	Sparebanken Møre	0	6,550
DNO	0	28,392	Northern Drilling	0	4,060	Sparebanken Sør	0	43,280
DOF	0	138,498	Norwegian Air Shuttle	0	3,264	Sparebanken Øst	0	3,000
Entra	0	14,362	Norwegian Property	0	150,000	Storebrand	0	5,005
Equinor	0	10,101	Ocean Yield	0	32,047	Subsea 7	0	9,001
Europpris	0	14,510	Odjell Drilling	0	8,731	Telenor	0	2,272
Faroe Petroleum	9,600	9,600	Orkla	0	23,746	TGS-NOPEC	0	2,050
Flex LNG	0	13,677	Panoro Energy	0	5,670	XXL	0	10,546
Frontline	0	14,043	Pareto Bank	0	967,091	Yara International	0	19,786
Gjensidige Forsikring	0	8,547	Petroleum Geo-Services	0	60,134	Zenterio	0	78,865
Golden Ocean Group	0	1,824						

This overview is updated monthly (last updated 17.01.2019).

*Analyst holdings refer to positions held by the Pareto Securities AS analyst covering the company.

Appendix B

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11, letters e-f, ref the Securities Trading Act Section 3-10

Overview over issuers of financial instruments where Pareto Securities AS have prepared or distributed investment recommendation, where Pareto Securities AS have been lead manager/co-lead manager or have rendered publicly known not immaterial investment banking services over the previous 12 months:

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Akva Group	Fortum	Pareto Bank
APC Forsikringsmæglere A/S	Gfinity Plc	PetroMatad Limited
Arnarlax	Gulf Keystone Petroleum	Petroleum Geo-Services
Atlantic Sapphire AS	Hertha BSC GmbH	Pioneer Public Properties Finland Oy
Avida Holding AB	Hunter Group	Point Resources AS
Bank Norwegian	Instabank	Quant AB
Bluewater Holding	Jactel AS	Rødovre Port Holding A/S
Borealis Finance	Klaveness Ship Holding	Sakthi Global Auto Holdings
Borr Drilling Limited	Magseis	Sand Hill Petroleum
Brado AB	McDermott International	SAS
Camanchaca	Monobank ASA	Scatec Solar
DNO ASA	Nemaska Lithium	Scorpio Tankers
DOF ASA	Northern Drilling	Shamran
Dof Subsea AS	Northmill Group AB	Siccar Point Energy
Echo Energy	Norwegian Air Shuttle	SL Bidco
Eco Atlantic Oil and Gas	Ocean Yield	Sparebank 1 Østlandet
Eidesvik Offshore	Odfjell	SpareBank 1 Buskerud-Vestfold
Eland Oil & Gas	Odfjell Drilling	Sparebanken Vest
FFS Bidco	Okea AS	Union Maritime Limited
Filo Mining Corp	Okeanis Eco Tankers	Vantage Drilling
Flex LNG	Pandion Energy	

This overview is updated monthly (this overview is for the period 31.12.2017 – 31.12.2018).

Appendix C

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11(4)

Distribution of recommendations

Recommendation	% distribution
Buy	73%
Hold	23%
Sell	4%

Distribution of recommendations (transactions*)

Recommendation	% distribution
Buy	91%
Hold	9%
Sell	0%

* Companies under coverage with which Pareto Securities Group has on-going or completed public investment banking services in the previous 12 months

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Appendix D

This section applies to research reports prepared by Pareto Securities AB.

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Aspire	Green Landscaping Holding	Powercell	Sedana Medical
Azelio	Jetpak Top Holding AB	Magnolia Bostad	Shamara Petroleum
Cibus Nordic Real Estate	Lehto Group	Scibase	Vostok New Ventures

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Appendix E

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11, letter d, ref the Securities Trading Act Section 3-10

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Biotest *	Gigaset *	OVH Holding AG	Syzygy AG *
Brenntag	Heidelberg Pharma *	Procredit Holding *	TAKKT AG
CORESTATE Capital Holding S.A.	Hypoport AG	PSI SOFTWARE AG *	Vapiano
Daldrup & Soehne *	Intershop Communications AG	PWO *	va-Q-tec *
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Eyemaxx Real Estate	Merkur Bank	SCOUT24	

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Appendix F

Disclosure requirements pursuant to the Norwegian Securities Trading Regulation § 3-11, letter g, ref the Securities Trading Act Section 3-10

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Baywa	Intershop Communications AG	OVH Holding AG	
BB Biotech	Merkur Bank	Schaltbau Holding AG	
Eyemaxx Real Estate	MOBOTIX AG	Siegfried Holding AG	

This overview is updated monthly (last updated 17.01.2018).