European video games

A safe haven in troubled times

Technology

8 April 2020

We thought that this would be an opportune time to take a fresh look at the European games sector. COVID-19 has swept round the world and as we write, more than a third of the global population is in lockdown. This of course has tragic human, as well as economic, consequences. However, certain sectors provide some respite for those in lockdown. The games sector is one such beneficiary. Its youthful workforce and agile development allow it to adjust to staff working from home, as well as to capitalise on back catalogues of existing games and mature digital delivery channels. The small-cap European games sector offers exposure to a number of well run, innovative businesses, with recurring revenue models that will benefit from increased consumer demand fulfilled digitally.

A global industry offering continuing growth

As is widely recognised, the games sector has shown strong growth, with global video games revenues rising 7.2% to $148.8bn in 2019 and forecast to grow at c 8.4% (2019–22), reaching a total market size of $190bn by 2022. Mobile gaming offers a low double-digit revenue CAGR, while PC and console gaming offer single-digit growth (Newzoo) as we move towards a next-generation console transition in 2020.

Impact of COVID-19

In this report, we compare business models across geographies and look at how different segments of the market may be affected by COVID-19. In the first few months of the year business disruption was mainly confined to China and the Far East, with concerns over supply chains and stock levels to the fore in the West. Since then, the reality of a global COVID-19 pandemic has emerged, with more than a third of the global population in lockdown today. The transition from office work to remote working has caused significant business disruption, but for most games companies the disruption has been effectively managed with business continuity plans now largely implemented. Looking ahead, we see a period of [at least] three to six months with consumers isolated from normal activities and other forms of entertainment; while it lasts, this period will provide a substantial benefit for games companies.

Full valuations – selectivity required

The share prices of our universe of European games stocks has increased by 30% on average over the 12 months to 31 March 2020. As is set out in Exhibit 8, there has been limited consolidation of valuations in Q120, but the worst performers have tended to be relatively smaller, more challenged stocks, with larger, more liquid businesses seeing further share price appreciation in the quarter. The games sector offers a safer haven in troubled markets, with increased consumer demand for live games following lockdowns in the short term and a forecast continuation of growth in the long run. However, at current market levels, although value exists, investors will need to be selective in choosing their exposure.

Companies mentioned in this report

11 bit studios (11B.WA)
Astralis (ASTGRP.CO)
Bigben Interactive (BGBN.PA)
CD Projekt (CDR.WA)
Codemasters (CDM.LN)
Digital Bros (DIB.IM)
Embracer (EMBRACb.ST)
Focus Home (ALFOC.PA)
Frontier Developments (FDEV.LN)
G5 Entertainment (G5EN.ST)
Gfinity (GFIN.LN)
Keywords Studios* (KWS.LN)
MTG (MTGb.ST)
Nacon (NACON.PA)
Paradox Interactive (PDXI.ST)
PlayWay (PLWP.WA)
Remedy Entertainment (REMEDY.HE)
Rovio Entertainment (ROVIO.HE)
Starbreeze (STZEb.ST)
Stillfront Group (SFRG.ST)
Sumo Group (SUMO.LN)
Team17 (TM17.LN)
Ubisoft Entertainment (UBIP.PA)

***Edison client**

Analysts

Richard Williamson	+44 (020) 3077 5700
Dan Ridsdale	+44 (020) 3077 5715

tech@edisongroup.com

COVID-19: Games sector a genuine beneficiary

Exhibit 1: As expected, signs of US games spend starting to rise

Source: www.facteus.com

According to the latest Facteus Insight Report on Consumer Spending and Transactions (a weekly report on the impact of COVID-19 on the US economy) covering data up to 29 March 2020, spending on video games (online and offline), which had already seen strong growth in the first two months of 2020, began to surge in the week of 9 March 2020 and was up over 50% y-o-y for the week of 25 March 2020. We note that this is a very short-term indicator for one specific (though important) market, but given that consumers have few options to socialise other than virtually, we are not surprised to see this trend and very much expect it to continue.

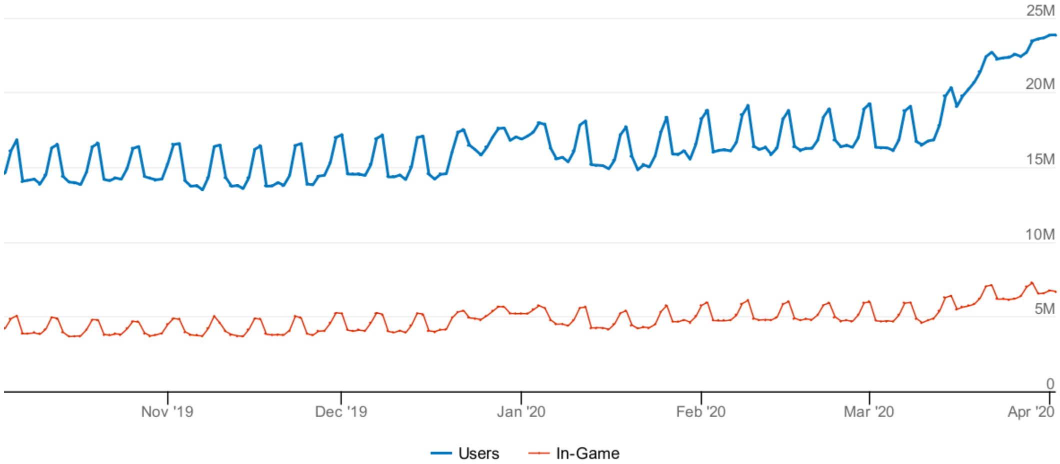
Impact of COVID-19 on the games sector in 2020

To round-up some of the questions we have been asked by investors over the past few weeks, we see the following principal impacts on the following segments of the games sector in FY20:

The consumer: as highlighted by the US-focused Facteus report above, the global games sector is expected to benefit from an extended period of lockdown and isolation, with consumers looking for engaging content as well as virtual interaction with friends and family. Games have always provided cost-effective entertainment and with the sector's digital delivery channels still open, consumers have the full gamut of titles and delivery channels to choose from.

By way of example, Steam (the leading PC-based online sales platform) broke its record for concurrent users actively playing games on Sunday 29 March 2020, with a total user base of 7.25 million. The previous record, as recorded by SteamDB, was 7.2 million in January 2018. Steam also registered a new record in excess of 23.5 million active users – users with the Steam client active on their PCs (but not necessarily in-game) – in the last week of March, beating the previous record set the prior week.

Exhibit 2: Last six months' Steam usage trends – breaking out in March



Source: SteamDB

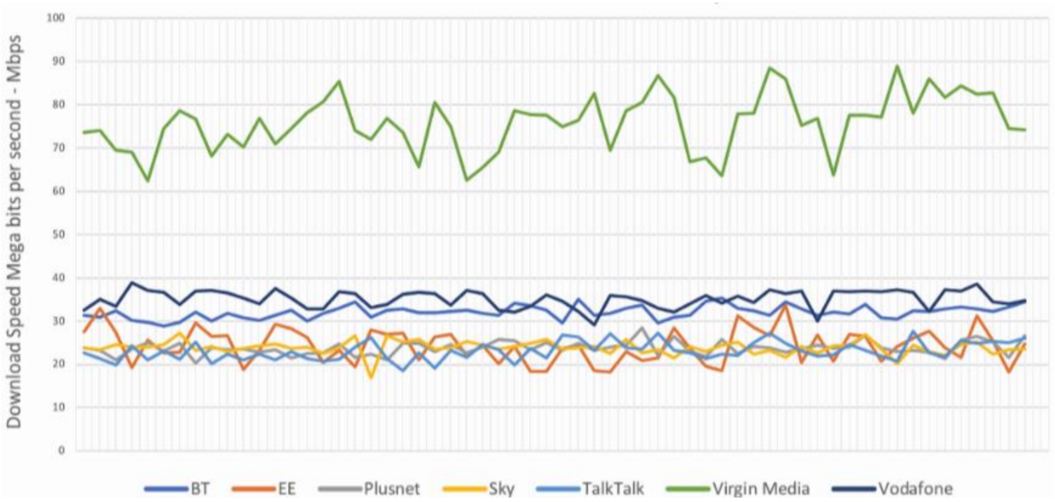
Exhibit 3: Monthly Steam usage data 2019–20 year-to-date

Month	Peak	Gain	% gain	Min daily peak	Avg daily peak	In-game peak
Last 30 days	23,635,201	4,527,398	**23.7%**	16,106,355	19,846,624	7,248,887
Feb-20	19,107,803	772,895	**4.2%**	15,846,983	17,046,966	6,079,346
Jan-20	18,334,908	734,166	**4.2%**	14,811,064	16,265,412	5,742,563
Dec-19	17,600,742	626,348	**3.7%**	14,157,477	15,805,190	5,666,621
Nov-19	16,974,394	145,548	**0.9%**	13,470,414	14,801,253	5,252,907
Oct-19	16,828,846	284,920	**1.7%**	13,823,282	14,805,565	5,065,579
Sep-19	16,543,926	552,660	**3.5%**	13,777,036	14,797,209	4,856,290
Aug-19	15,991,266	-540,228	**-3.3%**	14,304,685	14,924,747	4,923,539
Jul-19	16,531,494	38,773	**0.2%**	14,326,050	15,118,307	5,241,697
Jun-19	16,492,721	-485,843	**-2.9%**	14,464,902	15,332,248	5,115,578
May-19	16,978,564	-147,106	**-0.9%**	14,245,647	15,338,828	5,185,843
Apr-19	17,125,670	-157,426	**-0.9%**	14,385,939	15,329,432	5,266,796
Mar-19	17,283,096	-332,077	**-1.9%**	14,173,812	15,353,190	5,427,382
Feb-19	17,615,173	82,725	**0.5%**	14,184,269	15,407,436	5,339,890
Jan-19	17,532,448	565,709	**3.3%**	14,325,593	15,733,693	5,555,946

Source: SteamDB

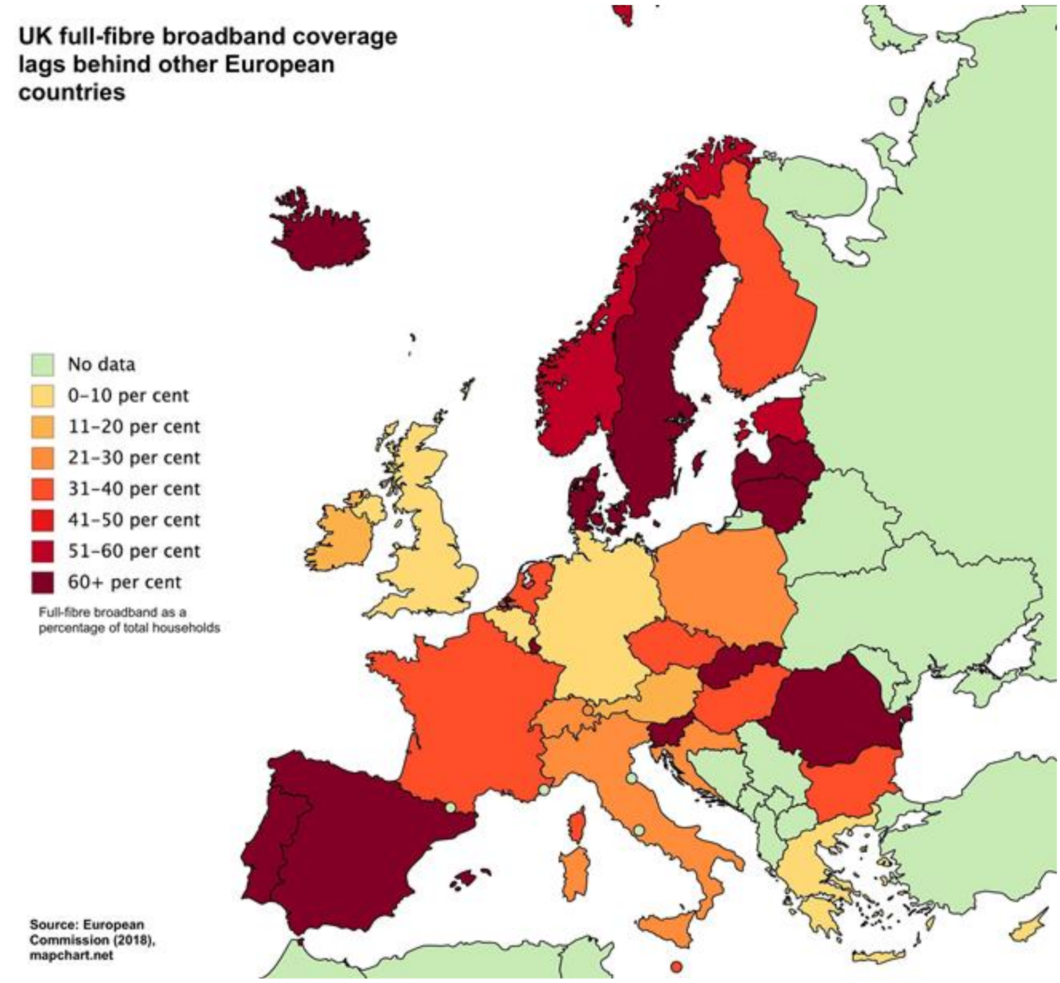
Internet infrastructure: with so many consumers at home, the level of ongoing demand on existing internet infrastructure and cloud-delivery is unprecedented. Providers of streaming services and video conference calls have already throttled back resolution to reduce the strain on bandwidth and demand (eg Netflix, YouTube, Apple TV, Amazon and Disney+). And with workers turning to Office 365, Microsoft Teams and Zoom in large numbers in parallel, the strain on cloud delivery (eg as evidenced by school software provider Firefly) has been immense. In the UK, despite weekday demand increasing by 35–60% on usual levels to 7.5Tb/s, BT claims that demand remains well within tolerance and well below evening peak demand (17.5Tb/s) (https://newsroom.bt.com/the-facts-about-our-network-and-coronavirus/). Currently, despite the UK lagging in its roll-out of fibre-to-the-home (FTTH) compared to its European peers (Exhibit 5), broadband speeds are holding up well, with no systemic slowdown in broadband speeds (Exhibit 4).

Exhibit 4: Major broadband providers daily observed speed test 24/1/20–23/3/20



Source: thinkbroadband.com

Exhibit 5: UK full-fibre broadband lags EU (2018 data)



Source: The European Commission Digital Economy and Society Index (DESI)

The developer/publisher: we expect to see some short-term disruption to games companies as management implement contingency plans and realign their businesses around remote working, but by H220, we expect development largely to be back on track. This is an industry with a young workforce, able to work effectively remotely, although companies with short-term funding needs and emerging business models are likely to struggle.

Back catalogue: looking back to our note last summer Frictionless Borders, we identified IP-owning companies, with an established back catalogue and recurring revenues, as preferred investments. With the onset of COVID-19, we expect those companies with established titles and back catalogues to benefit most from the measures used to contain the COVID-19 pandemic, with consumers having few options to socialise other than virtually.

Mobile games: reduced mobility does not appear to lead to reduced reliance on the mobile phone. Socialisation appears to outweigh the loss of mobility. Anecdotally, social games are seeing a spike in revenue as a way to keep in touch with friends and stay connected. App monetization and advertising firm ironSource has reported increasing numbers of mobile game players after countries implement social distancing policies and go into lockdown. Weekday daily average users (DAU) have risen across the board; weekend numbers have risen, but not as significantly. In the US, the weekday DAUs have risen by 13% for the week of 13 March 2020. In South Korea the jump has been 23% since 20 February 2020, and in Italy DAUs were up 15% since the country went into lockdown.

New titles/IP: even when businesses are fully up and running remotely, we expect home working to be less efficient than office working and with end-of-project 'crunch' (a dying industry habit of long working hours, seven days a week to finish off a game on time) under intense scrutiny across the industry, we believe that there will be inevitable project delays, slipped milestones and missed launch dates. Bethesda has been one of the first to announce the delay of the Wastelanders update for Fallout76, but more will follow. Watch this space.

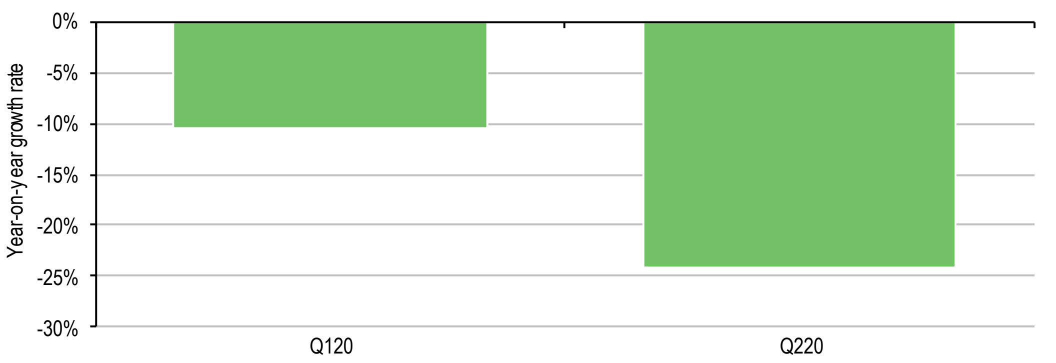
Film tie-ins: with cinemas closed, all major film releases for H120 have now been delayed (31 films delayed). This leaves game developers in a difficult position, assessing whether it is better to release their game without the marketing support and hype of the film release (if that is an option contractually), or hold off and wait to release the game at a later date with the film (eg Codemasters with Fast & Furious 9).

Streaming: the COVID-19 pandemic may have come too early for the streaming segment of the games industry, with few mature services offering a broad catalogue of titles (eg Google Stadia has been widely criticised by the industry for launching with a lack of content). Amazon is reported to have delayed the launch of its streaming service, Project Tempo, to 2021 at least in part because of COVID-19. However, at the very least, the pandemic underlines the business case for streaming when it does eventually arrive at scale.

eSports: there are more mixed messages from eSports. On the one hand, all major traditional sporting brands should be considering the virtualisation of their events (eg online F1 races to replace cancelled events, virtual Grand National, UEFA Champions League etc). On the other hand, most of the industry's revenue today is based around live (physical) events and tournaments with digital content sourced from these to an audience of 500m viewers. The cancellation of all major sporting events is likely to boost demand for eSports and raise the industry's profile in the medium term, but nascent business models may be irreparably damaged in the short term. Publishers EA (FIFA, Madden NFL, NBA, NHL) and Codemasters (F1) look well-placed, as do platforms (Amazon's Twitch) but eSports service providers may suffer. MTG has announced an expected fall in H120 sales of 35–45% and Gfinity announced a £2.25m funding round on 2 April 2020, following its announcement of a three-way partnership with Bidstack and Venatus. Astralis (a Danish eSports management company) remains relatively well placed, having raised US$21m in its December 2019 IPO.

AR/VR: the difficult times for augmented reality (AR) and virtual reality (VR) continue as the industry creeps towards consumer mass adoption (self-contained headsets of sufficient quality, at an affordable price-point, together with the games content to exploit their unique capabilities (eg Half-Life: Alyx, Phantom)).However, latest data (Exhibit 6) suggest that supply-chain disruption will lead to a 10% y-o-y fall in headset shipments in Q120 and a 24% y-o-y fall in Q220. With hardware scarce, mass adoption still remains round the corner.

Exhibit 6: AR/VR headset shipments affected by COVID-19



Source: Statista.com

Games conferences: global games conferences, such as GDC and E3, have been cancelled or delayed and other events such as Develop: Brighton 2020 have been postponed until later in the year. Deals are signed at these events and they are critically important for new studios looking to establish their reputation, but for the more established players, although the events are convenient and efficient for business development, they can largely be replaced by calls and conferencing.

PS5 and Xbox Series X console launches: the new console launches should go ahead as planned in Q420 (as stated in recent updates from Sony and Xbox), although we suspect that these may be very soft launches, with the significant logistical challenges leading to either a staggered global roll-out, or just very few consoles being delivered at launch. However, we see these as short-term issues and any financial impact should be limited as new consoles are more hype than substance at launch and it always takes a number of years for the installed user base to achieve critical mass.

Economic conditions/recession risks: historically, the games industry has been relatively recession-proof. However, if the COVID-19 pandemic leads to a global economic slowdown, this time round the industry is both bigger and more global and therefore it is harder to argue that it will perform independently from the global economy. However, as has been highlighted, games are both cost-effective entertainment and a good distraction when times are tough. As such, we would expect to see a boost to games revenues in the short term, potentially medium-term softness in H220–H121 and then we would expect the underlying growth drivers in the games industry to reassert themselves from FY21.

M&A: deals in H120 are likely to be challenging due to acquirors focusing on cash preservation in the short term, together with logistical challenges such as travel restrictions, the difficulties of due diligence, etc. However, as the horizon clears and businesses are able to plan with greater certainty, we may well see an increase in deals in H220 with distressed and ready sellers looking to exit towards the end of what will have been a difficult year for many.

Debt: although there are not many heavily indebted businesses in the games industry, we see no reason why the revenues of those that do have meaningful gearing (eg Stillfront, Media & Games Invest, etc) should not hold up well in FY20 as they manage mature portfolios of established games, demand for which is likely to increase in H120, all things being equal.

Sector overview

Reflecting the approach in our sector reports last year (Heterogeneous not homogeneous and Frictionless Borders), we have sought to compare companies with similar characteristics rather than considering the country of listing, to make more relevant valuation comparisons and help investors identify investment opportunities offering potential value.

Exhibit 7: Companies grouped by investment characteristics

Global IP	Scale & Liquidity	Digital/ GaaS	Regional footprint	Niche market leader	Mobile exposure	eSports/VR	Growth (consensus)	Asian exposure	Value	Buy-and-build
Rovio	Ubisoft	Frontier	Bigben	Codemasters	Stillfront	Gfinity	CD Projekt	Codemasters	Bigben	Keywords
CD Projekt	CD Projekt	Paradox	Digital Bros	Keywords	G5	Immotion	Gfinity	Frontier	Focus Home	Embracer
Ubisoft	Embracer	PlayWay	Focus Home	MTG	Rovio	MTG	11 bit	PlayWay	Digital Bros	Stillfront
Codemasters	Games Workshop	Team17	Embracer	Sumo	MTG	Codemasters	Stillfront	Keywords	Rovio	Media & Games Invest
Embracer	Paradox	11 bit		Games Workshop		Astralis	Media & Games Invest	11 bit	G5	
	Keywords	Stillfront		Paradox				Stillfront		

Source: Edison Investment Research

Segmenting the investment universe

We have analysed each of the quoted companies in our European universe and compared valuation multiples of companies with similar business models in an attempt to identify relative value. The categories we consider are:

- **Publishers** – financiers, developers and publishers of their own games, but also providers of publishing and distribution services to third-party developers.
- **Self-publishers/developers** – developers that have taken the opportunity presented by the digitalisation of the industry to self-publish their own titles online (though also likely to use publishers/distributors for physical product) as well as traditional developers who rely on publishers for both digital and physical distribution.
- **Mobile/casual** – companies whose business is dominated by free-to-play (FTP) or premium casual PC and/or mobile titles.
- **eSports** – companies that offer significant exposure to eSports (typically media companies or service providers) as the segment grows and evolves.
- **Mid-market publishers/distributors** – regional publishers and distributors with a primarily local or regional footprint, usually including physical distribution.
- **Services/other** – a broader range of businesses that do not fit easily into the above categories, but nevertheless offer investment exposure to the industry.

Valuations

After the broad rebasing of share prices seen in 2018, European games companies recorded very positive share price performances across the sector in 2019. Our universe of European stocks was up 30% on average over the last 12 months, with Remedy Entertainment, Ten Square Games and Team17 all rising more than 100%. However, as is set out in Exhibit 8 below, some companies have seen their share prices fall in Q120, but the worst performers have tended to be relatively smaller, more challenged businesses, or loss-making companies, with relatively larger, more liquid stocks seeing further share price appreciation over the quarter.

As a result of this continuing strength, valuations of European games companies remain elevated by historic standards, with our universe of shares trading at an overall mean FY1e P/E multiple of c 31x (median of 22x) and an overall mean FY1e EV/sales multiple of 4.7x (median of 4.2x).

However, the aggregate valuation is relatively meaningless, given the wide variety of business models encompassed, so we break down our analysis by sectors, summarised below.

Exhibit 8: Share price performance for March and Q120

Largest quarterly risers	March	Q120	Largest quarterly fallers	March	Q120
Team17	9%	53%	Gfinity	37%	-47%
Ten Square Games	-7%	43%	Bigben	-33%	-35%
Embracer Group	3%	39%	MTG B	-9%	-30%
Playway	-10%	28%	Starbreeze AB B	-21%	-30%
Stillfront Group publ AB	-1%	21%	Astralis	-25%	-29%
Ubisoft	-2%	9%	Focus Home	1%	-25%
G5 Entertainment publ AB	28%	8%	Digital Bros	-2%	-15%
Paradox Interactive	14%	6%	Codemasters	-21%	-14%
CD Projekt SA	-5%	3%	Sumo Digital	-9%	-14%
Media and Games Invest	0%	1%	11BIT	-16%	-10%
Frontier Developments	-1%	1%	Rovio Entertainment	19%	-5%
Nacon	-	-	Keywords Studios	-6%	-3%

Source: Refinitiv data as at 31 March 2020. Note: See Exhibit 9 for the market cap and financial information.

Looking at the publishers (which typically have larger market capitalisations), we see a mean EV/sales valuation for FY2e of 5.1x and a P/E multiple of 36x, with investors looking through the current year and still ascribing steep valuations for 2021 and beyond (please note that we have largely ignored the valuation of CD Projekt in our analysis as an extreme outlier – the company has invested more than $100m in its next title CyberPunk 2077, for which the market ascribes significant value, skewing its multiples. The title's delayed launch is now set for 17 September 2020). The self-publishers (typically a step-down in capitalisation, digitally-led businesses) offer notably higher FY2e EV/sales multiples of 7.0x, but on a P/E basis, valuations are significantly lower with a mean FY1e P/E of 35x and FY2e P/E of 23x, with the capital-light self-publishing model delivering markedly better margins than the publishers. A comparison with the mid-market publishers is revealing, with mean FY1e EV/sales of only 0.9x and a mean P/E multiple of c 11x. These businesses have a lower capitalisation, more limited financial resources and greater reliance on physical distribution, as well as offering lower visibility on their ability to maintain market share and deliver continuing growth.

Mobile and casual games companies trade at a mean FY1e EV/sales multiple of 2.5x and a P/E multiple of 21x, indicative of lower investor confidence in a less well understood segment of the market. However, if these companies can demonstrate a robust performance in FY20, we might expect this valuation disparity to start to close. The lack of certainty eSports companies offer today in terms of business model, margins and growth trajectory (eSports remains a nascent US$1bn industry) means that investors remain cautious, with FY1e EV/sales of 0.7x and an unproven profitability profile. MTG expects a 35–45% fall in H120 revenues and intends to divest or list its casual games business, while at the end of March Gfinity announced a three-way partnership with Venatus and Bidstack, two games-focused advertising businesses, and subsequently confirmed a £2.25m placing.

Finally, when we look at the Other/services category, we see widely varying multiples, with Games Workshop (a fantasy IP-owner, table-top games retailer and community that derives significant revenue from games licensing) down over 40% from its all-time share price highs in February after closing its shops as part of the UK lockdown. Sumo Digital (co-developer and work for hire developer) has indicated some exposure to milestone slippage, while Keywords Studios (a leading provider of games services), although recognising some short-term disruption to its business, has indicated that ultimately it may benefit from project slippage and the additional resilience it can offer clients.

Overall, the games sector offers a potential haven in troubled markets, with increased consumer demand for live games following lockdowns in the short term and continuing growth forecast for the years afterwards. However, at current market levels, although value exists, investors will need to be selective in choosing their exposure.

Exhibit 9: European games sector valuations

Name	Year end	Quoted currency	Market cap ($m)	EV ($m)	Sales growth 1FY (%)	Sales growth 2FY (%)	EBITDA margin 1FY (%)	EBITDA margin 2FY (%)	EV/sales 1FY (x)	EV/sales 2FY (x)	EV/ EBITDA 1FY (x)	EV/ EBITDA 2FY (x)	EV/EBIT 1FY (x)	EV/EBIT 2FY (x)	P/E 1FY (x)	P/E 2FY (x)
Publishers																
Ubisoft Entertainment SA	Mar-20	€	9,265	9,739	-25.4	67.7	45.2	49.7	6.0	3.6	13.2	7.1	212.0	15.6	NM	20.6
CD Projekt SA	Dec-19	PLN	6,738	6,600	22.9	578.7	34.4	77.8	62.7	9.2	182.2	11.9	231.5	13.4	260.4	16.8
THQ Nordic AB	Mar-20	SEK	2,639	2,366	-8.9	52.0	35.3	37.9	4.6	3.0	13.0	8.0	50.6	24.1	129.4	51.4
Team17 Group PLC	Dec-20	GBp	862	813	10.2	10.7	35.6	35.9	9.7	8.8	27.3	24.5	31.7	27.9	38.5	35.5
Mean (ex CDP)					**-8.0**	**43.5**	**38.7**	**41.2**	**6.8**	**5.1**	**17.8**	**13.2**	**98.1**	**22.5**	**83.9**	**35.9**
Median					**0.7**	**59.9**	**35.5**	**43.8**	**7.8**	**6.2**	**20.3**	**9.9**	**131.3**	**19.9**	**129.4**	**28.1**
Self-publishers / developers																
Paradox Interactive AB (publ)	Dec-20	SEK	1,722	1,690	27.8	11.9	54.2	56.8	10.4	9.3	19.2	16.4	29.7	25.1	38.9	32.9
Frontier Developments PLC	May-20	GBp	639	633	-22.4	22.9	34.0	37.5	7.4	6.0	21.9	16.1	44.7	28.7	52.8	33.9
Playway SA	Dec-19	PLN	495	479	54.6	17.1	71.4	65.0	16.6	14.2	23.3	21.9	24.8	22.0	35.3	31.2
Codemasters Group Holdings PLC	Mar-20	GBp	436	405	14.1	34.3	20.0	26.7	4.1	3.0	20.3	11.3	21.5	12.2	21.5	12.7
11 Bit Studios SA	Dec-20	PLN	196	179	1.7	88.1	42.6	57.1	10.5	5.6	24.6	9.7	36.6	11.0	41.9	9.6
Remedy Entertainment Oyj	Dec-20	€	215	198	-5.2	50.0	38.3	33.3	6.1	4.1	15.9	12.2	30.6	13.1	20.9	16.3
Mean					**11.8**	**37.4**	**43.4**	**46.1**	**9.2**	**7.0**	**20.9**	**14.6**	**31.3**	**18.7**	**35.2**	**22.8**
Median					**7.9**	**28.6**	**40.5**	**47.2**	**8.9**	**5.8**	**21.1**	**14.1**	**30.1**	**17.5**	**37.1**	**23.7**
Mobile / casual																
Stillfront Group AB (publ)	Dec-20	SEK	1,314	1,389	71.0	16.8	40.7	42.3	4.2	3.6	10.3	8.5	16.7	13.2	21.7	17.7
Modern Times Group MTG AB	Dec-20	SEK	514	486	NM	13.7	8.1	11.6	1.0	0.9	12.9	7.9	NM	18.9	NM	NM
Ten Square Games SA	Dec-20	PLN	513	495	41.5	12.8	29.6	34.6	6.1	5.4	20.8	15.8	18.1	16.0	21.4	19.2
Rovio Entertainment Oyj	Dec-20	€	374	244	-1.6	3.0	14.9	14.7	0.8	0.8	5.3	5.2	7.5	7.0	17.7	18.5
Media and Games Invest plc	Dec-20	€	73	212	59.7	16.1	23.2	26.8	2.1	1.8	9.0	6.7	33.4	17.5	27.3	16.8
G5 Entertainment AB (publ)	Dec-20	SEK	104	90	12.2	10.7	14.6	16.4	0.7	0.6	4.5	3.6	11.4	8.4	15.1	11.2
Mean					**36.5**	**12.2**	**21.8**	**24.4**	**2.5**	**2.2**	**10.5**	**8.0**	**17.4**	**13.5**	**20.6**	**16.7**
Median					**41.5**	**13.2**	**19.1**	**21.6**	**1.6**	**1.4**	**9.6**	**7.3**	**16.7**	**14.6**	**21.4**	**17.7**
eSports																
Modern Times Group MTG AB	Dec-20	SEK	514	486	NM	13.7	8.1	11.6	1.0	0.9	12.9	7.9	NM	18.9	NM	NM
Gfinity PLC	Jun-20	GBp	7	5	81.9	81.9	NM	NM	0.3	0.2	NM	NM	NM	NM	NM	NM
Mean					**81.9**	**47.8**	**8.1**	**11.6**	**0.7**	**0.5**	**12.9**	**7.9**	**NM**	**18.9**		
Median					**81.9**	**47.8**	**8.1**	**11.6**	**0.7**	**0.5**	**12.9**	**7.9**	**NM**	**18.9**		
Mid-market publishers / distributors																
Bigben Interactive SA	Mar-20	€	214	285	12.6	12.2	21.2	21.7	1.0	0.9	4.5	3.9	10.1	8.9	9.0	7.7
Focus Home Interactive SA	Jun-20	€	159	161	75.7	-1.9	15.5	15.8	1.1	1.1	7.1	7.1	10.2	10.8	15.1	14.7
Digital Bros SpA	Mar-20	€	103	94	15.3	-6.4	12.8	13.9	0.6	0.6	4.7	4.6	5.0	4.8	7.8	8.0
Mean					**34.5**	**1.3**	**16.5**	**17.1**	**0.9**	**0.9**	**5.4**	**5.2**	**8.5**	**8.2**	**10.6**	**10.2**
Median					**15.3**	**-1.9**	**15.5**	**15.8**	**1.0**	**0.9**	**4.7**	**4.6**	**10.1**	**8.9**	**9.0**	**8.0**
Other / services																
Games Workshop Group PLC	May-20	GBp	1,670	1,664	0.9	3.6	37.9	39.5	5.2	5.1	13.8	12.8	14.0	13.2	22.2	20.5
Keywords Studios PLC	Dec-19	GBp	1,082	1,114	29.6	9.1	15.7	16.2	3.2	2.9	20.1	17.9	24.8	22.4	31.7	27.9
Sumo Group PLC	Dec-19	GBp	312	313	31.0	18.8	27.3	26.5	5.0	4.2	18.5	16.0	21.3	18.7	25.6	22.9
Overall mean (ex CDP)					**22.7**	**24.3**	**29.4**	**31.4**	**4.7**	**3.8**	**14.7**	**11.1**	**32.7**	**16.3**	**31.3**	**21.5**
Overall median					**14.1**	**13.7**	**28.4**	**30.1**	**4.2**	**3.0**	**13.5**	**9.1**	**23.2**	**15.8**	**22.2**	**18.8**

Source: Refinitiv data, Edison Investment Research. Note: Prices as at 6 April 2020.

Conclusions

COVID-19 has brought about a rapid transition from office work to remote-working, causing significant business disruption. However, for most games companies, the disruption has been effectively managed with business continuity plans now largely implemented. Looking ahead, we see a period of [at least] three to six months with consumers isolated from normal activities and entertainment; while it lasts, we expect this period to provide a substantial boost for games companies with live games in the market.

Investors should find reassurance from the fact that the games industry is large (c $150bn), global, growing strongly (Newzoo: 8.4% CAGR to 2022), has already dealt with many of the challenges faced by the transition to a digital model and, as such, is well-placed to deal with the challenges and opportunity dealt by the COVID-19 pandemic.

Given the levels of external investment we have seen over the course of 2019 in, for example, streaming, subscription models, digital distribution, VR and eSports as the global technology leaders position themselves with a channel to market, we believe that IP owners are set to benefit disproportionately. There will be an increasing need to differentiate their product, with IP ownership or exclusivity (potentially by way of M&A) an obvious differentiator. IP ownership should be valued at a premium and IP owners represent the most attractive companies in which to invest in the games industry for the foreseeable future.

The games industry has made demonstrable progress over the last 10 years and valuations remain challenging. However, any weakness around COVID-19 might present a good buying opportunity for investors who want to gain (or increase) exposure to quality businesses, secure in the knowledge that industry growth is forecast to remain strong in the long run.

Exhibit 10: The European games landscape

Strengths	Weaknesses
Digital business models with recurring revenues	No global tech titans in Europe
A likely beneficiary from the COVID-19 lockdown	Asia and the US still lead the industry
Sustained long-term growth potential (8.4%+ to 2022 (Newzoo))	Substantial investment and innovation occurring overseas
Games offers singular exposure to a global youth demographic	Scale and liquidity lacking
Europe offers a range of companies targeting specialist niches	Many of the most innovative companies are not yet quoted
European creativity is world-leading in multiple genres	eSports, VR and streaming hard to play themes
Supportive tax regimes in most key territories	
Opportunities	**Threats**
Further upside as full benefits of digitalisation yet to be realised	Overseas tech giants attempting to dominate the industry
Investors able to arbitrage cross-border valuation anomalies	Challenge to screen time from other media
Growing appreciation of the games industry by the media	Hit-driven models remain high risk
Potential for games to become a mainstream investment	A number of companies still operating legacy business models
Interactivity and stickiness of games to dominate media consumption	Lack of access to capital may push companies towards M&A
	Fragmentation will continue to challenge slower moving businesses

Source: Edison Investment Research

What sorts of company do we prefer?

- Companies with a mature back catalogue and recurring revenues
- Companies that nurture and serve their player community
- Companies with world-class IP and a clear focus on their core skillset
- Niche market leaders with a high-quality client base
- Opportunistic, disciplined acquirers

Which companies are at risk?

- Companies over-exposed to legacy business models (eg physical distribution)
- Cash-challenged businesses with inadequate financial resources (eg eSports)
- ‘Hit-driven’ models exposed to a single IP or narrow portfolio
- Mid-market publishers/distributors
- Work-for-hire developers forced to take on low-quality, marginal projects
- Over-extended ‘buy and build’ outfits

Frankfurt +49 (0)69 78 8076 960
Schumannstrasse 34b
60325 Frankfurt
Germany

London +44 (0)20 3077 5700
280 High Holborn
London, WC1V 7EE
United Kingdom

New York +1 646 653 7026
1,185 Avenue of the Americas
3rd Floor, New York, NY 10036
United States of America

Sydney +61 (0)2 8249 8342
Level 4, Office 1205
95 Pitt Street, Sydney
NSW 2000, Australia