Pareto Securities AS Equity Research

Restructuring process on track

Schaltbau Holding today released a few preliminary numbers for 2018. Like-for-like group sales came in slightly below (-2.4%) our estimate, while the achieved EBIT operating margin of c. 3.0% compares to our estimate of 3.6%. The first verbal outlook statement for 2019e confirms our expectations of a continuing margin improvement. Financial debt restructuring will be one of the challenges within 2019e. We interpret the company's statement as a confirmation of our current investment case. Buy. TP EUR 32.30 from EUR 32.80 per share.

Successful turnaround in 2018e

Group sales increased 11% on a like-for-like basis to EUR ~480m from EUR 432m (Pareto calculation). The EBIT operating margin reached c. 3% (2017: 0.5%) and is signalling the turnaround. We were slightly too optimistic and have cut our margin to 3.2% now.

First guidance for 2019e signals further margin improvement

In a first verbal outlook statement Schaltbau wants to achieve a further noticeable margin improvement on its way back to historic levels. We translate this into a mid-term range of 7.0%-9.0%.

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.

Valuation: DCF-model signals upside potential

Based on our updated TP of EUR 32.30 the shares currently offer a significant upside potential. Our current P/E 19e of 16.6 compares to the Industrial's sector P/E (GER) of 15.5. For FY 20e Schaltbau's P/E of 12.1 compares to the sector of 13.3. Based on our TP the implicit P/E 19e amounted to 26.7 and for 20e of 19.4.

EURm	2016	2017	2018e	2019e	2020e
Revenues	509	517	480	502	520
EBITDA	16	20	25	34	40
EBIT	(11)	(25)	(1)	25	31
EPS	(2.61)	(8.03)	(0.71)	1.21	1.66
EPS adj	(3.75)	(5.27)	0.67	1.21	1.66
DPS	-	-	-	-	0.30
EV/EBITDA	22.1	17.8	11.8	8.5	7.0
EV/EBIT	-	-	-	11.7	8.9
P/E adj	-	-	30.0	16.6	12.1
P/B	2.43	4.29	2.17	1.91	1.65
ROE (%)	-	-	-	12.2	14.6
Div yield (%)	-	-	-	-	1.5
Net debt	148	159	87	79	67

Source: Pareto

Schaltbau Holding AG

Sponsored Research Update 20 February 2019



Target price (EUR)	32
Share price (EUR)	20

Forecast changes

%	2018e	2019e	2020e
Revenues	(2)	-	-
EBITDA	(8)	-	-
EBIT adj	(12)	-	-
EPS reported	NM	-	-
EPS adj	(19)	-	-

Source: Pareto

Ticker	SLTG.DE, SLT GY
Sector	Industrials
Shares fully diluted (m)	6.6
Market cap (EURm)	133
Net debt (EURm)	87
Minority interests (EURm)	31
Enterprise value 18e (EURm)	297
Free float (%)	32



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 total sales. 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 currently assumes a growth rate of only 2% yoy to EUR 502m while the EBIT operating-margin is expected to rise to 4.9% from 3.2% 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 that 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 down to EUR 32.30 from EUR 32.80 per share
- Current upside potential ~61%

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

Based on the first preliminary figures for FY 2018 Schaltbau group reached their own targets. Moreover and looking forward the margin improvement should continue, that is in line with our expectations. 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 signals significant upside potential

			Phase I					Phase II			Phase III
EUR m	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	
Revenues	480.0	502.0	519.5	539.0	558.5	577.2	595.0	611.7	627.2	641.4	
growth rate	-7.1%	4.6%	3.5%	3.8%	3.6%	3.3%	3.1%	2.8%	2.5%	2.3%	
EBIT	15.2	24.4	30.6	34.7	37.4	39.0	40.6	42.1	43.5	44.9	
EBIT margin	3.2%	4.9%	5.9%	6.4%	6.7%	6.8%	6.8%	6.9%	6.9%	7.0%	
Tax	-4.6	-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.	26.8	9.5	9.0	9.0	9.0	10.1	10.9	11.4	11.8	12.2	
%of sales	5.6%	1.9%	1.7%	1.7%	1.6%	1.8%	1.8%	1.9%	1.9%	1.9%	
Сарех	-9.0	-9.0	-11.3	-11.6	-11.4	-11.7	-12.0	-12.3	-12.6	-12.8	
%of sales	1.9%	1.8%	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	-2.3	-2.7	-2.8	-2.9	-3.0	-3.1	-3.2	
% of sales	0.5%	0.4%	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
Free Cash Flow	26.1	15.7	16.9	19.4	21.0	22.9	24.4	25.6	26.7	27.7	533.
growth rate Present Value FCF	nm 26.1	-40.1% 14.7	7.9% 14.8	^{14.6%} 15.8	8.6% 16.0	9.1% 16.3	6.3% 16.2	4.9% 15.8	4.1% 15.3	3.8% 14.8	2.0% 285.
PV Phase I PV Phase II PV Phase III		87.5 78.4 285.5			Risk fre Premiur Premiur	n Equity	3.50% 5.00% 2.00%		Targ.eq Beta WACC	uity ratio	659 1. 7.39
		205.5			Fleiniui		2.00 /0		WACC		7.57
Enterprise value		451.4			Sensitiv	ity		Gro	wth in p	hase III	
- Net Debt (Cash)		96.5					1.0%	1.5%	2.0%	2.5%	3.0%
- Pension Provisions		37.5				6.57%	32.9	36.2	40.3	45.5	52.0
- Minorities & Peripherals	5	31.3				6.93%	29.7	32.6	36.0	40.3	45.6
+ MV of financial assets					WACC	7.30%	26.9	29.4	32.3	35.9	40.2
- Paid-out dividends for la	ast FY	0.0				7.66%	24.4	26.6	29.1	32.1	35.7
+/- Other EV items						8.02%	22.2	24.1	26.3	28.8	31.9
Equity value		286.1									
Number of shares		200. I 8.85									
		32.32									
Value per share (€)		20.10									
Current Price (€)		20.10 60.8%									

Source: FactSet (share price as of 19 Feb. 2019), Pareto Securities

In our DCF-model we use EBIT adjusted figures. Following the published preliminary numbers today, we have slightly reduced our EBIT operating margin for FY 2018e down to 3.2 % from 3.5%. The mentioned figure for group sales of EUR 480m is a like-for-like number. The final reported group sales number will be higher than EUR 480m.

Exhibit 2: 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.	17.0	14.0	9.4	8.3	0.8	0.7
Talgo SA	16.4	12.4	10.7	8.4	1.6	1.2
Westinghouse Air Brake Technologies Corporation	16.7	14.6	16.1	nm	2.3	nm
Greenbrier Companies, Inc.	10.1	9.6	4.4	3.7	0.4	0.3
Knorr-Bremse AG	20.5	19.3	12.7	11.7	2.0	1.9
Median	17.0	14.3	11.7	8.4	1.5	0.9
Schaltbau Holding AG	16.6	12.1	12.4	9.5	0.6	0.6

Source: FactSet (share price as of 19 Feb. 2019), Pareto

Outlook for FY 2019e

Margin improvement should continue

Schaltbau management stated that they want to achieve a further noticeable EBIT operating margin improvement in the current year. Mid-term they want to return to historic levels. We translate this into a range between 7.0%-9.0%. This will not be reached in the current year 2019e. Our own estimate for FY 2021e amounted to 6.4%.

Exhibit 3: Schaltbau Holding group reached financial guidance for FY 2018

Schaltbau Holding AG	FY '17	FY '18	FY '18e	FY '18	Deviat	tion	Pare	to estimates	i
EUR m	reported*	reported	Pareto	consens**	Pareto	consens**	2019e	2020e	2021e
Mobile Transportation Techn. (MTT)	333.4		285.0						
Stationary Transportation Techn. (STT)	114.3		73.0						
Components (COM)	146.3		150.0						
Consolidation/Other	0.0		0.0						
Group Incoming orders	594.0	n.a.	508.0	n.a.					
Mobile Transportation Techn. (MTT)	269.1		285.0						
Stationary Transportation Techn. (STT)	120.5		74.0						
Components (COM)	131.3		138.0						
Consolidation/Other	-4.4		-5.0						
Group sales	516.5	480.0	492.0	496.2	-2.4%	-3.3%	502.0	519.5	539.0
Mobile Transportation Techn. (MTT)	-26.4		-8.8						
Stationary Transportation Techn. (STT)	-5.5		0.5						
Components (COM)	21.4		24.1						
Consolidation/Other	-12.5		-12.3						
Group EBIT, reported	-23.0	n.a.	3.5				24.4	30.6	34.7
Group EBIT, operating	2.4	n.a.	17.3				24.4	30.6	34.7
EPS, EUR	-8.03	n.a.	-0.71				1.21	1.66	1.97
ANALYSIS GROUP									
Mobile Transportation Techn. (MTT)	n.m.		n.m.						
Stationary Transportation Techn. (STT)	n.m.		0.7%						
Components (COM)	16.3%		17.5%						
Consolidation/Other	n.m.		n.m.						
Group EBIT reported-margin, %	n.m.		0.7%				4.9%	5.9%	6.4%
Group EBIT operating-margin, %	0.5%	c. 3.0%	3.5%	n.a.			4.9%	5.9%	6.4%
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						

Source: Pareto Securities Research

Exhibit 4: Schaltbau Holding group: EBIT-bridge

EUR m	2015	2016	2017	2018e	2019e	2020e	2021e	202
EBIT reported	33.4	-14.5	-23.0	-1.6	24.4	30.6	34.7	3
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				
Further revaluation at Alte Technologies S.L.U.				3.0				
EBIT operating	28.0	-24.3	2.4	15.2	24.4	30.6	34.7	3
EBIT operating - margin, %	5.6%	n.m.	0.5%	3.2%	4.9%	5.9%	6.4%	6

Source: Company data, Pareto Securities Research

The EBIT operating margin 2018e of 3.2% is based on the like-for-like group sales figure of EUR 480m. As exhibit 4 shows, from today's point of view for the period of our estimates we expect no further restructuring costs or any other adjustments.

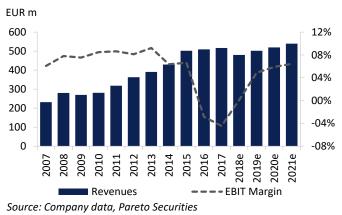


Exhibit 5: EBIT-margins by segment

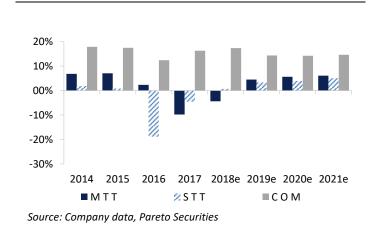


Exhibit 7: Schaltbau Holding group: Financial debt and maturities overview

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	
e: Company data, Pareto Securities Research		

Exhibit 4: Recovery of the EBIT-margin

Appendix

Exhibit 8: Schaltbau Holding group: 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	275.0	290.0	302.0	313.0	323.0
yoy %		21.2%	-1.2%	20.7%	2.2%	5.5%	4.1%	3.6%	3.2%
EBIT reported	12.7	16.0	5.2	-26.4	-13.5	13.0	17.0	19.0	20.5
Analysis									
Book-to-bill ratio (x)	1.05	1.00	1.18	1.24	1.04	1.02	1.02	1.02	1.02
EBIT reported - margin	6.8%	7.1%	2.3%	-9.8%	-4.9%	4.5%	5.6%	6.1%	6.3%

Source: Company data, Pareto Securities Research

Exhibit 9: Schaltbau Holding group: 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
уоу %		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 Securities Research

Exhibit 10: Schaltbau Holding group: 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	24.0	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%	17.4%	14.3%	14.2%	14.7%	14.6%

Source: Company data, Pareto Securities Research

PROFIT & LOSS (fiscal year) (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Revenues	391	430	502	509	517	480	502	520
EBITDA	45	38	46	16	20	25	34	40
Depreciation & amortisation	(9)	(11)	(13)	(31)	(43)	(27)	(10)	(9)
EBIT	36	40	35	(11)	(25)	(1)	25	31
Net interest	(5)	(4)	(5)	(5)	(11)	(7)	(6)	(6)
Other financial items	-	-	-	-	-	-	-	-
Profit before taxes	31	35	30	(16)	(36)	(8)	18	25
Taxes	(6)	(6)	(8)	4	(14)	2	(5)	(7)
Minority interest	(3)	(4)	(6)	(4)	(2)	(1)	(2)	(3)
Net profit	21	25	17	(16)	(52)	(6)	11	15
EPS reported	3.29	4.04	2.79	(2.61)	(8.03)	(0.71)	1.21	1.66
EPS adjusted	3.29	4.04	2.16	(3.75)	(5.27)	0.67	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	73	75	75
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	438	452	471
Total equity	89	113	125	107	71	114	125	139
Interest-bearing non-current debt	63	105	162	178	184	127	129	132
Interest-bearing current debt	-	-	-	-	-	-	-	101
Other Debt	82	104	122	134	160	161	162	163
Total liabilites & equity	267	361	446	459	452	438	452	471
CASH FLOW (EURm)	2013	2014	2015	2016	2017	2018e	2019e	2020e
Cash earnings	27	42	59	37	(24)	15	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	(15)	(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	20.1	20.1
Number of shares end period	6	6	6	6	7	9	9	g
Net interest bearing debt	49	80	130	148	159	87	79	67
Enterprise value	342	344	460	360	358	297	288	276
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	11.8	8.5	7.0
EV/EBIT	9.5	8.7	13.0	-	-	-	11.7	8.9
P/E reported	13.2	9.8	17.3	-	-	-	16.6	12.1
P/E adjusted	13.2	9.8	22.3	-	-	30.0	16.6	12.1
Р/В	3.6	2.6	3.2	2.4	4.3	2.2	1.9	1.6
FINANCIAL ANALYSIS & CREDIT METRICS	2013	2014	2015	2016	2017	2018e	2019e	2020e
ROE adjusted (%)	25.8	24.6	10.9	-	-	6.2	9.0	11.2
Dividend yield (%)	-	2.5	2.1	-	-	-	-	1.5
	11.4	8.9	9.3	3.2	3.9	5.3	6.8	7.6
EBITDA margin (%)								
EBITDA margin (%) EBIT margin (%)	9.2	9.2	7.1	-	-	-	4.9	5.9
EBITDA margin (%) EBIT margin (%) NIBD/EBITDA	9.2 1.09	9.2 2.08	7.1 2.79	- 9.08	- 7.89	- 3.45	4.9 2.33	5.9 1.69

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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

The below list shows companies where Pareto Securities AS - together with affiliated companies and/or persons – own a portion of the shares exceeding 5% of the total share capital in any company where a recommendation has been produced or distributed by Pareto Securities AS.

Companies	No. of shares Hol	dings in %	Companies	No. of shares Hol	dings in %
Helgeland Sparebank	2,008,203	9.62%	SpareBank 1Østfold Akersł	1,139,560	9.20%
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 moreof the equity securities of :

Companies	No. of shares Ho	ldings in %	Companies	No. of shares Ho	ldings in %
Helgeland Sparebank	2,008,203	9.62%	SpareBank 1SM N	1,879,292	1.45%
NHST Media Group AS	21,475	1.85%	SpareBank 1Østfold Akersl	1,139,560	9.20%
Pareto Bank ASA	10,842,964	18.50%	Sparebanken Møre	311,739	3.15%
Selvaag Bolig A SA	2,174,147	2.32%	Sparebanken Sør	460,589	2.94%
SpareBank 1BV	1,557,140	2.48%	Sparebanken Vest	4,506,060	7.63%
SpareBank 1Nord-Norge	1,045,659	1.04%			

Pareto Securities AS may hold financial instruments in companies where a recommendation has been produced or distributed by Pareto Securities AS in connection with rendering investment services, including Market Making.

Please find below an overview of material interests in shares held by employees in Pareto Securities AS, in companies where arecommendation 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	A nalyst holdings*	Total holdings	Company	A nalyst holdings*	Total holdings
AF Gruppen	0	1,675	Helgeland Sparebank	0	1,700	Protector Forsikring	0	14,685
Aker	0	682	Höegh LNG	0	7,203	REC Silicon	0	157,742
AkerBP	0	5,050	Jæren Sparebank	0	500	SalMar	0	130
Aker Solutions	0	1,825	Komplett Bank	0	99,934	Sandnes Sparebank	0	17,282
AKVA Group	0	1,500	Kongsberg Gruppen	0	5,901	Scatec Solar	0	35,635
Archer	0	72,770	KWS Saat	15	15	Seadrill	0	8,661
Atea	0	450	Lerøy Seafood	0	33,795	Selvaag Bolig	0	5,000
Austevoll Seafood	0	5,780	Magseis Fairfield	0	12,879	SpareBank 1BV	0	17,700
A vance Gas	0	4,595	Monobank	0	1,355,000	SpareBank 1Nord-Norge	0	30,000
Axactor	0	15,933	Mowi	0	1,864	SpareBank 1SM N	0	16,590
Bonheur	0	46,709	Nordic Semiconductor	0	6,000	SpareBank 1SR-Bank	0	34,187
Borr Drilling	0	4,415	Norsk Hydro	0	113,795	SpareBank 1Østlandet	0	4,041
BWLPG	0	5,569	Northern Drilling	0	6,060	Sparebanken M øre	0	6,550
DNB	0	35,072	Norwegian Air Shuttle	0	6,536	Sparebanken Sør	0	43,280
DNO	0	29,377	Norwegian Property	0	150,000	Sparebanken Øst	0	3,000
Entra	0	14,362	Ocean Yield	0	32,967	Storebrand	0	5,005
Equinor	0	10,101	Odfjell Drilling	0	8,649	Subsea 7	0	7,484
Europris	0	12,150	Orkla	0	24,026	Telenor	0	2,075
FlexLNG	0	11,825	Panoro Energy	0	5,670	TGS-NOPEC	0	2,050
Frontline	0	13,793	Pareto Bank	0	967,091	XXL	0	10,696
Gjensidige Forsikring	0	8,623	Petroleum Geo-Services	0	60,134	Yara International	0	19,786
Golden Ocean Group	0	1,824	Prosafe	0	5,984	Zenterio	0	78,865
Grieg Seafood	0	770						

This overview is updated monthly (last updated 19.02.2019).

 $^* Analyst \ holdings refers to \ positions \ held \ by \ the \ Pareto \ Securities \ AS \ analyst \ covering \ the \ company.$

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:

Africa Energy	Floatel	Okea AS
Akva Group	Fortum	OkeanisEco Tankers
APC Forsikringsmæglere A/S	GfinityPlc	Pandion Energy
Arnarlax	Gulf Keystone Petroleum	Panoro Energy
At lantic Sapphire AS	HerthaBSCGmbH	ParetoBank
Avida Holding AB	Hunter Group	PetroMatadLimited
Bank Norwegian	Ice Group	Petroleum Geo-Services
Bluewater Holding	Instabank	Pioneer Public Properties Finland Oy
BorealisFinance	Jactel AS	Point Resources AS
Borr Drilling Limited	Klaveness Ship Holding	Quant AB
BradoAB	Lundin Petroleum	Rødovre Port Holding A/S
Camanchaca	Magseis	Sand Hill Petroleum
DNOASA	McDermott International	SAS
DNOASA DOFASA	McDermott International Monobank ASA	SAS Scatec Solar
DOFASA	Monobank ASA	Scatec Solar
DOFASA Dof Subsea AS	Monobank ASA Nemaska Lithium	Scatec Solar Scorpio Tankers
DOFASA Dof Subsea AS Echo Energy	Monobank ASA Nemaska Lithium NGEx Resources	Scatec Solar Scorpio Tankers Shamaran
DOFASA Dof Subsea AS Echo Energy Eco Atlantic Oil and Gas	Monobank ASA Nemaska Lithium NGEx Resources Northern Drilling	Scatec Solar Scorpio Tankers Shamaran Sparebank 1 <i>0</i> stlandet
DOFASA Dof Subsea AS Echo Energy Eco Atlantic Oll and Gas Eidesvik Offshore	Monobank ASA Nemaska Lithium NGEx Resources Northern Drilling Northmill Group AB	Scatec Solar Scorpio Tankers Shamaran Sparebank 1Øst landet SpareBank 1Buskerud-Vest fold
DOFASA Dof Subsea AS Echo Energy Eco Atlantic Oll and Gas Eidesvik Offshore Eland Oll & Gas	Monobank ASA Nemaska Lithium NGEx Resources Northern Drilling Northmill Group AB Norwegian Air Shuttle	Scatec Solar Scorpio Tankers Shamaran Sparebank 1Øst landet SpareBank 1Buskerud-Vest fold Sparebanken Vest
DOFASA Dof Subsea AS Echo Energy Eco Atlantic Oil and Gas Eidesvik Offshore Eland Oil & Gas FFS Bidco	Monobank ASA Nemaska Lithium NGEx Resources Northern Drilling Northmill Group AB Norwegian Air Shuttle Ocean Yield	Scatec Solar Scorpio Tankers Shamaran Sparebank 1Østlandet SpareBank 1Buskerud-Vestfold Sparebanken Vest Union Martime Limited

This overview is updated monthly (this overview is for the period 31.01.2018 – 31.01.2019).

Appendix C

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

Distribution of recommendations Recommendation

Buy	68%
Hold	27%
Sell	4%

Recommendation	% distribution
Buy	86%
Hold	14 %
Sell	0%

* Companies under coverage with which Pareto Securities Group has on-going or completed public investment banking services in the previous 12 months This overview is updated monthly (last updated 19.02.2019).

% distribution

Appendix D

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

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The Pareto Group has material holdings of other financial instruments than shares issued by the following companies induded in Pareto Securities AB's research coverage universe: None

Disclosure of assignments and mandates

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Azelio	Jetpak Top Holding AB	Sedana M edical	Vostok New Ventures
Green Landscaping Holding	Magnolia Bostad	ShaM aran Petroleum	
Members of the Pareto Group provide market making or c	ther liquidity providing services to the following companies in	duded in Pareto Securities AB's resear	ch coverage universe:

Cavotec	Saltängen Property Invest	Sed ana M edical	Tethys Oil
Cibus Nordic Real Estate	SciBase Holding	ShaM aran Petroleum	Vostok Emerging Finance
Isofol Medical			

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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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Brenntag	Heidelberg Pharma *	Procredit Holding *	Syzygy AG *
CORESTATE Capital Holding S.A.	Hypoport AG	PSI SOFTWARE AG *	TAKKT AG
Demire	Intershop Communications AG	PWO*	Vapiano
Epigenomics AG*	Logwin *	RIB Software *	va-Q-tec *
Euromicron AG *	Manz AG *	S&T AG *	Viscom*
Eyemaxx Real Estate	MAX Automation SE *	Schaltbau Holding AG	windeln.de

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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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BB Biotech	First Sensor	MOBOTIX AG	Siegfried Holding AG
comdirect	Hypoport AG	OHB SE	Vapiano

This overview is updated monthly (last updated 19.02.2019).