

Rovio Entertainment Corporation

Half Year Financial Report

August 8, 2019

H1

HALF YEAR FINANCIAL REPORT FOR JANUARY-JUNE 2019

19



Games revenue grew 7.8% in H1 2019 and was stable in Q2, Angry Birds Dream Blast continued growing

April-June 2019 highlights

- Rovio's revenue was EUR 71.8 million (71.8) and thus stable year-on-year; In comparable currencies, the revenue declined by approximately 3%
- Rovio's newest game Angry Birds Dream Blast, launched on 24th January 2019, had gross bookings of EUR 14.0 million and became Rovio's second largest game
- Games revenue in Q2 was EUR 65.4 million (65.3) or 0.2% growth year-on-year. In comparable currencies, the revenue declined by approximately 4%. The Games gross bookings were EUR 65.2 million (64.8) or 0.6% growth year-on-year and in comparable currencies the gross bookings declined by approximately 3%.
- User acquisition investments were EUR 21.3 million (22.9), or 32.6% of the Games segment's revenue (35.1%)
- Brand Licensing revenue was EUR 6.4 million (6.5) or -2.0% lower year-on-year
- Group adjusted operating profit was EUR 5.3 million (6.0) and adjusted operating profit margin 7.4% (8.4%)
- Group adjusted operating profit excluding Hatch Entertainment was EUR 8.1 million (7.5) and adjusted operating profit margin 11.3% (10.4%)
- Operating cash flow was EUR 4.8 million (1.8)
- Earnings per share was EUR 0.04 (0.07)

January-June 2019 highlights

- Rovio's revenue was EUR 142.6 million (137.5) or 3.8% growth year-on-year; in comparable currencies, the revenue was approximately at the same level year-on-year
- Rovio's newest game Angry Birds Dream Blast, launched on 24th January 2019, had total gross bookings of EUR 20.9 million during the second half of 2019 and is trending towards EUR 50 million for the full year
- Games revenue grew 7.8% to EUR 131.7 million (122.1). In comparable currencies, the revenue growth was approximately 3%. The Games gross bookings were EUR 131.0 million (123.4) or 6.2% growth year-on-year and in comparable currencies the growth was approximately 1%.
- User acquisition investments were EUR 45.1 million (37.5), or 34.2% of the Games segment's revenue (30.7%)
- Brand Licensing revenue was EUR 11.0 million (15.4) or 28.7% lower year-on-year, as expected
- Group adjusted operating profit was EUR 12.8 million (15.6) and adjusted operating profit margin 9.0% (11.3%)
- Group adjusted operating profit excluding Hatch Entertainment was EUR 17.4 million (18.3) and adjusted operating profit margin 12.2% (13.3%)
- Operating cash flow was EUR 8.0 million (12.3)
- Earnings per share was EUR 0.11 (0.16)

Key figures

EUR million	4-6 2019	4-6/ 2018	Change, %	1-6/ 2019	1-6/ 2018	Change, %	1-12/ 2018
Revenue	71.8	71.8	0.0%	142.6	137.5	3.8%	281.2
EBITDA*	9.6	9.3	3.8%	20.1	23.6	-14.7%	47.8
EBITDA margin*	13.4%	12.9%	-	14.1%	17.1%	-	17.0%
Adjusted EBITDA*	9.6	9.3	3.8%	20.1	23.9	-15.9%	47.5
Adjusted EBITDA margin, %*	13.4%	12.9%	-	14.1%	17.4%	-	16.9%
Operating profit*	5.3	6.0	-11.3%	12.8	15.2	-16.1%	31.5
Operating profit margin, %*	7.4%	8.4%	-	9.0%	11.1%	-	11.2%
Adjusted operating profit*	5.3	6.0	-11.3%	12.8	15.6	-17.9%	31.2
Adjusted operating profit margin, %*	7.4%	8.4%	-	9.0%	11.3%	-	11.1%
Profit before tax	4.8	6.8	-29.4%	12.4	15.8	-21.8%	32.2
Capital expenditure	1.0	0.0	N/A	1.6	0.3	369.0%	1.3
User acquisition	21.3	22.9	-6.9%	45.1	37.5	20.2%	78.6
Return on equity (ROE), %	18.5%	20.6%	-	18.5%	20.6%	-	21.5%
Net gearing ratio, %*	-66.8%	-63.9%	-	-66.8%	-63.9%	-	-75.3%
Equity ratio, %*	79.6%	83.4%	-	79.6%	83.4%	-	83.7%
Earnings per share, EUR	0.04	0.07	-45.1%	0.11	0.16	-28.1%	0.31
Earnings per share, diluted EUR	0.04	0.07	-45.0%	0.11	0.15	-28.0%	0.31
Net cash flows from operating activities*	4.8	1.8	162.4%	8.0	12.3	-34.7%	42.6
Employees (average for the period)	448	379	18.2%	435	382	13.9%	388

*Not fully comparable due to IFRS 16 adoption in 2019. See Note 1 for details.

Unless otherwise stated, the comparison figures in brackets refer to the corresponding period in the previous year. Calculations and definitions are presented in the Performance Measures section.

The changes in comparable currencies have been calculated by translating the reporting period figures with the average USD/EUR exchange rates of the comparison period for the US dollar dominated in-app-purchases in United States and global ad network sales.

Kati Levoranta, CEO:

Rovio's revenue in the second quarter of 2019 was EUR 71.8 (71.8) million and thus, stable year-on-year. Rovio games revenue was EUR 65.4 million and similar to last years' period (65.3). The newest game in Rovio's portfolio, Angry Birds Dream Blast, continued to grow and reached EUR 14.0 million gross bookings and became Rovio's 2nd largest game in the quarter. We are happy with how Angry Birds Dream Blast has developed and that it is now trending towards EUR 50 million for the full year. The gross bookings of Angry Birds 2, Rovio's largest game, declined year-on-year to EUR 26.5 million (29.7) due to much lower user acquisition investments in the period as UA investments were optimized across the key games. In total, we invested 21.3 million in user acquisition (22.9) which was a bit lower than last year's period. The lower level of user acquisition impacted the revenues mainly for Angry Birds 2. We expect the large media visibility of the Angry Birds Movie sequel, which starts its global roll-out in August, to enable increasing user acquisition investments for our top games during the second half of the year.

The adjusted operating profit in the reporting period was EUR 5.3 (6.0) million and the adjusted operating profit margin 7.4% (8.4%). The decline in operating profit was attributed to Hatch Entertainment's expansion to new markets along the 5G roll-outs.

We are very excited by our new games pipeline: We have currently 11 games in different phases of development out of which three are in soft launch. We aim to launch at least one game during the second half of 2019.

Brand Licensing unit's revenue in the second quarter was EUR 6.4 million and thus at the same level as last year (6.5). We expect the Angry Birds Movie sequel and surrounding marketing to boost our licensing business as well as drive users to our Angry Birds games during the second half of 2019. The movie sequel is rolling out globally in August, with the two largest markets of USA and China scheduled for launch on 14th and 16th of August, respectively.

Hatch Entertainment, Rovio's 80% owned subsidiary developing a game streaming service for mobile and smart TVs, has signed a partnership agreement with Samsung in April and announced partnerships with Vodafone in UK, Spain and Italy. To accelerate its growth, Hatch Entertainment is seeking external funding and further strategic partnerships.

With the launch of the Angry Birds Movie sequel and with several promising games in development, we are thrilled to enter the second half of 2019.

Outlook for 2019 (unchanged)

In 2019, Rovio expects group revenues to grow to EUR 300 – 330 million and adjusted operating profit margin between 9 and 11 per cent.

Basis for outlook

In 2019, Rovio Games business continues developing its live game portfolio according to the Games as a Service strategy, profitable user acquisition and development of new games. Target is to launch at least two new games in 2019 (the first one, Angry Birds Dream Blast, was launched on January 24th). The expected timing of the second launch is during the second half of the year.

The user acquisition investments are expected to be 30-35 percent of Games revenues for the full year with an average payback time of 12 months. The amount of user acquisition may vary depending on development of the games' monetization, timing of new game launches and the level of competition in the market.

The Brand Licensing segment revenues are expected to be at a similar or slightly higher level in 2019 with focus on the second half of the year when the Angry Birds Movie sequel is scheduled for release.

On group level the largest revenue growth is expected during the second half of 2019. The profit margin excluding Hatch Entertainment is expected to be between 12 and 14 per cent for the full year.

Briefing and audiocast:

Rovio will host an English language audiocast on the 2019 second quarter results, including the Q&A session for investors, media and institutional investors at 14:00-15:00 EET on August 8th, 2019. The audiocast can be viewed live at: <http://www.rovio.com/investors-investor-calendar> , and later on the same day as a recording.

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Rovio in brief

Rovio Entertainment Corporation is a global, games-first entertainment company that creates, develops and publishes mobile games, which have been downloaded 4.5 billion times so far. The Company is best known for the global Angry Birds brand, which started as a popular mobile game in 2009, and has since evolved from games to various entertainment and consumer products in brand licensing. Today, the Company offers multiple mobile games, animations and has produced The Angry Birds Movie, which opened number one in theatres in 50 countries. Its sequel, The Angry Birds Movie 2, releases worldwide starting in August 2019. Rovio is headquartered in Finland and the company's shares are listed on the main list of NASDAQ Helsinki stock exchange with the trading code ROVIO.

(www.rovio.com)

Rovio Entertainment Corporation Half Year Financial Report 1–6/2019

A description of the accounting standards applied in the preparation of this Half Year Financial Report is provided in the notes to this Half Year Financial Report, in Note 1 Accounting principles.

Market review

According to market intelligence provider Newzoo's latest global games market report published in June 2019, the global mobile gaming market size in end-user generated revenue was estimated to be USD 62.1 billion in 2018 which represented 10% year-on-year growth. In 2019, Newzoo estimates the global mobile gaming market to grow by 10% to USD 68.5 billion.

The global growth rate was somewhat reduced from their previous report due to the lower market growth especially in China, Middle East and Africa. The Chinese market growth is still recovering from the ending of the 9-month hiatus in approving new game launches for both foreign and domestic game developers at the end of 2018.

In the long-term, the global mobile gaming market is expected to continue its double-digit growth of 11% CAGR during 2018-2022. The Western market is expected to grow at 9% CAGR during 2018-2022.

Revenue and result

April-June 2019

In the second quarter 2019, Rovio group revenue was EUR 71.8 million (71.8) and thus, stable compared to last year's second quarter. In comparable currencies the revenue declined by approximately 3%.

The Games segment revenue was EUR 65.4 million (65.3) or 0.2% growth year-on-year. In comparable currencies, revenue declined by approximately 4%. In the reporting period, the revenue of Rovio's largest game Angry Birds 2 declined year-on-year due to lower user acquisition investments while Rovio's newest game Angry Birds Dream Blast grew to become Rovio's second largest game and replaced the revenue of older declining portfolio.

The revenue of the Brand Licensing -segment was EUR 6.4 million (6.5) or 2.0% decline year-on-year. The revenue consisted of EUR 5.2 million (4.0) from Content Licensing, the majority of which was income from the Angry Birds Movie, and EUR 1.1 million (2.4) from Consumer Products.

The Group's adjusted EBITDA was EUR 9.6 million (9.3), or 13.4% (12.9%) of revenues.

The Group's adjusted operating profit was EUR 5.3 million (6.0) and adjusted operating profit margin 7.4 (8.4%). Excluding Hatch Entertainment operating expenses, the Group's adjusted profit was EUR 8.1 million (7.5) and adjusted operating profit margin 11.3% (10.4%). There were no adjustments in the reporting period.

The Games segment's adjusted EBITDA was EUR 10.5 million (9.2) or 16.1% (14.1%) of revenues. Games EBITDA margin was higher compared to last year due to somewhat lower user acquisition investments in the reporting period: EUR 21.3 million (22.9) or 32.6% of revenues (35.1%).

The Brand Licensing segment's adjusted EBITDA was EUR 3.7 million (3.6) and adjusted EBITDA margin was 58.3% (56.1%).

The Group's profit before taxes was EUR 4.8 million (6.8) and earnings per share EUR 0.04 (0.07).

January-June 2019

In the first half of 2019, Rovio group revenue was EUR 142.6 million (137.5) and grew 3.8% year-on-year. In comparable currencies the growth was approximately 3%.

The Games segment revenue was EUR 131.7 million (122.1) or 7.8% growth year-on-year. In comparable currencies, the growth was approximately 3%.

The revenue of the Brand Licensing -segment was EUR 11.0 million (15.4) or 28.7% decline year-on-year, as expected. The revenue consisted of EUR 8.5 million (11.2) from Content Licensing, the majority of which was income from the first Angry Birds Movie, and EUR 2.5 million (4.2) from Consumer Products.

The Group's adjusted EBITDA was EUR 20.1 million (23.9), or 14.1% (17.4%) of revenues. The decline in EBITDA was mainly due to lower movie revenues.

The Group's adjusted operating profit was EUR 12.8 million (15.6) and adjusted operating profit margin 9.0% (11.3%). Excluding Hatch Entertainment operating expenses, the Group's adjusted profit was EUR 17.4 million (18.3) and adjusted operating profit margin 12.2% (13.3%). There were no adjustments in the reporting period. The adjustments in the first half 2018 were EUR 0.3 million and were related to the closing of Rovio's games studio in London.

The Games segment's adjusted EBITDA was EUR 21.7 million (19.8) or 16.5% (16.3%) of revenues. The user acquisition investments in the reporting period were EUR 45.1 million (37.5) or 34.2% of revenues (30.7%). The increase in user acquisition investments were mainly targeted to drive growth in the new game Angry Birds Dream Blast in the first quarter of 2019.

The Brand Licensing segment's adjusted EBITDA was EUR 6.2 million (10.2) and adjusted EBITDA margin was 56.6% (66.5%). The decline in EBITDA from last year was due to lower revenues.

The Group's profit before taxes was EUR 12.4 million (15.8) and earnings per share EUR 0.11 (0.16).

Financing and investments

Rovio's capital expenditure was EUR 1.0 million (0.0) in the second quarter of 2019. Rovio refers to the user acquisition costs of the Games segment as investments, but pursuant to accounting regulations, they are recognized as expenses rather than investments due to their average payback period being about a year.

The Games segment's capital expenditure was EUR 0.2 million (0.0) in the second quarter and related to external game development. Brand Licensing Unit capital expenditure was EUR 0.5 million and related mainly to external development of Angry Birds Explore application. The Other-segment's investments were EUR 0.3 million (0.0) for the quarter and consisted mainly of machinery and equipment.

Cash flow from financing amounted to EUR -7.8 million (-7.2) in the second quarter and consisted dividend payments of EUR 7.1 million and EUR 0.7 million of finance lease repayments, mostly reclassified from operating cash flows as required by the IFRS 16-standard.

At the end of the second quarter, Rovio's total interest-bearing loans and financial liabilities amounted to EUR 16.1 million (2.7) consisting of EUR 3.6 million product development loans from Tekes (the Finnish Funding Agency for Innovation), EUR 3.0 million convertible note to Hatch Entertainment from NTT DoCoMo Ventures as well as EUR 9.4 million leasing liabilities recognized on the balance sheet as required by the IFRS 16 -standard.

Rovio's cash and cash equivalents at the end of the review period amounted to EUR 124.6 million (97.0).

Development per business segment

Games

April-June 2019

The Games segment's revenue in the reporting period amounted to EUR 65.4 million (65.3), which corresponds to a year-on-year growth of 0.2%. In comparable currencies, the revenue declined approximately by 4%.

Angry Birds Dream Blast that was launched in January 2019 continued to grow and has already been Rovio's best free-to-play game launch measured in quarterly gross bookings in the first year. Rovio's top five games in the reporting period were Angry Birds 2, Angry Birds Dream Blast, Angry Birds Match, Angry Birds Friends and Angry Birds Pop.

The Games segment's EBITDA was EUR 10.5 million (9.2) which represents an increase of 14.3% year-on-year. The year-on-year increase is both due to lower user acquisition investments in the reporting period and higher gross profit due to a higher share of internally developed games in the portfolio as well as a higher share of advertising revenue compared to last year.

The Games segment's user acquisition investments decreased to EUR 21.3 million (22.9), or 32.6% (35.1%) of the Games segment's revenue in the reporting period. The decrease was due to optimization of user acquisition investments according average 12-month payback time. During the reporting period, most of the user acquisition investments were directed to Angry Birds Dream Blast.

The Games segment's capital expenditure amounted to EUR 0.2 million (0.0).

January-June 2019

In the first half of 2019, the Games segment's revenue amounted to EUR 131.7 million (122.1), representing a growth of 7.8%. In comparable currencies, the revenue growth was approximately 3%.

The Games segment's adjusted EBITDA grew year-on-year by 9.2% to EUR 21.7 million (19.8) in the reporting period. The EBITDA growth was primarily driven by the growth in revenues.

In the first half of 2019, Games segment's user acquisition amounted to EUR 45.1 million (37.5), or 34.2% (30.7%) of Games segment's revenue. The growth in user acquisition was due to investments into Angry Birds Dream Blast's global launch in the first quarter of 2019.

The Games segment's capital expenditure was EUR 0.3 million (0.3).

EUR million	4-6/ 2019	4-6/ 2018	Change, %	1-6/ 2019	1-6/ 2018	Change, %	1-12/ 2018
Gross bookings	65.2	64.8	0.6%	131.0	123.4	6.2%	253.3
Revenue	65.4	65.3	0.2%	131.7	122.1	7.8%	250.4
Adjusted EBITDA	10.5	9.2	14.3%	21.7	19.8	9.2%	40.8
Adjusted EBITDA margin, %	16.1%	14.1%		16.5%	16.3%		16.3%
EBITDA	10.5	9.2	14.3%	21.7	19.5	11.0%	40.5
EBITDA margin, %	16.1%	14.1%		16.5%	16.0%		16.2%
User acquisition	21.3	22.9	-6.9%	45.1	37.5	20.2%	78.6
User acquisition share of revenue, %	32.6%	35.1%		34.2%	30.7%		31.4%
Capital expenditure	0.2	0.0	-	0.3	0.3	19.4%	0.3

Key performance indicators of the Games segment

The key performance indicators of the Games segment's use gross bookings in place of revenue as it gives a more accurate view of Rovio's operating performance at a specific point in time. Gross bookings represent in-app purchases and in-app advertising sales in the given calendar month, reported based on the date of purchase/sale. Gross bookings do not include revenue from custom contracts, revenue deferrals or accounting adjustments due to, for example, foreign exchange rate differences between revenue accruals and actual payments, and thus differ from the reported revenue. The reconciliation of gross bookings to revenue is presented in the notes.

In the second quarter, the Games segment's gross bookings grew by 0.6% to EUR 65.2 million (64.8). The growth was driven by improved monetization for the top 5 games, for which MARPPU grew quarter-on-quarter by 6% to EUR 41.5. Additionally, both ARPDau and MARPPU for all games reached all time high figures. The reach of Rovio's game portfolio, measured as daily active users (DAU) declined slightly quarter-on-quarter from 3.5 to 3.4 million for the top 5 games, and from 7.0 to 6.6 million for the whole game portfolio. The slight decline was reflected also in the amount of monthly unique payers (MUP) that declined from 422 to 394 thousand for the top 5 games. The decline in MUP was mainly due to lower user acquisition investments in Angry Birds 2.

EUR million	4-6/2019	1-3/2019	10-12/2018	7-9/2018	4-6/2018	1-3/2018
Gross bookings top 5	56.7	56.1	57.7	54.3	54.8	46.5
Gross bookings total	65.2	65.8	66.7	63.2	64.8	58.6

Million	4-6/2019	1-3/2019	10-12/2018	7-9/2018	4-6/2018	1-3/2018
DAU top 5	3.4	3.5	3.5	3.8	4.0	3.6
DAU all	6.6	7.0	7.0	8.0	8.8	8.7
MAU top 5	16.2	17.1	18.0	20.2	22.2	18.1
MAU all	45.3	49.3	50.1	59.6	64.2	61.7

Thousand	4-6/2019	1-3/2019	10-12/2018	7-9/2018	4-6/2018	1-3/2018
MUP top 5	394	422	444	451	497	407
MUP all	460	495	504	517	581	507

EUR	4-6/2019	1-3/2019	10-12/2018	7-9/2018	4-6/2018	1-3/2018
ARPDau top 5	0.18	0.18	0.18	0.16	0.15	0.14
ARPDau all	0.11	0.10	0.10	0.09	0.08	0.08
MARPPU top 5	41.5	39.0	38.7	36.0	33.5	35.6
MARPPU all	40.4	38.5	38.9	35.9	33.0	35.0

Game-specific performance in the Games segment

Angry Birds 2, released in July 2015, remained as the largest game in Rovio's portfolio. Its gross bookings amounted to EUR 26.5 million (29.7) or 11% lower than a year mainly due to lower user acquisition investments.

Rovio's second biggest game in the reporting period was Angry Birds Dream Blast, released in January 2019. The gross bookings of Angry Birds Dream Blast were EUR 14.0 million (-) and is trending towards EUR 50 million gross bookings for the full year. Angry Birds Dream Blast has been the best game launch of Rovio Games so far, measured in quarterly gross bookings for the first year.

Angry Birds Match, a match-3 game released in August 2017, passed Angry Birds Friends as Rovio's third biggest game in the reporting period. Angry Birds Match reached gross bookings of EUR 6.6 million (6.8), which is a decline of 3% year-on-year.

Rovio's fourth biggest game in the reporting period was Angry Birds Friends that was released already in 2012. The gross bookings of Angry Birds Friends was EUR 6.6 million (8.0).

Angry Birds Pop, released in March 2015, remained as Rovio's fifth biggest game in the reporting period. The gross bookings of Angry Birds Pop were EUR 3.0 million (3.8).

The other games, that include less actively maintained titles of Rovio's game portfolio, generated total gross bookings of EUR 8.5 million (16.4) and declined 48% year-on-year. We now include Angry Birds Evolution, Angry Birds Blast and Battle Bay in the other games category.

Gross bookings, EUR million	4-6/2019	1-3/2019	10-12/2018	7-9/2018	4-6/2018	1-3/2018
AB 2	26.5	32.0	35.2	30.8	29.7	21.6
AB Dream Blast	14.0	6.9	0.5			
AB Match	6.6	6.8	6.7	6.5	6.8	6.2
AB Friends	6.6	7.2	7.9	8.2	8.0	7.2
AB Pop	3.0	3.3	3.8	3.6	3.8	4.1
Other games	8.5	9.7	12.7	14.1	16.4	19.5
Total	65.2	65.8	66.7	63.2	64.8	58.6

Brand Licensing

April-June 2019

The revenue of the Brand Licensing segment in the reporting period was EUR 6.4 million (6.5) and declined 2.0% year-on-year. The revenue consisted of EUR 5.2 million (4.0) from Content Licensing, the majority of which was income from the first Angry Birds Movie, released in 2016, and EUR 1.1 million (2.4) from Consumer Products. The slow start of the year for consumer products was expected as revenue streams from old license contracts are declining and new contracts wait for the launch of the Angry Birds Movie 2 in August 2019. The Brand Licensing segment's adjusted EBITDA was 3.7 million (3.6) and EBITDA margin was 58.3% of revenues (56.1%).

During the reporting period, Brand Licensing Unit continued to build the licensing program for The Angry Birds Movie sequel launching in August 2019, and developing other projects in content roadmap, such as TV animation. A new Virtual Reality game "The Angry Birds Movie 2 VR: Under Pressure" will be released exclusively for Playstation VR at the time of the movie sequel.

January-June 2019

The revenue of the Brand Licensing segment in the reporting period was EUR 11.0 million (15.4) and declined 28.7% year-on-year, as expected. The revenue consisted of EUR 8.5 million (11.2) from Content Licensing, the majority of which was income from the first Angry Birds Movie, released in 2016, and EUR 2.5 million (4.2) from Consumer Products. The lower content licensing revenues was due to decline of the first Angry Birds Movie revenues as expected based on the typical revenue flow of movies. The slow start of the year for consumer products was expected as revenue streams from old license contracts are declining and new contracts wait for the launch of the Angry Birds Movie 2 in August 2019.

The Brand Licensing segment's adjusted EBITDA was 6.2 million (10.2) and EBITDA margin was 56.6% of revenues (66.5%). The lower EBITDA margin was due to lower movie revenues compared to last year.

EUR million	4-6/ 2019	4-6/ 2018	Change, %	1-6/ 2019	1-6/ 2018	Change, %	1-12/ 2018
Revenue	6.4	6.5	-2.0%	11.0	15.4	-28.7%	30.8
Consumer products	1.1	2.4	-54.1%	2.5	4.2	-40.6%	8.6
Content licensing	5.2	4.0	29.6%	8.5	11.2	-24.2%	22.2
Adjusted EBITDA	3.7	3.6	1.9%	6.2	10.2	-39.4%	20.8
Adjusted EBITDA margin, %	58.3%	56.1%		56.6%	66.5%		67.5%
EBITDA	3.7	3.6	1.9%	6.2	10.2	-39.4%	20.8
EBITDA margin, %	58.3%	56.1%		56.6%	66.5%		67.5%
Capital expenditure	0.5	0.0	-	0.5	0.0	-	0.2
Amortization	3.1	2.6	17.5%	5.0	7.0	-29.6%	13.7

Other segment

Hatch Entertainment

Hatch Entertainment Ltd, a subsidiary in which Rovio holds an 80 percent stake, is developing a cloud-based game streaming service for mobile and smart TVs. Today, more than 150 titles are currently live in the service, with a new game scheduled to go live each week. More than 150 developers and publishers have signed up to bring more than 400 premium games to Hatch, which is now available on the Samsung's Galaxy Store in South Korea and USA and on Google Play in Japan and 18 European countries. Hatch Premium, a paid subscription that removes ads and offers additional content and features such as Android TV support, is also now available in South Korea, USA, Japan, UK, Spain, Italy and with more markets to follow.

During the reporting period, Hatch announced go-to-market partnerships with Samsung in South Korea and USA and with Vodafone in UK, Spain and Italy.

Hatch operating expenses during the second quarter of 2019 were EUR 2.8 million (1.5) and during the first half of 2019 EUR 4.6 million (2.7). The increased expenses in the reporting period were due to expansion to new markets.

During 2019, Rovio is exploring alternative financial structures and partnerships to accelerate Hatch's growth and is prepared to reduce its ownership below 50 percent.

Consolidated statement of financial position

Consolidated statement of financial position. EUR million	30 June 2019	30 June 2018	31 Dec 2018
Non-current assets	49.8	49.8	45.4
Current receivables	43.1	42.2	34.2
Cash and cash equivalents	124.6	97.0	123.6
Total assets	217.5	189.0	203.2
Equity	163.1	148.0	159.4
Financial liabilities	6.7	2.5	3.6
Advances received and deferred income	12.5	11.3	12.7
Other payables	35.2	27.2	27.4
Total equity and liabilities	217.5	189.0	203.2

Rovio's consolidated statement of financial position amounted to EUR 217.5 million on June 30, 2019 (189.0), with equity representing EUR 163.1 million (148.0) of the total. Cash and cash equivalents amounted to EUR 124.6 million (97.0). The cash deposits amounted to EUR 54.5 million and the cash equivalents to EUR 70.1 million, consisting of investments in money market funds. The decline in cash and cash equivalents was primarily due to paid dividends during the quarter.

Total advances received, and deferred income were 12.5 million (11.3).

On June 30, 2019 Rovio's non-current assets were EUR 49.8 million (49.8) up from EUR 45.4 million on December 31, 2018. The change was primarily due to the right-of-use assets (office and equipment leases) recognized due to adopting the IFRS 16 -standard, partially offset with the decrease in intangible assets. The intangible asset decrease is due to amortization, mainly of development expenses of the first Angry Birds movie. Rovio recognizes amortization on the movie in each reporting period in an amount that corresponds to 55% of the Angry Birds movie's revenue for the period.

Rovio's net debt on June 30, 2019 amounted to negative EUR 108.9 million. Rovio's debt consisted of loans from Tekes (the Finnish Funding Agency for Innovation) of EUR 3.6 million, Hatch Entertainment's convertible note from NTT DoCoMo of EUR 3.0 million, as well as EUR 9.4 million in leasing debt.

Cash flow and financing

Consolidated statement of cash flows, EUR million

	4-6/2019	4-6/2018	1-6/2019	1-6/2018	1-12/2018
Cash flow from operating activities	4.8	1.8	8.0	12.3	42.6
Cash flow from investing activities	-1.0	-0.0	-2.4	-0.3	-1.2
Cash flow from financing activities	-7.8	-7.2	-4.8	-6.5	-9.4
Change in cash and cash equivalents	-4.0	-5.4	0.9	5.5	32.0
Net foreign exchange difference	-0.3	0.9	0.1	0.7	0.8
Cash and cash equivalents at the beginning of the period	128.8	101.5	123.6	90.8	90.8
Cash and cash equivalents at the end of the period	124.6	97.0	124.6	97.0	123.6

Rovio's net cash flow from operating activities amounted to EUR 4.8 million (1.8) in the second quarter. The increase quarter on quarter was mainly due to the increase in working capital, partially offset by a decrease in EBITDA as well as an increase in taxes paid.

Cash flows used in investing activities amounted to EUR -1.0 million (-0.0) in the second quarter. The increase is mostly attributable to capital expenditure in Brand Licensing - segment of EUR 0.5 million mainly in Angry Birds Explore application, as well as investments in Games of EUR 0.2 million and Other-segment of EUR 0.3 million.

Cash flows used in financing activities amounted to EUR -7.8 million (-7.2) in the second quarter. The increase was driven by EUR 0.7 million of lease repayments, that since the beginning of 2019 are shown in financing cash flows as opposed to the earlier presentation in operating cash flows due to the IFRS 16 - standard. The dividends paid were EUR 7.1 million and were on the same level as in Q2 2018.

Personnel

From April to June 2019, Rovio's average number of employees was 448 (379). The Games business unit employed 339 people (289), the Brand Licensing business unit 33 people (32), and other operations, including Hatch Entertainment and administrative functions employed 76 people (58).

The average number of employees increased due to the acquisition of Playraven Ltd. at the end of 2018 as well as the organic growth of Games segment and Hatch Entertainment.

	4-6/ 2019	4-6/ 2018	Change, %	1-6/ 2019	1-6/ 2018	Change, %	1-12/ 2018
Employees (average for the Period)	448	379	18.2%	435	382	13.8%	388
Employees (end of period)	463	386	19.9%	463	386	19.9%	418

Shares and shareholders

On June 30, 2019, Rovio's share capital amounted to EUR 0.7 million and the number of shares was 79,677,642.

The shareholdings of the 10 largest shareholders are presented in the table below (nominee-registered holdings excluded). Oivor AB's shareholding is nominee-registered and not explicitly shown in the table.

On June 30, 2019 Rovio Entertainment Corporation held 482,691 of its own shares.

Shareholder	Number of Shares	Percentage of shares and votes
Ilmarinen Mutual Pension Insurance Company	2,067,500	2.6%
Hed Niklas Peter	1,921,746	2.4%
Vesterbacka Jan-Peter Edvin	1,456,229	1.8%
Elo Pension Company	1,250,000	1.6%
The State Pension Fund	1,000,000	1.3%
Sijoitusrahasto Aktia Capital	875,074	1.1%
Danske Invest Finnish Institutional Equity Fund	710,000	0.9%
Varma Mutual Pension Insurance Company	677,471	0.9%
Sijoitusrahasto Aktia Nordic Small Cap	514,196	0.6%
Säästöpankki Kotimaa	506,567	0.6%
Total	10,978,783	13.8%
Other shareholders	68,698,859	86.2%
Number of shares total	79,677,642	100%

A monthly updated table of Rovio's shareholders is available online at <https://www.rovio.com/investors/shareholders>

Share-based incentive program

Rovio has a long-term incentive program that consists of an option plan for all employees, including the CEO and Rovio's management, and a restricted share plan for selected key employees.

The option plan provides for the issuance of up to 5,000,000 options. Each option entitles its holder to subscribe for one share. The option plan includes three lots of options that can be allocated to 2017, 2018, and 2019. Options have a vesting period of two years. The subscription price for the 2017 options is the share price in Rovio's Initial Public Offering. The subscription price for the 2018 options is the trading volume-weighted average quotation of the shares on Nasdaq Helsinki during May 2 -31, 2018, and, for the 2019 options, the trading volume-weighted average quotation of the shares on Nasdaq Helsinki during May 2 -31, 2019.

A total of 985,150 options were allocated under the 2017 option program as of June 30, 2019, a total of 1,168,500 options were allocated under the 2018 option program as of June 30, 2019 and a total of 1,234,750 options were allocated under the 2019 option program as of June 30, 2019.

The option plan participants can execute their reward during a one-year subscription period following each vesting period through either subscribing for shares or selling options that have been publicly listed. The option plan participants generally lose the right to their reward if their employment terminates during the vesting period.

The restricted share plan is constructed as a restricted share pool from which a predetermined number of Rovio shares can be allocated to a limited number of selected key employees. The Company's Board of Directors decides for each participant separately the length of the restricted period (1-3 years) relating to the shares allocated to the employee under the restricted share plan. The restricted share plan participants must be working at Rovio when the shares are transferred. The maximum number of

shares that can be distributed through the restricted share plan is 1,300,000. Once the maximum number of shares has been allocated, the Board of Directors can decide on a new maximum number. A total of 590,495 rights entitling to shares had been allocated under the restricted share plan as of June 30, 2019.

Risks

The Company's liquidity and cash flow is strong, and the profitability outlook remains positive, which enables the Company to continue to execute its business in accordance with its strategy.

Based on the Company's assessment, there were no material changes in the risks and uncertainties during the review period.

The most significant risks are related to the financial performance of Rovio's top games in the market, the continuous development of these games, and ability to develop new successful games. Risks in user acquisition relate to the accuracy of the profit models and the impact on the Group's net profit. New games introduced by competitors and changes in the competitive landscape may also impact the success of Rovio's games revenues, size of user acquisition investments, and the Group's profit. Changes in governmental regulations in different countries can have both short- and long-term implications for the business.

Other significant risks relate to the demand for Angry Birds branded consumer products and other content that may impact the revenues of the Brand Licensing business unit.

The Company engages in business in several currencies, with the euro and U.S. dollar being the most significant. Fluctuations in exchange rates, particularly between the euro and the U.S. dollar could have a material impact on the Company's result.

More details on the risks, uncertainties, and Rovio's risk management can be found online at Rovio.com and in the most recent published financial statements.

Outlook for 2019 (unchanged)

In 2019, Rovio expects group revenues to grow to EUR 300 – 330 million and adjusted operating profit margin between 9 and 11 per cent.

Basis for outlook

In 2019, Rovio Games business continues developing its live game portfolio according to the Games as a Service strategy, profitable user acquisition and development of new games. Target is to launch at least two new games in 2019 (the first one, Angry Birds Dream Blast, was launched on January 24th). The expected timing of the second launch is during the second half of the year.

The user acquisition investments are expected to be 30-35 percent of Games revenues for the full year with an average payback time of 12 months. The amount of user acquisition may vary depending on development of the games' monetization, timing of new game launches and the level of competition in the market.

The Brand Licensing segment revenues are expected to be at a similar or slightly higher level in 2019 with focus on the second half of the year when the Angry Birds Movie sequel is scheduled for release.

On group level the largest revenue growth is expected during the second half of 2019. The profit margin excluding Hatch Entertainment is expected to be between 12 and 14 per cent for the full year.

Decisions of the Annual General Meeting and the organizing meeting of the Board of Directors

The Annual General Meeting of Rovio was held on April 9, 2019. The Annual General Meeting approved the financial statements for the financial year 2018 and discharged the members of the Board of Directors and the CEO from liability for the 2018 financial year. The Annual General Meeting decided, in accordance with the proposal of the Board of Directors, to distribute a dividend of EUR 0.09 per share. The record date of the dividend distribution was April 11, 2019 and the dividend was paid on April 18, 2019.

The Annual General Meeting decided that the Board of Directors shall comprise seven (7) members. Mr. Kaj Hed, Ms. Camilla Hed-Wilson, Mr. Kim Ignatius, Mr. Mika Ihamuotila, Mr. Fredrik Löving, Mr. Jeferson Valadares and Ms. Jenny Wolfram were elected members of the Board of Directors for a term of office expiring at the end of the Annual General Meeting in 2020. Mr. Mika Ihamuotila was elected as the Chairman and Mr. Kaj Hed was elected as the Vice Chairman of the Board of Directors.

The Annual General Meeting decided that the members of the Board of Directors will be paid monthly remuneration as follows: Chairman EUR 9,500; Vice Chairman EUR 7,500; other members EUR 5,000 each and EUR 2,500 as additional monthly compensation to the chairman of the Audit Committee. If the chairman of the Audit Committee is the Chairman or Vice Chairman of the Board of Directors, no additional compensation will be paid. Reasonable travel expenses of the Board members and committee members arising from Board or committee work will be compensated.

Ernst & Young Oy, authorized public accountants, was re-elected as the auditor of the company.

The Annual General Meeting authorized the Board of Directors to decide on the repurchase and/or on the acceptance as pledge of the company's own shares up to a maximum of 7 946 474 shares (approximately 10% of all the current shares in the company).

The Annual General Meeting authorized the Board of Directors to decide on the issuance of shares and the issuance of special rights entitling to shares up to a maximum of 7 946 474 shares (approximately 10 percent of all the current shares of the company). In addition to the authorization to issue new shares, the Board of Directors may decide on the conveyance of an aggregate maximum of 7,946,474 own shares held by the company.

Both authorizations will be in force until the closing of the next Annual General Meeting, however no longer than until June 30, 2020.

In the organizing meeting of the Board of Directors held after the Annual General Meeting, the Board of Directors elected from amongst its members Mr. Kim Ignatius (Chair), Mr. Mika Ihamuotila and Ms. Jenny Wolfram as members of the Audit Committee, and Mr. Kim Ignatius (Chair), Ms. Camilla Hed-Wilson, Mr. Mika Ihamuotila and Ms. Jenny Wolfram as members of the Remuneration Committee.

Share subscriptions with stock options

During the second quarter a total of 212,900 Rovio Entertainment Corporation's new shares were subscribed for with stock options. The entire subscription price of EUR 610,260.00 was recorded into the invested unrestricted equity reserve.

As a result of the share subscriptions, the number of Rovio Entertainment Corporation's shares increased to 79,677,642 shares. The shares subscribed for under the stock options were registered in the Trade Register on 8 April 2019, as of which date the new shares established shareholder rights.

Dividend distribution

The Annual General Meeting decided, in accordance with the proposal of the Board of Directors, to distribute a dividend of EUR 0.09 per share, EUR 7,117,416.45 in total. The record date of the dividend distribution was April 11, 2019 and the dividend was paid on April 18, 2019.

Events after the review period

After the review period a total of 1,360,470 Rovio Entertainment Corporation's new shares were subscribed for with stock options. The entire subscription price of EUR 3,816,745.20 was recorded into the invested unrestricted equity reserve.

As a result of the share subscriptions, the number of Rovio Entertainment Corporation's shares increased to 81,038,112 shares. The shares subscribed for under the stock options were registered in the Trade Register on 24 July 2019, as of which date the new shares established shareholder rights.

Rovio received a flagging notice after the end of the review period. According to the notification the holding of Swedbank Robur Fonder AB and its subsidiaries in the Company's shares and votes has fallen below 10% on 24 July 2019.

ROVIO ENTERTAINMENT CORPORATION

Board of Directors

Performance measures

EUR million	4-6 2019	4-6/ 2018	Change, %	1-6/ 2019	1-6/ 2018	Change, %	1-12/ 2018
Revenue	71.8	71.8	0.0%	142.6	137.5	3.8%	281.2
EBITDA*	9.6	9.3	3.8%	20.1	23.6	-14.7%	47.8
EBITDA margin*	13.4%	12.9%	-	14.1%	17.1%	-	17.0%
Adjusted EBITDA*	9.6	9.3	3.8%	20.1	23.9	-15.9%	47.5
Adjusted EBITDA margin, %*	13.4%	12.9%	-	14.1%	17.4%	-	16.9%
Operating profit*	5.3	6.0	-11.3%	12.8	15.2	-16.1%	31.5
Operating profit margin, %*	7.4%	8.4%	-	9.0%	11.1%	-	11.2%
Adjusted operating profit*	5.3	6.0	-11.3%	12.8	15.6	-17.9%	31.2
Adjusted operating profit margin, %*	7.4%	8.4%	-	9.0%	11.3%	-	11.1%
Profit before tax	4.8	6.8	-29.4%	12.4	15.8	-21.8%	32.2
Capital expenditure	1.0	0.0	4161.5%	1.6	0.3	369.0%	1.3
User acquisition	21.3	22.9	-6.9%	45.1	37.5	20.2%	78.6
Return on equity (ROE), %	18.5%	20.6%	-	18.5%	20.6%	-	21.5%
Net gearing ratio, %*	-66.8%	-63.9%	-	-66.8%	-63.9%	-	-75.3%
Equity ratio, %*	79.6%	83.4%	-	79.6%	83.4%	-	83.7%
Earnings per share, EUR	0.04	0.07	-45.1%	0.11	0.16	-28.1%	0.31
Earnings per share, diluted EUR	0.04	0.07	-45.0%	0.11	0.15	-28.0%	0.31
Net cash flows from operating activities*	4.8	1.8	162.4%	8.0	12.3	-34.7%	42.6
Employees (average for the period)	448	379	18.2%	435	382	13.9%	388

*Not fully comparable due to IFRS 16 adoption in 2019. See Note 1 for details.

Rovio presents alternative performance measures as additional information to financial measures presented in the consolidated income statements, consolidated balance sheets, and consolidated statements of cash flows prepared in accordance with IFRS. In Rovio's view, the alternative performance measures provide the management, investors, securities analysts, and other parties with significant additional information related to Rovio's results of operations, financial position or cash flows, and are often used by analysts, investors, and other parties.

Rovio presents adjusted EBITDA and adjusted operating profit, which have been adjusted for material items outside the ordinary course of business such as material net gains and losses from business disposals, direct transaction costs related to business acquisitions, restructuring costs for business operations, and costs relating to enlargement of the ownership base of the Company. Adjusted EBITDA and adjusted operating profit are presented as complementing measures to the measures included in the consolidated income statement presented in accordance with IFRS as, in Rovio's view, they increase understanding of Rovio's results of operations.

EBITDA, EBITDA margin, adjusted EBITDA, adjusted EBITDA margin, operating profit, operating profit margin, adjusted operating profit, and adjusted operating profit margin are shown as complementing measures to assess the profitability and efficiency of Rovio's operations. User acquisition costs, user acquisition costs share of Games business unit's revenue, %, and gross bookings are presented to enhance the comparability to other actors in the industry. Dividend per share, equity ratio, return on equity (ROE), net gearing, and capital expenditure are useful measures in assessing the efficiency of Rovio's operations, and Rovio's ability to obtain financing and service its debts.

The alternative performance measures should not be considered in isolation or as substitutes to the measures under IFRS. All companies do not calculate alternative performance measures in a uniform way and, therefore, the alternative performance measures presented here may not be comparable with similarly named measures presented by other companies.

Reconciliation of adjusted operating profit

EUR million	4-6/2019	Income statement	
		Items affecting comparability	excluding items affecting comparability
Revenue	71.8		71.8
Other operating income	0.0		0.0
Materials and services	-19.0		-19.0
Employee benefits expense	-12.5		-12.5
Depreciation and amortization	-4.3		-4.3
Other operating expenses	-30.7		-30.7
Operating profit	5.3		5.3

EUR million	4-6/2018	Income statement	
		Items affecting comparability	excluding items affecting comparability
Revenue	71.8		71.8
Other operating income	0.0		0.0
Materials and services	-20.5		-20.5
Employee benefits expense	-10.4		-10.4
Depreciation and amortization	-3.3		-3.3
Other operating expenses	-31.6		-31.6
Operating profit	6.0		6.0

EUR million	1-6/2019	Income statement	
		Items affecting comparability	excluding items affecting comparability
Revenue	142.6		142.6
Other operating income	0.0		0.0
Materials and services	-38.8		-38.8
Employee benefits expense	-21.9		-21.9
Depreciation and amortization	-7.3		-7.3
Other operating expenses	-61.9		-61.9
Operating profit	12.8		12.8

EUR million	1-6/2018	Income statement	
		Items affecting comparability	excluding items affecting comparability
Revenue	137.5		137.5
Other operating income	0.0		0.0
Materials and services	-39.0		-39.0
Employee benefits expense	-21.5	0.3	-21.3
Depreciation and amortization	-8.3	0.0	-8.3
Other operating expenses	-53.5	0.1	-53.4
Operating profit	15.2	0.3	15.6

EUR million	1-12/2018	Income statement	
		Items affecting comparability	excluding items affecting comparability
Revenue	281.2		281.2
Other operating income	1.1	-0.7	0.4
Materials and services	-79.8		-79.8
Employee benefits expense	-42.6	0.3	-42.4
Depreciation and amortization	-16.3	0.0	-16.3
Other operating expenses	-111.9	0.1	-111.9
Operating profit	31.5	-0.3	31.2

Reconciliation of adjusted operating profit

EUR million	4-6/2019	4-6/2018	1-6/2019	1-6/2018	1-12/2018
Operating profit	5.3	6.0	12.8	15.2	31.5
Income from Bargain Purchase					-0.7
Restructuring costs arising from employee benefits expenses				0.3	0.3
Restructuring costs in Other operating expenses				0.1	0.1
Restructuring costs in Depreciation and amortization				0.0	0.0
Adjusted operating profit	5.3	6.0	12.8	15.6	31.2

Reconciliation of EBITDA and Adjusted EBITDA

EUR million	4-6/2019	4-6/2018	1-6/2019	1-6/2018	1-12/2018
Operating profit	5.3	6.0	12.8	15.2	31.5
Depreciation and amortization	4.3	3.3	7.3	8.3	16.3
EBITDA	9.6	9.3	20.1	23.6	47.8
Income from Bargain Purchase					-0.7
Restructuring costs arising from employee benefits expenses				0.3	0.3
Restructuring costs in Other operating expenses				0.1	0.1
Adjusted EBITDA	9.6	9.3	20.1	23.9	47.5

Reconciliation of equity ratio, %, return on equity, %, net gearing ratio, %, and net debt

EUR million	4-6/2019	4-6/2018	1-6/2019	1-6/2018	1-12/2018
Equity ratio, %	79.6%	83.4%	79.6%	83.4%	83.7%
Equity	163.1	148.0	163.1	148.0	159.4
Advances received	6.3	7.5	6.3	7.5	6.5
Deferred revenue	6.2	3.9	6.2	3.9	6.2
Total assets	217.5	189.0	217.5	189.0	203.2
Return on equity, %	18.5%	20.6%	18.5%	20.6%	21.5%
Profit/loss before tax	28.8	25.2	28.8	25.2	32.2
Shareholder's equity beginning of period	148.0	96.4	148.0	96.4	140.4
Shareholder's equity end of period	163.1	148.0	163.1	148.0	159.4
Net gearing ratio, %	-66.8%	-63.9%	-66.8%	-63.9%	-75.3%
Total interest-bearing debt	15.7	2.5	15.7	2.5	3.6
Cash and cash equivalents	124.6	97.0	124.6	97.0	123.6
Equity	163.1	148.0	163.1	148.0	159.4
Non-current interest-bearing loans and borrowings	10.1	2.5	10.1	2.5	3.4
Current interest-bearing loans and borrowings	5.6	0.0	5.6	0.0	0.1
Cash and cash equivalents	124.6	97.0	124.6	97.0	123.6
Net debt	-108.9	-94.5	-108.9	-94.5	-120.0

Gross bookings

The following table sets out reconciliation of gross bookings used in key operational metrics and reported revenue:

Reconciliation of gross bookings to revenue

EUR million	4-6/2019	4-6/2018	1-6/2019	1-6/2018	1-12/2018
Gross bookings	65.2	64.8	131.0	123.4	253.3
Change in deferred revenue	0.5	-0.4	0.6	-2.1	-4.7
Custom contracts	0.3	0.4	0.5	0.8	1.5
Other adjustments	-0.6	0.5	-0.4	0.1	0.3
Revenue	65.4	65.3	131.7	122.1	250.4

Custom contracts are distribution contracts that are signed with partners who pre-download Rovio's games onto their own devices or distribute Rovio's games through their proprietary distribution platforms. Custom contracts usually contain a minimum guarantee and revenue share to Rovio. Rovio recognizes corresponding minimum guarantee revenue over the contract period. Custom contracts do not include the application stores operated by Apple and Google.

Calculation principles of alternative performance measures

EBITDA (Earnings before interest, taxes, depreciation and amortization), which is operating profit before depreciations and amortizations.

EBITDA margin, %, which is defined as EBITDA as a percentage of revenue.

Items affecting comparability, which are defined as material items outside the ordinary course of business such as material net gains and losses from business disposals, direct transaction costs related to business acquisitions, restructuring costs for business operations, and costs relating to enlargement of the ownership base of the company.

Adjusted EBITDA, which is defined as EBITDA excluding items affecting comparability.

Adjusted EBITDA margin, %, which is defined as comparable EBITDA as a percentage of revenue.

Operating profit margin, %, which is operating profit as a percentage of revenue.

Adjusted operating profit, which is defined as operating profit excluding items affecting comparability.

Adjusted operating profit margin, %, which is defined as adjusted operating profit as a percentage of revenue.

User acquisition, which relate to acquisition of new players in the Company's games through performance marketing campaigns.

User acquisition share of Games revenue, %, which is user acquisition costs as a percentage of Games revenue.

Dividend per share, which is total dividend divided by number of shares, adjusted for share issues, at the end of the financial period less own shares.

Earnings per share, which is the net result for the review period divided by the average number of shares in the review period, less treasury shares.

Equity ratio, %, which is calculated by dividing (i) Total equity by (ii) Total equity and liabilities less advances received and deferred revenue.

Return on equity (ROE), which is calculated by dividing profit before tax, quarterly reports adjusted to correspond with 12 months, by the average of total equity in the opening and closing balance sheet.

Capital expenditure, which is cash flow of purchase of tangible and intangible assets.

Net debt, which is calculated by subtracting cash and cash equivalents from current and non-current interest-bearing loans and borrowings.

Net gearing %, which is calculated by dividing net debt by the total equity.

Gross bookings represent in-app purchases and in-app advertising sales in the given calendar month, reported on the basis of the date of purchase/sale. Gross bookings do not include revenue from custom contracts, revenue deferrals or accounting adjustments due to e.g., foreign exchange rate differences between revenue accruals and actual payments, and thus differs from the actual reported revenue.

DAU (Daily Active Users), which is defined as the number of devices that played one of our games during a particular day. Under this metric, a device that plays two different games on the same day is counted as two DAUs. We primarily use information provided by Rovio's own technology but we also use third-party tracking solutions for historical data and in cases when a game does not contain Rovio's tracking tools. Average DAUs for a particular period is the average of the DAUs for each day during that period.

MAU (Monthly Active Users), which is defined as the number of devices that played one of our games in the during a particular calendar month. Under this metric, a device that plays two different games in the same month is counted as two MAUs. We primarily use information provided by Rovio's own technology but we also use third party tracking solutions for historical data and in cases when a game does not contain Rovio's tracking tools.

MUP (Monthly Unique Payers), which is defined as the number of devices that made a payment at least once during the calendar month through a payment method for which we can quantify the number of individuals, including payers from our mobile games. MUPs does not include individuals who use certain payment methods for which we cannot quantify the number of unique payers. We only use information provided by Rovio's own payment verification technology.

ARPPU (Average Revenue Per Daily Active User), which is defined as Sum of quarterly Gross Bookings divided by number of days in the quarter divided by average DAU for the quarter.

MARPPU (Monthly Average Revenue Per Paying User), which is defined as Monthly Gross IAP Bookings divided by MUP from verified purchases. MARPPU does not include revenue from custom contracts, revenue deferrals or accounting adjustments such as foreign exchange rate differences between revenue accruals and actual payments.

Half Year Financial Report January 1–June 30, 2019 - Tables

The figures in the Half Year Financial report are unaudited

Statement of consolidated profit or loss and other comprehensive income

EUR million	4-6/ 2019	4-6/ 2018	1-6/ 2019	1-6/ 2018	1-12/ 2018
Revenue	71.8	71.8	142.6	137.5	281.2
Other operating income	0.0	0.0	0.0	0.0	1.1
Materials and services	19.0	20.5	38.8	39.0	79.8
Employee benefits expense	12.5	10.4	21.9	21.5	42.6
Depreciation and amortization	4.3	3.3	7.3	8.3	16.3
Other operating expenses	30.7	31.6	61.9	53.5	111.9
Operating profit	5.3	6.0	12.8	15.2	31.5
Finance income and expenses	-0.5	0.8	-0.4	0.6	0.7
Share of profit of associates	0.0	0.0	0.0	0.0	0.0
Profit (loss) before tax	4.8	6.8	12.4	15.8	32.2
Income tax expense	1.9	1.6	3.5	3.4	7.7
Profit for the period	2.9	5.2	8.9	12.4	24.6
Attributable to: Non-controlling interests	0.0	0.0	0.0	0.0	0.0
Equity holders of the parent company	2.9	5.2	8.9	12.4	24.6
Other comprehensive income/expense					
Other comprehensive income to be reclassified to profit or loss in subsequent periods (net of tax):					
Translation differences	-0.1	0.1	-0.0	-0.0	0.0
Total comprehensive income for the period net of tax	2.8	5.3	8.8	12.4	24.6
Attributable to: Non-controlling interests	0.0	0.0	0.0	0.0	0.0
Equity holders of the parent company	2.8	5.3	8.8	12.4	24.6
Earnings per share for net result attributable to owners of the parent:					
Earnings per share, EUR	0.04	0.07	0.11	0.16	0.31
Earnings per share, diluted EUR	0.04	0.07	0.11	0.15	0.31

Consolidated statement of financial position

EUR million	30 June 2019	30 June 2018	31 Dec 2018
ASSETS			
Non-current assets	49.8	49.8	45.4
Property, plant and equipment	9.8	0.5	0.6
Intangible assets	33.3	45.2	39.0
Investments	0.8	0.0	0.0
Non-current receivables	0.7	0.8	0.8
Deferred tax assets	5.2	3.3	4.9
Current assets	167.7	139.1	157.8
Trade receivables	28.8	30.7	23.0
Prepayments and accrued income	11.7	9.9	10.1
Other current financial assets	2.5	1.5	1.1
Cash and cash equivalents	124.6	97.0	123.6
Total assets	217.5	189.0	203.2
EQUITY AND LIABILITIES			
Equity			
Issued capital	0.7	0.7	0.7
Reserves	37.4	36.6	36.7
Translation differences	-0.5	-0.6	-0.5
Treasury shares	-2.2	0.0	-2.7
Retained earnings	118.9	98.9	100.7
Profit for the period	8.9	12.4	24.6
Equity holders of the parent company	163.1	148.0	159.4
Non-controlling interests	0.0	0.0	0.0
Total equity	163.1	148.0	159.4
Liabilities			
Non-current liabilities	10.2	2.7	3.6
Interest-bearing loans and borrowings	3.5	2.5	3.4
Other non-current financial liabilities	6.6	0.1	0.1
Deferred tax liabilities	0.0	0.1	0.1
Current liabilities	44.3	38.2	40.1
Trade and other payables	12.5	11.0	10.9
Interest-bearing loans and borrowings	3.2	0.0	0.1
Other current financial liabilities	2.8	0.1	0.3
Advances received	6.3	7.5	6.5
Deferred revenue	6.2	3.9	6.2
Income tax payable	0.3	0.1	1.2
Provisions	0.3	0.5	0.6
Accrued liabilities	12.6	15.1	14.3
Total liabilities	54.4	40.9	43.7
Total equity and liabilities	217.5	189.0	203.2

Consolidated statement of changes in equity

Attributable to the equity holders of the parent on June 30, 2018

EUR million	Issued capital	Unrestricted equity reserve	Treasury shares	Retained earnings	Foreign currency translation reserve	Total	Non-controlling interests	Total equity
December 31, 2017	0.7	35.8	0.0	104.3	-0.5	140.4	0.0	140.4
Adjustments to opening balance								
IFRS 2 amendment				0.2		0.2		0.2
Balance at Jan 1, 2018	0.7	35.8	0.0	104.6	-0.5	140.5	0.0	140.6
Profit for the period				12.4		12.4		12.4
Option subscriptions		0.7				0.7		0.7
Other comprehensive income					-0.0	-0.0		-0.0
Share-based payments				1.5		1.5		1.5
Cash dividends				-7.1		-7.1		-7.1
June 30, 2018	0.7	36.6	0.0	111.3	-0.6	148.0	0.0	148.0

Attributable to the equity holders of the parent on June 30, 2019

EUR million	Issued capital	Unrestricted equity reserve	Treasury shares	Retained earnings	Foreign currency translation reserve	Total	Non-controlling interests	Total equity
Balance at Jan 1, 2019	0.7	36.7	-2.7	125.3	-0.5	159.4	0.0	159.4
Profit for the period				8.9		8.9		8.9
Option subscriptions		0.7				0.7		0.7
Other comprehensive income					-0.0	-0.0		-0.0
Share-based payments			0.5	0.7		1.2		1.2
Cash dividends				-7.1		-7.1		-7.1
June 30, 2019	0.7	37.4	-2.2	127.7	-0.5	163.1	0.0	163.1

Consolidated statement of cash flows

EUR million	4-6/ 2019	4-6/ 2018	1-6/ 2019	1-6/ 2018	1-12/ 2018
Operating activities					
Profit (loss) before tax	4.8	6.8	12.4	15.8	32.2
Adjustments:					
Depreciation and amortization on tangible and intangible assets	4.3	3.3	7.3	8.3	15.7
Net foreign exchange differences	0.3	-0.9	-0.1	-0.8	-0.8
Gain on disposal of property, plant and equipment	0.0	-0.0	-0.0	-0.0	-0.0
Finance costs	0.3	0.1	0.5	0.2	0.1
Share of profit of an associate and a joint venture	0.0	0.0	0.0	0.0	0.0
Other adjustments	0.0	0.0	0.0	0.0	-0.1
Other non-cash items	0.6	0.8	1.3	1.5	3.0
Change in working capital:					
Change in trade and other receivables and prepayments	1.0	-2.2	-7.6	0.8	7.6
Change in trade and other payables	-3.1	-4.7	1.8	-4.5	-4.3
Interest received	0.1	0.1	0.2	0.2	0.3
Interest paid	-0.3	-0.2	-0.6	-0.4	-0.3
Income tax paid (received)	-3.2	-1.3	-7.2	-8.8	-10.9
Net cash flows from operating activities	4.8	1.8	8.0	12.3	42.6
Investing activities					
Purchase of tangible and intangible assets	-1.0	-0.0	-1.6	-0.3	-1.3
Other investments	0.0	0.0	-0.8	0.0	0.0
Proceeds from sales of tangible and intangible assets	0.0	0.0	0.0	0.0	0.0
Proceeds from sale of investments	0.0	0.0	0.0	0.0	0.0
Acquisition of subsidiaries, net of cash acquired	0.0	0.0	0.0	0.0	0.0
Proceeds from sale of investments in associates and joint ventures	0.0	0.0	0.0	0.0	0.0
Net cash flows used in investing activities	-1.0	-0.0	-2.4	-0.3	-1.2
Financing activities					
Acquisition of non-controlling interests	0.0	0.0	0.0	0.0	0.0
Finance lease repayments	-0.7	-0.1	-1.3	-0.1	-0.2
Proceeds from and repayments of borrowings	0.0	0.0	3.0	0.0	-0.2
Share subscriptions based on option rights	0.0	0.0	0.7	0.7	0.9
Acquisition of treasury shares	0.0	0.0	0.0	0.0	-3.0
Share-based payments	0.0	0.0	0.0	0.0	0.3
Proceeds of share issue	0.0	0.0	0.0	0.0	0.0
Share issue transaction costs	0.0	0.0	0.0	0.0	0.0
Dividends paid to equity holders of the parent	-7.1	-7.1	-7.1	-7.1	-7.1
Net cash flows from/(used in) financing activities	-7.8	-7.2	-4.8	-6.5	-9.4
Change in cash and cash equivalents	-4.0	-5.4	0.9	5.5	32.0
Net foreign exchange difference	-0.3	0.9	0.1	0.7	0.8
Cash and cash equivalents at beginning of period	128.8	101.5	123.6	90.8	90.8
Cash and cash equivalents at the end of the period	124.6	97.0	124.6	97.0	123.6

Notes

1. Key accounting principles

Rovio's consolidated financial statements are prepared in accordance with the International Financial Reporting Standards (IFRS) adopted by the EU. The Half Year Financial Report has been prepared in accordance with IAS 34, Interim Financial Reporting. The accounting principles and methods used in the preparation of the interim financial reports are essentially the same as those applied in the consolidated financial statements for the year 2018, except for the impact of adopting the IFRS 16 standard, which is presented below.

The figures in the consolidated interim financial statements have been rounded and consequently the sum of individual figures may deviate from the sum presented. Key figures have been calculated using exact figures.

This interim report does not include all the information or disclosures as presented in the consolidated financial statements of December 31, 2018.

The figures in this report are unaudited.

1.1 Changes in key accounting principles

Rovio adopted the IFRS 16 Leases-standard as it became effective, on January 1, 2019 using the modified retrospective approach, which means that the comparative figures will not be adjusted for the period ending 31 December 2018. Rovio has used the short-term exemption and the low-value exemption. The adoption of the standard has required significant management judgment. Critical management judgements and material estimates at the time of adoption of the standard are mainly related to the length of the lease term as well as discount rate determination.

Rovio has several lease agreements for both office space as well as machinery and equipment. Leases are recognized as a right-of-use asset and corresponding liability at the date of which leased asset is available for use by the Company. The lease liabilities are recorded at a present value of future lease payments. Lease payments are discounted using interest rate implicit in the lease, if that rate can be determined, or using incremental borrowing rate.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. Rovio's right-of-use assets are amortized over a 1-5-year period, depending on the lease agreement. The short-term exemption is used on leases shorter than 12 months, which are recorded as expenses in equal monthly instalments. During the interim period EUR 0.0 million was recorded as lease expense.

IFRS 16 related lease payments and interest payments are presented as part of financing cash flow in the Company's cash flow statement.

The IFRS 16 -standard was adopted as of 1 January 2019 and resulted in an increase in right of use assets of approximately EUR 5.6 million and an increase in financial liabilities of approximately EUR 6.0 million in Rovio's opening balance of 2019. In addition, approximately EUR 4.2 million were recognized based on lease agreements that commenced in the first quarter of 2019.

The impact of the adoption in the opening 2019 balance has been presented in the table below.

Consolidated statement of financial position, EUR million	Closing balance 31 Dec 2018	Impact of IFRS 16 implementation	Opening balance 1 Jan 2019
Non-current assets	45.4	5.6	51.0
Current receivables	34.2		34.2
Cash and cash equivalents	123.6		123.6
Total assets	203.2	5.6	208.8
Equity	159.4		159.4
Financial liabilities	3.6	6.0	9.7
Advances received and deferred income	12.7		12.7
Other payables	27.4	-0.4	27.0
Total equity and liabilities	203.2	5.6	208.8

The impact of the adoption in the second quarter Profit and Loss Statement has been presented in the table below.

EUR million	Reported 4-6/2019	IFRS 16 Impact	Adjusted with IFRS 16 impact 4-6/2019
Revenue	71.8		71.8
Other operating income	0.0		0.0
Materials and services	19.0		19.0
Employee benefits expense	12.5		12.5
Depreciation and amortization	4.3	-0.6	3.7
Other operating expenses	30.7	0.7	31.3
Operating profit	5.3		5.3
Finance income and expenses	-0.5	-0.1	-0.6
Profit (loss) before tax	4.8		4.8

The impact of the adoption in the first half Profit and Loss Statement has been presented in the table below.

EUR million	Reported 1-6/2019	IFRS 16 Impact	Adjusted with IFRS 16 impact 1-6/2019
Revenue	142.6		142.6
Other operating income	0.0		0.0
Materials and services	38.8		38.8
Employee benefits expense	21.9		21.9
Depreciation and amortization	7.3	-1.2	6.2
Other operating expenses	61.9	1.3	63.2
Operating profit	12.8		12.8
Finance income and expenses	-0.4	-0.1	-0.6
Profit (loss) before tax	12.4		12.4

1.2 IFRS 16 adoption impact in key figures

The IFRS 16 -standard impact in Key Figures is presented in the table below.

EUR million	Reported 4-6/2019	IFRS 16 Impact	Adjusted with IFRS 16 impact 4-6/2019
Revenue	71.8		71.8
EBITDA	9.6	-0.6	9.0
EBITDA margin	13.4%		12.6%
Adjusted EBITDA	9.6	-0.6	9.0
Adjusted EBITDA margin, %	13.4%		12.6%
Operating profit	5.3	-0.1	5.2
Operating profit margin, %	7.4%		7.3%
Adjusted operating profit	5.3	-0.1	5.2
Adjusted operating profit margin, %	7.4%		7.4%
Net gearing ratio, %	-66.8%		-72.1%
Equity ratio, %	79.6%		83.1%
Net cash flows from operating activities	4.8	-0.6	4.1

EUR million	Reported 1-6/2019	IFRS 16 Impact	Adjusted with IFRS 16 impact 1-6/2019
Revenue	142.6		142.6
EBITDA	20.1	-1.2	18.9
EBITDA margin	14.1%		13.3%
Adjusted EBITDA	20.1	-1.2	18.9
Adjusted EBITDA margin, %	14.1%		13.3%
Operating profit	12.8	-0.1	12.7
Operating profit margin, %	9.0%		8.9%
Adjusted operating profit	12.8	-0.1	12.7
Adjusted operating profit margin, %	9.0%		9.0%
Net gearing ratio, %	-66.8%		-72.1%
Equity ratio, %	79.6%		83.1%
Net cash flows from operating activities	8.0	-1.3	6.7

2. Notes to the statement of profit or loss

2.1 Segment disclosures

Rovio has defined its operating segments as Games, Brand Licensing (BLU) and Other.

Rovio defines the Group's Board of Directors as its chief operating decision maker (CODM). The CODM follows Rovio's performance on the segment level, which is presented in section 2.2 Segment operating performance. EBITDA is the primary performance measure that CODM follows. There are no revenues between the operating segments of Rovio Group.

The segment assets and liabilities except for non-current assets are not reported and reviewed by the chief operating decision maker and have not been included in the table below. Rovio did not during the interim period have customers that would require disclosure (i.e. 10% or more of revenues from transactions with a single customer).

2.2 Segment operating performance

The allocations between segments consist of shared functions employee benefits expense as well as general and administrative expenses that are recognized centrally and allocated to the reportable segments as a separate line item in management reporting.

Segment profit and loss 4-6/2019

EUR million	Games	Brand Licensing	Other	Allocation	Total IFRS segments
Revenue	65.4	6.4	0.0		71.8
Other operating income	0.0	0.0	0.0		0.0
Materials and services	18.8	0.3	0.0		19.0
Employee benefits expense	8.7	1.0	2.0	0.7	12.5
User acquisition	21.3	0.0	0.0		21.3
Other operating expenses	4.9	1.1	2.2	1.1	9.3
Allocations	1.2	0.3	0.4	-1.9	0.0
EBITDA	10.5	3.7	-4.6	0.0	9.6
Depreciation and amortization	1.1	3.1	0.1		4.3
Operating profit	9.5	0.6	-4.7		5.3
EBITDA	10.5	3.7	-4.6		9.6
Adjustments	0.0	0.0	0.0		0.0
Adjusted EBITDA	10.5	3.7	-4.6		9.6
Operating profit	9.5	0.6	-4.7		5.3
Adjustments	0.0	0.0	0.0		0.0
Adjusted operating profit	9.5	0.6	-4.7		5.3

Segment Capital expenditure 4-6/2019

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Capital expenditure	0.2	0.5	0.3	1.0

Segment assets June 30, 2019

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Non-current assets	7.2	25.4	17.2	49.8

Segment profit and loss 4-6/2018

EUR million	Games	Brand Licensing	Other	Allocation	Total IFRS segments
Revenue	65.3	6.5	0.0		71.8
Other operating income	0.0	0.0	0.0		0.0
Materials and services	19.9	0.6	0.0		20.5
Employee benefits expense	7.2	0.9	1.6	0.7	10.4
User acquisition	22.9	0.0	0.0		22.9
Other operating expenses	4.8	1.0	1.4	1.5	8.6
Allocations	1.3	0.3	0.6	-2.2	0.0
EBITDA	9.2	3.6	-3.6	0.0	9.3
Depreciation and amortization	0.5	2.6	0.1		3.3
Operating profit	8.7	1.0	-3.7		6.0
EBITDA	9.2	3.6	-3.6		9.3
Adjustments	0.0	0.0	0.0		0.0
Adjusted EBITDA	9.2	3.6	-3.6		9.3
Operating profit	8.7	1.0	-3.7		6.0
Adjustments	0.0	0.0	0.0		0.0
Adjusted operating profit	8.7	1.0	-3.7		6.0

Segment Capital expenditure 4-6/2018

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Capital expenditure	0.0	0.0	0.0	0.0

Segment assets June 30, 2018

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Non-current assets	8.0	36.2	5.6	49.8

Segment profit and loss 1-6/2019

EUR million	Games	Brand Licensing	Other	Allocation	Total IFRS segments
Revenue	131.7	11.0	0.0		142.6
Other operating income	0.0	0.0	0.0		0.0
Materials and services	38.3	0.5	0.0		38.8
Employee benefits expense	14.9	1.9	3.7	1.4	21.9
User acquisition	45.1	0.0	0.0		45.1
Other operating expenses	9.5	1.8	3.4	2.1	16.8
Allocations	2.2	0.6	0.7	-3.5	0.0
EBITDA	21.7	6.2	-7.8	0.0	20.1
Depreciation and amortization	2.1	5.0	0.3		7.3
Operating profit	19.6	1.2	-8.1		12.8
EBITDA	21.7	6.2	-7.8		20.1
Adjustments	0.0	0.0	0.0		0.0
Adjusted EBITDA	21.7	6.2	-7.8		20.1
Operating profit	19.6	1.2	-8.1		12.8
Adjustments	0.0	0.0	0.0		0.0
Adjusted Operating profit	19.6	1.2	-8.1		12.8

Segment Capital expenditure 1-6/2019

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Capital expenditure	0.3	0.5	0.8	1.6

Segment assets June 30, 2019

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Non-current assets	7.2	25.4	17.2	49.8

Segment profit and loss 1-6/2018

EUR million	Games	Brand Licensing	Other	Allocation	Total IFRS segments
Revenue	122.1	15.4	0.0		137.5
Other operating income	0.0	0.0	0.0		0.0
Materials and services	38.0	1.0	0.0		39.0
Employee benefits expense	15.3	1.9	3.0	1.4	21.5
User acquisition	37.5	0.0	0.0		37.5
Other operating expenses	9.2	1.6	2.3	2.8	15.9
Allocations	2.6	0.6	1.0	-4.2	0.0
EBITDA	19.5	10.2	-6.2	0.0	23.6
Depreciation and amortization	1.1	7.0	0.2		8.3
Operating profit	18.4	3.2	-6.4		15.2
EBITDA	19.5	10.2	-6.2		23.6
Adjustments	0.3	0.0	0.0		0.3
Adjusted EBITDA	19.8	10.2	-6.2		23.9
Operating profit	18.4	3.2	-6.4		15.2
Adjustments	0.3	0.0	0.0		0.3
Adjusted operating profit	18.8	3.2	-6.4		15.6

Segment Capital expenditure 1-6/2018

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Capital expenditure	0.3	0.0	0.1	0.3

Segment assets June 30, 2018

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Non-current assets	8.0	36.2	5.6	49.8

Segment profit and loss 1-12/2018

EUR million	Games	Brand Licensing	Other	Allocation	Total IFRS segments
Revenue	250.4	30.8	0.0		281.2
Other operating income	0.3	0.0	0.8		1.1
Materials and services	78.0	1.8	0.0		79.8
Employee benefits expense	29.7	3.7	6.6	2.7	42.6
User acquisition	78.6	0.0	0.0		78.6
Other operating expenses	18.5	3.3	5.9	5.6	33.3
Allocations	5.4	1.2	1.7	-8.3	0.0
EBITDA	40.5	20.8	-13.4	0.0	47.8
Depreciation and amortization	2.2	13.7	0.4		16.3
Operating profit	38.3	7.0	-13.8		31.5
EBITDA	40.5	20.8	-13.4		47.8
Adjustments	0.3	0.0	-0.7		-0.3
Adjusted EBITDA	40.8	20.8	-14.1		47.5
Operating profit	38.3	7.0	-13.8		31.5
Adjustments	0.3	0.0	-0.7		-0.3
Adjusted operating profit	38.6	7.0	-14.5		31.2

Segment Capital expenditure 1-12/2018

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Capital expenditure	0.3	0.2	0.9	1.3

Segment assets December 31, 2018

EUR million	Games	Brand Licensing	Other	Total IFRS segments
Non-current assets	7.9	29.7	7.8	45.4

2.3 Geographical distribution of revenue

The Group's business is very international. North America, and the United States in particular, is Rovio's largest market. The geographical distribution of revenue per segment is presented below.

For in-app purchases and advertising revenue, the Games segment's revenue has been allocated to the geographical markets based on gross bookings, which can be monitored on a country-specific basis. Revenue from custom contracts is presented based on the customer's home country. Revenue deferrals and other adjustment items have been allocated to the geographical markets in proportion to gross bookings, as they are estimated to largely follow the same structure.

The licensing revenue of the Brand Licensing segment has been allocated to the geographical markets based on reported royalties and, for terminating contracts, according to the partner's home country. Revenue from content sales (movie, short form animations) has been allocated to the geographical markets based on the home country of the distribution partner or contractual partner. The advertising revenue allocated to the Brand Licensing segment has been allocated to the geographical markets according to the same principle as in the Games segment.

	4-6/2019			4-6/2018		
EUR Million	Games	Brand Licensing	Total	Games	Brand Licensing	Total
NAM	42.7	5.2	47.9	39.9	3.9	43.7
LATAM	0.7	0.2	0.8	0.9	0.4	1.4
EMEA	14.4	0.7	15.1	16.6	1.2	17.8
APAC	7.7	0.2	8.0	7.9	1.1	8.9
Total	65.4	6.4	71.8	65.3	6.5	71.8

	1-6/2019			1-6/2018		
EUR Million	Games	Brand Licensing	Total	Games	Brand Licensing	Total
NAM	87.2	8.0	95.3	75.6	10.8	86.4
LATAM	1.3	0.3	1.6	1.8	0.6	2.4
EMEA	29.4	1.9	31.3	31.9	2.3	34.1
APAC	13.7	0.8	14.4	12.9	1.6	14.5
Total	131.7	11.0	142.6	122.1	15.4	137.5

	1-12/2018		
EUR Million	Games	Brand Licensing	Total
NAM	156.1	21.8	177.8
LATAM	3.4	0.6	4.0
EMEA	64.2	4.9	69.1
APAC	26.8	3.5	30.3
Total	250.4	30.8	281.2

2.4 Disaggregation of revenue from contracts with Customers

EUR million

Segment and revenue stream	Timing of revenue recognition	4-6/2019	4-6/2018	1-6/2019	1-6/2018	1-12/2018
Games						
In-application purchases	At a point in time and over time	55.8	57.4	113.1	108.5	220.3
Subscription payments	Over time	0.0	0.0	0.0	0.0	0.0
Custom contracts	Over time	0.3	0.4	0.5	0.8	1.5
Advertising	At a point in time	9.3	7.5	18.1	12.9	28.6
Games total revenue		65.4	65.3	131.7	122.1	250.4
Brand Licensing						
IP Licensing and tangible sales	At a point in time and over time	1.1	2.4	2.5	4.2	8.6
Animation broadcasting and distribution	At a point in time	5.2	4.0	8.3	11.1	21.9
Advertising	At a point in time	0.1	0.1	0.1	0.1	0.3
Brand Licensing total revenue		6.4	6.5	11.0	15.4	30.8
Group revenue		71.8	71.8	142.6	137.5	281.2

3. Notes to the statement of financial position

3.1 Non-Current Assets – Intangible Assets

Reconciliation of beginning and ending balances by classes of assets:

EUR million	Development costs - Games	Trademarks	Development costs - Movie	Development costs - Other	Total
Cost					
At January 1, 2018	35.2	1.5	63.0	20.2	119.8
Additions	0.3	0.0	0.0	0.0	0.3
Disposals	0.0	0.0	0.0	0.0	0.0
At June 30, 2018	35.5	1.5	63.0	20.2	120.1
At January 1, 2019	28.6	1.6	63.0	20.8	114.0
Additions	0.3	0.0	0.0	0.5	0.8
Disposals	0.0	0.0	0.0	-0.7	-0.7
At June 30, 2019	28.9	1.6	63.0	20.6	114.1
Amortization and impairment					
At January 1, 2018	26.5	0.6	23.8	15.8	66.8
Amortization	1.0	0.1	5.7	1.4	8.2
Impairment	0.0	0.0	0.0	0.0	0.0
At June 30, 2018	27.5	0.7	29.5	17.2	74.9
At January 1, 2019	20.7	0.8	35.2	18.2	74.9
Amortization	1.0	0.1	4.1	0.7	5.9
Impairment	0.0	0.0	0.0	0.0	0.0
At June 30, 2019	21.7	0.9	39.4	19.0	80.8
Carrying amount					
At June 30, 2018	8.0	0.8	33.4	3.0	45.2
At June 30, 2019	7.2	0.7	23.6	1.6	33.3
At December 31, 2018	7.9	0.8	27.7	2.6	39.0

Development expenses still in production at June 30, 2019 amounted to EUR 4.6 million.

3.2 Non-Current Assets – Tangible Assets

There were no material changes in tangible assets during the first half of 2019.

EUR million	Land and Buildings*	Machinery and equipment
Cost		
At January 1, 2018		5.0
Additions		0.2
Disposals		0.0
Translation differences		0.0
At June 30, 2018		5.3
At January 1, 2019	5.6	5.5
Additions	4.0	0.9
Disposals	0.0	0.0
Translation differences	0.1	0.0
At June 30, 2019	9.7	6.6
Depreciation and amortization		
At January 1, 2018		-4.6
Depreciation charge for the period		-0.2
Disposals		-0.0
Translation differences		-0.0
At June 30, 2018		-4.9
At January 1, 2019	0.0	-4.9
Depreciation charge for the period	-1.1	-0.3
Disposals	0.0	0.0
Translation differences	-0.0	0.0
At June 30, 2019	-1.1	-5.3
Carrying amount		
At June 30, 2018		0.5
At June 30, 2019	8.5	1.3
At December 31, 2018		0.6

* Includes the right-of-use assets recognized on the balance sheet due to adopting the IFRS 16 - standard.

3.3 Investments

In the first quarter of 2019, Rovio announced a USD 3.0 million investment in a gaming startup focused venture capital fund managed by Play Ventures. The first instalment of EUR 0.8 million was paid in Q1 2019. It is valued on level 3 and currently the fair value equals the initial investment.

4. Changes in contingent liabilities or contingent assets

Future minimum rentals payable under non-cancelable operating leases and other commitments are as follows. The change compared to the ending balance of 2018 is due to the change in the presentation of lease liabilities on the balance sheet as required by IFRS 16-standard.

EUR million	At June 30, 2019	At June 30, 2018	At December 31, 2018
Equipment lease commitments			
Due within one year	0.0	0.2	0.3
Due in subsequent years	0.0	0.1	0.5
Total	0.0	0.3	0.8
Office rental commitments			
Due within one year	0.0	2.1	2.6
Due in subsequent years	0.0	2.5	4.8
Total	0.0	4.6	7.5
Other commitments			
Enterprise mortgages	0.0	30.0	0.0
Venture Capital investment commitment	1.9	0.0	0.0
Total	1.9	30.0	0.0

5. Related party transactions

Rovio's related parties include its subsidiaries, associates, key persons belonging to the management and their close family members and entities controlled by them, and entities with significant influence on Rovio.

Oivor AB is an entity, that has significant influence over the Rovio Group. In April 2019, EUR 2.9 million was paid out as dividend between the Rovio Group and Oivor.

6. Calculation of earnings per share

	4-6/ 2019	4-6/ 2018	1-6/ 2019	1-6/ 2018	1-12/ 2018
Earnings per share, EUR	0.04	0.07	0.11	0.16	0.31
Earnings per share, diluted, EUR	0.04	0.07	0.11	0.15	0.31
Shares outstanding at the end of the period (thousands)	79,678	79,401	79,678	79,401	78,852
Weighted average adjusted number of shares during the financial period, basic (thousands)	79,615	79,391	79,242	79,327	79,282
Weighted average adjusted number of shares during the financial period, diluted (thousands)	80,372	80,214	80,091	80,281	80,161