

Expedeon AG

Germany / Biotech

Xetra

Bloomberg: EXNN GR

ISIN: DE000A2YN801

H1/19 results

RATING**PRICE TARGET**

Return Potential

Risk Rating

BUY**€ 2.20**

117.8%

High

H1/19 ADJ. EBITDA ABOVE EXPECTATIONS, COMPANY ON TRACK

Expedeon AG published H1/19 results. Revenues for H1/19 came in as expected and increased by 31% to €7.4m (FB: €7.5m; H1/18: €5.6m). Reported EBITDA amounted to €274k, below our estimate of €800k. However, this position was affected by non-cash expenses of €812k related to the revaluation of earn-outs for the TGR acquisition. This revaluation was chiefly driven by the recovery of Expedeon's share price during H1/19. We note that in Q4/18 the company had booked a non-cash income of about €1.0m from the revaluation of acquisition earn-outs due to Expedeon's share price weakness. H1/19 EBITDA adjusted for non-cash items (earn-outs revaluations and share option charges) amounted to €1.2m and was above our estimate of €1.0m (H1/18 adj.: €0.2m). Following these overall positive results, we view the company on track to achieve its guidance for 2019 of double digit growth and an adjusted EBITDA higher than €2.0m. Based on unchanged estimates, we reiterate our Buy rating and €2.20 price target.

H1/19 sales and gross profit were both as expected The company was able to increase sales strongly by 31% y/y to €7.4m (FB: €7.5m; H1/18: €5.6m). Gross profit climbed by 37% y/y to €5.6m (FB: €5.6m; H1/18: €4.1m). The underlying gross margin widened to 76.1% in H1/19 from 72.5% in H1/18 (FB: 74.9%). Besides economies of scale, the contribution of the acquired company TGR with its slightly higher-margin product portfolio had in our view a positive impact on the company's margin expansion.

H1/19 EBITDA and EBIT figures adjusted for certain non-cash items were stronger than anticipated The company reported EBITDA of €274k in H1/19, which was below our estimate of €800k (H1/18: €23k). However, this position was negatively affected by non-cash expenses totalling €937k which were booked under administrative expenses.

p.t.o.

FINANCIAL HISTORY & PROJECTIONS

	2016	2017	2018	2019E	2020E	2021E
Revenue (€m)	1.79	7.80	13.13	16.02	19.22	23.06
Y-o-y growth	222.3%	335.8%	68.4%	22.0%	20.0%	20.0%
EBIT (€m)	-4.02	-4.49	-0.59	-0.80	0.96	2.91
EBIT margin	-224.7%	-57.6%	-4.5%	-5.0%	5.0%	12.6%
Net income (€m)	-4.39	-3.70	-0.30	-1.51	0.18	1.90
EPS (diluted) (€)	-0.18	-0.12	0.00	-0.01	0.00	0.03
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-3.89	-5.01	-1.21	-0.01	0.04	2.00
Net gearing	-3.5%	9.6%	9.5%	7.3%	7.2%	2.7%
Liquid assets (€m)	3.80	1.95	6.24	7.44	7.48	9.48

RISKS

Risks include, but are not limited to intellectual property and patent challenges, shareholder dilution, competition and retaining management risks.

COMPANY PROFILE

Expedeon develops, manufactures and commercializes tools and reagents (kits) for use in research of biopharmaceutical, diagnostic and academic institutions. The company's patent protected technologies offer superior features compared to solutions existing in the market. The company has production facilities in the US, UK, Spain and Australia, as well as an own distribution network in the US, UK, Germany, Singapore and Australia.

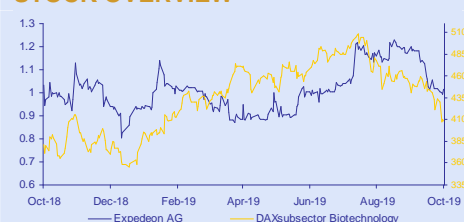
MARKET DATA

As of 11 Oct 2019

Closing Price	€ 1.01
Shares outstanding	51.56m
Market Capitalisation	€ 52.08m
52-week Range	€ 0.81 / 1.23
Avg. Volume (12 Months)	36,591

Multiples	2018	2019E	2020E
P/E	n.a.	n.a.	347.5
EV/Sales	4.9	4.0	3.3
EV/EBIT	n.a.	n.a.	66.9
Div. Yield	0.0%	0.0%	0.0%

STOCK OVERVIEW



COMPANY DATA

As of 30 Jun 2019

Liquid Assets	€ 3.86m
Current Assets	€ 10.05m
Intangible Assets	€ 48.69m
Total Assets	€ 61.56m
Current Liabilities	€ 7.15m
Shareholders' Equity	€ 46.34m

SHAREHOLDERS

Deutsche Balaton	8.3%
Fernandez Trust	5.1%
Dr. Lanckriet	3.2%
Free Float	83.4%



These non-cash administrative expenses were related to the revaluation of earn outs and chiefly stemmed from the TGR acquisition (€812k), as well as to the employee option compensation plan (€125k). EBITDA adjusted for these non-cash items amounted to €1.2m and was slightly above our projection of €1.0m. We note that in Q4/18 the company booked a non-cash gain of €1.0m stemming from the revaluation of the earn-out associated with the TGR acquisition. The weak performance of Expedeon's share price during 2018 led to a reduction in the accounting fair value of the earn-out to be settled in shares. However, following the share price recovery which took place during H1/19 and the clear expectation that TGR will achieve 100% of its 2019 revenue targets, the company carried out a revaluation of the TGR acquisition earn-out in Q2/19. This led to the €812k non-cash loss booked under administrative expenses. Reported EBIT came in at €-1.2m. Adjusted for the above-mentioned non-cash items, EBIT was €-0.3m and above our projection of €-0.4m (H1/18 adj.: €-0.9m). Reported net income for the period came in at €-1.8m (FB: €-0.4m; H1/18: €-0.9m).

Figure 1: P&L H1/19 reported figures vs. FB estimates and H1/18 (KPIs)

H1/19 results	H1/19	H1/19E	Delta	H1/18	Delta
Revenues	7,351	7,530	-2%	5,620	31%
Gross profit	5,591	5,640	-1%	4,077	37%
margin	76.1%	74.9%		72.5%	
EBITDA	274	800	-66%	23	1091%
margin	3.7%	10.6%		0.4%	
EBITDA adjusted*	1,211	950	27%	164	638%
margin	16.5%	12.6%		2.9%	
EBIT	-1,228	-540	n.a.	-1,011	n.a.
EBIT adjusted*	-291	-390	n.a.	-870	n.a.
Net income / loss	-1,785	-380	n.a.	-873	n.a.

*Profitability figures adjusted for other non-cash as well as acquisition-related expenses

Source: First Berlin Equity Research, Expedeon AG

Solid balance sheet Expedeon reported a lower cash position of €3.9m (FY/18: €6.2m), which is chiefly explained by a €1.2m loan note repayment to former TGR shareholders related to the company's acquisition, as well as Spanish soft loan repayments of €0.3m. As a result, financial liabilities (LT+ST) declined to €9.0m in H1/19 (FY/18: €10.6m). Net debt amounted to €5.1m (FY/18: €4.4m). Equity declined slightly to €46.3m (FY/18: €46.5m), corresponding to a high equity ratio of 75% (FY/18: 72%).

Positive operating cash flow Operating cash flow came in at €0.2m (H1/18: €-0.7m). Cash flow from investment activities declined to €-0.5m (H1/18: €-6.2m). In H1/18, this position included a €5.7m cash outflow for Expedeon's acquisition of TGR. Financing cash flow declined to €-1.8m in H1/19 from €6.1m in H1/18. While Expedeon repaid debt in H1/19, it raised debt and equity in H1/18 to finance TGR's acquisition.

Company guidance for 2019 confirmed Expedeon is still guiding towards double-digit sales growth and adjusted EBITDA higher than €2.0m in 2019. Following the adjusted EBITDA of €1.2m achieved in H1/19, the company is on track to meet its targets.

Several commercial agreements and launched products over the last few months will support company's growth strategy In August the company announced a commercial agreement with Sona Nanotech Inc. for its proprietary gold nanoparticle and bioconjugation technologies for the development of complex diagnostic applications. The partner will use Expedeon's technologies to offer development services for highly demanded multiplex point-of-care (POC) and lateral flow assay (LFA) diagnostic tests. This cooperation has the potential to fuel the company's mid-term growth prospects. Furthermore, in May and June, Expedeon expanded its product portfolio by launching three new products which significantly



improve immunoassay procedures (e.g. ELISA immunoassay) based on its core technologies CaptSure (2x) and Lightning-Link (1x). The three new products, CaptSure based DIY-ELISA and ELISA-ONE, as well as the Lightning-Link Labelling Kits, widen the company's offering within the academic, industrial and diagnostic development markets. They enable a new range of applications such as single-cell analysis, monitoring of cell signalling pathways, investigation of specific intracellular proteins in signalling pathways, etc. These products will boost company's short to mid-term product sales in our view. The ELISA-ONE market alone is estimated by Expedeon at approx. USD300m.

Management confirmed estimation that core technologies powered by cooperation deals have the potential to boost company's mid-term product sales by up to €30m by 2022 During the H1/19 investors' call, Expedeon's management reiterated its previous estimation of the high additional sales potential emerging from the company's development pipeline and collaborations. Based on 24 active programmes, management can see incremental sales potential of €30m by 2022 (see figure 2 below). We currently view this as upside to our forecasts.

Figure 2: Development pipeline indicative incremental sales potential by 2022

GROWTH OPPORTUNITY	NUMBER OF ACTIVE PROGRAMMES	SALES POTENTIAL IN € MILLION
Gene therapy	2	10
Oligo barcoding	7	5
Isotope barcoding	3	5
Multiplex	3	3
Diagnostic supplies	9	7
TOTAL	24	30

Source: First Berlin Equity Research, Expedeon AG

Expedeon's shares converted from bearer shares into registered shares On October 4, the company announced the conversion of its shares to registered shares. The registered shares are now traded under the new ISIN DE000A2YN801 (previously: DE000A1RFM03) or WKN A2YN80 (previously: A1RFM0). The stock symbol changed to EXNN (previously: EXN).

Buy rating and price target unchanged Based on unchanged estimates, our DCF model still yields an unchanged price target of €2.20. We reiterate our Buy recommendation.



VALUATION MODEL

Figure 3: DCF Model

All figures in EUR '000	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Net sales	16,016	19,219	23,063	27,676	33,211	39,853	47,824	56,911
NOPLAT	-805	935	2,625	4,465	6,919	9,469	11,885	13,803
+ depreciation & amortisation	2,643	2,191	2,007	1,827	1,827	1,993	2,200	2,276
Net operating cash flow	1,838	3,126	4,631	6,292	8,746	11,462	14,085	16,079
- total investments (CAPEX and WC)	-2,038	-2,596	-2,175	-2,178	-2,395	-2,536	-2,890	-2,774
Capital expenditures	-1,345	-1,345	-1,384	-1,356	-1,594	-1,475	-1,769	-2,106
Working capital	-693	-1,251	-792	-822	-801	-1,061	-1,121	-668
Free cash flows (FCF)	-200	530	2,456	4,114	6,350	8,926	11,195	13,305
PV of FCF's	-189	457	1,930	2,948	4,149	5,318	6,081	6,589

All figures in EUR '000	
PV of FCFs in explicit period	51,402
PV of FCFs in terminal period	75,482
Enterprise value (EV)	126,884
+ Net cash / - net debt	-4,409
+ Investments / minority interests	0
Shareholder value	122,475
Diluted number of shares	55,584
Fair value per share in EUR	2.20

	WACC	Terminal growth rate							
		1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	
Cost of equity	10.5%	6.7%	3.38	3.62	3.90	4.26	4.71	5.31	6.12
Pre-tax cost of debt	5.0%	7.7%	2.76	2.91	3.09	3.30	3.56	3.89	4.30
Tax rate	22.0%	8.7%	2.30	2.40	2.52	2.66	2.83	3.02	3.26
After-tax cost of debt	3.9%	9.7%	1.95	2.03	2.11	2.20	2.31	2.44	2.59
Share of equity capital	87.5%	10.7%	1.68	1.73	1.79	1.86	1.94	2.02	2.12
Share of debt capital	12.5%	11.7%	1.46	1.50	1.54	1.59	1.65	1.71	1.78
WACC	9.7%	12.7%	1.28	1.31	1.34	1.38	1.42	1.47	1.51

*Please note our model runs through 2030 and we have only shown the abbreviated version for formatting purposes



INCOME STATEMENT

All figures in EUR '000	2016	2017*	2018	2019E	2020E	2021E
Revenues	1,789	7,797	13,128	16,016	19,219	23,063
Cost of goods sold	-1,026	-2,881	-3,591	-4,324	-5,093	-5,973
Gross profit	763	4,916	9,537	11,692	14,126	17,090
Marketing & sales expenses	-895	-1,870	-2,809	-3,043	-3,402	-4,059
Administration expenses	-2,771	-6,749	-7,482	-8,232	-8,264	-8,303
Research & development	-1,219	-794	-1,043	-1,201	-1,480	-1,799
Other operating income (expenses)	102	4	1,212	-20	-20	-20
EBITDA	-3,208	-2,895	1,761	1,838	3,151	4,916
Operating income (EBIT)	-4,020	-4,493	-585	-805	960	2,909
Net financial result	-128	-163	82	-724	-752	-724
Pre-tax income (EBT)	-4,148	-4,656	-503	-1,529	208	2,185
Tax result	-240	961	202	15	-25	-284
Net income / loss	-4,388	-3,695	-301	-1,514	183	1,901
Other comprehensive income (currency related)	376	-1,468	239	0	0	0
Total comprehensive income	-4,012	-5,163	-62	-1,514	183	1,901
Diluted EPS (in €)	-0.18	-0.12	0.00	-0.01	0.00	0.03
One-off expenses**	-764	-765				
Other non-cash income/expenses***			777	-265	-265	-265
Adjusted EBITDA stripping out other non-cash or one-off expenses	-2,444	-2,130	984	2,103	3,416	5,181
Adjusted EBIT stripping out other non-cash or one-off expenses**	-3,256	-3,728	-1,362	-540	1,225	3,174
*FY/17 figures corrected in accordance with IAS 8 following audit of FY/16 financial statement by German authorities						
**In 2016 and 2017 Sygnis incurred one-off integration and restructuring expenses related to the acquisitions of C.B.S. Scientific, Expedeon and Innova Biosciences						
***Based on other non-cash expenses seen in FY/18 related to employee share option compensation, we have projected other non-cash expenses for the period 2019E-2021E						
Ratios						
Gross margin	42.6%	63.0%	72.5%	73.0%	73.5%	74.1%
EBITDA margin on revenues	n.m.	n.m.	13.4%	11.5%	16.4%	21.3%
EBITDA adj. margin on revenues	n.m.	n.m.	7.5%	13.1%	17.8%	22.5%
EBIT margin on revenues	n.m.	n.m.	n.m.	-5.0%	5.0%	12.6%
EBIT adj. margin on revenues	n.m.	n.m.	n.m.	n.m.	6.4%	13.8%
Net margin on revenues	n.m.	n.m.	n.m.	-9.5%	1.0%	8.2%
Tax rate	-5.8%	20.6%	40.2%	1.0%	12.0%	13.0%
Expenses as % of revenues						
Marketing & sales expenses	50.0%	24.0%	21.4%	19.0%	17.7%	17.6%
Administration expenses	154.9%	86.6%	57.0%	51.4%	43.0%	36.0%
Research & development	68.1%	10.2%	7.9%	7.5%	7.7%	7.8%
Y-Y Growth						
Revenues	222.3%	335.8%	68.4%	22.0%	20.0%	20.0%
Operating income (EBIT)	n.m.	n.m.	n.m.	n.m.	n.m.	203.0%
Net income/ loss	n.m.	n.m.	n.m.	n.m.	n.m.	936.5%



BALANCE SHEET

All figures in EUR '000	2016	2017*	2018	2019E	2020E	2021E
Assets						
Current assets, total	6,330	5,807	12,369	13,550	14,469	17,357
Cash and cash equivalents	3,795	1,954	6,238	7,439	7,481	9,479
Receivables	771	1,472	2,627	2,808	3,370	3,918
Inventories	1,092	1,234	1,966	1,765	2,079	2,422
Other current assets	672	1,147	1,538	1,538	1,538	1,538
Non-current assets, total	31,712	43,725	51,489	50,192	49,347	48,724
Property, plant & equipment	957	2,050	1,999	1,903	1,826	1,942
Goodwill	23,829	30,408	33,906	33,906	33,906	33,906
Intangible assets	6,926	11,267	15,584	14,383	13,614	12,876
Other assets	0	0	0	0	0	0
Total assets	38,042	49,532	63,858	63,743	63,815	66,081
Shareholders' equity & debt						
Current liabilities, total	3,198	5,142	7,759	6,534	6,158	6,257
Short-term debt	421	1,766	3,171	2,021	2,021	2,021
Accounts payable	656	849	1,498	1,422	1,046	1,146
Other current liabilities	2,121	2,527	3,090	3,090	3,091	3,091
Long-term liabilities, total	3,437	5,324	9,597	11,162	11,427	11,692
Long-term debt	2,285	3,947	7,476	8,776	8,776	8,776
Other liabilities and provisions	1,152	1,377	2,121	2,386	2,651	2,916
Shareholders' equity	31,407	39,066	46,502	46,047	46,231	48,132
Total consolidated equity and debt	38,042	49,532	63,858	63,743	63,815	66,081
<i>*FY/17 figures corrected in accordance with IAS 8 following audit of FY/16 financial statement by German authorities</i>						
Ratios						
Current ratio (x)	2.0	1.1	1.6	2.1	2.3	2.8
Quick ratio (x)	1.6	0.9	1.3	1.8	2.0	2.4
Net debt/(net cash)	-1,089	3,759	4,409	3,358	3,316	1,318
Net gearing	-3.5%	9.6%	9.5%	7.3%	7.2%	2.7%
Book value per share (in €)	1.43	0.94	0.91	0.43	0.84	0.88
Return on equity (ROE)	-14.0%	-9.5%	-0.6%	-3.3%	0.4%	3.9%



CASH FLOW STATEMENT

All figures in EUR '000	2016	2017*	2018	2019E	2020E	2021E
Net income	-4,388	-3,695	-301	-1,514	183	1,901
Depreciation and amortisation	812	1,598	2,345	2,643	2,191	2,007
Changes in working capital	-653	-1,184	-322	-56	-1,251	-791
Other adjustments	1,129	435	-1,630	265	265	265
Operating cash flow	-3,100	-2,846	92	1,338	1,388	3,382
Interest expense	-115	-38	-250	0	0	0
Net operating cash flow	-3,215	-2,884	-158	1,338	1,388	3,382
CapEx	-673	-2,123	-1,051	-1,345	-1,345	-1,384
Free cash flow	-3,888	-5,007	-1,209	-7	43	1,998
Other investments and disposals	-1,129	-7,194	-5,656	0	0	0
Cash flow from investing	-1,802	-9,317	-6,707	-1,345	-1,345	-1,384
Debt financing, net	129	1,095	6,465	150	0	0
Equity financing, net	4,115	9,330	4,722	1,059	0	0
Cash flow from financing	4,244	10,425	11,187	1,209	0	0
Exchange differences	11	-65	-39	0	0	0
Net cash flow	-762	-1,841	4,283	1,202	43	1,998
Cash, start of the year	4,557	3,795	1,954	6,237	7,439	7,481
Cash, end of the year	3,795	1,954	6,237	7,439	7,481	9,479
EBITDA/share (in €)	-0.15	-0.07	0.03	0.02	0.06	0.09

*FY/17 figures corrected in accordance with IAS 8 following audit of FY/16 financial statement by German authorities

Y-Y Growth

Operating cash flow	n.m.	n.m.	n.m.	1359.7%	3.7%	143.6%
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	4590.1%
EBITDA/share	n.m.	n.m.	n.m.	-50.4%	235.6%	56.0%

FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	13 August 2018	€1.43	BUY	€2.65
...	↓	↓	↓	↓
2	5 December 2018	€1.00	BUY	€2.55
3	29 May 2019	€0.90	BUY	€2.20
4	Today	€1.01	BUY	€2.20

Authored by: Christian Orquera, Analyst

Company responsible for preparation:

First Berlin Equity Research GmbH

Mohrenstraße 34
10117 Berlin

Tel. +49 (0)30 - 80 93 96 93 Fax +49 (0)30 - 80 93 96 87

info@firstberlin.com

www.firstberlin.com

Person responsible for forwarding or distributing this financial analysis: Martin Bailey

Copyright© 2019 First Berlin Equity Research GmbH No part of this financial analysis may be copied, photocopied, duplicated or distributed in any form or media whatsoever without prior written permission from First Berlin Equity Research GmbH. First Berlin Equity Research GmbH shall be identified as the source in the case of quotations. Further information is available on request.

INFORMATION PURSUANT TO SECTION 34B OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO REGULATION (EU) NO 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF APRIL 16, 2014, ON MARKET ABUSE (MARKET ABUSE REGULATION) AND TO THE GERMAN ORDINANCE ON THE ANALYSIS OF FINANCIAL INSTRUMENTS [FINANV]

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular the German Securities Trading Act [WpHG], Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and the German Ordinance on the Analysis of Financial Instruments [FinAnV] into consideration. In the following First Berlin provides investors with information about the statutory provisions that are to be observed in the preparation of financial analyses.

CONFLICTS OF INTEREST

In accordance with Section 34b Paragraph 1 of the German Securities Trading Act [WpHG] and Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) financial analyses may only be passed on or publicly distributed if circumstances or relations which may cause conflicts of interest among the authors, the legal entities responsible for such preparation or companies associated with them are disclosed along with the financial analysis.

First Berlin offers a range of services that go beyond the preparation of financial analyses. Although First Berlin strives to avoid conflicts of interest wherever possible, First Berlin may maintain the following relations with the analysed company, which in particular may constitute a potential conflict of interest (further information and data may be provided on request):

- The author, First Berlin, or a company associated with First Berlin holds an interest of more than five percent in the share capital of the analysed company;
- The author, First Berlin, or a company associated with First Berlin provided investment banking or consulting services for the analysed company within the past twelve months for which remuneration was or was to be paid;
- The author, First Berlin, or a company associated with First Berlin reached an agreement with the analysed company for preparation of a financial analysis for which remuneration is owed;
- The author, First Berlin, or a company associated with First Berlin has other significant financial interests in the analysed company;

In order to avoid and, if necessary, manage possible conflicts of interest both the author of the financial analysis and First Berlin shall be obliged to neither hold nor in any way trade the securities of the company analyzed. The remuneration of the author of the financial analysis stands in no direct or indirect connection with the recommendations or opinions represented in the financial analysis. Furthermore, the remuneration of the author of the financial analysis is neither coupled directly to financial transactions nor to stock exchange trading volume or asset management fees.

If despite these measures one or more of the aforementioned conflicts of interest cannot be avoided on the part of the author or First Berlin, then reference shall be made to such conflict of interest.

INFORMATION PURSUANT TO SECTION 64 OF THE GERMAN SECURITIES TRADING ACT [WPHG] (2ND FIMANOG) OF 23 JUNE 2017, DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 15 MAY 2014 ON MARKETS IN FINANCIAL INSTRUMENTS AND AMENDING DIRECTIVE 2002/92/EC AND DIRECTIVE 2011/61/EU, ACCOMPANIED BY THE MARKETS IN FINANCIAL INSTRUMENTS REGULATION (MIFIR, REG. EU NO. 600/2014)

First Berlin notes that it has concluded a contract with the issuer to prepare financial analyses and is paid for that by the issuer. First Berlin makes the financial analysis simultaneously available for all interested security financial services companies. First Berlin thus believes that it fulfils the requirements of section 64 WpHG for minor non-monetary benefits.

PRICE TARGET DATES

Unless otherwise indicated, current prices refer to the closing prices of the previous trading day.

AGREEMENT WITH THE ANALYSED COMPANY AND MAINTENANCE OF OBJECTIVITY

The present financial analysis is based on the author's own knowledge and research. The author prepared this study without any direct or indirect influence exerted on the part of the analysed company. Parts of the financial analysis were possibly provided to the analysed company prior to publication in order to avoid inaccuracies in the representation of facts. However, no substantial changes were made at the request of the analysed company following any such provision.

ASSET VALUATION SYSTEM

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
Current market capitalisation (in €)		0 - 2 billion	> 2 billion
Strong Buy ¹	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%

¹ 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.

RISK ASSESSMENT

The First Berlin categories for risk assessment are low, average, high and speculative. They are determined by ten factors: Corporate governance, quality of earnings, management strength, balance sheet and financial risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, strength of brandname, market capitalisation and free float. These risk factors are incorporated into the First Berlin valuation models and are thus included in the target prices. First Berlin customers may request the models.

INVESTMENT HORIZON

Unless otherwise stated in the financial analysis, the ratings refer to an investment period of twelve months.

UPDATES

At the time of publication of this financial analysis it is not certain whether, when and on what occasion an update will be provided. In general First Berlin strives to review the financial analysis for its topicality and, if required, to update it in a very timely manner in connection with the reporting obligations of the analysed company or on the occasion of ad hoc notifications.

SUBJECT TO CHANGE

The opinions contained in the financial analysis reflect the assessment of the author on the day of publication of the financial analysis. The author of the financial analysis reserves the right to change such opinion without prior notification.

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

EXCLUSION OF LIABILITY (DISCLAIMER)

RELIABILITY OF INFORMATION AND SOURCES OF INFORMATION

The information contained in this study is based on sources considered by the author to be reliable. Comprehensive verification of the accuracy and completeness of information and the reliability of sources of information has neither been carried out by the author nor by First Berlin. As a result no warranty of any kind whatsoever shall be assumed for the accuracy and completeness of information and the reliability of sources of information, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the accuracy and completeness of information and the reliability of sources of information.

RELIABILITY OF ESTIMATES AND FORECASTS

The author of the financial analysis made estimates and forecasts to the best of the author's knowledge. These estimates and forecasts reflect the author's personal opinion and judgement. The premises for estimates and forecasts as well as the author's perspective on such premises are subject to constant change. Expectations with regard to the future performance of a financial instrument are the result of a measurement at a single point in time and may change at any time. The result of a financial analysis always describes only one possible future development – the one that is most probable from the perspective of the author – of a number of possible future developments.

Any and all market values or target prices indicated for the company analysed in this financial analysis may not be achieved due to various risk factors, including but not limited to market volatility, sector volatility, the actions of the analysed company, economic climate, failure to achieve earnings and/or sales forecasts, unavailability of complete and precise information and/or a subsequently occurring event which affects the underlying assumptions of the author and/or other sources on which the author relies in this document. Past performance is not an indicator of future results; past values cannot be carried over into the future.

Consequently, no warranty of any kind whatsoever shall be assumed for the accuracy of estimates and forecasts, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the correctness of estimates and forecasts.

INFORMATION PURPOSES, NO RECOMMENDATION, SOLICITATION, NO OFFER FOR THE PURCHASE OF SECURITIES

The present financial analysis serves information purposes. It is intended to support institutional investors in making their own investment decisions; however in no way provide the investor with investment advice. Neither the author, nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be considered to be acting as an investment advisor or portfolio manager vis-à-vis an investor. Each investor must form his own independent opinion with regard to the suitability of an investment in view of his own investment objectives, experience, tax situation, financial position and other circumstances.

The financial analysis does not represent a recommendation or solicitation and is not an offer for the purchase of the security specified in this financial analysis. Consequently, neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall as a result be liable for losses incurred through direct or indirect employment or use of any kind whatsoever of information or statements arising out of this financial analysis.

A decision concerning an investment in securities should take place on the basis of independent investment analyses and procedures as well as other studies including, but not limited to, information memoranda, sales or issuing prospectuses and not on the basis of this document.

NO ESTABLISHMENT OF CONTRACTUAL OBLIGATIONS

By taking note of this financial analysis the recipient neither becomes a customer of First Berlin, nor does First Berlin incur any contractual, quasi-contractual or pre-contractual obligations and/or responsibilities toward the recipient. In particular no information contract shall be established between First Berlin and the recipient of this information.

NO OBLIGATION TO UPDATE

First Berlin, the author and/or the person responsible for passing on or distributing the financial analysis shall not be obliged to update the financial analysis. Investors must keep themselves informed about the current course of business and any changes in the current course of business of the analysed company.

DUPLICATION

Dispatch or duplication of this document is not permitted without the prior written consent of First Berlin.

SEVERABILITY

Should any provision of this disclaimer prove to be illegal, invalid or unenforceable under the respectively applicable law, then such provision shall be treated as if it were not an integral component of this disclaimer; in no way shall it affect the legality, validity or enforceability of the remaining provisions.

APPLICABLE LAW, PLACE OF JURISDICTION

The preparation of this financial analysis shall be subject to the law obtaining in the Federal Republic of Germany. The place of jurisdiction for any disputes shall be Berlin (Germany).

NOTICE OF DISCLAIMER

By taking note of this financial analysis the recipient confirms the binding nature of the above explanations.

By using this document or relying on it in any manner whatsoever the recipient accepts the above restrictions as binding for the recipient.

QUALIFIED INSTITUTIONAL INVESTORS

First Berlin financial analyses are intended exclusively for qualified institutional investors.

This report is not intended for distribution in the USA and/or Canada.