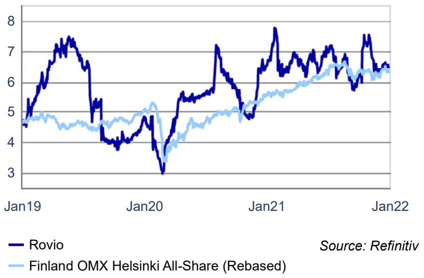
Rovio

Telecom Equipment and IT
Finland

KEY DATA

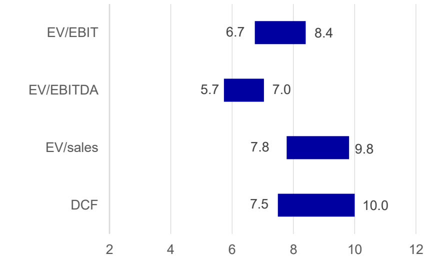
Stock country	Finland
Bloomberg	ROVIO FH
Reuters	ROVIO.HE
Share price (close)	EUR 6.48
Free Float	50%
Market cap. (bn)	EUR 0.48/EUR 0.48
Website	http://www.rovio.com/
Next report date	11 Feb 2022

PERFORMANCE



Source: Refinitiv

VALUATION APPROACH (EUR/SHARE)



Source: Nordea estimates

ESTIMATE CHANGES

Year	2021E	2022E	2023E
Sales	1%	4%	2%
EBIT (adj)	2%	-1%	0%

Source: Nordea estimates

Nordea Markets - Analysts
Felix Henriksson
Analyst

Sami Sarkamies
Director

Promising initiatives to drive growth

We expect Rovio's Q4 report to offer sequential growth in Games revenue, supported by both a solid organic contribution and the acquisition of Ruby Games. Looking further ahead, we find view Rovio's outlook favourable given the combination of highly cash-generative existing Angry Birds games and compelling growth initiatives offered by the soft launch pipeline (AB Journey, Hunter Assassin 2, Moomin: Puzzle and Design). Additionally, high capacity to drive M&A (EUR ~160m in cash and 9% of own shares) provides further upside for estimates and value-creation potential. The share remains attractively valued at a 40-60% discount to western mobile gaming peers. We maintain our fair value range of EUR 6.9-8.8.

Q4 to show sequential growth in Games revenue

For Q4, we model Games gross bookings of EUR 72.6m, corresponding to 9% q/q growth, of which 5 pp is derived organically thanks to sequential growth by key Angry Birds franchise games (AB 2, ABDB, AB Friends and AB Journey). Furthermore, Ruby Games has had its first full quarter as part of Rovio, contributing EUR 3.5m in bookings for Q4, based on our estimates. In line with the message conveyed with the Q3 results and Rovio's mid-quarter update, we expect UA costs in Q4 to remain in line with the Q3 level of 26% of Games revenue. For Q4, we forecast 3% above Infront consensus on revenue and 2% above on adjusted EBIT.

Earnings estimates for 2022-23 broadly unchanged

We raise our Q4 2021 Games revenue estimate based on commentary from Rovio's mid-quarter update and data from external sources (Sensor Tower, App Annie). For 2022-23, we lift our revenue estimates by 2-4%, thanks to our higher conviction in the potential for AB Journey and Hunter Assassin 2, in particular. However, our adjusted EBIT estimates for 2022-23 remain broadly unchanged, as we raise our opex due to the scaling-up of the Montreal and Toronto studios as well as higher UA relating to upcoming global launches of AB Journey and Hunter Assassin 2 in Q1 2022E and our estimated launch of Moomin: Puzzle and Design in Q4 2022E.

Fair value range of EUR 6.9-8.8

We derive an estimated fair value range of EUR 6.9-8.8 based on an average of four separate valuation methods: EV/EBIT, EV/EBITDA, EV/sales and DCF. We apply a 40% discount to the median multiples for peers due to Rovio's weaker growth profile.

SUMMARY TABLE - KEY FIGURES

EURm	2017	2018	2019	2020	2021E	2022E	2023E
Total revenue	297	281	289	272	283	320	338
EBITDA (adj)	65	48	33	65	52	60	63
EBIT (adj)	36	31	18	47	41	50	55
EBIT (adj) margin	12.1%	11.1%	6.4%	17.3%	14.6%	15.7%	16.4%
EPS (adj, EUR)	0.33	0.31	0.17	0.48	0.49	0.55	0.60
EPS (adj) growth	129.9%	-7.1%	-44.5%	180.7%	2.4%	12.4%	10.2%
DPS (ord, EUR)	0.06	0.09	0.09	0.12	0.13	0.14	0.15
EV/Sales	2.1	0.7	0.9	1.2	1.2	1.0	0.9
EV/EBIT (adj)	17.5	5.9	13.5	7.1	7.9	6.5	5.3
P/E (adj)	27.5	12.5	26.1	13.3	13.3	11.8	10.7
P/BV	5.1	1.9	2.1	2.8	2.5	2.1	1.9
Dividend yield (ord)	0.7%	2.4%	2.0%	1.9%	2.0%	2.2%	2.3%
FCF Yield bef A&D, lease	8.3%	13.6%	1.8%	12.6%	8.8%	9.5%	9.9%
Net debt	-88	-120	-110	-129	-149	-150	-183
Net debt/EBITDA	-1.5	-2.5	-3.4	-2.2	-2.9	-2.5	-2.9
ROIC after tax	43.9%	53.6%	30.0%	79.7%	82.4%	69.2%	60.5%

Source: Company data and Nordea estimates

Game portfolio update

Game overview by lifecycle

Rovio divides its game portfolio into three categories: Growth, Earn and Catalogue

At its CMD in November 2019, Rovio divided its game portfolio into three categories to describe its future growth prospects and the profitability of its various games.

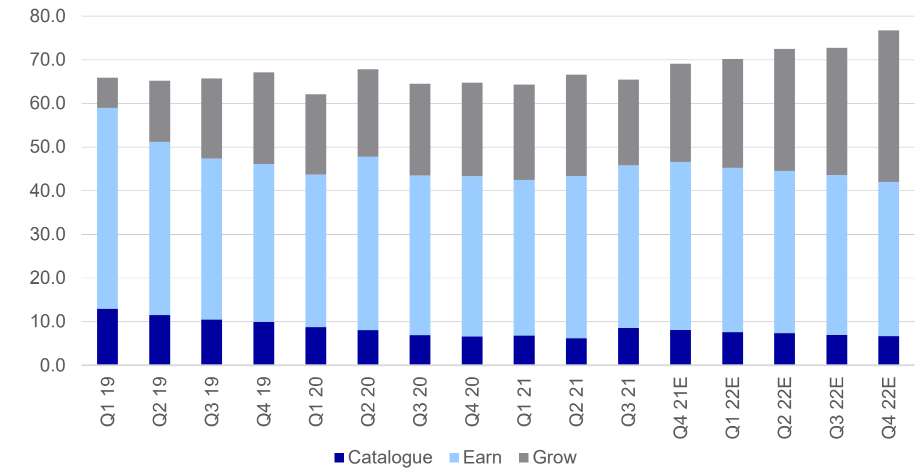
Growth games: These are games that Rovio aims to scale up with significant user acquisition (UA) investments. They have large developer teams and low to negative profit margins. Rovio's current growth games are AB Dream Blast, Small Town Murders and the games in soft launch (AB Journey, Supernatural City and Moomin: Puzzle and Design). Our estimates allocate all forecast game launches to this category.

Earn games: These are games that Rovio aims to maintain at their current size or to grow slightly. They may still have significant UA investments but notably lower than for the growth games. Development teams are still large, with a focus on live operations and new features, as well as events. Earn games have moderate to high profit margins. Current earn games are AB 2, AB Match and AB Friends.

Catalogue games: These are old or small games that require no significant UA investments or development teams. Revenue from these games declines over time as their user bases decrease. Catalogue games have very high profit margins, basically ~70%, as the only costs that these games incur are platform costs to Apple and Google at around 30%.

Largest share of quarterly revenue comes from Earn games

GAME PORTFOLIO REVENUE OVERVIEW BY LIFECYCLE* (EURm)



* Excludes revenue contribution from Ruby Games

Source: Company data and Nordea estimates

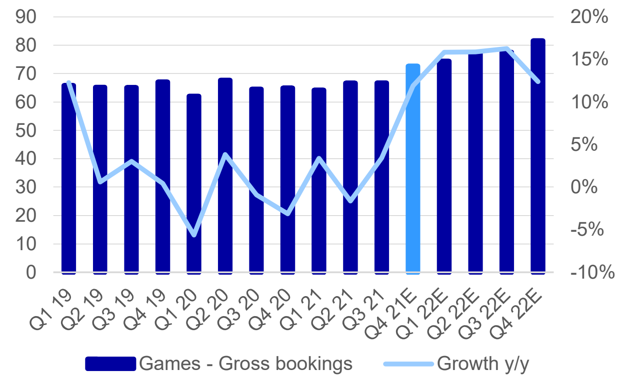
Q4 2021 expectations

Sequential organic growth, UA on a par with Q3

We expect Q4 to show sequential growth in gross bookings

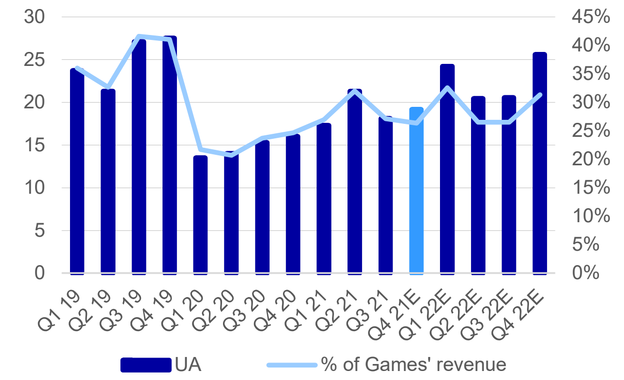
For Q4, we model Games gross bookings of EUR 72.6m, corresponding to 9% q/q growth, of which 5 pp is derived organically. Ruby Games has had its first full quarter as part of Rovio (consolidated from the start of September), and we expect a EUR 3.5m Q4 revenue contribution, which translates into a 4 pp contribution to growth in Rovio's gross bookings. In line with the message conveyed with the Q3 results and at Rovio's mid-quarter analyst meeting, we expect UA costs in Q4 to remain broadly in line with the Q3 level of 26% of Games revenue.

GAMES: GROSS BOOKINGS (EURm) AND GROWTH (%)



Source: Company data and Nordea estimates

UA COSTS (EURm) AND AS % OF GAMES' REVENUE (%)

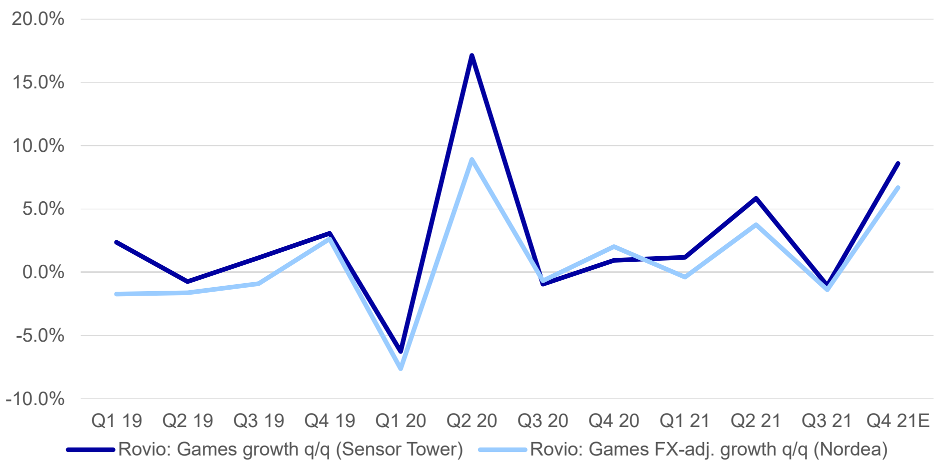


Source: Company data and Nordea estimates

We find support for our estimates in Sensor Tower data on in-app purchase revenue, which accounted for 88% of Rovio's 2020 revenue for Games. We adjust the raw Sensor Tower data with our estimates for Rovio's advertising revenue, which accounts for the rest of Games' revenue. The data from Sensor Tower includes both iOS and Android devices and has a vast geographical reach including 95 countries. The historical correlation between the data and our FX-adjusted gross bookings growth for Rovio's Games segment has been fairly accurate.

Sensor Tower data on IAP revenues supports our estimates

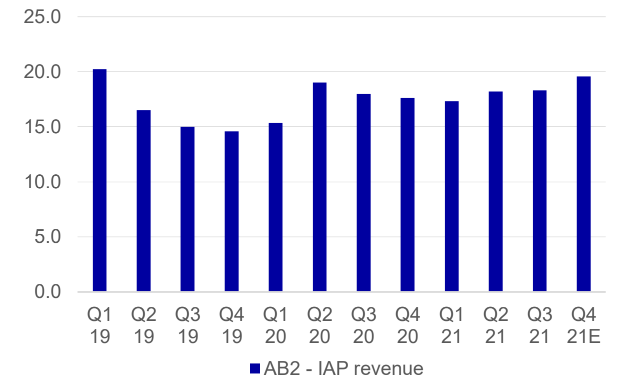
GAMES: Q/Q GROWTH IN GROSS BOOKINGS – SENSOR TOWER VS OUR ESTIMATES



Source: Sensor Tower and Nordea estimates

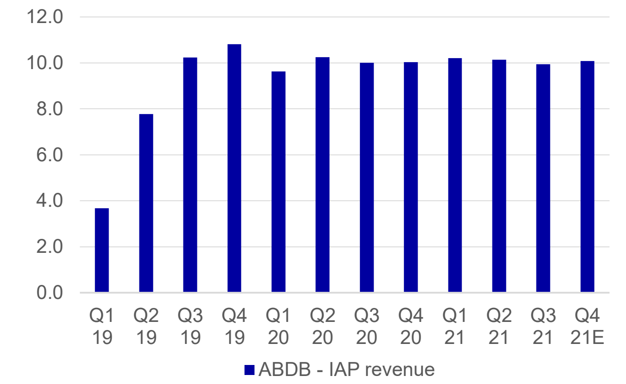
Based on Sensor Tower data and Rovio's Q4 mid-quarter meeting message, we forecast 4% q/q growth for Rovio's two largest games: AB 2 and AB Dream Blast. As we understand it, AB 2 enjoyed tailwinds from good monetisation and retention thanks to seasonal events and ABDB had its strongest quarter of the year as a consequence of better monetisation and higher UA. For AB Friends, we also expect sequential growth in bookings at 2% q/q.

AB2: IN-APP PURCHASE REVENUE (USDm)



Source: Sensor Tower

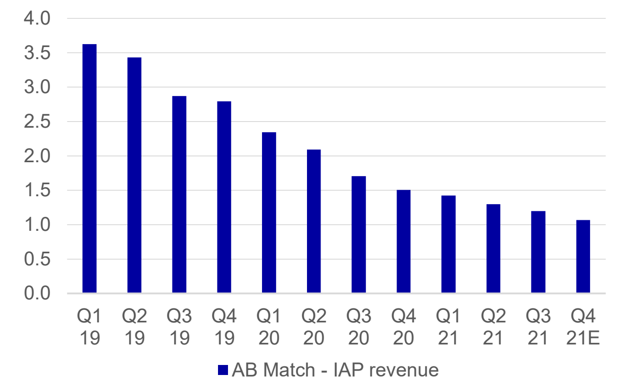
AB DREAM BLAST: IN-APP PURCHASE REVENUE (USDm)



Source: Sensor Tower

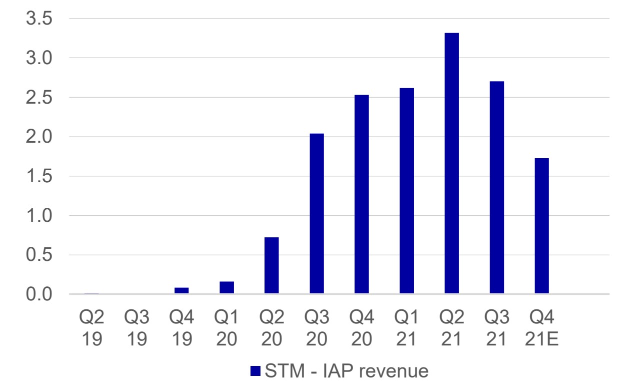
Based on our estimates, AB Match and Small Town Murders (STM) will show a sequential decline in bookings for Q4. Rovio reduced UA investments for Small Town Murders in Q4, to focus instead on improving the core game during the quarter. This has impacted bookings negatively, but the company is evaluating a further ramp-up of UA if KPIs justify this.

AB MATCH: IN-APP PURCHASE REVENUE (USDm)



Source: Sensor Tower

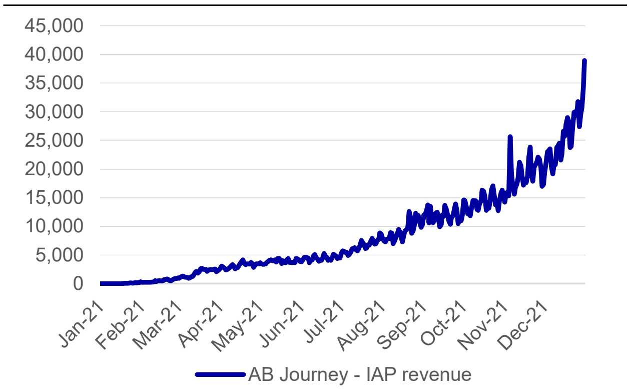
STM: IN-APP PURCHASE REVENUE (USDm)



Source: Sensor Tower

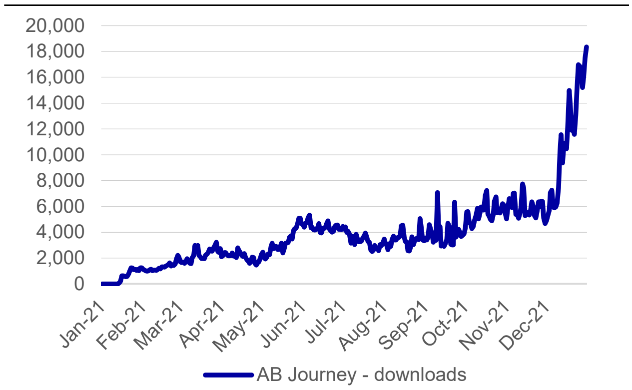
In addition to a solid performance by AB 2, ABDB and AB Friends and an inorganic growth contribution by Ruby Games, an important contributor to both Q4 2021E and 2022E growth for Rovio is AB Journey. The game is currently in soft launch and will launch globally on 20 January 2022. As we understand it, the game already generated EUR 2m of run-rate bookings in Q3 and, based on Sensor Tower data on in-app purchase revenues and downloads, the trend has been only improving since. We model EUR 3.5m of gross bookings from AB Journey for Q4, rising to EUR 6.0m for Q1 2022 as the game is released globally.

AB JOURNEY: DAILY IN-APP PURCHASE REVENUE (USD)



Source: Sensor Tower

AB JOURNEY: DAILY DOWNLOADS



Source: Sensor Tower

Promising growth initiatives for 2022 and beyond

AB Journey delivered EUR 2m of quarterly bookings in Q3 while in soft launch

In our view, Rovio's outlook for 2022 seems promising given the current game launch pipeline. As mentioned above, **AB Journey**, a slingshot/puzzle game set to release in January 2022, has already shown good KPIs and solid revenues in soft launch. The game itself features casual elements and should appeal to a wide audience, we believe. We expect AB Journey to grow its quarterly gross bookings from EUR 3.5m in Q4 2021 to EUR 10m by Q4 2022, representing a 11% contribution to our total 2022E gross bookings for Rovio.

Hunter Assassin 2 by Ruby Games is a key source of upside for estimates, we believe

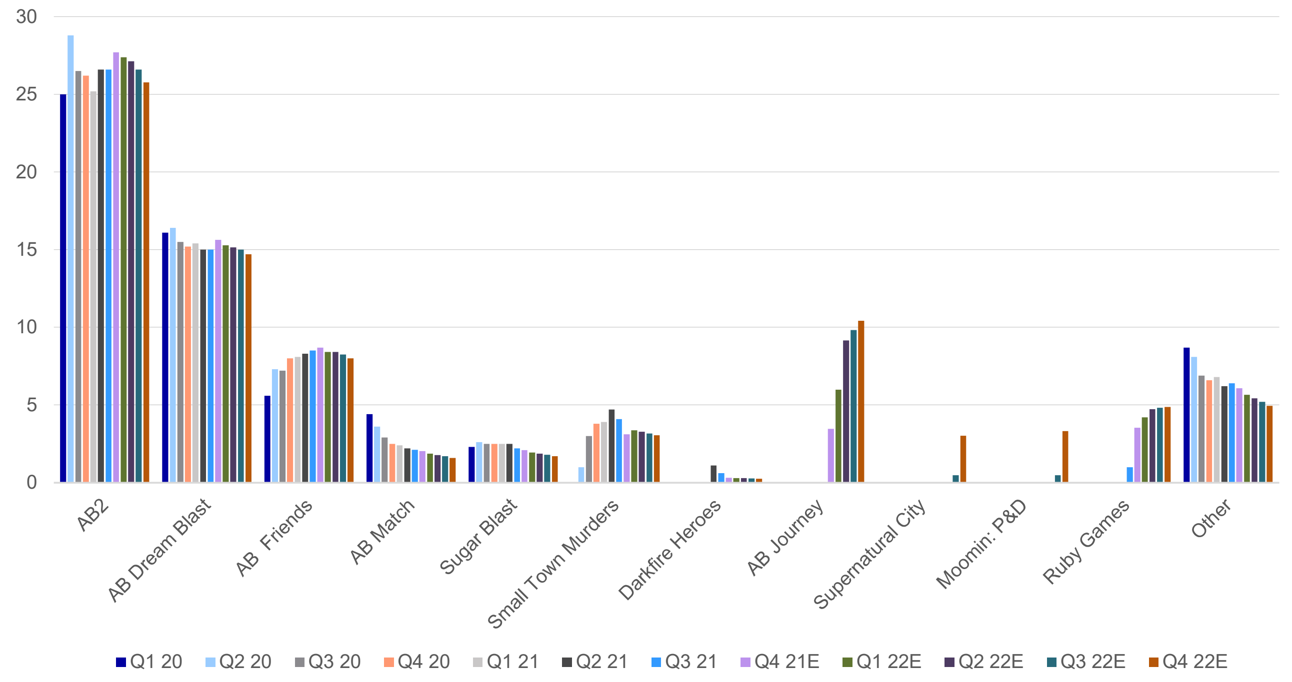
Aside from AB Journey, we believe that the biggest swing factor for Rovio in 2022 will be the hyper-casual game **Hunter Assassin 2** by Ruby Games, which is currently in soft launch and expected to launch globally in early 2022. The game is a sequel to Hunter Assassin, which was the sixth most downloaded game in 2020 globally. Contrary to its predecessor, which monetised purely on ad revenues, Hunter Assassin 2 will also feature in-app purchases and utilise LiveOps to improve retention.

For 2022, we expect Ruby Games to contribute around EUR 19m of bookings for Rovio, the majority of which will be driven by Hunter Assassin 2. It is worth noting that in 2020, the launch year for Hunter Assassin, Ruby Games generated some EUR 27m (USD 31m) in revenue, which highlights the upside for estimates in a successful launch scenario for the sequel. Hunter Assassin 2 has already demonstrated high success potential by reaching the no. 1 download rank in India on Android.

First Moomin game was soft launched in December 2021

Rovio's first Moomin IP game, **Moomin: Puzzle and Design**, was also soft launched in December in Finland, Poland and the Philippines. It features a story line where the player has to solve puzzles to decorate and design the Moomin valley. We find the commercial potential of the IP compelling for Rovio and model revenue contribution from the game as of Q3 2022, with global launch taking place in Q4. We thus see the Moomin game as more of a 2023 story for Rovio.

QUARTERLY GROSS BOOKINGS CONTRIBUTION: ACTUALS AND ESTIMATES PER GAME (EURm)



Source: Company data and Nordea estimates

GAME PORTFOLIO OVERVIEW

Title	Angry Birds Friends	Angry Birds 2	Angry Birds Match	Angry Birds Dream Blast
Genre	Sligshot	Slingshot	Puzzle	Puzzle
Launch	Q1 2012	Q3 2015	Q3 2017	Q1 2019
Category	Earn	Earn	Earn	Grow
Cumulative sales	177	554	83	182
Q4 2021E sales	9	28	2	16
- % of Games	12%	38%	3%	22%
2022E sales	33	107	7	60
- % of Games	11%	34%	2%	19%
Title	**Sugar Blast**	**Small Town Murders**	**Darkfire Heroes**	**Angry Birds Journey**
Genre	Puzzle	Puzzle	RPG	Sligshot
Launch	Q3 2019	Q2 2020	Q2 2021	Q1 2022E
Category	Catalogue	Grow	Catalogue	Grow
Cumulative sales	22	24	2	3
Q4 2021E sales	2	3	0	3
- % of Games	3%	4%	0%	5%
2022E sales	7	13	1	35
- % of Games	2%	4%	0%	11%
Title	**Supernatural City**	**Moomin: Puzzle and Design**	**Ruby Games**	
Genre	Puzzle	Puzzle	Hypercasual	
Launch	Q3 2022E	Q4 2022E	n.a.	
Category	Soft launch	Soft launch	n.a.	
Cumulative sales	0	0	n.a.	
Q4 2021E sales	0	0	4	
- % of Games	0%	0%	5%	
2022E sales	3	4	19	
- % of Games	1%	1%	6%	

Source: Company data and Nordea estimates

Estimate revisions

Estimate revisions

- We adjust our Q4 2021 Games revenue estimates based on commentary from Rovio's mid-quarter analyst meeting and data from external sources (Sensor Tower, App Annie). Meanwhile, we trim our Q4 estimates for Brand Licensing.
- We raise our 2022-23 estimates for Games revenue thanks to the promising potential demonstrated by AB Journey and Hunter Assassin 2, in particular.
- We amend our adjusted EBIT estimates by between -1% and 0% for 2022-23. The lower margin estimate for 2022 relates to higher opex stemming from the scaling up of the Montreal and Toronto studios, plus higher UA relating to AB Journey and Hunter Assassin 2.

ESTIMATE REVISIONS (EPS AND DPS IN EUR)

	New estimates				Old estimates				Difference %			
EURm	Q4 21E	2021E	2022E	2023E	Q4 21E	2021E	2022E	2023E	Q4 21E	2021E	2022E	2023E
Revenue												
Games	72.6	272.5	310.7	329.5	70.9	270.8	297.7	322.5	2%	1%	4%	2%
Brand Licensing	3.4	10.8	9.5	8.1	3.7	11.1	9.6	8.1	-7%	-2%	0%	0%
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.m	n.m	n.m	n.m
Total	**76.0**	**283.3**	**320.3**	**337.6**	**74.5**	**281.8**	**307.3**	**330.6**	**2%**	**1%**	**4%**	**2%**
Adj. EBIT												
Games	13.0	49.8	58.2	63.7	12.1	48.8	58.5	63.5	8%	2%	-1%	0%
Brand Licensing	1.0	2.2	2.4	2.0	1.2	2.4	2.5	2.0	-17%	-9%	-3%	-3%
Other	-3.5	-11.4	-10.3	-10.3	-3.5	-11.4	-10.3	-10.3	0%	0%	0%	0%
Total	**10.6**	**41.3**	**50.2**	**55.4**	**9.9**	**40.6**	**50.6**	**55.2**	**7%**	**2%**	**-1%**	**0%**
Adj. EBIT ex Hatch	**11.1**	**44.9**	**52.2**	**57.4**	**10.4**	**44.2**	**52.6**	**57.2**	**7%**	**2%**	**-1%**	**0%**
Adj. EBIT margin												
Games	17.9%	18.3%	18.7%	19.3%	17.0%	18.0%	19.7%	19.7%	0.8pp	0.2pp	-0.9pp	-0.4pp
Brand Licensing	30.3%	20.1%	25.1%	24.6%	34.0%	21.5%	25.7%	25.2%	-3.7pp	-1.4pp	-0.6pp	-0.6pp
Other	n.m	n.m	n.m	n.m	n.m	n.m	n.m	n.m	n.m	n.m	n.m	n.m
Total	**13.9%**	**14.6%**	**15.7%**	**16.4%**	**13.2%**	**14.4%**	**16.5%**	**16.7%**	**0.7pp**	**0.2pp**	**-0.8pp**	**-0.3pp**
Margin ex. Hatch	**14.5%**	**15.8%**	**16.3%**	**17.0%**	**13.9%**	**15.7%**	**17.1%**	**17.3%**	**0.7pp**	**0.2pp**	**-0.8pp**	**-0.3pp**
EPS	0.11	0.47	0.54	0.60	0.11	0.46	0.55	0.60	7%	2%	-1%	0%
DPS	n.m	0.13	0.14	0.15	n.m	0.13	0.14	0.15	n.m	0%	0%	0%

Source: Nordea estimates

Our estimates versus consensus

We find ourselves forecasting 3% ahead of Refinitiv consensus on Q4 sales and 2% ahead on adjusted EBIT. For 2022, we forecast 7% above consensus on sales and 11% above on adjusted EBIT.

ROVIO: OUR ESTIMATES VERSUS CONSENSUS (EPS AND DPS IN EUR)

	Nordea estimates				Consensus estimates				Difference			
EURm	Q4 21E	2021E	2022E	2023E	Q4 21E	2021E	2022E	2023E	Q4 21E	2021E	2022E	2023E
Sales	**76.0**	**283.3**	**320.3**	**337.6**	**74.1**	**281.4**	**298.8**	**309.2**	**3%**	**1%**	**7%**	**9%**
- growth y/y	12.0%	4.1%	13.0%	5.4%	9.1%	3.4%	6.2%	3.5%	2.9pp	0.7pp	6.8pp	2.0pp
EBITDA	**13.4**	**50.8**	**59.8**	**63.5**	**12.4**	**49.8**	**52.8**	**55.3**	**9%**	**2%**	**13%**	**15%**
- margin	17.7%	17.9%	18.7%	18.8%	16.7%	17.7%	17.7%	17.9%	1.0pp	0.3pp	1.0pp	0.9pp
Adj. EBIT	**10.6**	**41.3**	**50.2**	**55.4**	**10.3**	**40.9**	**45.2**	**48.6**	**2%**	**1%**	**11%**	**14%**
- margin	13.9%	14.6%	15.7%	16.4%	13.9%	14.5%	15.1%	15.7%	-0.1pp	0.0pp	0.6pp	0.7pp
EBIT	**10.6**	**40.4**	**50.2**	**55.4**	**9.5**	**39.2**	**42.2**	**45.6**	**11%**	**3%**	**19%**	**21%**
- margin	13.9%	14.2%	15.7%	16.4%	12.9%	13.9%	14.1%	14.7%	1.0pp	0.3pp	1.6pp	1.7pp
PTP	10.6	42.0	50.2	55.4	9.1	40.2	41.8	45.2	16%	4%	20%	23%
Net profit	8.4	34.9	40.2	44.3	7.2	31.1	32.6	35.3	17%	12%	23%	26%
EPS	**0.11**	**0.47**	**0.54**	**0.60**	**0.09**	**0.38**	**0.40**	**0.43**	**26%**	**24%**	**37%**	**39%**
DPS		**0.13**	**0.14**	**0.15**		**0.12**	**0.13**	**0.13**		**6%**	**12%**	**18%**

Source: Refinitiv and Nordea estimates

Valuation

We derive a DCF-based fair value range of EUR 7.5-10.0 per share by applying a WACC range of 8.1-12.1%. We include a relative valuation by applying a 15% range to the average EV/EBITDA, EV/EBIT and EV/sales of western mobile gaming peers. We apply a 40% discount to the median multiples, as Rovio's growth profile is weaker and its game portfolio more concentrated than that of the peer group. The average of these valuation approaches yields a fair value range of EUR 6.9-8.8 per share.

DCF valuation

DCF valuation range of EUR 7.5-10.0

We base our DCF valuation on a bottom-up approach, through which we forecast current and upcoming quarterly revenue on a game-by-game basis for 2021-24. We model user acquisition and marketing costs using the same approach for the corresponding period. When valuing the Brand Licensing business, we take a similar bottom-up approach, forecasting quarterly revenue, profitability and capex for the business unit. We apply a 10.1% WACC to our DCF valuation.

DCF VALUATION (EURm AND EUR PER SHARE)

DCF value	Value	Per share
NPV FCFF	455	6.2
(Net debt)	129	1.8
Market value of associates	0	0.0
(Market value of minorities)	0	0.0
Surplus values	0	0.0
(Market value preference shares)	0	0.0
Share based adjustments	0	0.0
Other adjustments	0	0.0
Time value	62	0.8
DCF Value	**647**	**8.8**

Source: Company data and Nordea estimates

WACC COMPONENTS

WACC components	
Risk-free interest rate	2.0%
Market risk premium	4.5%
Forward looking asset beta	nm
Beta debt	0.20
Forward looking equity beta	1.80
Cost of equity	10.10%
Cost of debt	3.0%
Tax-rate used in WACC	20.0%
Equity weight	100.0%
WACC	**10.1%**

Source: Company data and Nordea estimates

DCF ASSUMPTIONS

Averages and assumptions	2021-26	2027-31	2032-36	2037-41	2042-46	2047-51	Sust.
Sales growth, CAGR	6.28%	3.0%	3.0%	2.5%	2.5%	2.5%	
EBIT-margin, ex. associates	16.8%	15.0%	12.0%	12.0%	12.0%	1.0%	
Capex/depreciation, x	0.7	1.10	1.10	1.10	1.10	1.10	
Capex/sales	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	
NWC/sales	-0.7%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
FCFF, CAGR	13.8%	0.4%	-1.7%	2.6%	2.5%	-44.9%	2.5%

Source: Company data and Nordea estimates

Relative valuation complements our DCF model

Our peer group for relative valuation consists of western mobile gaming companies. In terms of benchmarking, we regard EV-based multiples, such as EV/EBIT and EV/sales, as the most relevant multiples for the gaming sector. EV/sales is especially interesting thanks to its stability – from time to time, other multiples can be inflated as a result of timing effects in revenue recognition and game releases.

EV/sales, although also volatile, varies far less. In addition, EV multiples are preferable because many companies in the mobile gaming business have net cash positions, and EV multiples are neutral to a company's financial gearing, thus giving a better comparison point.

Finally, we add the traditional P/E multiple to complement our EV-based relative valuation framework.

WESTERN MOBILE GAMING PEERS: VALUATION MULTIPLES

	EV/Sales			EV/EBITDA			EV/EBIT			P/E			FCF yield		
	2021E	2022E	2023E	2021E	2022E	2023E	2021E	2022E	2023E	2021E	2022E	2023E	2021E	2022E	2023E
Western mobile gaming peers															
G5 Entertainment Ab (Publ)	2.2	2.0	1.8	8.1	6.6	5.7	12.9	9.9	8.6	14.3	11.0	9.7	5.3%	6.2%	7.8%
Mag Interactive Ab (Publ)	2.0	1.6	1.5	10.3	7.8	7.2	47.4	21.0	17.3	65.6	29.7	23.8			
Next Games Oyj	1.0	0.6	0.5	10.4	7.8	4.8			20.9				3.6%	3.0%	3.8%
Playtika Holding Corp	3.5	3.2	2.9	9.2	8.6	7.8	15.9	13.5	11.9	28.0	17.8	15.2	5.9%	8.4%	9.5%
Stillfront Group Ab (Publ)	4.1	3.6	3.3	11.0	9.2	8.2	15.2	12.4	11.4	24.8	16.8	14.5	3.9%	5.9%	6.7%
Zynga Inc	3.5	3.2	2.9	15.3	13.5	11.8	16.5	14.8	13.1	26.2	21.6	19.2	2.3%	5.8%	7.3%
Peer average	2.7	2.4	2.2	10.7	8.9	7.6	21.6	14.3	13.9	31.7	19.4	16.5	4.2%	5.9%	7.0%
Peer median	**2.9**	**2.6**	**2.4**	**10.4**	**8.2**	**7.5**	**15.9**	**13.5**	**12.5**	**26.2**	**17.8**	**15.2**	**3.9%**	**5.9%**	**7.3%**
Rovio Entertainment Oyj (NDA)	**1.1**	**1.0**	**0.8**	**6.2**	**5.1**	**4.2**	**7.7**	**6.1**	**4.8**	**13.4**	**11.9**	**10.8**	**8.7%**	**9.5%**	**9.9%**
difference	**-61%**	**-63%**	**-67%**	**-40%**	**-37%**	**-45%**	**-51%**	**-55%**	**-62%**	**-49%**	**-33%**	**-29%**	**1.2pp**	**0.6pp**	**0.4pp**
Rovio Entertainment Oyj (consensus)	1.6	1.5	1.5	9.1	8.7	8.6	11.2	10.5	10.1	14.9	14.8	14.1	6.0%	5.8%	6.6%
difference	-44%	-42%	-38%	-13%	6%	15%	-29%	-23%	-19%	-43%	-17%	-7%	0.6pp	0.0pp	-0.1pp

Source: Refinitiv and Nordea estimates

WESTERN MOBILE GAMING PEERS: KEY FINANCIALS AND KPIs*

		Price	Mcap	EV	Sales CAGR		EBITDA margin			DAU	MAU	DAU/	ARPDAU
	Country	Local	EURm	EURm	18-20	20-23E	2021E	2022E	2023E	(mln)	(mln)	MAU	USD
Western mobile gaming peers													
G5 Entertainment Ab (Publ)	Sweden	338	296	284	-2.8%	6.0%	27.0%	30.3%	31.8%	1.8	6.7	27%	0.22
Mag Interactive Ab (Publ)	Sweden	26	68	63	9.8%		19.3%	20.6%	21.0%	1.6	5.5	30%	0.05
Next Games Oyj	Finland	1	33	31	-12.2%	30.9%	9.4%	7.4%	10.7%	0.2	0.6	31%	0.38
Playtika Holding Corp	Israel	19	6,805	8,051	22.2%	12.0%	38.3%	36.9%	37.6%	10.4	35.4	29%	0.67
Stillfront Group Ab (Publ)	Sweden	51	1,951	2,193	75.8%	19.0%	37.7%	39.3%	40.5%	12.3	62.3	20%	0.12
Zynga Inc	US	9	8,793	8,785	52.1%	15.5%	23.1%	23.6%	24.8%	38.0	183.0	21%	0.19
Peer average					24.2%	16.7%	25.8%	26.4%	27.7%	10.7	48.9	26%	0.27
Peer median					**16.0%**	**15.5%**	**25.1%**	**27.0%**	**28.3%**	**6.1**	**21.1**	**28%**	**0.20**
Rovio Entertainment Oyj (NDA)	**Finland**	**6.5**	**536**	**445**	**-1.6%**	**7.4%**	**18.3%**	**18.7%**	**18.8%**	**4.9**	**17.9**	**27%**	**0.19**
difference					**-18pp**	**-8pp**	**-6.8pp**	**-8pp**	**-10pp**	**-20%**	**-15%**	**-1pp**	**-6%**
Rovio Entertainment Oyj (consensus)	Finland	6.5	536	445	-1.6%	3.7%	17.6%	17.2%	17.0%	n.a.	n.a.	n.a.	n.a.
difference					-18pp	-12pp	-8pp	-10pp	-11pp	n.a.	n.a.	n.a.	n.a.

* KPI figures (DAU, MAU, ARPDAU) based on the latest fiscal quarter

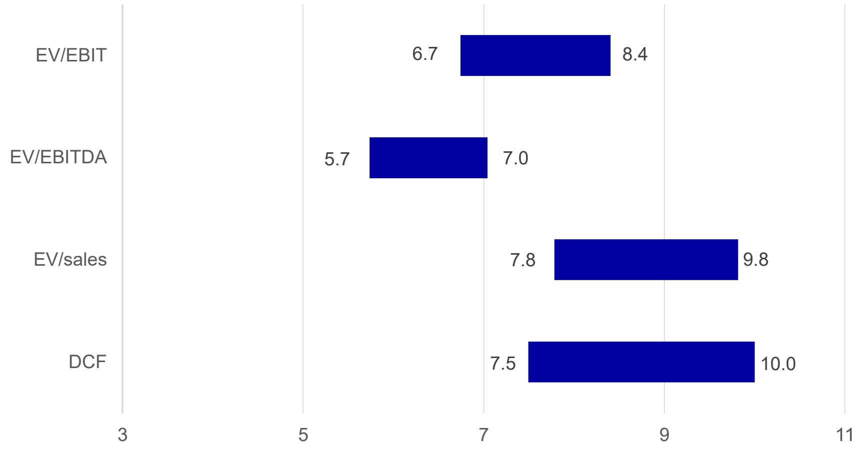
Source: Company data, Refinitiv and Nordea estimates

DCF and peer multiples imply an average valuation range of EUR 6.9-8.8

We derive a DCF-based fair value range of EUR 7.5-10.0 per share by applying a WACC range of 8.1-12.1%. We also include a relative valuation by applying a 15% range to the median EV/EBIT, EV/EBITDA and EV/sales multiples of western mobile gaming peers. We apply a 40% discount to the median multiples, as Rovio's growth profile is weaker than that of the peer group.

The average of these valuation approaches yields a fair value range of EUR 6.9-8.8 per share. The share could be set for a rerating if top-line growth and game portfolio diversification are achieved through a successful game launch or M&A.

VALUATION APPROACHES (EUR PER SHARE)



Source: Company data and Nordea estimates

Risk factors

Below, we list the main risk factors that we find relevant for Rovio. The purpose of this is not to provide a comprehensive list of all the risks that the company may face but instead to highlight those that we find most relevant. In our view, the relevant short-term risks mainly come from external sources.

IDFA deprecation
Apple announced changes to its iOS privacy settings in 2020. New versions of iOS ask permission for an app to track the user across other apps and websites. The answer to this question determines whether the app has access to the device identifier for advertisers (IDFA). If users deny permission, targeted user acquisition could become more difficult for gaming companies. As the change in access to IDFA came into force in 2021, it remains uncertain how this will affect mobile gaming companies' user-acquisition methodologies. This consequently puts the efficiency of mobile gaming companies' user acquisition at risk.

Decline of the appeal of the Angry Birds brand
Although Rovio has launched non-Angry Birds games, the company's revenue effectively comes from Angry Birds-related games and licensing. Thus, a decline in the appeal of the brand would have consequences, especially for the licensing business.

Ability to release games according to expected schedule
Consensus estimates are fairly sensitive to changes in the game launch schedule. If Rovio cannot launch new games according to the expected schedule, this could trigger large estimate revisions.

Ability to attract and retain top talent
Given the global and highly competitive nature of the mobile gaming market, Rovio's success depends on attracting and retaining top international specialists and executives.

Ability to develop games with lucrative feature sets
According to a study by GameRefinery, 50% of a game's success is explained by its feature set. Mobile gaming is still a nascent industry, which means that "a winning feature set" is a constantly moving target, making success extremely hard to replicate in subsequent games.

Failure to create new IP and enter new genres
Rovio's current game portfolio is dependent on Angry Birds-themed casual games, such as slingshot, match-3 and bubble-popping games. In the future, Rovio aims diversify its game portfolio to IPs other than Angry Birds. This may prove a costly task, eroding Rovio's profitability and cash position.

Regulation
The mobile gaming industry is facing increasing regulation, especially in China. The trend towards tighter regulation of mobile game monetisation could hamper Rovio's financial performance in the long run.

Detailed estimates

REPORTED ANNUAL NUMBERS AND ESTIMATES (EURm, EUR AND %)

Group	2017	2018	2019	2020	2021E	2022E	2023E	2024E	CAGR 19-22E	CAGR 22E-24E
Revenue	**297.1**	**281.2**	**289.1**	**272.2**	**283.3**	**320.3**	**337.6**	**344.7**	**3%**	**4%**
- growth y/y		-5.4%	2.8%	-5.8%	4.1%	13.0%	5.4%	2.1%		
- growth q/q										
Materials and services	81.8	79.8	77.3	74.6	75.9	87.5	92.7	94.9	4%	4%
Employee benefits expense	52.0	42.6	41.7	48.9	49.8	46.8	47.9	48.5	4%	2%
Other operating expenses	104.2	112.0	138.4	89.4	107.4	126.1	133.6	134.2	-3%	3%
EBITDA	**60.0**	**47.9**	**32.4**	**60.0**	**50.8**	**59.8**	**63.5**	**67.2**	**23%**	**6%**
Adj. EBITDA	**64.5**	**47.5**	**32.7**	**60.1**	**51.7**	**59.8**	**63.5**	**67.2**	**22%**	**6%**
- margin	21.7%	16.9%	11.3%	22.1%	18.3%	18.7%	18.8%	19.5%		
EBIT	**31.4**	**31.5**	**18.1**	**42.5**	**40.4**	**50.2**	**55.4**	**60.4**	**40%**	**10%**
Adj. EBIT	**35.9**	**31.2**	**18.4**	**47.1**	**41.3**	**50.2**	**55.4**	**60.4**	**40%**	**10%**
- margin	12.1%	11.1%	6.4%	17.3%	14.6%	15.7%	16.4%	17.5%		
Adj. EBIT (excl. Hatch)	**36.0**	**38.7**	**29.0**	**54.7**	**44.9**	**52.2**	**57.4**	**60.4**	**22%**	**8%**
- margin	12.1%	13.8%	10.0%	20.1%	15.8%	16.3%	17.0%	17.5%		
PTP	26.7	32.2	17.7	40.7	42.0	50.2	55.4	60.4	42%	10%
Net Profit	20.7	24.5	13.2	32.1	34.9	40.2	44.3	48.3	45%	10%
EPS, diluted	**0.27**	**0.31**	**0.16**	**0.42**	**0.47**	**0.54**	**0.60**	**0.65**	**50%**	**10%**
DPS	0.06	0.09	0.09	0.12	0.13	0.14	0.15	0.16	16%	7%
Payout ratio	22%	29%	56%	28%	28%	26%	25%	25%		
Net debt	-88	-120	-110	-129	-149	-150	-183	-217		
Net debt/EBITDA	-1.5x	-2.5x	-3.4x	-2.2x	-2.9x	-2.5x	-2.9x	-3.2x		
Net gearing	-63%	-75%	-66%	-78%	-78%	-68%	-72%	-74%		
ROE	18%	16%	8%	19%	20%	19%	19%	18%		

Source: Company data and Nordea estimates

REPORTED QUARTERLY NUMBERS AND ESTIMATES (EURm, EUR AND %)

Group	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21E	Q1 22E	Q2 22E	Q3 22E	Q4 22E
Revenue	**66.6**	**69.2**	**67.9**	**68.5**	**67.1**	**68.8**	**71.4**	**76.0**	**76.4**	**79.5**	**79.9**	**84.5**
- growth y/y	-6.1%	-3.6%	-9.2%	-4.3%	0.8%	-0.6%	5.2%	11.0%	13.8%	15.5%	11.9%	11.2%
- growth q/q	-7.0%	3.9%	-1.9%	0.9%	-2.0%	2.5%	3.8%	6.5%	0.4%	4.1%	0.5%	5.8%
Materials and services	18.1	19.8	18.5	18.2	18.2	18.7	18.3	20.7	20.9	21.7	21.8	23.0
Employee benefits expense	11.2	12.1	11.2	14.4	12.2	12.9	11.3	13.3	12.0	11.5	10.2	13.1
Other operating expenses	21.5	21.5	22.4	24.0	25.4	28.6	24.8	28.6	32.6	29.3	28.6	35.6
EBITDA	**15.8**	**16.1**	**15.9**	**12.2**	**11.8**	**8.7**	**16.9**	**13.4**	**10.8**	**17.0**	**19.2**	**12.8**
Adj. EBITDA	**16.1**	**15.9**	**15.9**	**12.2**	**12.4**	**8.7**	**17.2**	**13.4**	**10.8**	**17.0**	**19.2**	**12.8**
- margin	24.2%	23.0%	23.4%	17.8%	18.5%	12.6%	24.1%	17.7%	14.2%	21.3%	24.1%	15.2%
EBIT	**12.7**	**14.1**	**12.8**	**2.9**	**9.6**	**6.2**	**14.0**	**10.6**	**8.4**	**14.6**	**16.8**	**10.4**
Adj. EBIT	**13.0**	**13.8**	**12.8**	**7.5**	**10.2**	**6.2**	**14.3**	**10.6**	**8.4**	**14.6**	**16.8**	**10.4**
- margin	19.5%	19.9%	18.9%	10.9%	15.2%	9.0%	20.1%	13.9%	11.0%	18.4%	21.0%	12.3%
Adj. EBIT (excl. Hatch)	**15.8**	**15.6**	**14.2**	**9.1**	**11.5**	**7.5**	**14.8**	**11.1**	**8.9**	**15.1**	**17.3**	**10.9**
- margin	23.7%	22.5%	20.9%	13.3%	17.1%	10.9%	20.8%	14.5%	11.7%	19.0%	21.6%	12.9%
PTP	11.5	14.8	12.1	2.3	10.5	6.3	14.6	10.6	8.4	14.6	16.8	10.4
Net Profit	8.9	11.1	9.2	2.9	7.5	7.4	11.5	8.4	6.7	11.7	13.4	8.3
EPS, diluted	**0.11**	**0.15**	**0.12**	**0.04**	**0.10**	**0.10**	**0.16**	**0.11**	**0.09**	**0.16**	**0.18**	**0.11**

Source: Company data and Nordea estimates

REPORTED ANNUAL NUMBERS AND ESTIMATES BY SEGMENT (EURm AND %)

Games	2017	2018	2019	2020	2021E	2022E	2023E	2024E	CAGR 19-22E	CAGR 22E-24E
Revenue	**247.9**	**250.4**	**264.8**	**258.2**	**272.5**	**310.7**	**329.5**	**337.8**	**5%**	**4%**
- growth y/y	55.9%	1.0%	5.8%	-2.5%	5.6%	14.0%	6.0%	2.5%		
- growth q/q										
UAC, EURm	**69.6**	**78.6**	**99.6**	**58.8**	**75.8**	**90.8**	**96.0**	**96.1**	**-3%**	**3%**
- % of revenue	28.1%	31.4%	37.6%	22.8%	27.8%	29.2%	29.1%	28.5%		
EBITDA	**43.1**	**40.5**	**35.6**	**65.3**	**54.9**	**63.5**	**68.2**	**72.7**	**21%**	**7%**
Adj. EBITDA	**43.2**	**40.8**	**35.6**	**65.3**	**54.9**	**63.5**	**68.2**	**72.7**	**21%**	**7%**
- margin	17.4%	16.3%	13.4%	25.3%	20.1%	20.4%	20.7%	21.5%		
EBIT	**38.4**	**38.4**	**31.3**	**56.6**	**49.8**	**58.2**	**63.7**	**69.0**	**23%**	**9%**
Adj. EBIT	**38.5**	**38.7**	**31.3**	**61.2**	**49.8**	**58.2**	**63.7**	**69.0**	**23%**	**9%**
- margin	15.5%	15.5%	11.8%	23.7%	18.3%	18.7%	19.3%	20.4%		

Brand Licensing	2017	2018	2019	2020	2021E	2022E	2023E	2024E	CAGR 19-22E	CAGR 22E-24E
Revenue	**49.1**	**30.8**	**24.3**	**13.9**	**10.8**	**9.5**	**8.1**	**7.0**	**-27%**	**-14%**
- growth y/y		-37.3%	-21.1%	-42.8%	-22.3%	-11.9%	-15.3%	-13.7%		
- growth q/q										
EBITDA	**30.1**	**20.8**	**13.8**	**8.6**	**7.0**	**6.3**	**5.2**	**4.5**	**-23%**	**-16%**
Adj. EBITDA	**32.0**	**20.8**	**14.0**	**8.8**	**7.0**	**6.3**	**5.2**	**4.5**	**-23%**	**-16%**
- margin	65.2%	67.5%	57.6%	63.3%	64.7%	66.3%	64.3%	64.3%		
EBIT	**6.4**	**7.1**	**4.3**	**0.6**	**2.2**	**2.4**	**2.0**	**1.8**	**-18%**	**-14%**
Adj. EBIT	**8.3**	**7.1**	**4.6**	**0.8**	**2.2**	**2.4**	**2.0**	**1.8**	**-20%**	**-14%**
- margin	13.0%	23.1%	17.7%	4.3%	20.1%	25.1%	24.6%	25.7%		

Others	2017	2018	2019	2020	2021E	2022E	2023E	2024E
Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	-13.2	-13.4	-17.0	-14.5	-11.5	-9.9	-9.9	-9.9
Adj. EBITDA	-10.7	-14.1	-17.0	-14.5	-10.7	-9.9	-9.9	-9.9
EBIT	-13.5	-13.9	-17.6	-15.3	-12.0	-10.3	-10.3	-10.3
Adj. EBIT	-11.0	-14.6	-17.6	-15.3	-11.4	-10.3	-10.3	-10.3

Source: Company data and Nordea estimates

REPORTED QUARTERLY NUMBERS AND ESTIMATES BY SEGMENT (EURm AND %)

Games	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21E	Q1 22E	Q2 22E	Q3 22E	Q4 22E
Revenue	**62.7**	**66.9**	**64.2**	**64.4**	**64.9**	**66.4**	**68.6**	**72.6**	**74.4**	**77.2**	**77.6**	**81.6**
- growth y/y	-5.4%	2.3%	-3.3%	-3.4%	3.5%	-0.7%	6.9%	12.8%	14.6%	16.2%	13.1%	12.4%
- growth q/q	-6.0%	6.7%	-4.0%	0.3%	0.8%	2.3%	3.3%	5.9%	2.4%	3.8%	0.5%	5.2%
UAC, EURm	**13.5**	**14.0**	**15.3**	**16.0**	**17.3**	**21.3**	**18.1**	**19.1**	**24.2**	**20.4**	**20.6**	**25.6**
- % of revenue	21.5%	20.9%	23.8%	24.8%	26.7%	32.1%	26.4%	26.4%	32.6%	26.5%	26.5%	31.4%
EBITDA	**17.8**	**18.1**	**16.2**	**13.7**	**13.8**	**9.6**	**17.6**	**14.4**	**12.6**	**17.4**	**19.9**	**13.6**
Adj. EBITDA	**17.8**	**18.1**	**16.2**	**13.7**	**13.8**	**9.6**	**17.6**	**14.4**	**12.6**	**17.4**	**19.9**	**13.6**
- margin	28.4%	27.1%	25.2%	21.3%	21.3%	14.4%	25.7%	19.9%	16.9%	22.6%	25.6%	16.7%
EBIT	**16.6**	**17.0**	**15.4**	**8.1**	**12.8**	**8.2**	**16.3**	**13.0**	**11.2**	**16.1**	**18.6**	**12.4**
Adj. EBIT	**16.6**	**17.0**	**15.4**	**12.7**	**12.8**	**8.2**	**16.3**	**13.0**	**11.2**	**16.1**	**18.6**	**12.4**
- margin	26.5%	25.4%	24.0%	19.7%	19.7%	12.3%	23.8%	17.9%	15.0%	20.8%	23.9%	15.2%

Brand Licensing	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21E	Q1 22E	Q2 22E	Q3 22E	Q4 22E
Revenue	**3.9**	**2.3**	**3.7**	**4.1**	**2.2**	**2.4**	**2.8**	**3.4**	**2.0**	**2.3**	**2.3**	**2.9**
- growth y/y	-15.2%	-64.1%	-56.0%	-16.3%	-43.6%	4.3%	-24.3%	-17.0%	-9.7%	-3.7%	-17.3%	-14.5%
- growth q/q	-20%	-41%	61%	11%	-46%	9%	17%	22%	-42%	16%	0%	26%
EBITDA	**2.4**	**1.0**	**2.5**	**2.9**	**1.2**	**1.4**	**2.0**	**2.4**	**1.1**	**1.5**	**1.6**	**2.0**
Adj. EBITDA	**2.6**	**1.0**	**2.5**	**2.9**	**1.2**	**1.4**	**2.0**	**2.4**	**1.1**	**1.5**	**1.6**	**2.0**
- margin	66.7%	43.5%	67.6%	70.7%	54.5%	60.0%	71.4%	69.1%	55.2%	66.0%	71.1%	70.2%
EBIT	**0.7**	**0.2**	**0.5**	**-0.7**	**0.2**	**0.4**	**0.5**	**1.0**	**0.2**	**0.6**	**0.6**	**1.0**
Adj. EBIT	**0.8**	**0.2**	**0.5**	**-0.7**	**0.2**	**0.4**	**0.5**	**1.0**	**0.2**	**0.6**	**0.6**	**1.0**
- margin	20.5%	8.7%	13.5%	-17.1%	9.1%	18.3%	17.9%	30.3%	8.8%	27.7%	24.8%	34.4%

Others	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21E	Q1 22E	Q2 22E	Q3 22E	Q4 22E
Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	-4.3	-3.0	-2.9	-4.4	-3.2	-2.4	-2.6	-3.4	-2.8	-2.0	-2.3	-2.8
Adj. EBITDA	-4.2	-3.2	-2.9	-4.4	-2.7	-2.4	-2.3	-3.4	-2.8	-2.0	-2.3	-2.8
EBIT	-4.5	-3.2	-3.0	-4.6	-3.4	-2.5	-2.7	-3.5	-2.9	-2.1	-2.4	-2.9
Adj. EBIT	-4.4	-3.4	-3.0	-4.6	-2.8	-2.5	-2.7	-3.5	-2.9	-2.1	-2.4	-2.9

Source: Company data and Nordea estimates

ESTIMATED KPIs FOR ROVIO'S CURRENT TOP FIVE GAMES (MILLIONS AND %), ANNUAL

GAME KPIs	2017	2018	2019	2020	2021E	2022E	2023E	2024E
AB2								
Gross bookings	**78.7**	**117.3**	**108.4**	**106.5**	**106.1**	**106.9**	**94.2**	**87.0**
MAU	9.4	10.7	8.9	9.0	8.2	8.3	7.1	6.2
DAU/MAU	19%	19%	20%	18%	18%	18%	18%	18%
DAU	1.8	2.0	1.8	1.6	1.5	1.5	1.3	1.1
ARPDAU (EUR)	0.12	0.16	0.17	0.18	0.20	0.20	0.20	0.21
AB Friends								
Gross bookings	**32.7**	**31.3**	**25.9**	**28.1**	**33.6**	**33.1**	**30.9**	**29.8**
MAU	3.9	2.9	2.1	2.4	2.6	2.6	2.3	2.1
DAU/MAU	19%	19%	20%	18%	18%	18%	18%	18%
DAU	0.8	0.5	0.4	0.4	0.5	0.5	0.4	0.4
ARPDAU	0.12	0.16	0.17	0.18	0.20	0.20	0.20	0.21
AB Dream Blast								
Gross bookings	**0.0**	**0.5**	**57.5**	**63.2**	**61.0**	**60.1**	**54.1**	**48.0**
MAU	0.0	0.2	4.8	5.4	4.7	4.9	4.4	3.9
DAU/MAU	0%	19%	20%	18%	18%	18%	18%	18%
DAU	0.0	0.0	0.9	1.0	0.9	0.9	0.8	0.7
ARPDAU (EUR)	0.00	0.18	0.17	0.18	0.20	0.19	0.19	0.19
AB Match								
Gross bookings	**10.1**	**26.2**	**24.4**	**13.4**	**8.7**	**6.9**	**4.9**	**3.2**
MAU	2.1	2.4	2.0	1.1	0.7	0.6	0.4	0.3
DAU/MAU	20%	19%	20%	18%	18%	18%	18%	18%
DAU	0.4	0.5	0.4	0.2	0.1	0.1	0.1	0.0
ARPDAU (EUR)	0.13	0.16	0.17	0.18	0.20	0.19	0.19	0.19
Small Town Murders								
Gross bookings	**0.0**	**0.0**	**0.0**	**7.8**	**15.8**	**12.9**	**9.6**	**6.5**
MAU	0.0	0.0	0.0	1.0	1.2	1.0	0.7	0.5
DAU/MAU	0%	0%	0%	18%	18%	18%	18%	18%
DAU	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.1
ARPDAU (EUR)	0.00	0.00	0.00	0.19	0.20	0.20	0.20	0.21

Source: Company data and Nordea estimates

ESTIMATED KPIs FOR ROVIO'S CURRENT TOP FIVE GAMES (MILLIONS AND %), QUARTERLY

GAME KPIs	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21E	Q1 22E	Q2 22E	Q3 22E	Q4 22E
AB2												
Gross bookings	**25.0**	**28.8**	**26.5**	**26.2**	**25.2**	**26.6**	**26.6**	**27.7**	**27.4**	**27.1**	**26.6**	**25.8**
MAU	9.2	9.9	8.7	8.3	7.6	8.0	8.4	8.8	8.8	8.5	8.2	7.8
DAU/MAU	19%	18%	18%	18%	19%	18%	18%	18%	18%	18%	18%	18%
DAU	1.7	1.8	1.5	1.5	1.4	1.4	1.5	1.6	1.6	1.5	1.5	1.4
ARPDAU (EUR)	0.16	0.17	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.20	0.20	0.20
AB Friends												
Gross bookings	**5.6**	**7.3**	**7.2**	**8.0**	**8.1**	**8.3**	**8.5**	**8.7**	**8.4**	**8.4**	**8.2**	**8.0**
MAU	2.1	2.5	2.4	2.5	2.4	2.5	2.7	2.8	2.7	2.6	2.5	2.4
DAU/MAU	19%	18%	18%	18%	19%	18%	18%	18%	18%	18%	18%	18%
DAU	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
ARPDAU	0.16	0.17	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.20	0.20	0.20
AB Dream Blast												
Gross bookings	**16.1**	**16.4**	**15.5**	**15.2**	**15.4**	**15.0**	**15.0**	**15.6**	**15.3**	**15.1**	**15.0**	**14.7**
MAU	5.9	5.6	5.1	4.8	4.6	4.5	4.8	5.0	5.0	4.9	4.8	4.7
DAU/MAU	19%	18%	18%	18%	19%	18%	18%	18%	18%	18%	18%	18%
DAU	1.1	1.0	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.8
ARPDAU (EUR)	0.16	0.17	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.19	0.19	0.19
AB Match												
Gross bookings	**4.4**	**3.6**	**2.9**	**2.5**	**2.4**	**2.2**	**2.1**	**2.0**	**1.9**	**1.8**	**1.7**	**1.6**
MAU	1.6	1.2	1.0	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5
DAU/MAU	19%	18%	18%	18%	19%	18%	18%	18%	18%	18%	18%	18%
DAU	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ARPDAU (EUR)	0.16	0.17	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.19	0.19	0.19
Small Town Murders												
Gross bookings		**1.0**	**3.0**	**3.8**	**3.9**	**4.7**	**4.1**	**3.1**	**3.4**	**3.3**	**3.2**	**3.0**
MAU		0.8	1.0	1.2	1.2	1.4	1.3	1.0	1.1	1.0	1.0	0.9
DAU/MAU		18%	18%	18%	19%	18%	18%	18%	18%	18%	18%	18%
DAU		0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
ARPDAU (EUR)		0.18	0.19	0.19	0.20	0.20	0.19	0.19	0.19	0.20	0.20	0.20

Source: Company data and Nordea estimates

Reported numbers and forecasts

INCOME STATEMENT

EURm	2013	2014	2015	2016	2017	2018	2019	2020	2021E	2022E	2023E
Total revenue	**n.a.**	**158**	**142**	**192**	**297**	**281**	**289**	**272**	**283**	**320**	**338**
Revenue growth	n.a.	n.a.	-10.3%	34.9%	55.0%	-5.4%	2.8%	-5.8%	4.1%	13.0%	5.4%
of which organic	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
of which FX	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EBITDA	0	17	-6	35	60	48	32	60	51	60	63
Depreciation and impairments PPE	0	0	0	0	0	0	0	0	0	0	0
of which leased assets	0	0	0	0	0	0	0	0	0	0	0
EBITA	0	17	-6	35	60	48	32	60	51	60	63
Amortisation and impairments	0	-7	-15	-18	-29	-16	-14	-18	-10	-10	-8
EBIT	n.a.	10	-22	17	31	32	18	43	40	50	55
of which associates	0	0	0	0	0	0	0	0	0	0	0
Associates excluded from EBIT	0	0	0	0	0	0	0	0	0	0	0
Net financials	0	1	1	-1	-5	1	0	-2	2	0	0
of which lease interest	0	0	0	0	0	0	0	0	0	0	0
Changes in value, net	0	0	0	0	0	0	0	0	0	0	0
Pre-tax profit	**0**	**11**	**-21**	**16**	**27**	**32**	**18**	**41**	**42**	**50**	**55**
Reported taxes	0	-3	3	-5	-6	-8	-5	-9	-7	-10	-11
Net profit from continued operations	0	8	-18	11	21	25	13	32	35	40	44
Discontinued operations	0	0	0	0	0	0	0	0	0	0	0
Minority interests	0	0	0	0	0	0	0	0	0	0	0
Net profit to equity	0	8	-18	11	21	25	13	32	35	40	44
EPS, EUR	**n.a.**	**0.11**	**-0.24**	**0.14**	**0.27**	**0.31**	**0.17**	**0.42**	**0.47**	**0.55**	**0.60**
DPS, EUR	0.00	0.04	0.00	0.06	0.06	0.09	0.09	0.12	0.13	0.14	0.15
of which ordinary	0.00	0.04	0.00	0.06	0.06	0.09	0.09	0.12	0.13	0.14	0.15
of which extraordinary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Profit margin in percent											
EBITDA	n.a.	10.8%	-4.5%	18.5%	20.2%	17.0%	11.2%	22.0%	17.9%	18.7%	18.8%
EBITA	n.a.	10.8%	-4.5%	18.5%	20.2%	17.0%	11.2%	22.0%	17.9%	18.7%	18.8%
EBIT	n.a.	6.3%	-15.2%	8.8%	10.6%	11.2%	6.3%	15.6%	14.2%	15.7%	16.4%
Adjusted earnings											
EBITDA (adj)	0	17	-6	35	65	48	33	65	52	60	63
EBITA (adj)	0	17	-6	35	65	48	33	65	52	60	63
EBIT (adj)	0	10	-22	17	36	31	18	47	41	50	55
EPS (adj, EUR)	n.a.	0.11	-0.24	0.14	0.33	0.31	0.17	0.48	0.49	0.55	0.60
Adjusted profit margins in percent											
EBITDA (adj)	n.a.	10.8%	-4.5%	18.5%	21.7%	16.9%	11.3%	23.8%	18.3%	18.7%	18.8%
EBITA (adj)	n.a.	10.8%	-4.5%	18.5%	21.7%	16.9%	11.3%	23.8%	18.3%	18.7%	18.8%
EBIT (adj)	n.a.	6.3%	-15.2%	8.8%	12.1%	11.1%	6.4%	17.3%	14.6%	15.7%	16.4%
Performance metrics											
CAGR last 5 years											
Net revenue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12.8%	13.9%	8.1%	1.5%	3.7%
EBITDA	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	13.7%	n.m.	7.5%	-0.1%	5.8%
EBIT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12.7%	n.m.	19.0%	9.9%	11.9%
EPS	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.0%	n.m.	27.2%	15.2%	14.3%
DPS	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	17.6%	n.m.	16.7%	18.5%	10.8%
Average last 5 years											
Average EBIT margin	n.a.	n.a.	n.a.	n.a.	n.a.	6.4%	6.4%	10.5%	11.5%	12.6%	13.7%
Average EBITDA margin	n.a.	n.a.	n.a.	n.a.	n.a.	14.4%	14.1%	17.7%	17.6%	17.4%	17.7%

VALUATION RATIOS - ADJUSTED EARNINGS

EURm	2013	2014	2015	2016	2017	2018	2019	2020	2021E	2022E	2023E
P/E (adj)	n.a.	n.a.	n.a.	n.a.	27.5	12.5	26.1	13.3	13.3	11.8	10.7
EV/EBITDA (adj)	n.a.	n.a.	n.a.	n.a.	9.7	3.9	7.6	5.2	6.3	5.4	4.6
EV/EBITA (adj)	n.a.	n.a.	n.a.	n.a.	9.7	3.9	7.6	5.2	6.3	5.4	4.6
EV/EBIT (adj)	n.a.	n.a.	n.a.	n.a.	17.5	5.9	13.5	7.1	7.9	6.5	5.3

VALUATION RATIOS - REPORTED EARNINGS

EURm	2013	2014	2015	2016	2017	2018	2019	2020	2021E	2022E	2023E
P/E	n.a.	n.a.	n.a.	n.a.	33.5	12.4	26.6	15.2	13.6	11.8	10.7
EV/Sales	n.a.	n.a.	n.a.	n.a.	2.11	0.65	0.86	1.23	1.15	1.02	0.87
EV/EBITDA	n.a.	n.a.	n.a.	n.a.	10.4	3.8	7.7	5.6	6.4	5.4	4.6
EV/EBITA	n.a.	n.a.	n.a.	n.a.	10.4	3.8	7.7	5.6	6.4	5.4	4.6
EV/EBIT	n.a.	n.a.	n.a.	n.a.	20.0	5.8	13.7	7.9	8.1	6.5	5.3
Dividend yield (ord.)	n.a.	n.a.	n.a.	n.a.	0.7%	2.4%	2.0%	1.9%	2.0%	2.2%	2.3%
FCF yield	n.a.	n.a.	n.a.	n.a.	7.2%	13.6%	1.8%	12.7%	5.9%	2.3%	9.1%
FCF Yield bef A&D, lease adj	n.a.	n.a.	n.a.	n.a.	8.3%	13.6%	1.8%	12.6%	8.8%	9.5%	9.9%
Payout ratio	n.a.	37.1%	0.0%	42.0%	18.3%	29.5%	53.1%	25.2%	26.7%	25.6%	24.9%

Source: Company data and Nordea estimates

BALANCE SHEET

EURm	2013	2014	2015	2016	2017	2018	2019	2020	2021E	2022E	2023E
Intangible assets	0	39	69	74	53	39	29	19	21	50	51
of which R&D	0	0	0	0	0	0	0	0	0	0	0
of which other intangibles	0	39	69	74	53	39	29	19	12	7	5
of which goodwill	0	0	0	0	0	0	0	0	9	43	46
Tangible assets	0	2	1	1	1	1	9	10	10	10	10
of which leased assets	0	0	0	0	0	0	8	8	8	8	8
Shares associates	0	0	0	0	0	0	1	2	7	7	7
Interest bearing assets	0	0	0	0	0	0	0	0	0	0	0
Deferred tax assets	0	0	6	1	3	5	6	8	8	8	8
Other non-IB non-current assets	n.a.	1	2	1	1	1	1	1	1	1	1
Other non-current assets	0	0	0	0	0	0	0	0	0	0	0
Total non-current assets	n.a.	42	77	77	57	45	45	39	45	75	76
Inventory	0	0	0	0	0	0	0	0	0	0	0
Accounts receivable	0	25	19	28	29	23	33	21	22	25	26
Short-term leased assets	0	0	0	0	0	0	0	0	0	0	0
Other current assets	0	17	13	16	13	11	15	10	10	12	12
Cash and bank	0	54	34	29	91	124	125	139	158	160	193
Total current assets	0	95	66	73	133	158	172	170	190	196	231
Assets held for sale	0	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total assets	**n.a.**	**138**	**143**	**150**	**190**	**203**	**217**	**208**	**236**	**271**	**307**
Shareholders equity	0	94	74	87	140	160	168	165	191	222	256
Of which preferred stocks	0	0	0	0	0	0	0	0	0	0	0
Of which equity part of hybrid debt	0	0	0	0	0	0	0	0	0	0	0
Minority interest	0	0	0	0	0	0	0	0	0	0	0
Total Equity	0	94	74	87	140	160	168	165	191	222	256
Deferred tax	0	0	0	0	0	0	0	0	0	0	0
Long term interest bearing debt	0	0	16	3	3	3	2	1	1	1	1
Pension provisions	0	0	0	0	0	0	0	0	0	0	0
Other long-term provisions	0	0	0	0	0	0	0	0	0	0	0
Other long-term liabilities	0	0	0	0	0	0	0	0	0	0	0
Non-current lease debt	0	0	0	0	0	0	6	6	9	9	9
Convertible debt	0	0	0	0	0	0	0	0	0	0	0
Shareholder debt	0	0	0	0	0	0	0	0	0	0	0
Hybrid debt	0	0	0	0	0	0	0	0	0	0	0
Total non-current liabilities	0	0	17	3	3	4	8	7	10	10	10
Short-term provisions	0	1	3	1	1	1	0	1	1	1	1
Accounts payable	0	6	8	8	9	11	15	7	8	9	9
Current lease debt	0	0	0	0	0	0	2	3	0	0	0
Other current liabilities	0	37	33	35	37	29	20	25	26	30	32
Short term interest bearing debt	0	0	8	17	0	0	4	0	0	0	0
Total current liabilities	0	44	53	60	47	40	42	36	35	39	42
Liabilities for assets held for sale	0	0	0	0	0	0	0	0	0	0	0
Total liabilities and equity	**0**	**138**	**143**	**150**	**190**	**203**	**217**	**208**	**236**	**271**	**307**
Balance sheet and debt metrics											
Net debt	0	-54	-10	-10	-88	-120	-110	-129	-149	-150	-183
of which lease debt	0	0	0	0	0	0	8	9	9	9	9
Working capital	0	-1	-10	1	-4	-5	13	-2	-2	-2	-2
Invested capital	n.a.	41	68	78	53	40	58	37	43	73	74
Capital employed	0	94	99	106	143	163	182	175	201	232	266
ROE	n.m.	17.3%	-21.5%	13.3%	18.3%	16.3%	8.1%	19.3%	19.5%	19.4%	18.5%
ROIC	n.a.	n.a.	-31.6%	18.5%	43.9%	53.6%	30.0%	79.7%	82.4%	69.2%	60.5%
ROCE	n.m.	24.4%	-21.5%	16.5%	28.9%	21.1%	11.1%	26.1%	22.8%	23.2%	22.3%
Net debt/EBITDA	n.m.	-3.1	n.m.	-0.3	-1.5	-2.5	-3.4	-2.2	-2.9	-2.5	-2.9
Interest coverage	n.a.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Equity ratio	n.m.	68.0%	51.8%	58.0%	73.8%	78.5%	77.3%	79.4%	81.2%	82.0%	83.4%
Net gearing	n.m.	-57.4%	-13.3%	-11.4%	-62.9%	-75.3%	-65.7%	-78.2%	-77.7%	-67.6%	-71.6%

Source: Company data and Nordea estimates

CASH FLOW STATEMENT

EURm	2013	2014	2015	2016	2017	2018	2019	2020	2021E	2022E	2023E
EBITDA (adj) for associates	**0**	**17**	**-6**	**35**	**60**	**48**	**32**	**60**	**51**	**60**	**63**
Paid taxes	0	-9	1	0	-1	-11	-10	-6	-7	-10	-11
Net financials	0	0	-1	-2	-1	0	-1	-1	2	0	0
Change in provisions	0	1	2	-2	0	0	0	1	0	0	0
Change in other LT non-IB	n.a.	n.a.	-6	5	-1	-2	-1	-2	0	0	0
Cash flow to/from associates	0	0	0	0	0	0	0	0	0	0	0
Dividends paid to minorities	0	0	0	0	0	0	0	0	0	0	0
Other adj to reconcile to cash flow	n.a.	n.a.	5	-1	4	4	3	10	0	0	0
Funds from operations (FFO)	**0**	**7**	**-5**	**35**	**60**	**39**	**24**	**62**	**45**	**50**	**52**
Change in NWC	0	10	6	-13	-1	3	-13	1	0	0	0
Cash flow from operations (CFO)	**0**	**17**	**1**	**23**	**60**	**43**	**11**	**64**	**45**	**50**	**53**
Capital expenditure	0	0	0	0	0	-1	-4	-5	-4	-5	-5
Free cash flow before A&D	**0**	**17**	**1**	**23**	**60**	**41**	**7**	**59**	**42**	**45**	**47**
Proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0	0
Acquisitions	0	-38	-44	-23	-9	0	0	0	-14	-34	-4
Free cash flow	0	-21	-42	0	51	41	7	59	28	11	43
Free cash flow bef A&D, lease adj	0	17	1	23	60	41	7	59	42	45	47
Dividends paid	0	-3	0	-5	-5	-7	-7	-7	-9	-10	-10
Equity issues / buybacks	0	0	0	0	36	1	0	-31	0	0	0
Net change in debt	0	0	25	-6	-17	0	3	-4	0	0	0
Other financing adjustments	0	0	0	0	-1	-3	0	0	0	0	0
Other non-cash adjustments	0	78	-2	5	-3	1	-1	-3	0	0	0
Change in cash	0	54	-19	-6	62	33	1	14	19	1	33
Cash flow metrics											
Capex/D&A	n.m.	0.0%	0.0%	0.0%	0.0%	7.9%	27.3%	29.1%	36.3%	51.0%	66.6%
Capex/Sales	n.a.	0.0%	0.0%	0.0%	0.0%	0.5%	1.3%	1.9%	1.3%	1.5%	1.6%
Key information											
Share price year end (/current)	n.a.	n.a.	n.a.	n.a.	9	4	4	6	7	6	6
Market cap.	n.a.	n.a.	n.a.	n.a.	715	303	359	463	476	476	476
Enterprise value	n.a.	n.a.	n.a.	n.a.	627	183	248	334	327	326	292
Diluted no. of shares, year-end (m)	0.0	74.9	74.9	74.9	79.2	79.4	81.3	73.4	73.4	73.4	73.4

Source: Company data and Nordea estimates

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