

# ADVA Optical Networking SE

Germany / Technology

Frankfurt

Bloomberg: ADV GR

ISIN: DE0005103006

Q1 2020 results

**RATING****PRICE TARGET**

Return Potential

Risk Rating

**ADD****€ 7.10**

22.6%

High

## RISING NETWORK UTILISATION DURING CRISIS BODES WELL FOR ORDERS

Q1/20 results were adversely affected by the covid-19-related interruption of ADVA's supply chain in China. However, the magnitude of the revenue impact at €10m was at the lower end of the guidance of €10-20m given by management in February while Q1/20 proforma EBIT at €-1.7m was better than the consensus forecast of €-3.1m. The restoration of 100% manufacturing capacity at ADVA's Chinese supply hubs should ensure a return to profitability this quarter. However, management has withdrawn previous 2020 guidance for revenue of more than €580m and a proforma EBIT margin above 5% and, due to uncertainty as to the depth and duration of the pandemic-induced recession, has given no new guidance. The growing importance of remote working, media streaming and online gaming during the pandemic suggest that revenues from communications service providers and internet content providers, which together account for ca. 75% of revenues, will remain resilient. However, ADVA has noted reluctance to invest by private enterprise customers (ca. 25% of revenues). Given that this is the most profitable customer group, we expect the overall proforma gross margin to be in the low 30s in 2020 and 2021 rather than the 35-37% range seen during 2018-19. We assume that comprehensive testing for covid-19/and or a viable covid-19 vaccine will not be available until 2021, and so do not expect a full recovery in revenue growth and profitability until 2022. From 2022 on, we expect accelerating revenue growth as investment in the Internet of Things, 5G mobile telephony and fibre deep initiatives gather pace. Meanwhile margins should widen as the revenue mix shifts away from optical networking towards the more profitable carrier/network function virtualisation and synchronisation segments. We reduce our price target to €7.10 (previously: €8.00) to reflect downward revisions to our forecasts but retain our Add recommendation.

**Q1/20 covid-19 revenue impact at the low end of expectations** ADVA's Q1/20 results showed a 3.5% increase in revenues to €132.7m (consensus: €120.1m; Q1/19: €128.2m) while proforma EBIT came in at... (p.t.o.):

### FINANCIAL HISTORY & PROJECTIONS

	2017	2018	2019	2020E	2021E	2022E
Revenue (€m)	514.47	501.98	556.82	566.69	612.02	703.82
Y-o-y growth	-9.2%	-2.4%	10.9%	1.8%	8.0%	15.0%
EBIT (€m)	4.40	14.99	12.00	0.46	11.88	30.56
EBIT margin	0.9%	3.0%	2.2%	0.1%	1.9%	4.3%
Net income (€m)	-4.23	9.68	7.05	-1.11	6.86	20.85
EPS (diluted) (€)	-0.09	0.19	0.14	-0.02	0.13	0.41
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-27.44	12.09	6.42	0.33	3.29	-6.21
Net gearing	19.4%	13.2%	26.9%	27.0%	25.2%	25.9%
Liquid assets (€m)	58.38	62.65	54.26	56.67	55.08	56.31

### RISKS

Risks include but are not limited to: the impact of the covid-19-induced recession on customer investment behaviour, currency risk (particularly USD appreciation/GBP depreciation), the US-China trade conflict.

### COMPANY PROFILE

ADVA develops, manufactures, and sells optical networking solutions to deliver data, storage, voice, and video services. To date, the company's networking solutions have been deployed in more than 10,000 enterprises and more than 300 carrier networks around the world. Founded in 1994 and headquartered in Munich, Germany, ADVA had 1,892 employees at the end of March 2020.

### MARKET DATA

As of 27 Apr 2020

Closing Price	€ 5.79
Shares outstanding	50.18m
Market Capitalisation	€ 290.55m
52-week Range	€ 4.04 / 8.44
Avg. Volume (12 Months)	168,111

Multiples	2019	2020E	2021E
P/E	40.6	n.a.	43.0
EV/Sales	0.7	0.6	0.6
EV/EBIT	30.5	789.6	30.8
Div. Yield	0.0%	0.0%	0.0%

### STOCK OVERVIEW



### COMPANY DATA

As of 31 Mar 2020

Liquid Assets	€ 52.75m
Current Assets	€ 246.61m
Intangible Assets	€ 19.88m
Total Assets	€ 514.77m
Current Liabilities	€ 137.37m
Shareholders' Equity	€ 249.13m

### SHAREHOLDERS

Teleios Capital Partners GmbH	20.0%
EGORA Group	15.0%
Dimensional Fund Advisors LP	3.1%
DNB SA	3.0%
Free float and other	58.9%

**Figure 1: FY results vs. consensus estimates**

€000's	Q1/20A	Q1/20 (Cons.)	Δ%	Q1/19A	Δ%
Sales	132,686	120,100	10.5%	128,160	3.5%
Proforma EBIT	-1,671	-3,100	-46.1%	2,748	-160.8%
margin (%)	-1.3%	-2.6%		2.1%	

Source: ADVA Optical Networking SE

...€-1.7m (consensus: €-3.1m; Q1/19: €2.7m). Seasonal softness in ADVA's first quarter revenue is not uncommon, but the 12.2% decline in revenues in Q1/20 vs. Q4/19 compares with equivalent comparisons for Q1/17, Q1/18 and Q1/19 of +10.8%, +2.8% and -2.5% respectively. China manufactures a significant portion of the inputs incorporated in ADVA's products. The decrease in revenue in Q1/20 vs. Q4/19 was mainly attributable to interruptions in supply from China as a result of covid-19. ADVA's two most important supply hubs in China are the cities of Shenzhen (carrier ethernet components) and Wuhan (photonic components and subsystems). ADVA cautioned the market on 18 February that interruptions to supply from China would likely lead to negative proforma operating income. While proforma EBIT was indeed negative in Q1/20, both revenue and profitability were better than the consensus forecast. In our view, this owes to ADVA's strong year-end backlog, continued overall growth in demand during the first quarter, the adaptations to ADVA's supply chain already undertaken in 2019 in response to the US-China trade conflict, and also the rapid recovery in Chinese manufacturing capacity. ADVA quantifies the impact of covid-19 on Q1/20 revenue and proforma EBIT at €10.1m and €3.4m respectively. The revenue impact was at the low end of management guidance. During the FY2019 results conference call on 20 February, management estimated the Q1/20 revenue impact due to Chinese supply chain problems at €10-20m.

**Order intake from customers accounting for 75% of revenue holding up well** ADVA's approximate revenue split by customer group is communications service providers: 65%, internet content providers providers: 10%, private enterprises: 25%. ADVA noted "good order entry" from the first two customer groups during the first quarter but an increasing reluctance to invest from private enterprises. Business from the first two customer groups has been resilient since the onset of the crisis because for these customers the network is the product and network utilisation has been rising. But for private enterprises the network is not the product but only part of IT infrastructure. For this customer group, IT investments are subject to review and delay during recessions.

**Gross margin under pressure due to revenue mix shifting away from private enterprise customers** Private enterprises are ADVA's most profitable customer group. The shift in the sales mix away from this customer group is one of the reasons for the decline in the group's proforma gross margin by ca. 330 basis points to 31.9% (Q1/19: 35.2%). The strength of the US Dollar also contributed to the narrowing of the gross margin as ca. 75% of cost of goods sold and 50% of revenues are denominated in the US currency. Cost control measures implemented during both Q1/20 and 2019 meant that Q1/20 proforma sales & marketing, general & administration and R&D costs all fell as a percentage of sales. The proforma operating margin fell by ca. 340 basis points to -1.3% (Q1/19: 2.1%). The proforma operating margin narrowed further than the proforma gross margin mainly because other operating income (including items such as government grants received; release of provisions) amounted to €0.0m in Q1/20 vs. €1.2m in Q1/19.

**End Q1/20 net gearing of 30.4% below prior year figure of 32.0%** Weaker profitability meant that Q1/20 operating cashflow before changes in working capital fell €5.5m to €10.5m (Q1/19: €16.0m). But working capital yielded €0.2m of cash in Q1/20 whereas in Q1/19 it consumed €9.7m.



This meant that operating cashflow rose €5.0m to €11.3m (Q1/19: €6.3m). Investing cashflow and free cashflow were €-17.5m (Q1/19: €-15.1m) and €-6.2m (Q1/19: €-8.8m) respectively. Net debt including leasing liabilities climbed from €68.9m (net gearing of 26.9%) at the end of 2019 to a still manageable €75.8m (net gearing of 30.4%) at the end of March, but was below the end March 2019 figures of €79.6m and 32.0% respectively.

### **We do not assume a full recovery in revenue growth and profitability until 2022**

ADVA gave 2020 revenue guidance of more than €580m in its FY2019 results report released on 20 February. Proforma EBIT guidance was for a margin above 5%. This guidance was based on recovery in Chinese manufacturing capacity in Q2/20 and the containment of covid-19 largely within China. While the first assumption has proved to be valid, the second was too optimistic. In the light of covid-19-induced decreases in output and demand outside China, and uncertainty as to how long the pandemic will last, management has withdrawn previous guidance without giving any new forecast. Although the duration of the pandemic is uncertain, trends are discernible in the Q1 results which are likely to shape the next few quarters. First, the restoration of full manufacturing capacity at Wuhan and Shenzhen suggest that the €10m delivery backlog which built up in Q1/20 will be removed by the end of June. Based on the removal of this backlog and the impact of cost cutting measures implemented over the past year, management expect proforma EBIT to be positive during the current quarter. Second, it is likely that communication service provider and internet content provider revenues will outpace private enterprise revenues for the duration of the pandemic. This suggests that the gross margin will continue to be under pressure. However, given the growing importance of remote working, media streaming and online gaming, it is likely that revenues from the first two customer groups will remain resilient. We assume that comprehensive testing for covid-19/and or a viable covid-19 vaccine will not be effective until 2021, and so we do not assume a full recovery in revenue growth and profitability at ADVA until 2022.

### **Add recommendation maintained but price target lowered to €7.10 (previously: €8.00)**

From 2022 on, we assume that ADVA's revenue growth will accelerate as investment in the Internet of Things, 5G mobile telephony and fibre deep initiatives gather pace. Meanwhile, margins should widen as the revenue mix shifts away from optical networking (65% of 2019 sales) towards the more profitable carrier / NFV (network functions virtualisation) and network synchronisation technology segments (35% of 2019 sales). We have lowered our price target to €7.10 (previously: €8.00) to reflect the downward revisions to our forecasts shown in figure 2 (which for the first time include 2022 numbers), but retain our Add recommendation.

**Figure 2: Changes to our forecasts**

€000's	2020E	2020E	Δ%	2021E	2021E	Δ%	2022E
	New	Old		New	Old		New
Sales	566,686	580,213	-2.3%	612,021	655,356	-6.6%	703,824
Proforma gross profit	181,865	207,716	-12.4%	205,027	239,205	-14.3%	249,858
margin (%)	32.1%	35.8%		33.5%	36.5%		35.5%
Proforma EBIT	8,873	29,011	-69.4%	20,197	38,666	-47.8%	40,118
margin (%)	1.6%	5.0%		3.3%	5.9%		5.7%
Reported EBIT	464	20,909	-97.8%	11,881	29,515	-59.7%	30,555
margin (%)	0.1%	3.6%		1.9%	4.5%		4.3%
Net profit	-1,111	14,081	-107.9%	6,855	21,030	-67.4%	20,851
margin (%)	-0.2%	2.4%		1.1%	3.2%		3.0%
EPS (€)	-0.02	0.28	-107.9%	0.13	0.41	-67.2%	0.41

Source: First Berlin Equity Research estimates



## VALUATION MODEL

DCF valuation model								
All figures in EUR '000	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Net sales	566,686	612,021	703,824	788,283	852,990	922,585	1,000,135	1,085,784
NOPLAT	1,930	10,098	24,282	44,815	61,415	66,426	72,010	74,007
+ depreciation & amortisation	-54,972	-58,352	-65,456	-64,795	-69,945	-75,652	-82,011	-89,034
Net operating cash flow	56,902	68,450	89,738	109,610	131,360	142,078	154,021	163,041
- total investments (CAPEX and WC)	-61,687	-70,720	-102,641	-87,288	-104,395	-108,564	-118,164	-137,258
Capital expenditures	-60,418	-66,554	-76,641	-83,865	-89,105	-96,284	-104,431	-113,388
Working capital	-1,269	-4,166	-26,000	-3,423	-15,290	-12,280	-13,734	-23,870
Free cash flows (FCF)	-4,785	-2,270	-12,903	22,322	26,966	33,514	35,857	25,783
PV of FCF's	-4,487	-1,935	-10,001	15,729	17,274	19,517	18,984	12,410

All figures in thousands	
PV of FCFs in explicit period (2020E-2035E)	182,670
PV of FCFs in terminal period	222,728
Enterprise value (EV)	405,398
+ Net cash / - net debt	-75,816
+ PV cash proceeds of future option exercise	60,797
Shareholder value	390,379
Current shares outstanding	50,182
+ PV no shares issued against future option exercise	4,996
Proforma no shares	55,178
Fair value per share in EUR	7.07

WACC		Terminal growth rate							
		1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	
Cost of equity	13.0%	6.00%	16.18	17.48	19.14	21.35	24.46	29.11	36.88
Pre-tax cost of debt	1.5%	7.00%	12.32	13.03	13.90	14.98	16.37	18.23	20.83
Tax rate	30.0%	8.00%	9.72	10.14	10.64	11.23	11.96	12.86	14.03
After-tax cost of debt	1.1%	9.00%	7.87	8.13	8.43	8.78	9.20	9.70	10.31
Share of equity capital	75.0%	10.00%	6.49	6.66	6.86	7.07	7.33	7.62	7.97
Share of debt capital	25.0%	11.00%	5.44	5.56	5.68	5.82	5.98	6.17	6.38
		12.00%	4.62	4.69	4.78	4.87	4.98	5.10	5.23
Fair value per share in EUR	7.07	13.00%	3.96	4.01	4.07	4.13	4.20	4.28	4.37

\* for layout purposes the model shows numbers only to 2027, but runs until 2035



## INCOME STATEMENT

All figures in EUR '000	2017A	2018A	2019A	2020E	2021E	2022E
<b>Revenues</b>	<b>514,471</b>	<b>501,981</b>	<b>556,821</b>	<b>566,686</b>	<b>612,021</b>	<b>703,824</b>
Cost of goods sold	-348,251	-320,253	-365,908	-388,424	-411,370	-459,000
<b>Gross profit</b>	<b>166,220</b>	<b>181,728</b>	<b>190,913</b>	<b>178,262</b>	<b>200,650</b>	<b>244,824</b>
Sales and marketing expenses	-62,889	-63,569	-72,828	-69,934	-76,450	-92,141
General and administrative expenses	-36,260	-35,024	-35,126	-35,100	-38,881	-46,120
Research and development expenses	-69,037	-76,588	-75,186	-77,093	-80,783	-84,454
Net other operating income	6,369	8,442	4,230	4,328	7,344	8,446
<b>Operating income (EBIT)</b>	<b>4,403</b>	<b>14,989</b>	<b>12,003</b>	<b>464</b>	<b>11,881</b>	<b>30,555</b>
Net interest income/(expense)	-785	-1,408	-2,304	-1,575	-2,213	-2,147
Other financial gains and losses, net	-3,809	-1,096	-770	0	0	0
<b>Pre-tax income (EBT)</b>	<b>-191</b>	<b>12,485</b>	<b>8,929</b>	<b>-1,111</b>	<b>9,668</b>	<b>28,408</b>
Income taxes	-4,037	-2,807	-1,884	0	-2,813	-7,557
Minority interests	0	0	0	0	0	1
<b>Net income / loss</b>	<b>-4,228</b>	<b>9,678</b>	<b>7,045</b>	<b>-1,111</b>	<b>6,855</b>	<b>20,851</b>
<b>Diluted EPS (in €)</b>	<b>-0.09</b>	<b>0.19</b>	<b>0.14</b>	<b>-0.02</b>	<b>0.13</b>	<b>0.41</b>
<b>EBITDA</b>	<b>51,267</b>	<b>64,356</b>	<b>73,661</b>	<b>62,122</b>	<b>77,454</b>	<b>104,315</b>
<b>Ratios</b>						
Gross margin	32.3%	36.2%	34.3%	31.5%	32.8%	34.8%
EBITDA margin on revenues	10.0%	12.8%	13.2%	11.0%	12.7%	14.8%
EBIT margin on revenues	0.9%	3.0%	2.2%	0.1%	1.9%	4.3%
Net margin on revenues	-0.8%	1.9%	1.3%	-0.2%	1.1%	3.0%
Tax rate	2113.6%	-22.5%	-21.1%	0.0%	-29.1%	-26.6%
<b>Expenses as % of revenues</b>						
Sales and marketing expenses	12.2%	12.7%	13.1%	12.3%	12.5%	13.1%
General and administrative expenses	7.0%	7.0%	6.3%	6.2%	6.4%	6.6%
Research and development expenses	13.4%	15.3%	13.5%	13.6%	13.2%	12.0%
<b>Y-Y Growth</b>						
Revenues	-9.2%	-2.4%	334.5%	2.5%	8.0%	15.0%
Operating income	-77.3%	240.4%	1282.8%	-95.7%	2460.6%	157.2%
Net income/ loss	n.m.	n.m.	580.0%	n.m.	n.m.	204.2%



## BALANCE SHEET

All figures in EUR '000	2017A	2018A	2019A	2020E	2021E	2022E
<b>Assets</b>						
<b>Current assets, total</b>	<b>232,639</b>	<b>257,216</b>	<b>269,240</b>	<b>276,286</b>	<b>289,208</b>	<b>325,551</b>
Cash and cash equivalents	58,376	62,652	54,263	56,669	55,082	56,306
Receivables	81,327	97,936	96,193	98,630	106,520	122,498
Contract assets	0	320	654	283	306	352
Inventories	81,694	85,734	105,355	107,670	113,224	130,207
Tax assets	1,438	1,675	1,857	1,700	1,836	2,111
Other current assets	9,804	8,899	10,918	11,334	12,240	14,076
<b>Non-current assets, total</b>	<b>231,249</b>	<b>229,322</b>	<b>267,122</b>	<b>266,023</b>	<b>267,796</b>	<b>272,281</b>
Right of use assets	0	0	31,985	25,299	18,078	9,774
Property, plant & equipment	26,898	29,052	32,622	33,448	36,124	41,543
Goodwill	68,036	70,400	72,023	72,863	73,703	74,543
Capitalised development projects	85,175	87,926	96,169	108,452	121,305	133,973
Intangible assets from acquisitions	30,505	26,012	20,864	14,630	7,898	156
Other intangible assets	6,280	5,512	3,704	1,434	0	0
Deferred tax assets	10,614	7,315	6,336	6,496	7,016	8,069
Other non-current assets	3,741	3,105	3,419	3,400	3,672	4,223
<b>Total assets</b>	<b>463,888</b>	<b>486,538</b>	<b>536,362</b>	<b>542,309</b>	<b>557,004</b>	<b>597,832</b>
<b>Shareholders' equity &amp; debt</b>						
<b>Current liabilities, total</b>	<b>188,985</b>	<b>145,576</b>	<b>159,140</b>	<b>169,959</b>	<b>184,552</b>	<b>201,926</b>
Lease liabilities	0	0	6,082	6,608	6,667	6,413
Financial liabilities	79,061	19,400	19,221	22,667	24,481	29,561
Accounts payable	39,193	63,195	73,398	75,257	81,278	81,644
Advance payments received	93	0	0	0	0	0
Current provisions	21,994	15,005	14,379	16,209	18,972	23,181
Tax liabilities	6,446	5,067	1,686	1,729	1,867	2,147
Contract liabilities	0	14,061	12,448	14,620	15,790	18,159
Other current liabilities	42,198	28,848	31,926	32,868	35,497	40,822
<b>Long-term liabilities, total</b>	<b>47,882</b>	<b>96,321</b>	<b>121,430</b>	<b>118,635</b>	<b>113,697</b>	<b>119,978</b>
Lease liabilities	0	0	28,348	30,800	31,077	29,890
Financial liabilities	17,500	70,084	61,758	56,669	48,962	51,379
Provisions for pensions	5,822	5,531	7,756	8,500	9,180	10,557
Other provisions	1,478	1,453	1,380	1,415	1,528	1,757
Deferred tax liabilities	12,502	10,828	12,307	13,034	14,076	16,188
Other non-current liabilities	10,580	8,425	9,881	8,217	8,874	10,205
<b>Shareholders' equity</b>	<b>227,021</b>	<b>244,641</b>	<b>255,792</b>	<b>253,715</b>	<b>258,755</b>	<b>275,929</b>
<b>Total consolidated equity and debt</b>	<b>463,888</b>	<b>486,538</b>	<b>536,362</b>	<b>542,309</b>	<b>557,004</b>	<b>597,832</b>
<b>Ratios</b>						
Net debt	44,007	32,363	68,902	68,576	65,285	71,494
Net gearing	19.4%	13.2%	26.9%	27.0%	25.2%	25.9%
Book value per share (in €)	4.56	4.90	5.10	5.06	5.16	5.50
Return on equity (ROE)	-1.8%	4.1%	2.9%	-0.4%	2.7%	7.8%



## CASH FLOW STATEMENT

All figures in EUR '000	2017A	2018A	2019A	2020E	2021E	2022E
<b>Income before tax</b>	<b>-191</b>	<b>12,485</b>	<b>8,929</b>	<b>-1,111</b>	<b>9,668</b>	<b>28,408</b>
Depreciation and amortisation	46,864	49,367	62,191	61,658	65,573	73,760
Changes in working capital	-16,551	-2,207	-3,516	-1,269	-4,166	-26,000
Income tax paid	-1,666	-2,351	-1,684	0	-2,813	-7,557
Other adjustments	-1,322	3,066	971	1,466	1,583	1,821
<b>Operating cash flow</b>	<b>27,134</b>	<b>60,360</b>	<b>66,891</b>	<b>60,744</b>	<b>69,845</b>	<b>70,432</b>
Investments in PP&E	-10,559	-14,029	-16,888	-14,427	-17,364	-22,310
Investments in intangibles	-44,014	-34,239	-43,584	-45,991	-49,190	-54,331
<b>Free cash flow</b>	<b>-27,439</b>	<b>12,092</b>	<b>6,419</b>	<b>326</b>	<b>3,291</b>	<b>-6,210</b>
Acquisitions & disposals, net	-36,213	0	0	0	0	0
Other	248	207	169	0	0	0
<b>Investment cash flow</b>	<b>-90,538</b>	<b>-48,061</b>	<b>-60,303</b>	<b>-60,418</b>	<b>-66,554</b>	<b>-76,641</b>
Debt financing, net	37,184	-7,083	-8,500	-899	-5,214	8,874
Lease liabilities	0	0	-4,488	2,978	335	-1,441
Equity financing, exercise of stock options	1,029	810	1,257	0	0	0
Dividends paid	0	0	0	0	0	0
Other	-1,291	-1,953	-2,801	0	0	0
<b>Financing cash flow</b>	<b>36,922</b>	<b>-8,226</b>	<b>-14,532</b>	<b>2,080</b>	<b>-4,878</b>	<b>7,434</b>
FOREX & other effects	-13	203	-445	0	0	0
<b>Net cash flows</b>	<b>-26,495</b>	<b>4,276</b>	<b>-8,389</b>	<b>2,406</b>	<b>-1,587</b>	<b>1,224</b>
Cash, start of the year	84,871	58,376	62,652	54,263	56,669	55,082
<b>Cash, end of the year</b>	<b>58,376</b>	<b>62,652</b>	<b>54,263</b>	<b>56,669</b>	<b>55,082</b>	<b>56,306</b>
<b>EBITDA/share (in €)</b>	<b>1.02</b>	<b>1.28</b>	<b>1.43</b>	<b>1.22</b>	<b>1.52</b>	<b>2.05</b>
<b>Y-Y Growth</b>						
Operating cash flow	-55.8%	122.5%	10.8%	-9.2%	15.0%	0.8%
Free cash flow	n.m.	n.m.	-46.9%	-94.9%	910.3%	n.m.
EBITDA/share	-13.2%	25.4%	11.6%	-14.7%	24.7%	34.7%

## FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	17 September 2019	€6.53	Buy	€8.50
2...1	↓	↓	↓	↓
2	5 November 2019	€7.01	Add	€8.60
3	24 February 2020	€7.06	Add	€8.00
4	Today	€5.79	Add	€7.10

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Category		1	2
Current market capitalisation (in €)		0 - 2 billion	> 2 billion
Strong Buy <sup>1</sup>	An expected favourable price trend of:	> 50%	> 30%
Buy	An expected favourable price trend of:	> 25%	> 15%
Add	An expected favourable price trend of:	0% to 25%	0% to 15%
Reduce	An expected negative price trend of:	0% to -15%	0% to -10%
Sell	An expected negative price trend of:	< -15%	< -10%

<sup>1</sup> The expected price trend is in combination with sizable confidence in the quality and forecast security of management.

Our recommendation system places each company into one of two market capitalisation categories. Category 1 companies have a market capitalisation of €0 – €2 billion, and Category 2 companies have a market capitalisation of > €2 billion. The expected return thresholds underlying our recommendation system are lower for Category 2 companies than for Category 1 companies. This reflects the generally lower level of risk associated with higher market capitalisation companies.

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