

# **ADVA Optical Networking SE**

Germany / Technology Frankfurt Bloomberg: ADV GR ISIN: DE0005103006

Q3 2019 results

RATING PRICE TARGET

ADD € 8.60

Return Potential 22.7% Risk Rating High

## ROBUST Q3 WITH IMPORTANT GROWTH DRIVERS STILL TO KICK IN

Sales climbed 14.4% to €144.3m in Q3/19 (FBe: €137.5m; Q3/18: €126.2m and were 9.5% ahead after nine months at €405.7m (9M/18: €370.5m). Proforma Q3/19 EBIT was €7.4m (FBe: €6.6m; Q3/18: €6.8m), equivalent to 5.1% of sales. The numbers were above our forecasts and also towards the upper end of Q3 guidance which was for sales of €135-145m and a proforma EBIT margin of 3%-6%. Sales growth was achieved with support from all technologies, but three expected future growth drivers, namely the recently launched FSP 3000 Teraflex, 5G rollout, and NFV (network function virtualisation), have still to kick in with substantial revenue contributions. This increases our confidence that sales growth at ADVA will remain buoyant. We raise the price target to €8.60 (previously: €8.50) but lower the recommendation from Buy to Add to reflect recent share price appreciation.

Sales growth accelerated but stronger USD, tariffs hit gross margin Q3/19 sales growth of 14.4% y-o-y compares with figures of 6.3% and 7.6% for Q1/19 and Q2/19 respectively. The Q3/19 gross margin of 34.0% was well down on the prior year figure of 37.5% because of the strength of the US Dollar (75% of ADVA's cost of goods sold are denominated in USD compared with 50% of revenues) and also because of the impact of the US-China trade dispute. A significant portion of the inputs incorporated in products sold by ADVA in the US are imported from China and have been subject to tariffs since 2018. The tariff burden on ADVA 's products increased in both May and October 2019.

**Production relocations, cost reduction measures**ADVA is currently implementing a raft of improvement measures in response to tariffs and the stronger US Dollar. The company has relocated production and transferred prefabricated materials to locations outside China. In Q3/19 these measures resulted in above normal inventory levels and also in higher freight costs because they were implemented under time pressure. (p.t.o.)

### **FINANCIAL HISTORY & PROJECTIONS**

	2016	2017	2018	2019E	2020E	2021E
Revenue (€m)	566.69	514.47	501.98	552.69	598.40	655.38
Y-o-y growth	28.2%	-9.2%	-2.4%	10.1%	8.3%	9.5%
EBIT (€m)	19.37	4.40	14.99	10.79	21.56	29.52
EBIT margin	3.4%	0.9%	3.0%	2.0%	3.6%	4.5%
Net income (€m)	21.35	-4.23	9.68	7.27	14.46	20.86
EPS (diluted) (€)	0.43	-0.09	0.19	0.14	0.28	0.41
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	7.14	-27.44	12.09	-19.01	1.09	4.84
Net gearing	-8.7%	19.4%	13.2%	35.7%	34.9%	32.2%
Liquid assets (€m)	84.87	58.38	62.65	38.69	41.89	45.88

### **RISKS**

Risks include but are not limited to: loss of key customers/channel partners, currency risk (particularly USD appreciation/GBP depreciation), the US-China trade conflict, price pressure from Huawei.

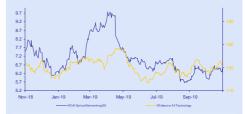
#### **COMPANY PROFILE**

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 1,917 employees at the end of June 2019.

MARKET DATA	As of 04 Nov 2019
Closing Price	€ 7.01
Shares outstanding	50.16m
Market Capitalisation	€ 351.64m
52-week Range	€ 5.66 / 9.78
Avg. Volume (12 Months)	156,271

Multiples	2018	2019E	2020E
P/E	36.4	49.2	24.7
EV/Sales	163.0	148.0	136.7
EV/EBIT	5457.6	7581.4	3793.5
Div. Yield	0.0%	0.0%	0.0%

### STOCK OVERVIEW



COMPANY DATA	As of 30 Sep 2019
Liquid Assets	€ 38.40m
Current Assets	€ 256.52m
Intangible Assets	€ 195.97m
Total Assets	€ 529.81m
Current Liabilities	€ 156.32m
Shareholders' Equity	€ 254.98m

### SHARFHOI DERS

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Teleios Capital Partners GmbH	22.4%
EGORA Group	14.9%
Morgan Stanley	3.9%
Dimensional Fund Advisors LP	3.2%
Free float and other	55.6%

Figure 1: Q3 results vs. our forecasts

€000's	Q3/19A	Q3/19E	∆%	Q3/18A	Δ <b>%</b>
Sales	144,310	137,500	5.0%	126,178	14.4%
Proforma gross profit	49,086	49,500	-0.8%	47,304	3.8%
margin (%)	34.0%	36.0%		37.5%	
Proforma EBIT	7,393	6,600	12.0%	6,776	9.1%
margin (%)	5.1%	4.8%		5.4%	

Source: ADVA Optical Networking SE, First Berlin Equity Research estimates

In addition, ADVA is selectively reducing headcount, streamlining its footprint and consolidating R&D expenses. Expenses in connection with the headcount reduction were the largest element in a restructuring charge of €2.5m in Q3/19. The improvement measures are expected to result in total cost savings of €8m by the end of 2019 and €30m by the end of 2020.

Operating costs down as a percentage of sales in Q3/19 The impact of the improvement measures was already apparent in the Q3/19 results which showed a reduction in operating costs as a percentage of sales to 28.9% in Q3/19 from 32.1% in Q3/18. Proforma R&D expenses were 19.7% of sales in Q3/19 (Q3/18: 20.8%) while the R&D capitalisation rate rose from 26.9% to 35.8% so that net R&D expense fell to 12.6% of sales (Q3/18: 15.2%). In recent years a substantial portion of R&D spending was devoted to the development of NFV technology and the latest generation of the FSP 3000 technology, the FSP 3000 TeraFlex. Given that the investment in NFV technology was made to accommodate a once-in-a-decade shift in networking architecture, and that the FSP 3000 Teraflex was launched as recently as May, we think it reasonable to assume a further decline in proforma R&D costs over the next few years. Meanwhile sales & marketing costs fell as a percentage of sales (10.7% of sales in Q3/19 vs. 11.5% in Q3/18) as did general & administrative costs (5.9% of sales in Q3/19 vs. 6.1% in Q3/18).

Excluding lease liabilities (first booked in Q1/19), balance sheet is stronger than a year ago Q3/19 operating cashflow fell 5.2% to €9.0m (Q3/18: €9.5m) due mainly to cash outflow (€9.9m) occasioned by rising inventories. Operating cashflow before changes in working capital rose 17.4% to €20.0m (Q3/18: €17.1m). Cash outflow from investing activities rose 29.4% to €15.0m (Q3/18: €11.6m), manly due to the above-mentioned increase in capitalised development projects. The biggest element in the cash outflow from financing activities of €4.0m (Q3/18: €3.7m) was repayment of bank liabilities of €3.1m. Net debt including lease liabilities rose €7.2m during Q3/19 to €81.5m equivalent to net gearing of 31.9%. Lease liabilities were booked on the balance sheet for the first time in Q1/19 in line with the requirements of IFRS16. Stripping out lease liabilities, net debt at the end of Q3/19 was €45.2m equivalent to net gearing of 17.7% (end Q3/18: net debt excluding lease liabilities of €45.3m equivalent to net gearing of 19.0%).

We have adjusted our sales and proforma gross profit and EBIT forecasts upward following stronger Q3/19 numbers than we expected. The reductions in our reported EBIT and net profit forecasts mainly reflect higher restructuring charges than we had previously modelled. We previously forecast a restructuring charge of €1.0m for Q3/19 and no restructuring charge for Q4/19. However, the Q3/19 restructuring charge came in at €2.5m and following comments made by management during the course of the Q3/19 conference call, we now model €2m for Q4/19. ADVA's management is guiding towards revenues of €142m-€152m for Q4/19 and a proforma EBIT margin of 5-7% (see figure 2). We have assumed sales and proforma EBIT figures at the midpoint of both these ranges.

Figure 2: Management's Q4/19 guidance

€m	Q4/18A	Q4/19 guidance Lo	Q4/19 guidance Hi
Revenue	131.5	142.0	152.0
$\Delta$ y-o-y (%)	12.2%	8.0%	15.6%
Proforma EBIT	8.1	7.1	10.6
margin (%)	6.2%	5.0%	7.0%

Source: ADVA Optical Networking SE

Figure 3: Changes to our forecasts

€000's	2019E	2019E	Δ%	2020E	2020E	Δ%	2021E	2021E	Δ%
	New	Old		New	Old		New	Old	
Sales	552,686	540,376	2.3%	598,398	591,199	1.2%	655,382	649,187	1.0%
Proforma gross profit	192,181	191,023	0.6%	214,227	211,649	1.2%	239,214	236,953	1.0%
margin (%)	34.8%	35.4%		35.8%	35.8%		36.5%	36.5%	
Proforma EBIT	22,563	21,674	4.1%	29,920	29,560	1.2%	38,668	38,302	1.0%
margin (%)	4.1%	4.0%		5.0%	5.0%		5.9%	5.9%	
Reported EBIT	10,790	13,234	-18.5%	21,564	21,092	2.2%	29,516	29,003	1.8%
margin (%)	2.0%	2.4%		3.6%	3.6%		4.5%	4.5%	
Net profit	7,273	8,250	-11.8%	14,455	14,020	3.1%	20,858	20,360	2.4%
margin (%)	1.3%	1.5%		2.4%	2.4%		3.2%	3.1%	
EPS (€)	0.14	0.16	-10.9%	0.28	0.28	1.4%	0.41	0.40	2.4%

Source: First Berlin Equity Research estimates

Three expected future major growth drivers have still to kick in The 14.4% increase in Q3/19 sales (9M/19: +9.5%) was achieved with support from all technologies but with only minor contributions from three expected major future growth drivers: namely the recently launched FSP 3000 Teraflex, 5G rollout, NFV.

The FSP 3000 TeraFlex optical networking terminal uses new fractional quadrature amplitude modulation capabilities to allow increased traffic over existing networks without additional investment. ADVA claims that the product provides 50% more capacity than the leading competitor's current product. It was launched in May and only contributed marginally to Q3/19 revenues. Management expects a single digit revenue contribution in Q4/19.

Figure 4: Ensemble Connector customer wins



Source: ADVA Optical Networking SE

All big telecommunications operators have announced their 5G plans, but infrastructure rollout is still at an early stage. So far the main beneficiary at ADVA of 5G investment has been the Oscilloquartz business. This is because network synchronisation is one of the first steps in the installation of 5G infrastructure. Oscilloquartz accounted for around 3% of group revenues in 2018. We expect this figure to reach 6-7% in 2019.

The Ensemble Connector is ADVA's virtual networking platform. Figure 4 above shows the spike in customer wins for this product since autumn last year. ADVA's management has stated that so far there has typically been a timelag between customers signing Ensemble Connector contracts and the placing of orders. The software component of NFV revenues is expected to make only a low single digit contribution to revenue this year (although if associated hardware revenues are included, the contribution from NFV is significantly higher). We continue to expect NFV to be an important growth driver for ADVA in coming years.

Price target raised to €8.60 (previously €8.50); recommendation lowered to Add We have raised our price target in line with the increase in our forecasts. We now see fair value for the ADVA share at €8.60 (previously: €8.50). We have lowered the recommendation from Buy to Add to reflect recent share price appreciation.

**Figure 5: DCF Valuation Model** 

DCF valuation model								
All figures in EUR '000	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Net sales	552,686	598,398	655,382	714,560	781,338	853,957	932,636	1,020,906
NOPLAT	6,011	17,503	23,594	34,835	49,790	61,485	67,150	73,505
+ depreciation & amortisation	-60,643	-64,803	-68,487	-74,672	-73,864	-79,845	-87,201	-95,455
Net operating cash flow	66,654	82,306	92,081	109,506	123,654	141,330	154,351	168,960
- total investments (CAPEX and WC)	-84,299	-79,939	-86,451	-93,499	-102,637	-112,013	-122,111	-134,085
Capital expenditures	-66,481	-72,008	-76,565	-83,231	-91,051	-99,414	-108,460	-118,770
Working capital	-17,818	-7,931	-9,887	-10,267	-11,586	-12,599	-13,651	-15,315
Free cash flows (FCF)	-17,645	2,367	5,630	16,008	21,017	29,316	32,241	34,875
PV of FCF's	-17.403	2.136	4.651	12.103	14.544	18.567	18.688	18.502

All figures in thousands	
PV of FCFs in explicit period (2019E-2035E)	214,038
PV of FCFs in terminal period	280,072
Enterprise value (EV)	494,110
+ Net cash / - net debt	-81,452
+ PV cash proceeds of future option exercise	67,654
Shareholder value	480,312
Current shares outstanding	50,164
+ PV no shares issued against future option exercise	5,708
Proforma no shares	55,872
Fair value per share in EUR	8.60

WACC	9.3%
Cost of equity	12.0%
Pre-tax cost of debt	1.5%
Tax rate	30.0%
After-tax cost of debt	1.1%
Share of equity capital	75.0%
Share of debt capital	25.0%
Fair value per share in EUR	8.60

Terminal growth rate										
	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%			
5.26%	21.16	23.36	26.36	30.68	37.46	49.60	77.67			
6.26%	15.55	16.66	18.07	19.91	22.41	26.02	31.68			
7.26%	11.98	12.61	13.36	14.29	15.46	17.00	19.09			
8.26%	9.54	9.91	10.35	10.87	11.50	12.28	13.26			
9.26%	7.78	8.02	8.29	8.60	8.96	9.40	9.92			
10.26%	6.47	6.62	6.79	6.99	7.21	7.47	7.78			
11.26%	5.45	5.55	5.67	5.79	5.94	6.10	6.29			
12.26%	4.65	4.72	4.79	4.88	4.98	5.08	5.20			
2035										

 $<sup>^{\</sup>star}$  for layout purposes the model shows numbers only to 2026, but runs until 2035

Source: First Berlin Equity Research estimates

## **INCOME STATEMENT**

All figures in EUR '000	2016A	2017A	2018A	2019E	2020E	2021E
Revenues	566,686	514,471	501,981	552,686	598,398	655,382
Cost of goods sold	-400,397	-348,251	-320,253	-364,617	-388,462	-420,866
Gross profit	166,289	166,220	181,728	188,069	209,937	234,516
Sales and marketing expenses	-60,014	-62,889	-63,569	-70,163	-78,421	-85,889
General and administrative expenses	-32,252	-36,260	-35,024	-35,751	-39,258	-42,997
Research and development expenses	-60,468	-69,037	-76,588	-75,638	-77,874	-83,979
Net other operating income	5,812	6,369	8,442	4,273	7,181	7,865
Operating income (EBIT)	19,367	4,403	14,989	10,790	21,564	29,516
Net interest income/(expense)	-60	-785	-1,408	-2,431	-1,699	-1,058
Other financial gains and losses,net	-292	-3,809	-1,096	1,522	0	0
Pre-tax income (EBT)	19,015	-191	12,485	9,881	19,865	28,458
Income taxes	2,517	-4,037	-2,807	-2,609	-5,410	-7,600
Minority interests	0	0	0	0	0	0
Net income / loss	21,352	-4,228	9,678	7,273	14,455	20,858
Diluted EPS (in €)	0.43	-0.09	0.19	0.14	0.28	0.41
EBITDA	58,942	51,267	64,356	71,433	86,367	98,003
Ratios						
Gross margin	29.3%	32.3%	36.2%	34.0%	35.1%	35.8%
EBITDA margin on revenues	10.4%	10.0%	12.8%	12.9%	14.4%	15.0%
EBIT margin on revenues	3.4%	0.9%	3.0%	2.0%	3.6%	4.5%
Net margin on revenues	3.8%	-0.8%	1.9%	1.3%	2.4%	3.2%
Tax rate	13.2%	2113.6%	-22.5%	-26.4%	-27.2%	-26.7%
Expenses as % of revenues						
Sales and marketing expenses	10.6%	12.2%	12.7%	12.7%	13.1%	13.1%
General and administrative expenses	5.7%	7.0%	7.0%	6.5%	6.6%	6.6%
Research and development expenses	10.7%	13.4%	15.3%	13.7%	13.0%	12.8%
Y-Y Growth						
Revenues	28.2%	-9.2%	-2.4%	10.1%	8.3%	9.5%
Operating income	-27.6%	-77.3%	240.4%	-28.0%	99.9%	36.9%
Net income/ loss	-20.5%	n.m.	n.m.	-24.9%	98.8%	44.3%



## **BALANCE SHEET**

All figures in EUR '000	2016A	2017A	2018A	2019E	2020E	2021E
Assets						
Current assets, total	268,361	232,639	257,216	254,236	275,263	301,476
Cash and cash equivalents	84,871	58,376	62,652	38,688	41,888	45,877
Receivables	78,474	81,327	97,936	107,774	116,688	127,799
Contract assets	0	0	320	276	299	328
Inventories	92,800	81,694	85,734	94,509	102,326	112,070
Tax assets	1,474	1,438	1,675	2,487	2,693	2,949
Other current assets	10,742	9,804	8,899	10,501	11,370	12,452
Non-current assets, total	176,191	231,249	229,322	272,646	284,060	297,100
Right of use assets	0	0	0	36,300	39,548	43,314
Property, plant & equipment	25,126	26,898	29,052	32,056	34,707	38,012
Goodwill	41,538	68,036	70,400	71,240	72,080	72,920
Capitalised development projects	76,263	85,175	87,926	98,887	111,454	122,595
Intangible assets from acquistions	14,284	30,505	26,012	20,361	13,779	6,569
Other intangible assets	2,145	6,280	5,512	2,196	-74	-74
Deferred tax assets	12,659	10,614	7,315	8,290	8,976	9,831
Other non-current assets	4,176	3,741	3,105	3,316	3,590	3,932
Total assets	444,552	463,888	486,538	526,882	559,323	598,575
Shareholders' equity & debt						
Current liabilities, total	141,526	188,985	145,576	156,231	170,231	186,379
Lease liabilities	0	0	0	5,300	5,984	6,554
Financial liabilities	18,648	79,061	19,400	18,146	18,489	18,163
Accounts payable	73,290	39,193	63,195	69,638	75,398	82,578
Advance payments received	352	93	0	0	0	0
Current provisions	11,789	21,994	15,005	17,826	21,291	25,342
Tax liabilities	2,957	6,446	5,067	5,527	5,984	6,554
Contract liabilities	0	0	14,061	15,475	16,755	18,351
Refund liabilities	0	0	511	1,105	1,197	1,311
Deferred revenues	11,347	15,062	0	0	0	0
Other current liabilities	23,143	27,136	28,337	23,213	25,133	27,526
Long-term liabilities, total	64,079	47,882	96,321	125,295	131,475	136,457
Lease liabilities	0	0	0	31,000	33,564	36,760
Financial liabilities	40,717	17,500	70,084	65,555	66,794	65,617
Provisions for pensions	4,705	5,822	5,531	6,356	6,882	7,537
Other provisions	1,507	1,478	1,453	1,658	1,795	1,966
Deferred tax liabilities	6,916	12,502	10,828	12,712	13,763	15,074
Contract liabilities	0	0	6,469	6,632	7,181	7,865
Deferred revenues	6,971	7,402	0	0	0	0
Other non-current liabilities	3,263	3,178	1,956	1,382	1,496	1,638
Shareholders' equity	238,947	227,021	244,641	245,356	257,617	275,740
Total consolidated equity and debt	444,552	463,888	486,538	526,882	559,323	598,575

ADVA Optical Networking SE



## **CASH FLOW STATEMENT**

All figures in EUR '000	2016A	2017A	2018A	2019E	2020E	2021E
Income before tax	19,015	-191	12,485	9,881	19,865	28,458
Depreciation and amortisation	39,575	46,864	49,367	60,643	64,803	68,487
Changes in working capital	2,571	-16,551	-2,207	-17,818	-7,931	-9,887
Income tax paid	-599	-1,666	-2,351	-2,609	-5,410	-7,600
Other adjustments	788	-1,322	3,066	-2,623	1,773	1,942
Operating cash flow	61,350	27,134	60,360	47,475	73,100	81,401
Investments in PP&E	-12,889	-10,559	-14,029	-22,624	-23,894	-26,571
Investments in intangibles	-41,325	-44,014	-34,239	-43,857	-48,113	-49,994
Free cash flow	7,136	-27,439	12,092	-19,006	1,092	4,836
Acquisitions & disposals, net	-32,509	-36,213	0	0	0	0
Other	350	248	207	0	0	0
Investment cash flow	-86,373	-90,538	-48,061	-66,481	-72,008	-76,565
Debt financing, net	16,676	37,184	-7,083	-4,958	2,108	-848
Equity financing, exercise of stock options	421	1,029	810	0	0	0
Dividends paid	0	0	0	0	0	0
Other	-1,318	-1,291	-1,953	0	0	0
Financing cash flow	15,779	36,922	-8,226	-4,958	2,108	-848
FOREX & other effects	265	-13	203	0	0	0
Net cash flows	-8,979	-26,495	4,276	-23,964	3,200	3,989
Cash, start of the year	93,850	84,871	58,376	62,652	38,688	41,888
Cash, end of the year	84,871	58,376	62,652	38,688	41,888	45,877
EBITDA/share (in €)	1.18	1.02	1.28	1.40	1.70	1.93
Y-Y Growth						
Operating cash flow	55.7%	-55.8%	122.5%	-21.3%	54.0%	11.4%
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	342.8%
EBITDA/share	-10.8%	-13.2%	25.4%	9.3%	21.2%	13.5%



#### FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	17 September	€6.53	Buy	€8.50
5	Today	€7.01	Add	€8.60

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First Berlin's system for asset valuation is divided into an asset recommendation and a risk assessment.

#### ASSET RECOMMENDATION

The recommendations determined in accordance with the share price trend anticipated by First Berlin in the respectively indicated investment period are as follows:

Category		1	2 > 2 billion	
Current market	rrent market capitalisation (in €) 0 - 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>&</sup>lt;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  $\le 0 - \le 2$  billion, and Category 2 companies have a market capitalisation of  $> \le 2$  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.

#### RISK ASSESSMENT

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#### Legally required information regarding

- key sources of information in the preparation of this research report
- valuation methods and principles
- sensitivity of valuation parameters

can be accessed through the following internet link: http://firstberlin.com/disclaimer-english-link/

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Lurgiallee 12, 60439 Frankfurt

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