

<b>Buy</b> (Hold) <b>EUR 52.00</b> (EUR 50.50) Price <b>EUR 33.30</b> <b>Upside 56.2 %</b>	<b>Value Indicators:</b> EUR DCF: 52.15	<b>Share data:</b> Bloomberg: WSO1 GR Reuters: WSO1k.DE ISIN: DE000A2GS609	<b>Description:</b> Operator of financial portals, including the largest German financial user forum
	<b>Market Snapshot:</b> EUR m Market cap: 55.38 No. of shares (m): 1.66 EV: 41.39 Freefloat MC: 14.95 Ø Trad. Vol. (30d): 32.71 th	<b>Shareholders:</b> Freefloat 27.0 % AKD (André Kolbinger) 39.0 % André Kolbinger 34.0 %	<b>Risk Profile (WRe):</b> 2018e Beta: 1.4 Price / Book: 1.6 x Equity Ratio: 92 %

## Revaluation after acquisition and increased confidence in IR business; Buy

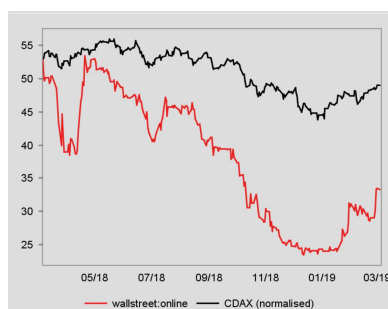
Wallstreet:online AG (ws:o) announced last Wednesday (27.02.2019) the acquisition of ABC New Media AG, which operates the financial information platform finanznachrichten.de, for a purchase price of EUR 2.8m in cash. Finanznachrichten.de is a well-known platform that provides users with share price information with a focus on potentially market-moving news. We welcome the acquisition for the following reasons:

- As it appears that finanznachrichten.de was less focused on selling advertising space on its website, ws:o should be able to use this space to enhance its existing marketing strategy.
- There is synergy potential in the purchase of financial market and share price information.
- Similar unique user profiles of the two platforms should contribute to the consolidation and expansion of ws:o's market position as the second-largest German financial information platform.
- The purchase price of EUR 2.8m represents a current sales multiple of 3.1x, which is much cheaper than ws:o's current valuation of 5.8x 18e sales.

The acquisition is reflected in our new estimates with a sales contribution of EUR 1m in 2019e and, taking the operating leverage of the platform into consideration, EUR 1.5m in 2020e. Furthermore, a comparable margin to the core business of ws:o is assumed. Besides including the impact of the acquisition, the model was also reworked. The tax rate was increased substantially for the near term, reflecting higher than assumed taxes as early as in H1 2018.

Furthermore, we are now more confident that the investor relations business (the main driver of strong development in the past) will remain stable or even increase, even in market downturns. While the financial markets suffered heavily in the last quarter of 2018, ws:o stated that IR business was still on track and generated favourable returns. Considering this together with the favourable acquisition, we **increase our rating to Buy** and slightly increase our **PT to EUR 52**.

Changes in Estimates:						Comment on Changes:	
FY End: 31.12. in EUR m	2018e (old)	+ / -	2019e (old)	+ / -	2020e (old)	+ / -	
Sales	9.42	0.0 %	10.60	9.4 %	11.67	12.9 %	<ul style="list-style-type: none"> <li>EPS decline due to higher tax rate assumptions</li> <li>Integration of finanznachrichten.de should come with high synergies as ws:o should be able to leverage the platform at low cost</li> </ul>
EBIT	4.34	0.0 %	4.87	12.1 %	5.52	15.2 %	
EPS	2.43	-8.6 %	2.63	0.0 %	2.96	-3.0 %	

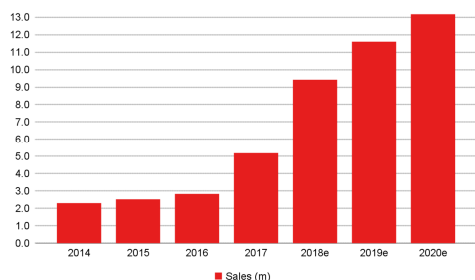


Rel. Performance vs CDAX:	
1 month:	8.9 %
6 months:	-10.4 %
Year to date:	26.9 %
Trailing 12 months:	-24.4 %

Company events:	

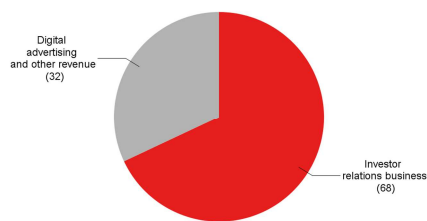
FY End: 31.12. in EUR m	CAGR (17-20e)	2014	2015	2016	2017	2018e	2019e	2020e
Sales	36.4 %	2.30	2.52	2.83	5.19	9.42	11.60	13.17
Change Sales yoy		2.2 %	9.5 %	12.3 %	83.2 %	81.7 %	23.1 %	13.5 %
Gross profit margin		78.3 %	84.3 %	81.3 %	86.5 %	82.5 %	82.6 %	82.3 %
EBITDA	49.5 %	0.20	0.40	0.38	2.03	4.64	5.82	6.78
Margin		8.7 %	15.9 %	13.3 %	39.1 %	49.2 %	50.2 %	51.5 %
EBIT	49.9 %	-0.07	0.08	0.14	1.89	4.34	5.46	6.36
Margin		-2.9 %	3.0 %	5.1 %	36.4 %	46.1 %	47.1 %	48.3 %
Net income	39.0 %	-0.07	0.08	0.14	1.78	3.69	4.37	4.77
EPS	18.2 %	-0.06	0.08	0.14	1.74	2.22	2.63	2.87
EPS adj.	18.2 %	-0.06	0.08	0.14	1.74	2.22	2.63	2.87
DPS	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCFPS		0.20	0.34	0.31	0.99	2.25	2.30	2.69
EV / Sales		1.0 x	1.2 x	1.0 x	2.5 x	4.5 x	3.6 x	2.8 x
EV / EBITDA		12.0 x	7.8 x	7.4 x	6.5 x	9.1 x	7.1 x	5.4 x
EV / EBIT		n.a.	40.7 x	19.4 x	7.0 x	9.8 x	7.6 x	5.8 x
P / E		n.a.	52.1 x	29.5 x	9.3 x	15.0 x	12.7 x	11.6 x
P / E adj.		n.a.	52.1 x	29.5 x	9.3 x	15.0 x	12.7 x	11.6 x
FCF Potential Yield		8.3 %	12.8 %	13.5 %	14.4 %	9.4 %	11.4 %	14.1 %
Net Debt		-1.03	-1.12	-1.43	-3.33	-12.97	-13.99	-18.46
ROE		-4.2 %	4.9 %	8.3 %	91.9 %	20.4 %	12.0 %	11.7 %
ROCE (NOPAT)		n.a.	15.0 %	32.4 %	n.a.	37.1 %	19.1 %	19.3 %
Guidance:	2018: Revenue EUR 8.4m - 10.3m; EBT EUR 4.5m - 5.5m							

Sales development in EUR m



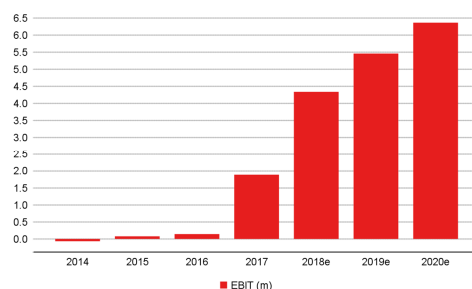
Source: Warburg Research

Revenue Split 2017e; in %



Source: Warburg Research

EBIT development in EUR m



Source: Warburg Research

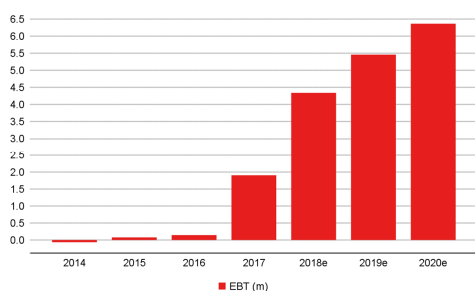
## Company Background

- The operation of the German financial information platforms [www.wallstreet-online.de](http://www.wallstreet-online.de) and [www.boersennews.de](http://www.boersennews.de) forms the core business of the company.
- The financial user forum on [www.wallstreet-online.de](http://www.wallstreet-online.de) is the biggest in Germany with more than 460k active users and 1.1m articles on more than 80 topics.
- The users of the portals are very homogeneous and thus attractive for advertisers in terms of specific targeting.
- The company aims at further diversification along the value chain of financial services and capital markets to broaden the offering to the customer.

## Competitive Quality

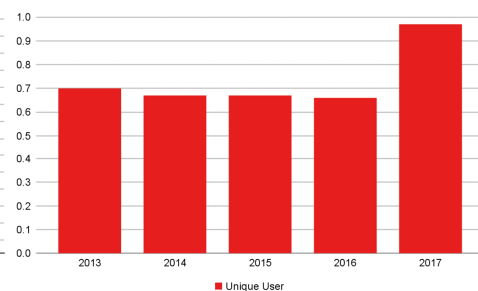
- Strong player in race for number two in German financial portals. Merger with [boersennews.de](http://boersennews.de) strengthens mobile offering.
- Key differentiator is the large user forum, resulting in a high number of loyal users, who also generate new content.
- Homogeneous user structure makes advertisers' targeting more specific, resulting in comparably high prices for marketing space on the platform.
- Future diversification of revenue streams will reduce cyclicity and, to a certain extent, decouple the company's revenues from capital market developments.

EBT development in EUR m



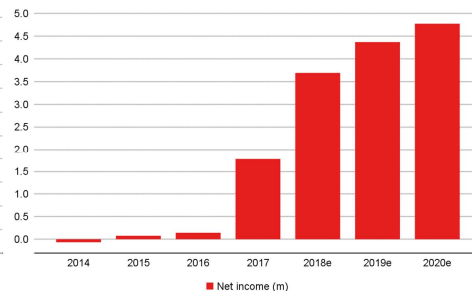
Source: Warburg Research

Unique User Development in m



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
	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	
Sales	9.42	11.60	13.17	14.49	15.64	16.74	17.74	18.63	19.56	20.54	21.16	21.79	22.34	
Sales change	81.7 %	23.1 %	13.5 %	10.0 %	8.0 %	7.0 %	6.0 %	5.0 %	5.0 %	5.0 %	3.0 %	3.0 %	2.5 %	2.5 %
EBIT	4.34	5.46	6.36	7.10	7.82	8.37	8.87	9.32	9.78	10.27	10.58	10.90	11.17	
EBIT-margin	46.1 %	47.1 %	48.3 %	49.0 %	50.0 %	50.0 %	50.0 %	50.0 %	50.0 %	50.0 %	50.0 %	50.0 %	50.0 %	
Tax rate (EBT)	15.0 %	20.0 %	25.0 %	30.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	
NOPAT	3.69	4.37	4.77	4.97	5.32	5.69	6.03	6.33	6.65	6.98	7.19	7.41	7.59	
Depreciation	0.30	0.36	0.41	0.43	0.47	0.50	0.53	0.56	0.59	0.62	0.63	0.65	0.67	
in % of Sales	3.1 %	3.1 %	3.1 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	
Changes in provisions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Change in Liquidity from														
- Working Capital	-0.26	0.30	0.10	0.20	0.13	0.12	0.11	0.10	0.10	0.11	0.07	0.07	0.06	
- Capex	0.51	0.61	0.61	0.58	0.55	0.50	0.53	0.56	0.59	0.62	0.63	0.65	0.67	
Capex in % of Sales	5.4 %	5.3 %	4.6 %	4.0 %	3.5 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Free Cash Flow (WACC Model)	3.74	3.82	4.48	4.62	5.11	5.57	5.92	6.24	6.55	6.88	7.13	7.34	7.53	8
PV of FCF	3.74	3.50	3.75	3.55	3.60	3.59	3.49	3.37	3.24	3.11	2.96	2.79	2.62	40
share of PVs	13.18 %			38.75 %										48.08 %

## Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	0.00 %	Financial Strength	1.00
Cost of debt (after tax)	2.3 %	Liquidity (share)	1.40
Market return	7.00 %	Cyclicality	1.60
Risk free rate	1.50 %	Transparency	1.50
		Others	1.50
<b>WACC</b>	<b>9.20 %</b>	<b>Beta</b>	<b>1.40</b>

## Valuation (m)

Present values 2030e	43		
Terminal Value	40		
Financial liabilities	0		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	3	No. of shares (m)	1.7
<b>Equity Value</b>	<b>87</b>	<b>Value per share (EUR)</b>	<b>52.15</b>

## Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %			-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.58	10.2 %	43.88	44.41	44.96	45.55	46.18	46.86	47.58	1.58	10.2 %	44.20	44.65	45.10	45.55	46.00	46.45	46.90
1.49	9.7 %	46.61	47.24	47.91	48.62	49.38	50.20	51.09	1.49	9.7 %	47.17	47.66	48.14	48.62	49.10	49.58	50.06
1.45	9.5 %	48.12	48.80	49.53	50.32	51.16	52.07	53.05	1.45	9.5 %	48.82	49.32	49.82	50.32	50.82	51.32	51.81
1.40	9.2 %	49.72	50.47	51.28	52.15	53.08	54.09	55.19	1.40	9.2 %	50.60	51.11	51.63	52.15	52.66	53.18	53.70
1.35	9.0 %	51.44	52.27	53.16	54.12	55.16	56.28	57.51	1.35	9.0 %	52.51	53.05	53.58	54.12	54.66	55.19	55.73
1.31	8.7 %	53.28	54.20	55.19	56.25	57.41	58.67	60.04	1.31	8.7 %	54.58	55.14	55.69	56.25	56.81	57.37	57.93
1.22	8.2 %	57.41	58.53	59.76	61.09	62.54	64.13	65.88	1.22	8.2 %	59.26	59.87	60.48	61.09	61.69	62.30	62.91

- We assume EBIT-margin to stand at slightly below 50% in a steady state scenario.

Valuation	2014	2015	2016	2017	2018e	2019e	2020e
Price / Book	2.2 x	2.6 x	2.3 x	8.0 x	1.6 x	1.4 x	1.3 x
Book value per share ex intangibles	1.14	1.32	1.59	1.95	6.85	7.71	10.41
EV / Sales	1.0 x	1.2 x	1.0 x	2.5 x	4.5 x	3.6 x	2.8 x
EV / EBITDA	12.0 x	7.8 x	7.4 x	6.5 x	9.1 x	7.1 x	5.4 x
EV / EBIT	n.a.	40.7 x	19.4 x	7.0 x	9.8 x	7.6 x	5.8 x
EV / EBIT adj.*	n.a.	40.7 x	19.4 x	7.0 x	9.8 x	7.6 x	5.8 x
P / FCF	17.1 x	12.1 x	13.3 x	16.3 x	14.8 x	14.5 x	12.4 x
P / E	n.a.	52.1 x	29.5 x	9.3 x	15.0 x	12.7 x	11.6 x
P / E adj.*	n.a.	52.1 x	29.5 x	9.3 x	15.0 x	12.7 x	11.6 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	8.3 %	12.8 %	13.5 %	14.4 %	9.4 %	11.4 %	14.1 %

\*Adjustments made for: -

Company Specific Items	2014	2015	2016	2017	2018e	2019e	2020e
Unique User	0.00	0.00	0.00	0.00	n.a.	n.a.	n.a.

## Consolidated profit & loss

In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
<b>Sales</b>	<b>2.30</b>	<b>2.52</b>	<b>2.83</b>	<b>5.19</b>	<b>9.42</b>	<b>11.60</b>	<b>13.17</b>
Change Sales yoy	2.2 %	9.5 %	12.3 %	83.2 %	81.7 %	23.1 %	13.5 %
Increase / decrease in inventory	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Own work capitalised	0.13	0.24	0.09	0.00	0.10	0.10	0.10
<b>Total Sales</b>	<b>2.44</b>	<b>2.76</b>	<b>2.92</b>	<b>5.19</b>	<b>9.52</b>	<b>11.70</b>	<b>13.27</b>
Material expenses	0.63	0.64	0.62	0.70	1.74	2.12	2.43
<b>Gross profit</b>	<b>1.80</b>	<b>2.12</b>	<b>2.30</b>	<b>4.49</b>	<b>7.78</b>	<b>9.58</b>	<b>10.84</b>
<i>Gross profit margin</i>	<i>78.3 %</i>	<i>84.3 %</i>	<i>81.3 %</i>	<i>86.5 %</i>	<i>82.5 %</i>	<i>82.6 %</i>	<i>82.3 %</i>
Personnel expenses	1.22	1.33	1.55	1.81	2.38	2.83	3.01
Other operating income	0.07	0.06	0.00	0.03	0.00	0.00	0.00
Other operating expenses	0.45	0.45	0.38	0.68	0.75	0.93	1.05
Unfrequent items	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>EBITDA</b>	<b>0.20</b>	<b>0.40</b>	<b>0.38</b>	<b>2.03</b>	<b>4.64</b>	<b>5.82</b>	<b>6.78</b>
<i>Margin</i>	<i>8.7 %</i>	<i>15.9 %</i>	<i>13.3 %</i>	<i>39.1 %</i>	<i>49.2 %</i>	<i>50.2 %</i>	<i>51.5 %</i>
Depreciation of fixed assets	-0.03	-0.03	-0.03	0.00	0.00	0.00	0.00
<b>EBITA</b>	<b>0.23</b>	<b>0.43</b>	<b>0.40</b>	<b>2.03</b>	<b>4.64</b>	<b>5.82</b>	<b>6.78</b>
Amortisation of intangible assets	0.27	0.32	0.23	0.14	0.30	0.36	0.41
Goodwill amortisation	0.03	0.03	0.03	0.00	0.00	0.00	0.00
<b>EBIT</b>	<b>-0.07</b>	<b>0.08</b>	<b>0.14</b>	<b>1.89</b>	<b>4.34</b>	<b>5.46</b>	<b>6.36</b>
<i>Margin</i>	<i>-2.9 %</i>	<i>3.0 %</i>	<i>5.1 %</i>	<i>36.4 %</i>	<i>46.1 %</i>	<i>47.1 %</i>	<i>48.3 %</i>
<b>EBIT adj.</b>	<b>-0.07</b>	<b>0.08</b>	<b>0.14</b>	<b>1.89</b>	<b>4.34</b>	<b>5.46</b>	<b>6.36</b>
Interest income	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Interest expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other financial income (loss)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>EBT</b>	<b>-0.07</b>	<b>0.08</b>	<b>0.14</b>	<b>1.90</b>	<b>4.34</b>	<b>5.46</b>	<b>6.36</b>
<i>Margin</i>	<i>-2.9 %</i>	<i>3.1 %</i>	<i>5.1 %</i>	<i>36.7 %</i>	<i>46.1 %</i>	<i>47.1 %</i>	<i>48.3 %</i>
Total taxes	0.00	0.00	0.00	0.13	0.65	1.09	1.59
<b>Net income from continuing operations</b>	<b>-0.07</b>	<b>0.08</b>	<b>0.14</b>	<b>1.78</b>	<b>3.69</b>	<b>4.37</b>	<b>4.77</b>
Income from discontinued operations (net of tax)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Net income before minorities</b>	<b>-0.07</b>	<b>0.08</b>	<b>0.14</b>	<b>1.78</b>	<b>3.69</b>	<b>4.37</b>	<b>4.77</b>
Minority interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Net income</b>	<b>-0.07</b>	<b>0.08</b>	<b>0.14</b>	<b>1.78</b>	<b>3.69</b>	<b>4.37</b>	<b>4.77</b>
<i>Margin</i>	<i>-2.9 %</i>	<i>3.1 %</i>	<i>5.1 %</i>	<i>34.2 %</i>	<i>39.2 %</i>	<i>37.7 %</i>	<i>36.2 %</i>
Number of shares, average	1.02	1.02	1.02	1.02	1.66	1.66	1.66
<b>EPS</b>	<b>-0.06</b>	<b>0.08</b>	<b>0.14</b>	<b>1.74</b>	<b>2.22</b>	<b>2.63</b>	<b>2.87</b>
EPS adj.	-0.06	0.08	0.14	1.74	2.22	2.63	2.87

\*Adjustments made for:

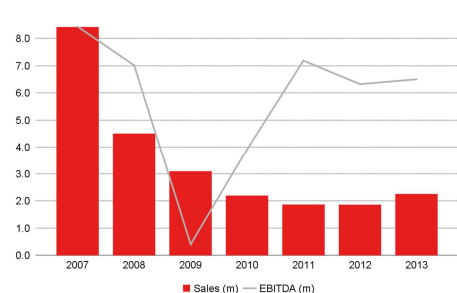
**Guidance: 2018: Revenue EUR 8.4m - 10.3m; EBT EUR 4.5m - 5.5m**

## Financial Ratios

	2014	2015	2016	2017	2018e	2019e	2020e
Total Operating Costs / Sales	97.1 %	93.7 %	89.9 %	60.9 %	51.8 %	50.6 %	49.3 %
Operating Leverage	n.a.	n.a.	7.1 x	14.6 x	1.6 x	1.1 x	1.2 x
EBITDA / Interest expenses	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tax rate (EBT)	0.0 %	0.0 %	0.0 %	6.6 %	15.0 %	20.0 %	25.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

### Sales, EBITDA

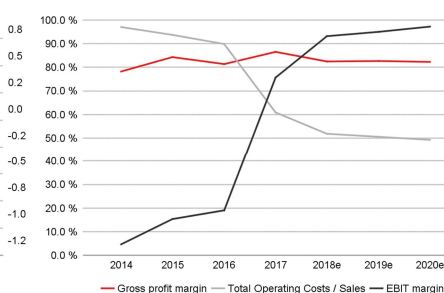
in EUR m



Source: Warburg Research

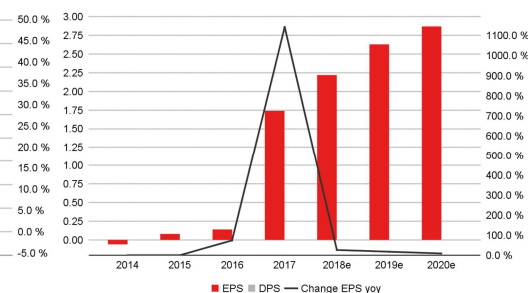
### Operating Performance

in %



Source: Warburg Research

### Performance per Share



Source: Warburg Research

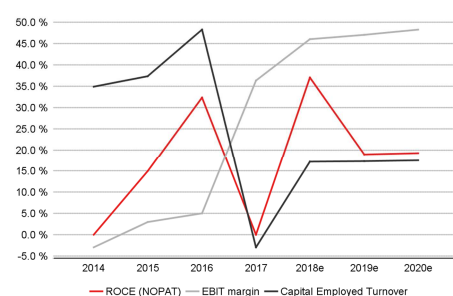
**Consolidated balance sheet**

In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
<b>Assets</b>							
Goodwill and other intangible assets	0.39	0.28	0.19	0.07	22.77	25.81	25.99
thereof other intangible assets	0.34	0.25	0.19	0.07	22.77	25.81	25.99
thereof Goodwill	0.05	0.03	0.00	0.00	0.00	0.00	0.00
Property, plant and equipment	0.04	0.03	0.02	0.02	0.03	0.04	0.05
Financial assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other long-term assets	0.00	0.05	0.01	0.00	0.00	0.00	0.00
<b>Fixed assets</b>	<b>0.44</b>	<b>0.36</b>	<b>0.22</b>	<b>0.08</b>	<b>22.80</b>	<b>25.84</b>	<b>26.04</b>
Inventories	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accounts receivable	0.25	0.37	0.39	1.42	1.30	1.60	1.80
Liquid assets	1.03	1.12	1.43	3.33	12.97	13.99	18.46
Other short-term assets	0.02	0.01	0.03	0.04	0.04	0.04	0.04
<b>Current assets</b>	<b>1.30</b>	<b>1.51</b>	<b>1.85</b>	<b>4.79</b>	<b>14.30</b>	<b>15.63</b>	<b>20.30</b>
<b>Total Assets</b>	<b>1.70</b>	<b>1.90</b>	<b>2.10</b>	<b>4.90</b>	<b>37.10</b>	<b>41.50</b>	<b>46.30</b>
<b>Liabilities and shareholders' equity</b>							
Subscribed capital	7.67	2.56	2.56	1.02	1.66	1.66	1.66
Capital reserve	0.01	5.12	5.12	5.12	32.90	32.90	32.90
Retained earnings	0.00	0.00	0.00	0.00	-0.65	-1.74	-3.33
Other equity components	-6.12	-6.05	-5.87	-4.09	0.25	5.81	12.08
Shareholders' equity	1.55	1.63	1.81	2.05	34.16	38.63	43.31
Minority interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total equity</b>	<b>1.55</b>	<b>1.63</b>	<b>1.81</b>	<b>2.05</b>	<b>34.16</b>	<b>38.63</b>	<b>43.31</b>
Provisions	0.09	0.10	0.16	0.67	0.67	0.67	0.67
thereof provisions for pensions and similar obligations	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial liabilities (total)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
thereof short-term financial liabilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accounts payable	0.04	0.05	0.02	0.16	0.30	0.30	0.40
Other liabilities	0.06	0.09	0.08	1.99	2.01	1.91	1.91
<b>Liabilities</b>	<b>0.19</b>	<b>0.24</b>	<b>0.26</b>	<b>2.82</b>	<b>2.98</b>	<b>2.88</b>	<b>2.98</b>
<b>Total liabilities and shareholders' equity</b>	<b>1.70</b>	<b>1.90</b>	<b>2.10</b>	<b>4.90</b>	<b>37.10</b>	<b>41.50</b>	<b>46.30</b>

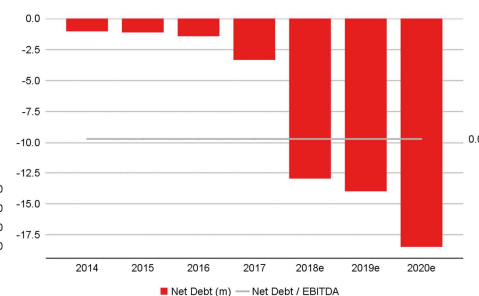
**Financial Ratios**

	2014	2015	2016	2017	2018e	2019e	2020e
<b>Efficiency of Capital Employment</b>							
Operating Assets Turnover	9.2 x	7.4 x	7.5 x	4.1 x	9.3 x	8.7 x	9.2 x
Capital Employed Turnover	4.4 x	5.0 x	7.4 x	-4.1 x	0.4 x	0.5 x	0.5 x
ROA	-15.2 %	21.4 %	65.3 %	2138.5 %	16.2 %	16.9 %	18.3 %
<b>Return on Capital</b>							
ROCE (NOPAT)	n.a.	15.0 %	32.4 %	n.a.	37.1 %	19.1 %	19.3 %
ROE	-4.2 %	4.9 %	8.3 %	91.9 %	20.4 %	12.0 %	11.7 %
Adj. ROE	-4.2 %	4.9 %	8.3 %	91.9 %	20.4 %	12.0 %	11.7 %
<b>Balance sheet quality</b>							
Net Debt	-1.03	-1.12	-1.43	-3.33	-12.97	-13.99	-18.46
Net Financial Debt	-1.03	-1.12	-1.43	-3.33	-12.97	-13.99	-18.46
Net Gearing	-66.5 %	-69.0 %	-79.0 %	-162.2 %	-38.0 %	-36.2 %	-42.6 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Book Value / Share	1.5	1.6	1.8	2.0	20.5	23.2	26.0
Book value per share ex intangibles	1.1	1.3	1.6	1.9	6.9	7.7	10.4

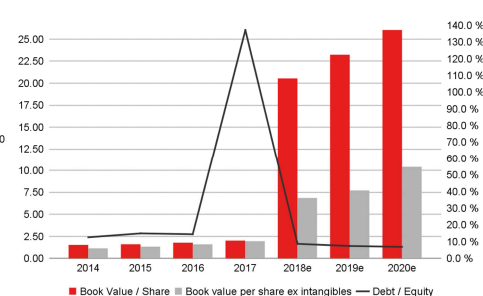
**ROCE Development**



**Net debt in EUR m**



**Book Value per Share in EUR**



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

**Consolidated cash flow statement**

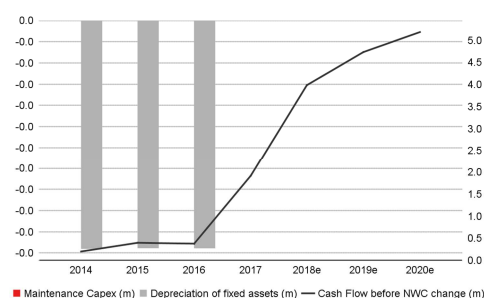
In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
Net income	-0.07	0.08	0.14	1.78	3.69	4.37	4.77
Depreciation of fixed assets	-0.03	-0.03	-0.03	0.00	0.00	0.00	0.00
Amortisation of goodwill	0.03	0.03	0.03	0.00	0.00	0.00	0.00
Amortisation of intangible assets	0.27	0.32	0.23	0.14	0.30	0.36	0.41
Increase/decrease in long-term provisions	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other non-cash income and expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Cash Flow before NWC change</b>	<b>0.20</b>	<b>0.40</b>	<b>0.38</b>	<b>1.92</b>	<b>3.99</b>	<b>4.73</b>	<b>5.19</b>
Increase / decrease in inventory	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase / decrease in accounts receivable	0.00	0.00	-0.02	-1.03	0.12	-0.30	-0.20
Increase / decrease in accounts payable	0.00	0.00	-0.03	0.14	0.14	0.00	0.10
Increase / decrease in other working capital positions	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase / decrease in working capital (total)	0.00	0.00	-0.05	-0.89	0.26	-0.30	-0.10
<b>Net cash provided by operating activities [1]</b>	<b>0.20</b>	<b>0.40</b>	<b>0.33</b>	<b>1.02</b>	<b>4.25</b>	<b>4.43</b>	<b>5.09</b>
Investments in intangible assets	0.00	0.00	0.00	0.00	-0.50	-0.60	-0.60
Investments in property, plant and equipment	0.00	-0.05	-0.01	-0.01	-0.01	-0.01	-0.01
Payments for acquisitions	0.00	0.00	0.00	0.00	-22.50	-2.80	0.00
Financial investments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income from asset disposals	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Net cash provided by investing activities [2]</b>	<b>0.00</b>	<b>-0.05</b>	<b>-0.01</b>	<b>-0.01</b>	<b>-23.01</b>	<b>-3.41</b>	<b>-0.61</b>
Change in financial liabilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividends paid	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase of own shares	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital measures	0.00	0.00	0.00	-1.53	28.40	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Net cash provided by financing activities [3]</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-1.53</b>	<b>28.40</b>	<b>0.00</b>	<b>0.00</b>
<b>Change in liquid funds [1]+[2]+[3]</b>	<b>0.20</b>	<b>0.35</b>	<b>0.32</b>	<b>-0.52</b>	<b>9.64</b>	<b>1.02</b>	<b>4.48</b>
Effects of exchange-rate changes on cash	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Cash and cash equivalent at end of period</b>	<b>1.49</b>	<b>1.38</b>	<b>1.44</b>	<b>0.91</b>	<b>12.97</b>	<b>13.99</b>	<b>18.46</b>

**Financial Ratios**

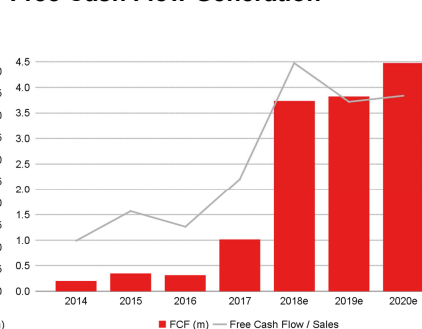
	2014	2015	2016	2017	2018e	2019e	2020e
<b>Cash Flow</b>							
FCF	0.20	0.35	0.32	1.01	3.74	3.82	4.48
Free Cash Flow / Sales	8.8 %	13.9 %	11.2 %	19.5 %	39.6 %	33.0 %	34.0 %
Free Cash Flow Potential	0.20	0.40	0.38	1.90	3.99	4.73	5.19
Free Cash Flow / Net Profit	-305.1 %	453.6 %	220.4 %	57.1 %	101.2 %	87.5 %	93.8 %
Interest Received / Avg. Cash	0.1 %	0.0 %	0.0 %	0.6 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Management of Funds</b>							
Investment ratio	0.0 %	2.0 %	0.4 %	0.2 %	5.4 %	5.3 %	4.6 %
Maint. Capex / Sales	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Capex / Dep	0.0 %	15.4 %	4.5 %	7.4 %	172.2 %	167.9 %	147.5 %
Avg. Working Capital / Sales	9.9 %	10.2 %	11.7 %	15.5 %	11.9 %	9.8 %	10.2 %
Trade Debtors / Trade Creditors	599.0 %	709.1 %	1647.1 %	877.5 %	433.3 %	533.3 %	450.0 %
Inventory Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Receivables collection period (days)	39	53	50	100	50	50	50
Payables payment period (days)	24	30	14	84	63	52	60
Cash conversion cycle (Days)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**CAPEX and Cash Flow**

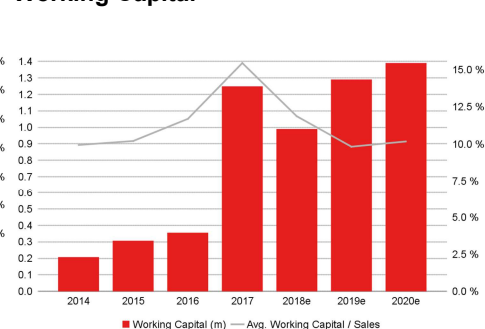
in EUR m



**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)
wallstreet:online	5	<a href="http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A2GS609.htm">http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A2GS609.htm</a>

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

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

Rating	Number of stocks	% of Universe
Buy	129	65
Hold	57	29
Sell	6	3
Rating suspended	8	4
<b>Total</b>	<b>200</b>	<b>100</b>

**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	28	72
Hold	9	23
Sell	0	0
Rating suspended	2	5
<b>Total</b>	<b>39</b>	<b>100</b>

**PRICE AND RATING HISTORY WALLSTREET:ONLINE AS OF 05.03.2019**



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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## Our research can be found under:

Warburg Research [research.mmwarburg.com/en/index.html](http://research.mmwarburg.com/en/index.html)  
Bloomberg MMWA GO  
FactSet [www.factset.com](http://www.factset.com)

Thomson Reuters [www.thomsonreuters.com](http://www.thomsonreuters.com)  
Capital IQ [www.capitaliq.com](http://www.capitaliq.com)

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