

Buy EUR 116.00 (EUR 97.50) Price EUR 107.00 Upside 8.4 %	Value Indicators: EUR DCF: 116.42	Share data: Bloomberg: AOF GR Reuters: AOFG ISIN: DE0005104400	Description: ATOSS supplies software and services for the optimisation of workforce management.
	Market Snapshot: EUR m Market cap: 425.5 No. of shares (m): 4.0 EV: 402.5 Freefloat MC: 139.1 Ø Trad. Vol. (30d): 76.16 th	Shareholders: Freefloat 32.7 % Founding Family 56.4 % Mainfirst 5.1 % Investment TGV Bonn 5.8 %	Risk Profile (WRe): 2019e Beta: 1.1 Price / Book: 16.6 x Equity Ratio: 58 %

Strong start to the year

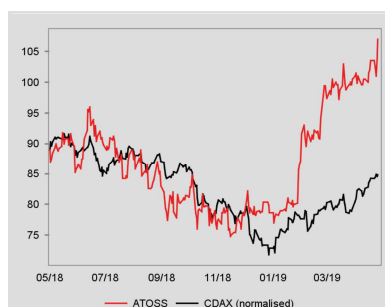
Stated Figures Q1/2019:								Comment on Figures:							
Angaben in Mio. EUR	Q 1/19	Q 1/19e	Q 1/18	yoy	2019e	2018	yoy	<ul style="list-style-type: none"> Strong Q1 seamlessly fits into a 14-year growth history Cloud sales in particular have developed very well recently (see below) and mark the beginning of a transformation of the business 							
Umsatz	16,9	16,3	14,5	16,6%	70,8	62,6	13,0%								
EBIT	4,6	4,4	3,8	19,6%	19,7	16,9	16,3%								
Margin	27,2%	27,0%	26,5%		27,8%	27,0%									

On April 25, ATOSS Software AG presented its figures for Q1 2019. Sales increased significantly by 17%, thus exceeding expectations. Earnings also increased considerably. The share of recurring software sales as a percentage of total software revenue rose from 67% to 69% (including maintenance).

The presented figures provide the basis for a slight increase in forecasts for the current year (see table below). In the context of the revision of our model, a detailed planning for 2021 is now also taken into account for the first time. In addition, the assumed long-term margin is slightly increased (in particular the terminal value from 35% to 36%). This is attributable to the continuing good development in the Cloud segment. The annual recurring revenue (ARR = revenues generated within the next 12 months on the basis of the current monthly cloud usage fees on the reporting date) amounted to EUR 5.1m as of March 31, 2019 and increased by 70% yoy (previous year EUR 3.0m).

Together with the roll-over of our model, this results in an **increased PT of EUR 116 (97.50). The share continues to be rated as Buy.**

Changes in Estimates:							Comment on Changes:						
FY End: 31.12. in EUR m	2019e (old)	+ / -	2020e (old)	+ / -	2021e (old)	+ / -	<ul style="list-style-type: none"> Q1 figures lead to a slight increase in forecasts. The terminal value for the assumed margin is increased from 35% to 36%. This is attributable to the continuing positive development in the Cloud segment. 						
Sales	68.2	3.8 %	76.3	3.8 %	n.a.	n.m.							
EBIT	18.4	6.8 %	21.0	4.9 %	n.a.	n.m.							
EPS	3.09	7.4 %	3.53	5.4 %	n.a.	n.m.							
DPS	1.55	7.1 %	1.77	5.1 %	n.a.	n.m.							

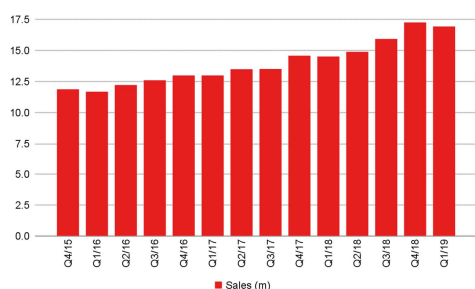


Rel. Performance vs CDAX:	
1 month:	-0.4 %
6 months:	27.8 %
Year to date:	19.8 %
Trailing 12 months:	23.9 %

Company events:	
30.04.19	AGM
24.07.19	Prel. Q2
09.08.19	Q2
24.10.19	Q3

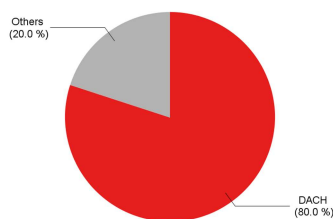
FY End: 31.12. in EUR m	CAGR (18-21e)	2015	2016	2017	2018	2019e	2020e	2021e
Sales	12.3 %	44.9	49.5	54.6	62.6	70.8	79.2	88.7
Change Sales yoy		13.2 %	10.2 %	10.2 %	14.7 %	13.0 %	12.0 %	12.0 %
Gross profit margin		68.5 %	69.9 %	70.3 %	70.5 %	71.0 %	71.0 %	71.0 %
EBITDA	13.2 %	12.0	14.3	14.9	18.0	20.8	23.3	26.1
Margin		26.8 %	28.8 %	27.2 %	28.7 %	29.4 %	29.4 %	29.4 %
EBIT	13.4 %	11.3	13.6	14.1	16.9	19.7	22.0	24.7
Margin		25.2 %	27.4 %	25.9 %	27.0 %	27.8 %	27.8 %	27.8 %
Net income	14.0 %	7.6	9.3	9.3	11.2	13.2	14.8	16.5
EPS	14.0 %	1.91	2.33	2.34	2.81	3.32	3.72	4.16
EPS adj.	14.0 %	1.91	2.33	2.34	2.81	3.32	3.72	4.16
DPS	-19.6 %	2.80	1.16	1.16	4.00	1.66	1.86	2.08
Dividend Yield		6.0 %	1.9 %	1.6 %	4.8 %	1.6 %	1.7 %	1.9 %
FCF / Market cap		1.81	2.80	1.95	2.74	2.61	3.33	3.84
		3.9 %	4.7 %	2.8 %	3.3 %	2.4 %	3.1 %	3.6 %
EV / Sales		3.7 x	4.4 x	4.7 x	4.9 x	5.7 x	5.0 x	4.4 x
EV / EBITDA		13.7 x	15.3 x	17.4 x	17.0 x	19.3 x	17.0 x	14.9 x
EV / EBIT		14.5 x	16.0 x	18.3 x	18.1 x	20.5 x	18.0 x	15.7 x
P / E		24.3 x	25.6 x	30.2 x	29.9 x	32.2 x	28.8 x	25.7 x
P / E adj.		24.3 x	25.6 x	30.2 x	29.9 x	32.2 x	28.8 x	25.7 x
FCF Potential Yield		4.8 %	4.3 %	3.8 %	3.9 %	3.4 %	3.9 %	4.5 %
Net Debt		-19.6	-19.4	-22.3	-28.5	-23.0	-29.6	-37.5
ROCE (NOPAT)		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Guidance:	Revenue growth 11-13 %, EBIT margin 25-28 %							

Sales development
in EUR m



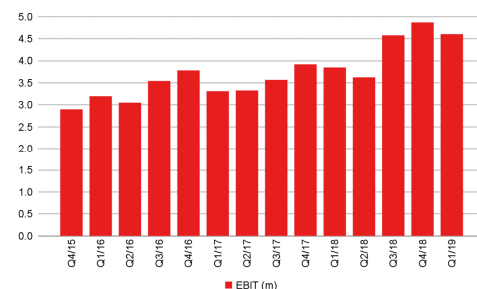
Source: Warburg Research

Sales by regions
2019e; in %



Source: Warburg Research

EBIT development
in EUR m



Source: Warburg Research

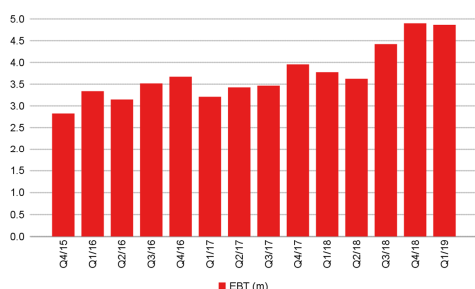
Company Background

- ATOSS Software AG is a supplier of software and services for the optimisation of workforce management.
- ATOSS solutions optimises companies' personnel procedures, improving the level of service and efficiency of the employees and improving customer satisfaction
- The company has achieved a leading market position, particularly in the German speaking countries.
- From medium-sized companies (Mittelstand) to blue-chip firms, several million employees use ATOSS solutions.

Competitive Quality

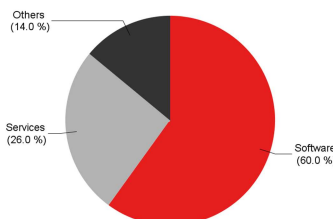
- ATOSS has a leading software product (the most modern Java technology)
- ATOSS specialises in regions and industry sectors (country-specific work conditions in the Germany, Austria, Swiss region and mapping out work processes in core industries)
- ATOSS works independently of producers (no ties to hardware or large software producers) and the ATOSS solutions have a high level of compatibility (e.g. seamless integration in the ERP systems possible)
- Financial stability and balance sheet quality is excellent, which can be regarded as a competitive advantage in the software industry.
- ATOSS is a relatively large supplier (in comparison to the competition) among many much smaller suppliers, which still pose stiff competition for ATOSS.

EBT development
in EUR m



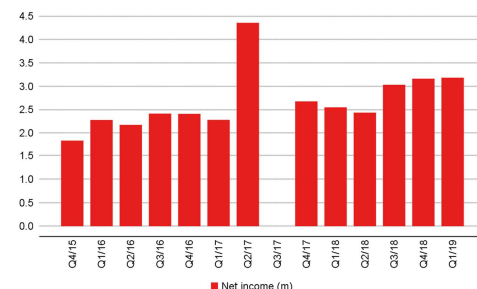
Source: Warburg Research

Sales by segments
2019e; in %



Source: Warburg Research

Net income development
in EUR m



Source: Warburg Research

DCF model

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	
Sales	70.8	79.2	88.7	97.6	107.4	118.1	127.6	137.8	148.8	157.7	164.0	170.6	177.4	2.5 %
Sales change	13.0 %	12.0 %	12.0 %	10.0 %	10.0 %	10.0 %	8.0 %	8.0 %	8.0 %	6.0 %	4.0 %	4.0 %	4.0 %	
EBIT	19.7	22.0	24.7	28.3	32.2	36.6	40.8	45.5	50.6	55.2	59.1	61.4	63.9	2.5 %
EBIT-margin	27.8 %	27.8 %	27.8 %	29.0 %	30.0 %	31.0 %	32.0 %	33.0 %	34.0 %	35.0 %	36.0 %	36.0 %	36.0 %	
Tax rate (EBT)	33.0 %	33.0 %	33.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	2.5 %
NOPAT	13.2	14.8	16.5	18.7	21.3	24.2	26.9	30.0	33.4	36.4	39.0	40.5	42.2	
Depreciation	1.1	1.3	1.4	2.0	1.8	1.8	1.9	2.1	2.2	2.4	2.5	2.6	2.7	2.5 %
in % of Sales	1.6 %	1.6 %	1.6 %	2.0 %	1.7 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	
Changes in provisions	0.0	0.0	0.0	0.2	0.2	0.3	0.2	0.2	0.2	0.0	0.1	0.1	0.1	2.5 %
Change in Liquidity from														
- Working Capital	2.2	1.1	1.0	0.6	0.0	1.1	0.9	1.0	1.1	0.9	0.6	0.7	0.7	2.5 %
- Capex	1.7	1.7	1.7	1.5	1.6	1.8	1.9	2.1	2.2	2.4	2.5	2.6	2.7	
Capex in % of Sales	2.4 %	2.2 %	1.9 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	1.5 %	2.5 %
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	10.4	13.2	15.2	18.7	21.7	23.4	26.2	29.2	32.5	35.6	38.4	40.0	41.5	2.5 %
PV of FCF	9.9	11.6	12.3	14.0	14.9	14.8	15.3	15.7	16.0	16.2	16.1	15.4	14.8	
share of PVs	7.78 %			35.25 %										56.96 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	0.00 %	Financial Strength	1.10
Cost of debt (after tax)	3.9 %	Liquidity (share)	1.10
Market return	8.00 %	Cyclicality	1.10
Risk free rate	2.50 %	Transparency	1.10
		Others	1.10
WACC	8.55 %	Beta	1.10

Valuation (m)

Present values 2031e	187		
Terminal Value	247		
Financial liabilities	0		
Pension liabilities	5		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	33	No. of shares (m)	4.0
Equity Value	463	Value per share (EUR)	116.42

Sensitivity Value per Share (EUR)

		Terminal Growth									Delta EBIT-margin						
Beta	WACC	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %	Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.28	9.6 %	94.31	95.73	97.26	98.89	100.63	102.52	104.55	1.28	9.6 %	94.68	96.08	97.48	98.89	100.29	101.69	103.09
1.19	9.1 %	101.39	103.12	104.97	106.96	109.12	111.45	113.98	1.19	9.1 %	102.41	103.93	105.45	106.96	108.48	110.00	111.52
1.15	8.8 %	105.32	107.23	109.28	111.50	113.90	116.51	119.35	1.15	8.8 %	106.75	108.33	109.92	111.50	113.09	114.67	116.26
1.10	8.6 %	109.56	111.67	113.95	116.42	119.10	122.03	125.23	1.10	8.6 %	111.45	113.11	114.77	116.42	118.08	119.73	121.39
1.05	8.3 %	114.13	116.48	119.02	121.78	124.79	128.08	131.70	1.05	8.3 %	116.58	118.31	120.05	121.78	123.51	125.25	126.98
1.01	8.1 %	119.07	121.69	124.53	127.63	131.02	134.75	138.87	1.01	8.1 %	122.18	124.00	125.81	127.63	129.45	131.27	133.08
0.92	7.6 %	130.29	133.57	137.17	141.12	145.48	150.32	155.73	0.92	7.6 %	135.08	137.09	139.11	141.12	143.13	145.14	147.15

■ In the DCF model, a moderate continuation of the constant growth of the past years is anticipated.

■ A margin improvement due to economies of scale is not assumed.

■ The long-term margin remains at a high level

■

Valuation	2015	2016	2017	2018	2019e	2020e	2021e
Price / Book	9.7 x	14.0 x	12.9 x	11.7 x	16.6 x	12.5 x	9.8 x
Book value per share ex intangibles	4.71	4.19	5.40	7.07	6.36	8.43	10.76
EV / Sales	3.7 x	4.4 x	4.7 x	4.9 x	5.7 x	5.0 x	4.4 x
EV / EBITDA	13.7 x	15.3 x	17.4 x	17.0 x	19.3 x	17.0 x	14.9 x
EV / EBIT	14.5 x	16.0 x	18.3 x	18.1 x	20.5 x	18.0 x	15.7 x
EV / EBIT adj.*	14.5 x	16.0 x	18.3 x	18.1 x	20.5 x	18.0 x	15.7 x
P / FCF	25.6 x	21.3 x	36.3 x	30.7 x	41.0 x	32.1 x	27.9 x
P / E	24.3 x	25.6 x	30.2 x	29.9 x	32.2 x	28.8 x	25.7 x
P / E adj.*	24.3 x	25.6 x	30.2 x	29.9 x	32.2 x	28.8 x	25.7 x
Dividend Yield	6.0 %	1.9 %	1.6 %	4.8 %	1.6 %	1.7 %	1.9 %
FCF Potential Yield (on market EV)	4.8 %	4.3 %	3.8 %	3.9 %	3.4 %	3.9 %	4.5 %
*Adjustments made for: -							

Consolidated profit and loss

In EUR m	2015	2016	2017	2018	2019e	2020e	2021e
Sales	44.9	49.5	54.6	62.6	70.8	79.2	88.7
Change Sales yoy	13.2 %	10.2 %	10.2 %	14.7 %	13.0 %	12.0 %	12.0 %
COGS	14.1	14.9	16.2	18.4	20.5	23.0	25.7
Gross profit	30.8	34.6	38.4	44.2	50.2	56.3	63.0
<i>Gross margin</i>	<i>68.5 %</i>	<i>69.9 %</i>	<i>70.3 %</i>	<i>70.5 %</i>	<i>71.0 %</i>	<i>71.0 %</i>	<i>71.0 %</i>
Research and development	8.7	9.5	10.3	11.2	12.7	14.3	16.0
Sales and marketing	7.4	8.0	9.7	10.9	12.4	13.9	15.5
Administration expenses	3.5	3.8	4.3	5.2	5.7	6.3	7.1
Other operating expenses	0.2	0.1	0.2	0.2	0.0	0.0	0.0
Other operating income	0.3	0.4	0.2	0.3	0.2	0.2	0.3
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	12.0	14.3	14.9	18.0	20.8	23.3	26.1
<i>Margin</i>	<i>26.8 %</i>	<i>28.8 %</i>	<i>27.2 %</i>	<i>28.7 %</i>	<i>29.4 %</i>	<i>29.4 %</i>	<i>29.4 %</i>
Depreciation of fixed assets	0.6	0.6	0.6	0.9	1.0	1.1	1.2
EBITA	11.5	13.7	14.2	17.1	19.8	22.2	24.8
Amortisation of intangible assets	0.1	0.1	0.1	0.2	0.1	0.2	0.2
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	11.3	13.6	14.1	16.9	19.7	22.0	24.7
<i>Margin</i>	<i>25.2 %</i>	<i>27.4 %</i>	<i>25.9 %</i>	<i>27.0 %</i>	<i>27.8 %</i>	<i>27.8 %</i>	<i>27.8 %</i>
EBIT adj.	11.3	13.6	14.1	16.9	19.7	22.0	24.7
Interest income	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Interest expenses	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	11.3	13.7	14.1	16.8	19.7	22.1	24.7
<i>Margin</i>	<i>25.2 %</i>	<i>27.6 %</i>	<i>25.7 %</i>	<i>26.8 %</i>	<i>27.8 %</i>	<i>27.8 %</i>	<i>27.8 %</i>
Total taxes	3.7	4.4	4.7	5.6	6.5	7.3	8.1
Net income from continuing operations	7.6	9.3	9.3	11.2	13.2	14.8	16.5
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	7.6	9.3	9.3	11.2	13.2	14.8	16.5
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	7.6	9.3	9.3	11.2	13.2	14.8	16.5
<i>Margin</i>	<i>16.9 %</i>	<i>18.7 %</i>	<i>17.1 %</i>	<i>17.9 %</i>	<i>18.6 %</i>	<i>18.6 %</i>	<i>18.6 %</i>
Number of shares, average	4.0	4.0	4.0	4.0	4.0	4.0	4.0
EPS	1.91	2.33	2.34	2.81	3.32	3.72	4.16
EPS adj.	1.91	2.33	2.34	2.81	3.32	3.72	4.16

*Adjustments made for:

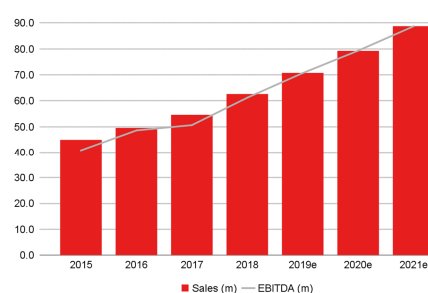
Guidance: Revenue growth 11-13 %, EBIT margin 25-28 %

Financial Ratios

	2015	2016	2017	2018	2019e	2020e	2021e
Total Operating Costs / Sales	43.3 %	42.5 %	44.4 %	43.5 %	43.2 %	43.2 %	43.2 %
Operating Leverage	1.2 x	1.9 x	0.4 x	1.3 x	1.3 x	1.0 x	1.0 x
EBITDA / Interest expenses	100.6 x	122.0 x	122.0 x	72.1 x	208.0 x	233.0 x	261.0 x
Tax rate (EBT)	33.0 %	32.2 %	33.6 %	33.3 %	33.0 %	33.0 %	33.0 %
Dividend Payout Ratio	146.7 %	49.7 %	49.4 %	142.1 %	50.0 %	50.1 %	50.0 %
Sales per Employee	146,103	153,395	161,023	175,832	189,229	201,844	215,301

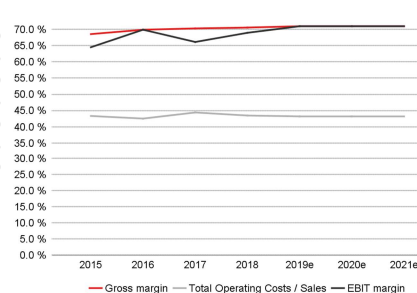
Sales, EBITDA

in EUR m

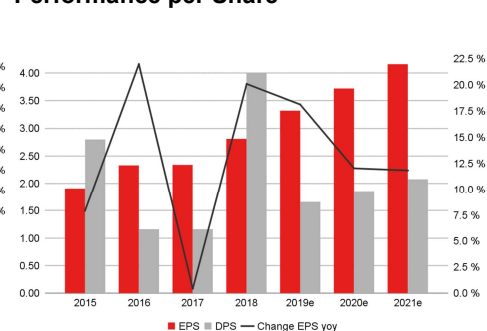


Operating Performance

in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

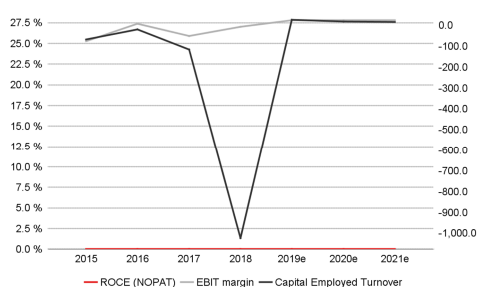
Consolidated balance sheet

In EUR m	2015	2016	2017	2018	2019e	2020e	2021e
Assets							
Goodwill and other intangible assets	0.2	0.2	0.4	0.4	0.4	0.4	0.4
thereof other intangible assets	0.2	0.2	0.4	0.4	0.4	0.4	0.4
thereof Goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property, plant and equipment	2.7	3.0	3.7	4.3	4.8	5.2	5.5
Financial assets	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	3.3	3.8	4.6	5.2	5.7	6.2	6.5
Inventories	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Accounts receivable	4.5	4.5	5.1	6.3	8.5	9.6	10.7
Liquid assets	23.9	24.3	27.1	33.3	27.8	34.4	42.3
Other short-term assets	1.6	1.5	1.8	2.4	2.4	2.6	2.8
Current assets	30.0	30.3	34.0	42.0	38.8	46.7	55.9
Total Assets	33.4	34.0	38.5	47.2	44.5	52.9	62.3
Liabilities and shareholders' equity							
Subscribed capital	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Capital reserve	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
Retained earnings	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other equity components	15.6	13.6	18.5	25.2	22.4	30.6	39.9
Shareholders' equity	18.9	16.9	21.8	28.5	25.7	34.0	43.2
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	18.9	16.9	21.8	28.5	25.6	33.9	43.2
Provisions	5.1	4.9	5.0	4.9	5.0	5.1	5.2
thereof provisions for pensions and similar obligations	4.3	4.9	4.8	4.8	4.8	4.8	4.8
Financial liabilities (total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
thereof short-term financial liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts payable	0.3	0.6	0.4	0.5	0.6	0.6	0.7
Other liabilities	9.0	11.5	11.3	13.3	13.3	13.3	13.3
Liabilities	14.4	17.1	16.7	18.7	18.9	19.0	19.2
Total liabilities and shareholders' equity	33.4	34.0	38.5	47.2	44.5	52.9	62.3

Financial Ratios

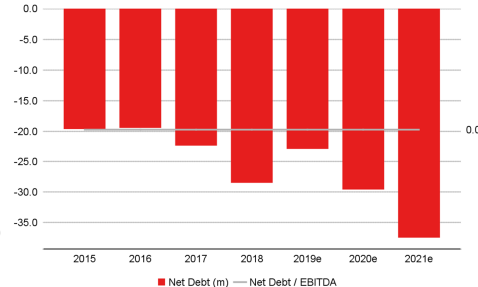
	2015	2016	2017	2018	2019e	2020e	2021e
Efficiency of Capital Employment							
Operating Assets Turnover	6.6 x	7.2 x	6.6 x	6.2 x	5.5 x	5.5 x	5.7 x
Capital Employed Turnover	-69.1 x	-20.1 x	-115.7 x	-1024.3 x	26.6 x	18.4 x	15.6 x
ROA	226.4 %	247.0 %	204.6 %	216.2 %	229.6 %	238.9 %	255.7 %
Return on Capital							
ROCE (NOPAT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ROE	44.8 %	51.8 %	48.1 %	44.4 %	48.7 %	49.5 %	42.9 %
Adj. ROE	44.8 %	51.8 %	48.1 %	44.4 %	48.7 %	49.5 %	42.9 %
Balance sheet quality							
Net Debt	-19.6	-19.4	-22.3	-28.5	-23.0	-29.6	-37.5
Net Financial Debt	-23.9	-24.3	-27.1	-33.3	-27.8	-34.4	-42.3
Net Gearing	-103.4 %	-114.6 %	-102.2 %	-100.2 %	-89.6 %	-87.3 %	-86.8 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Book Value / Share	4.8	4.2	5.5	7.2	6.5	8.5	10.9
Book value per share ex intangibles	4.7	4.2	5.4	7.1	6.4	8.4	10.8

ROCE Development



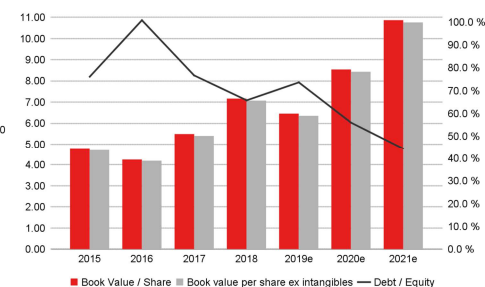
Source: Warburg Research

Net debt in EUR m



Source: Warburg Research

Book Value per Share in EUR



Source: Warburg Research

Consolidated cash flow statement

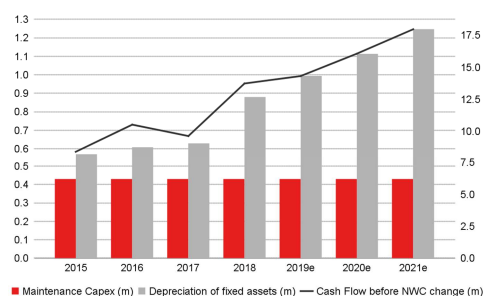
In EUR m	2015	2016	2017	2018	2019e	2020e	2021e
Net income	7.6	9.3	9.3	11.2	13.2	14.8	16.5
Depreciation of fixed assets	0.6	0.6	0.6	0.9	1.0	1.1	1.2
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.1	0.1	0.1	0.2	0.1	0.2	0.2
Increase/decrease in long-term provisions	0.1	0.5	-0.1	0.0	0.0	0.0	0.0
Other non-cash income and expenses	0.0	0.0	-0.4	1.5	0.0	0.0	0.0
Cash Flow before NWC change	8.4	10.5	9.6	13.7	14.3	16.0	18.0
Increase / decrease in inventory	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
Increase / decrease in accounts receivable	-0.6	0.0	-0.6	-1.2	-2.2	-1.1	-1.1
Increase / decrease in accounts payable	0.0	0.3	-0.2	0.1	0.1	0.0	0.1
Increase / decrease in other working capital positions	0.2	1.4	0.0	0.0	0.0	0.0	0.0
Increase / decrease in working capital (total)	-0.4	1.7	-0.8	-1.1	-2.2	-1.1	-1.0
Net cash provided by operating activities [1]	8.0	12.2	8.9	12.6	12.1	14.9	17.0
Investments in intangible assets	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
Investments in property, plant and equipment	-0.7	-1.0	-1.0	-1.5	-1.5	-1.5	-1.5
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	-1.1	-3.0	-2.5	0.0	0.0	0.0	0.0
Net cash provided by investing activities [2]	-1.9	-4.1	-3.6	-1.7	-1.7	-1.7	-1.7
Change in financial liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividends paid	-3.5	-11.1	-4.6	-4.7	-15.9	-6.6	-7.4
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net cash provided by financing activities [3]	-3.5	-11.1	-4.6	-4.7	-15.9	-6.6	-7.4
Change in liquid funds [1]+[2]+[3]	2.6	-3.0	0.7	6.2	-5.5	6.6	7.9
Effects of exchange-rate changes on cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalent at end of period	22.7	20.9	24.9	33.4	27.8	34.4	42.3

Financial Ratios

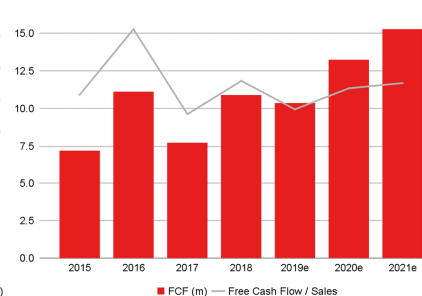
	2015	2016	2017	2018	2019e	2020e	2021e
Cash Flow							
FCF	7.2	11.1	7.7	10.9	10.4	13.2	15.3
Free Cash Flow / Sales	16.1 %	22.4 %	14.2 %	17.4 %	14.7 %	16.7 %	17.2 %
Free Cash Flow Potential	7.9	9.4	9.7	12.0	13.9	15.6	17.5
Free Cash Flow / Net Profit	95.1 %	119.8 %	83.1 %	97.5 %	78.6 %	89.6 %	92.2 %
Interest Received / Avg. Cash	0.4 %	0.9 %	0.2 %	0.4 %	0.4 %	0.4 %	0.3 %
Interest Paid / Avg. Debt	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Management of Funds							
Investment ratio	1.7 %	2.3 %	2.0 %	2.7 %	2.4 %	2.2 %	1.9 %
Maint. Capex / Sales	1.0 %	0.9 %	0.8 %	0.7 %	0.6 %	0.5 %	0.5 %
Capex / Dep	113.3 %	157.8 %	148.3 %	158.8 %	150.6 %	134.5 %	120.1 %
Avg. Working Capital / Sales	8.6 %	8.1 %	7.8 %	8.3 %	9.7 %	10.8 %	10.8 %
Trade Debtors / Trade Creditors	1487.0 %	720.6 %	1138.3 %	1226.3 %	1416.7 %	1600.0 %	1528.6 %
Inventory Turnover	1707.9 x	1803.3 x	4056.0 x	4131.1 x	205.2 x	229.8 x	257.4 x
Receivables collection period (days)	36	33	34	36	44	44	44
Payables payment period (days)	8	15	10	10	11	10	10
Cash conversion cycle (Days)	29	18	24	26	35	36	35

CAPEX and Cash Flow

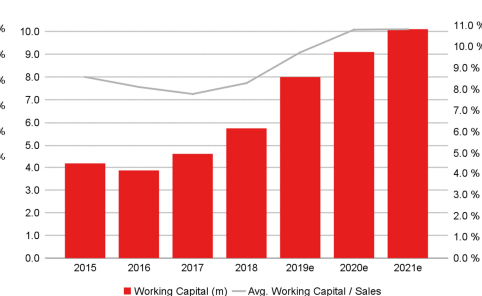
in EUR m



Free Cash Flow Generation



Working Capital



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
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Investment recommendation: expected direction of the share price development of the financial instrument up to the given price target in the opinion of the analyst who covers this financial instrument.

-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
“-“	Rating suspended:	The available information currently does not permit an evaluation of the company.

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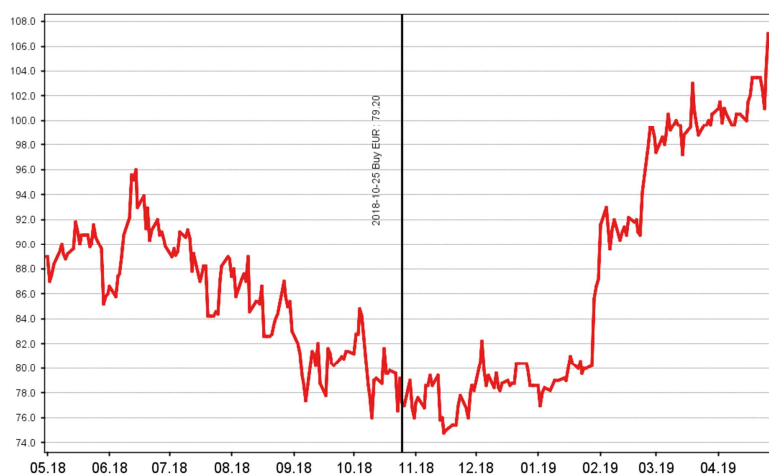
Rating	Number of stocks	% of Universe
Buy	128	65
Hold	59	30
Sell	4	2
Rating suspended	7	4
Total	198	100

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	31	82
Hold	5	13
Sell	0	0
Rating suspended	2	5
Total	38	100

PRICE AND RATING HISTORY ATOSS AS OF 29.04.2019



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

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