

Media and Games Invest SE

Sweden / Application Software
 Nasdaq First North Premier & Xetra
 Bloomberg: M8G GR
 ISIN: SE0018538068

February OSG

RATING
BUY

PRICE TARGET
€ 3.60

Return Potential 184.4%
 Risk Rating High

BUSINESS UPSWING CONTINUES IN FEBRUARY

MGI reported record sales for the month of February underpinned by 25% OSG (organic sales growth). This comes on the heels of a strong uptick in the KPI to 16% in Q4 followed by 18% in January. MGI brass pointed out that the drivers behind the recent upswing were again visible in February: (1) increased ad budgets from customers; (2) new customer onboardings; and (3) rising demand for MGI's AI-driven contextual data solutions as targeting identifiers continue to vanish. The performance is encouraging, considering that the OSG-needle had barely budged at ~1% in January-to-September period last year. We are Buy-rated on MGI with a €3.6 TP.

Business upswing continues in February After notching a scant 1% adjusted OSG (organic sales growth) in each of the prior three quarters, MGI surprised with 16% in Q4 and noted carry-through into January with the KPI hitting 18%. The 25% February figure should further bolster investor confidence that the recent upswing will sustain throughout 2024. While rising ad-budgets are welcome, we highlight the increased demand for ID-less solutions, which should help the company continue to win new customers to build future growth. MGI also noted its new client pipeline is populated with several large blue-chip operators.

Digital advertising is changing As we emphasised in our last note of 3 March 2024, MGI was an early mover in contextual tools having launched ATOM and Moments.AI in 2021 and 2022 respectively. We think the ad market is only just beginning to adjust to the elimination of identifier snooping. In January, Google turned off third-party cookies for 30m of its Chrome users and is planning a 100% phase-out by Q3/24. Market players still reliant on identifiers will be compelled to find alternative solutions. Management hinted at double digit growth for 2024 on the last earnings call, and we expect MGI to give a more detailed 2024 outlook with Q1 reporting slated for 30 May. (p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2020	2021	2022	2023	2024E	2025E
Revenue (€m)	140.22	252.17	324.44	321.98	357.40	403.86
Y/Y growth	157.2%	79.8%	28.7%	-0.8%	11.0%	13.0%
AEBITDA (€m)	29.09	71.10	93.15	95.17	96.07	110.94
AEBITDA margin	20.7%	28.2%	28.7%	29.6%	26.9%	27.5%
Net income (€m)*	6.58	28.02	21.08	57.45	16.09	29.79
EPS (diluted) (€)*	0.04	0.20	0.14	0.36	0.10	0.19
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-12.50	-230.79	-42.45	40.11	37.56	51.24
Net gearing	31.2%	63.7%	84.3%	83.7%	80.7%	68.5%
Liquid assets (€m)	46.25	180.16	149.99	121.74	111.38	112.84

* Adjusted for PPA-amortisation

RISKS

Risks include but are not limited to: revenue diversity, financing, technology, and regulatory risks.

COMPANY PROFILE

Media and Games Invest SE is an advertising software platform with strong first-party games. MGI combines organic growth with value-generating synergetic acquisitions and has achieved strong profitable growth with a 78% revenue CAGR (2019-2022). MGI has acquired and integrated over 35 companies and assets in the past 10 years to achieve efficiency gains & competitive advantages.

MARKET DATA

As of 19 Mar 2024

Closing Price € 1.27
 Shares outstanding 159.25m
 Market Capitalisation € 201.61m
 52-week Range € 0.76 / 1.49
 Avg. Volume (12 Months) 50,746

Multiples	2023	2024E	2025E
P/E	3.5	12.5	6.8
EV/Sales	1.5	1.4	1.2
EV/AEBITDA	5.2	5.2	4.5
Div. Yield	0.0%	0.0%	0.0%

STOCK OVERVIEW



COMPANY DATA

As of 31 Dec 2023

Liquid Assets € 121.70m
 Current Assets € 193.50m
 Intangible Assets € 796.60m
 Total Assets € 1,007.00m
 Current Liabilities € 240.80m
 Shareholders' Equity € 352.50m

SHAREHOLDERS

Bodhivas GmbH 27.1%
 Oaktree Capital Mngt 17.7%
 Sterling Active Fund 5.1%
 Free Float 50.1%



VALUATION

Table 1: DCF model

All figures in EUR '000	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Revenue	357,399	403,861	446,267	484,199	518,093	543,998	565,758	582,731
NOPLAT	41,763	51,306	63,547	69,155	74,709	79,599	83,737	88,356
(+) depreciation & amortisation	33,996	35,609	31,250	33,791	36,062	37,798	39,256	40,393
(=) Net operating cash flow	75,759	86,915	94,797	102,946	110,771	117,397	122,993	128,749
(-) Investments	-50,327	-52,802	-29,506	-29,667	-29,970	-30,192	-29,702	-30,593
(-) Working capital	329	780	-887	22	-144	-350	-466	-572
(=) Free cash flows (FCF)	25,760	34,892	64,403	73,301	80,657	86,855	92,824	97,584
PV of FCFs	23,733	29,025	48,373	49,711	49,389	48,021	46,339	43,986

All figures in thousands	WACC	Terminal EBIT margin							
		15.4%	17.4%	19.4%	21.4%	23.4%	25.4%	27.4%	
PV of FCFs in explicit period	421,171	9.3%	3.56	4.01	4.46	4.91	5.36	5.81	6.26
PV of FCFs in terminal period	498,501	9.8%	3.20	3.60	4.00	4.40	4.81	5.21	5.61
Enterprise value (EV)	919,672	10.3%	2.89	3.25	3.61	3.97	4.33	4.68	5.04
(+) Net cash / (-) net debt (pro-forma)	-294,900	10.8%	2.62	2.94	3.26	3.58	3.90	4.23	4.55
(-) Non-controlling interests	-552	11.3%	2.37	2.66	2.95	3.24	3.53	3.82	4.12
Shareholder value	624,220	11.8%	2.15	2.41	2.68	2.94	3.20	3.47	3.73
Fair value per share (€)	3.60	12.3%	1.95	2.19	2.43	2.67	2.91	3.15	3.39

	WACC	Terminal growth rate							
		1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	
Cost of equity	13.6%	9.3%	4.14	4.36	4.62	4.91	5.25	5.65	6.12
Pre-tax cost of debt	9.0%	9.8%	3.75	3.94	4.16	4.40	4.69	5.01	5.40
Tax rate	28.0%	10.3%	3.41	3.58	3.76	3.97	4.20	4.47	4.79
After-tax cost of debt	6.5%	10.8%	3.11	3.25	3.41	3.58	3.78	4.01	4.27
Share of equity capital	60.0%	11.3%	2.83	2.96	3.09	3.24	3.41	3.60	3.82
Share of debt capital	40.0%	11.8%	2.59	2.69	2.81	2.94	3.09	3.25	3.43
WACC	10.8%	12.3%	2.36	2.46	2.56	2.67	2.80	2.94	3.09

*Please note our model runs through 2033 and we have only shown the abbreviated version for formatting purposes



INCOME STATEMENT

All figures in EUR '000	2020	2021	2022	2023	2024E	2025E
Revenues	140,220	252,166	324,444	321,981	357,399	403,861
Capitalised work	15,994	22,851	28,928	25,954	26,269	27,706
Total output	156,214	275,017	353,373	347,935	383,668	431,567
Services purchased + Other OpEx	-96,365	-162,623	-215,619	-212,950	-217,299	-241,036
Personnel expenses	-39,573	-55,978	-76,207	-77,975	-79,628	-89,080
Other operating income	6,272	8,626	23,206	71,447	5,328	5,488
EBITDA	26,549	65,042	84,753	128,458	92,070	106,939
Depreciation & amortisation	-15,508	-28,238	-58,135	-29,456	-33,996	-35,609
Operating income (EBIT)	11,041	36,804	26,618	99,002	58,074	71,330
Net financial result	-7,139	-21,919	-37,959	-50,066	-45,922	-44,782
Pre-tax income (EBT)	3,901	14,885	-11,341	48,936	12,152	26,548
Income taxes	-1,194	1,169	-9,064	-2,718	-6,115	-5,310
Net income	2,707	16,054	-20,405	46,218	6,037	21,239
Discontinued operations	0	0	0	0	0	0
Consolidated profit	2,707	16,054	-20,405	46,218	6,037	21,239
Minority interests	352	7	88	513	-6	-21
Net income to owners	3,059	16,060	-20,317	46,731	6,031	21,218
Diluted EPS (in €)	0.03	0.11	-0.13	0.26	0.03	0.12
Adj. EPS (excl PPA amort.) (diluted)	0.04	0.20	0.14	0.36	0.10	0.19
AEBITDA (excl: one-offs)	29,090	71,100	93,153	95,171	96,070	110,939
AEBIT (excl: PPA amort. & one-offs)	14,916	54,826	76,508	76,943	72,124	83,880
Ratios						
EBITDA margin on revenues	18.9%	25.8%	26.1%	39.9%	25.8%	26.5%
EBIT margin on revenues	7.9%	14.6%	8.2%	30.7%	16.2%	17.7%
Net margin on revenues	2.2%	6.4%	-6.3%	14.5%	1.7%	5.3%
AEBITDA margin on revenues	20.7%	28.2%	28.7%	29.6%	26.9%	27.5%
Tax rate	30.6%	n.a.	-79.9%	5.6%	10.0%	20.0%
Expenses as % of revenues						
Services purchased + Other OpEx	68.7%	64.5%	66.5%	66.1%	60.8%	59.7%
Personnel expenses	28.2%	22.2%	23.5%	24.2%	22.3%	22.1%
Depreciation & amortisation	11.1%	11.2%	17.9%	9.1%	9.5%	8.8%
Y-Y Growth						
Revenues	67.1%	79.8%	28.7%	-0.8%	11.0%	13.0%
EBITDA	70.8%	145.0%	30.3%	51.6%	-28.3%	16.2%
Operating income	120.9%	233.4%	-27.7%	271.9%	-41.3%	22.8%
Net income/ loss	n.m.	425.0%	n.m.	n.m.	-87.1%	251.8%



BALANCE SHEET

All figures in EUR '000	2020	2021	2022	2023	2024E	2025E
Assets						
Current assets, total	92,375	283,599	221,022	193,512	183,841	193,613
Cash and equivalents	46,254	180,157	149,992	121,739	111,382	112,841
Trade receivables	46,121	103,442	71,030	71,773	72,459	80,772
Non-current assets, total	293,467	650,495	823,637	813,516	807,436	802,222
Property, plant & equipment	1,742	4,681	5,522	3,963	4,142	4,344
Intangible assets	272,829	605,746	791,284	796,608	790,132	784,495
Deferred taxes	15,737	11,545	6,651	10,506	10,716	10,930
Investments in associated companies	1,207	1,154	1,003	1,003	1,003	1,003
Other financial assets	1,952	27,369	19,177	1,436	1,443	1,450
Total assets	385,842	934,094	1,044,659	1,007,028	991,277	995,836
Shareholders' equity & debt						
Current liabilities, total	78,205	243,434	219,471	240,769	218,403	201,134
Trade payables	30,037	53,754	68,711	80,335	81,350	90,443
ST financial debt	6,087	32,027	31,903	32,000	30,000	25,000
Provisions	17,257	54,036	65,225	61,656	62,581	63,520
Other current financial liabilities	12,897	83,568	32,290	45,257	22,629	0
Other current liabilities	11,927	20,049	21,342	21,521	21,844	22,171
Long term liabilities, total	130,792	383,168	503,443	413,804	414,382	414,971
Other LT financial liabilities	11,671	16,034	89,618	36,881	36,881	36,881
Bonds	95,355	343,925	389,386	348,038	348,038	348,038
Deferred tax liabilities	23,766	23,209	24,439	28,885	29,463	30,052
Shareholders' equity	176,845	307,492	321,745	352,455	358,492	379,731
Total consolidated equity and debt	385,842	934,094	1,044,659	1,007,028	991,277	995,836
Ratios						
Current ratio (x)	1.2	1.2	1.0	0.8	0.8	1.0
Net debt	55,188	195,795	271,297	294,900	289,284	260,197
ICR (x)	4.1	4.6	4.0	2.5	3.1	3.6
Net gearing	31%	64%	84%	84%	81%	69%
Net debt / EBITDA (x)	1.9	2.8	2.9	3.1	3.0	2.3
Equity ratio	46%	33%	31%	35%	36%	38%
Return on equity (ROE)	1.5%	5.2%	-6.3%	13.1%	1.7%	5.6%
Capital employed (CE)	307,637	690,660	825,188	766,259	772,874	794,702
Return on capital employed (ROCE)	4%	5%	3%	13%	8%	9%



CASH FLOW STATEMENT

All figures in EUR '000	2020	2021	2022	2023	2024E	2025E
Net income	2,707	16,054	-20,405	46,218	6,037	21,239
Operating cash flow	29,745	68,996	83,298	60,740	92,070	106,939
Net operating cash flow	25,202	63,937	134,220	74,533	87,899	104,051
Cash flow from investing	-37,707	-294,729	-176,672	-34,423	-50,334	-52,810
Cash flow from financing	25,774	364,695	12,288	-65,481	-47,922	-49,782
Net cash flows	13,269	133,903	-30,164	-25,371	-10,357	1,459
Fx adjustments	0	0	0	-2,882	0	0
Cash, start of the year	32,984	46,254	180,157	149,992	121,739	111,382
Cash, end of the year	46,253	180,157	149,992	121,739	111,382	112,841
Free cash flow (FCF)	-12,505	-230,792	-42,452	40,110	37,564	51,241
FCFps (in €)	-0.15	-1.63	-0.27	0.25	0.24	0.32
Y-Y Growth						
Operating cash flow	56.4%	153.7%	109.9%	-44.5%	17.9%	18.4%
Free cash flow	n.m.	n.m.	n.m.	n.m.	-6.3%	36.4%
FCF / share	n.m.	n.m.	n.m.	n.m.	-6.3%	36.4%

Imprint / Disclaimer

First Berlin Equity Research

First Berlin Equity Research GmbH ist ein von der BaFin betreffend die Einhaltung der Pflichten des §85 Abs. 1 S. 1 WpHG, des Art. 20 Abs. 1 Marktmissbrauchsverordnung (MAR) und der Markets Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Durchführungsverordnung und der Markets in Financial Instruments Regulations (MiFIR) beaufsichtigtes Unternehmen.

First Berlin Equity Research GmbH is one of the companies monitored by BaFin with regard to its compliance with the requirements of Section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) Market Abuse Regulation (MAR) and Markets in Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Commission Delegated Regulation and Markets in Financial Instruments Regulations (MiFIR).

Anschrift:

First Berlin Equity Research GmbH
 Friedrichstr. 34
 10117 Berlin
 Germany

Vertreten durch den Geschäftsführer: Martin Bailey

Telefon: +49 (0) 30-80 93 9 680

Fax: +49 (0) 30-80 93 9 687

E-Mail: info@firstberlin.com

Amtsgericht Berlin Charlottenburg HR B 103329 B

UST-Id.: 251601797

Ggf. Inhaltlich Verantwortlicher gem. § 6 MDSStV

First Berlin Equity Research GmbH

Authored by: Ellis Acklin, Senior Analyst

All publications of the last 12 months were authored by Ellis Acklin.

Company responsible for preparation: First Berlin Equity Research GmbH, Friedrichstraße 69, 10117 Berlin

The production of this recommendation was completed on 20 March 2024 at 13:07

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

Copyright© 2024 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 85 (1) SENTENCE 1 OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO ART. 20 (1) OF 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 ART. 37 OF COMMISSION DELEGATED REGULATION (EU) NO 2017/565 (MiFID) II.

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and art. 37 of Commission Delegated Regulation (EU) no. 2017/565 (MiFID II) 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 art. 37 (1) of Commission Delegated Regulation (EU) no. 2017/565 (MiFID) II and art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) investment firms which produce, or arrange for the production of, investment research that is intended or likely to be subsequently disseminated to clients of the firm or to the public, under their own responsibility or that of a member of their group, shall ensure the implementation of all the measures set forth in accordance with Article 34 (2) lit. (b) of Regulation (EU) 2017/565 in relation to the financial analysts involved in the production of the investment research and other relevant persons whose responsibilities or business interests may conflict with the interests of the persons to whom the investment research is disseminated. In accordance with art. 34 (3) of Regulation (EU) 2017/565 the procedures and measures referred to in paragraph 2 lit. (b) of such article shall be designed to ensure that relevant persons engaged in different business activities involving a conflict of interests carry on those activities at a level of independence appropriate to the size and activities of the investment firm and of the group to which it belongs, and to the risk of damage to the interests of clients.

In addition, First Berlin shall pursuant to Article 5 of the Commission Delegated Regulation (EU) 2016/958 disclose in their recommendations all relationships and circumstances that may reasonably be expected to impair the objectivity of the financial analyses, including interests or conflicts of interest, on their part or on the part of any natural or legal person working for them under a contract, including a contract of employment, or otherwise, who was involved in producing financial analyses, concerning any financial instrument or the issuer to which the recommendation directly or indirectly relates.

With regard to the financial analyses of Media and Games Invest SE the following relationships and circumstances exist which may reasonably be expected to impair the objectivity of the financial analyses: The author, First Berlin, or a company associated with First Berlin reached an agreement with the Media and Games Invest SE for preparation of a financial analysis for which remuneration is owed.

Furthermore, 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:

- The author, First Berlin, or a company associated with First Berlin owns a net long or short position exceeding the threshold of 0.5 % of the total issued share capital of the analysed company;
- 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;

With regard to the financial analyses of Media and Games Invest SE the following of the aforementioned potential conflicts of interests or the potential conflicts of interest mentioned in Article 6 paragraph 1 of the Commission Delegated Regulation (EU) 2016/958 exist: The author, First Berlin, or a company associated with First Berlin reached an agreement with the Media and Games Invest SE for preparation of a financial analysis for which remuneration is owed.

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.

INFORMATION PURSUANT TO SECTION 64 OF THE GERMAN SECURITIES TRADING ACT [WPHG], 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.

RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	7 November 2019	€1.23	Buy	€2.10
2...25	↓	↓	↓	↓
26	29 July 2022	€2.24	Buy	€4.40
27	9 September 2022	€1.92	Buy	€4.40
28	17 November 2022	€1.79	Buy	€4.40
29	6 March 2023	€1.62	Buy	€4.00
30	2 June 2023	€1.10	Buy	€4.00
31	12 September 2023	€1.14	Buy	€3.20
32	7 December 2023	€0.80	Buy	€3.20
33	11 March 2024	€1.37	Buy	€3.60
34	Today	€1.27	Buy	€3.60

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: <https://firstberlin.com/disclaimer-english-link/>

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Marie-Curie-Straße 24-28, 60439 Frankfurt am Main

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.