BRYAN, GARNIER & CO

INDEPENDENT RESEARCH

1st July 2016

TMT

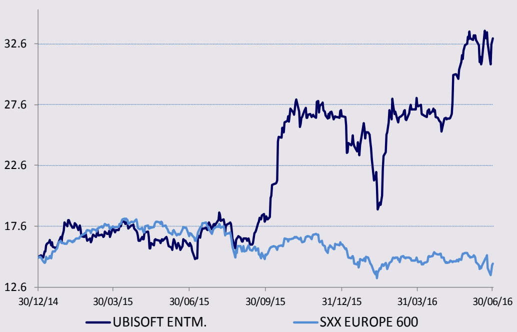
Ubisoft

"Same player shoot again"?

Fair Value EUR34 (price EUR33.01) **BUY**

Bloomberg	UBI.FP
Reuters	UBIP.PA
12-month High / Low (EUR)	33.7 / 14.9
Market capitalisation (EURm)	3,671
Enterprise Value (BG estimates EURm)	3,465
Avg. 6m daily volume ('000 shares)	322.3
Free Float	88.5%
3y EPS CAGR	37.1%
Gearing (03/16)	4%
Dividend yields (03/17e)	NM

YE March	03/16	03/17e	03/18e	03/19e
Revenue (EURm)	1,394	1,706	1,945	2,200
EBITA EURm)	156.1	219.0	319.0	429.0
Op.Margin (%)	11.2	12.8	16.4	19.5
Diluted EPS (EUR)	1.02	1.29	1.92	2.62
EV/Sales	2.67x	2.03x	1.67x	1.33x
EV/EBITDA	6.2x	4.7x	3.6x	2.7x
EV/EBITA	23.8x	15.8x	10.2x	6.8x
P/E	32.5x	25.5x	17.2x	12.6x
ROCE	11.0	15.7	23.3	31.6



The Ubisoft share price is not far from our EUR34 Fair Value, which simply values the group's fundamentals over the current fiscal year. In contrast, we advise investors to play positive momentum (no game delays on the cards) and speculation which both offer strong support for the share price (Vivendi at 20.1% of the capital). We are therefore maintaining our Buy Recommendation. All scenarios play in favour of a hike in the share price in coming months. We consider that Vivendi, which is the most motivated player since the acquisition of Gameloft, could ultimately make a bid on UBI in the EUR40-51 range.

- **We are optimistic on fundamentals and momentum for the Ubisoft share price.** We expect a **healthy operating performance** (no game delays given positive pressure from Vivendi), especially since the console cycle is in an up-phase (2013/20 cycle with a peak in 2018 for the hardware and 2019 for the software), digital offers a driver for growth and margin improvement, and the group is continuing to diversify beyond games. **Finally, we believe in speculation and estimate Vivendi is the most determined to acquire UBI,** especially since its successful bid for its sister company Gameloft. **In the event of an offer (2017?), we consider a price in the EUR40-51 range is credible.**
- In sector terms, **the 2016 E3 seemed very calm to us** suggesting that the trade fair is losing some of its status in the sector. On the publishing side, **only Ubisoft stood out positively, delivering its best conference of the past 10 years** among all the players (line-up adding weight to its guidance), and boasting the largest and most attractive booth among the games publishers present.
- **In terms of console makers, Sony again won the battle this year.** The Microsoft conference was rich on the hardware side (announcement of the Xbox One S this year and its Project Scorpio at end-2017) but communication was clumsy (three consoles available within the same cycle…), while there was very little surprise at the games level and virtual reality was hardly mentioned. In contrast, Sony was efficient in providing concrete news for its current PS4, with both its virtual reality headset (as of 13th October) and games available (eagerly expected titles and varied portfolio). Its Neo console will not be presented until it is finished, which is a wiser move than the communication chosen by Microsoft.

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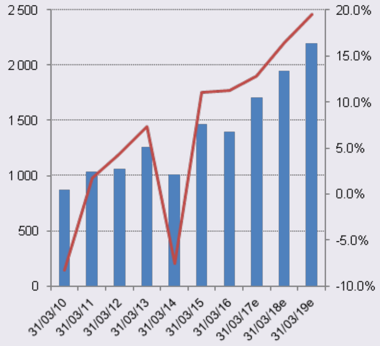
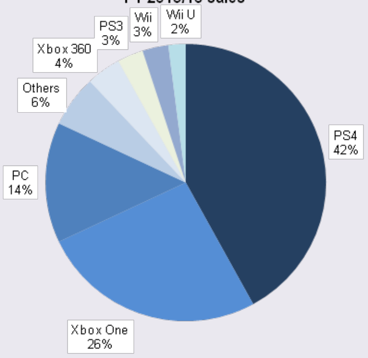
Sales and current EBIT after SO



FY 2015/16 sales



Company description

Publisher, developer and distributor of video games, mainly positioned on consoles and PCs

Simplified Profit & Loss Account (EURm)	31/03/14	31/03/15	31/03/16	31/03/17e	31/03/18e	31/03/19e
Revenues	1,007	1,464	1,394	1,706	1,945	2,200
Change (%)	*-19.8%*	*45.3%*	*-4.8%*	*22.4%*	*14.0%*	*13.1%*
Ifl change (%)	*-16.9%*	*41.6%*	*-10.7%*	*22.4%*	*14.0%*	*13.1%*
EBITDA	309	650	600	731	903	1,089
EBIT	(97.9)	139	137	219	319	429
EBIT adjusted	(75.3)	161	156	219	319	429
Change (%)	*-182%*	*-314%*	*-3.1%*	*40.3%*	*45.7%*	*34.5%*
Financial results	10.3	0.71	(13.7)	(6.0)	(5.0)	(4.0)
Pre-Tax profits	(87.6)	140	123	213	314	425
Tax	22.1	(53.1)	(29.7)	(64.1)	(92.4)	(123)
Profits from associates	0.0	0.0	0.0	0.0	0.0	0.0
Minority interests	0.0	0.0	0.0	0.0	0.0	0.0
Net profit	(65.5)	87.0	93.4	149	222	302
Restated net profit	(59.0)	103	116	149	222	302
Change (%)	*-197%*	*-275%*	*12.5%*	*28.3%*	*48.8%*	*36.1%*
Cash Flow Statement (EURm)						
Operating cash flows	285	648	624	677	821	977
Change in working capital	(37.2)	28.4	(229)	154	(11.5)	(12.2)
Capex, net	(454)	(478)	(532)	(581)	(584)	(660)
Financial investments, net	(28.6)	(26.9)	(34.0)	0.0	0.0	0.0
Dividends	0.0	0.0	0.0	0.0	0.0	0.0
Other	49.6	22.5	(92.7)	0.0	0.0	0.0
Net debt	14.8	(198)	44.2	(206)	(432)	(738)
Free Cash flow	(206)	199	(137)	250	226	305
Balance Sheet (EURm)						
Net fixed assets	794	783	838	890	874	858
Investments	3.6	4.2	4.3	4.3	4.3	4.3
Deffered tax assets	0.0	0.0	0.0	0.0	0.0	0.0
Cash & equivalents	238	657	461	357	583	888
current assets	94.7	42.3	439	123	140	158
Other assets	210	266	278	311	354	400
Total assets	1,339	1,752	2,021	1,685	1,956	2,310
L & ST Debt	253	459	506	151	151	151
Provisions	8.0	12.9	15.5	15.5	15.5	15.5
Deffered tax liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Others liabilities	268	301	481	351	401	453
Shareholders' equity	810	979	1,019	1,167	1,389	1,691
Total Liabilities	1,339	1,752	2,021	1,685	1,956	2,310
Capital employed	825	782	1,063	961	957	953
Ratios						
Operating margin	(7.48)	11.01	11.20	12.84	16.40	19.50
Tax rate	25.21	37.90	24.10	30.10	29.43	29.05
Net margin	(6.51)	5.94	6.70	8.73	11.39	13.71
ROE (after tax)	(8.09)	8.88	9.17	12.75	15.95	17.84
ROCE (after tax)	(6.79)	12.66	11.03	15.74	23.26	31.57
Gearing	1.83	(20.19)	4.34	(17.66)	(31.12)	(43.63)
Pay out ratio	0.0	0.0	0.0	0.0	0.0	0.0
Number of shares, diluted	107,343	113,298	114,198	115,198	115,198	115,198
Data per Share (EUR)						
EPS	(0.62)	0.81	0.84	1.34	1.99	2.71
Restated EPS	(0.55)	0.91	1.02	1.29	1.92	2.62
% change	*-188%*	*-266%*	*11.6%*	*27.2%*	*48.8%*	*36.1%*
BVPS	7.55	8.64	8.92	10.13	12.06	14.67
Operating cash flows	2.66	5.72	5.46	5.87	7.13	8.49
FCF	(1.92)	1.76	(1.20)	2.17	1.96	2.65
Net dividend	0.0	0.0	0.0	0.0	0.0	0.0

Source: Company Data; Bryan, Garnier & Co ests.

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1. Investment Case

Why the interest now?

The reason for writing now

Although we consider that the current share price is not far from valuing the group's fundamentals over the current fiscal year (our FV does not include a speculative premium), **momentum is beneficial** (no game delays on the cards) **and speculation offers strong support for the share price** (Vivendi has 20.1% of the capital). As such, we advise investors to play these factors and are **maintaining our Buy recommendation**. All scenarios play in favour of an increase in the share price in coming months.

Cheap or Expensive?

Valuation

Since Vivendi's entry, we believe Ubisoft should no longer be viewed from a three/six month perspective, but valued over the entire cycle. As such, **our EUR34 FV is based on the group's historical 12m-forward multiples from the past two console cycles, to which we have added a 15% premium** (justified by two new factors: very profitable digital revenues and sales generated in entertainment beyond video games), **that we have applied to 2016/17e** (the reliability of fundamentals for a console video games publisher looks risky beyond one year). **We believe that Vivendi is the most determined to acquire Ubisoft** (especially since the successful bid on its sister company Gameloft) **and that the media group could launch a bid in 2017.** In this speculative scenario, **we estimate the price could stand in a range of EUR40-51.**

When will I start making money?

Catalysts

We expect no operating accident (no game delays given positive pressure from Vivendi), especially since the **sector is in an up-phase** in the consoles cycle and that **digital offers a good driver for growth and margins** in coming years. **Finally, UBI is continuing to diversify beyond video games**, thereby enabling it to promote its brands and better monetise them.

What's the value added?

Difference from consensus

We are in line with the consensus for 2016/17e (slightly above sales guidance of EUR1.7bn, non-IFRS EBIT of around EUR230m and strong FCF). In contrast, **for the following year, our EPS works out 13.6% higher than forecasts** (in terms of both growth at 14% vs. 7.5% and operating margin at 17.2% vs. 16.2%).

Could I lose money?

Risks to our investment case

1/ Vivendi obtains at least one seat on Ubisoft's Board on 29/09 (a gradual increase in control is not in the interest of shareholders), **2/** games delays (this would suggest that the group is struggling to manage itself alone and that it should not stay independent), **3/** a significant commercial failure (which would highlight the failure of the current management).

2. Focus on Ubisoft: the publisher being wooed

2.1. Credible guidance in the short/medium terms

For several years we have appreciated: 1/ Ubisoft's internal game development strategy, which generates significant operating leverage for its intellectual property (operating margin higher than 50% above breakeven point), **2/ the gradual catching up in online competition,** both via acquisitions and in organic terms (the group has acquired small targeted teams and shared their know-how with its own teams in order to accelerate in organic terms) and **3/ the group's vision of entertainment in the wider sense,** over and above video games: books, TV series, cinema (in addition to the *Assassin's Creed* film next Dec., others are to follow in coming years on *Ghost Recon*, *Raving Rabbids*, *Watch Dogs* and *Splinter Cell*), theme parks, merchandising and other by-products.

Fig. 1: Our impressions of the main games shown by Ubisoft at E3

Games	Launch date	Target audience	Our impression at E3	Our comments
Watch Dogs 2	15/11/16	Core gamers	✓✓✓	Massive fan base (16m unique players LTD), 85% of players will by the sequel. 2.5x bigger world and 50 co-op missions to drive retention. The game (for PS4, Xbox One and PC) has the potential to sell 15m units on its 1st FY. PS4 players will receive all DLC 30 days before everyone else.
Ghost Recon: Wildlands	07/03/17	Core gamers	✓✓✓	First open-world military shooter. Fully coop enabled. UBI's largest action adventure open world game, for PS4, Xbox One and PC.
South Park : The Fractured But Hole	06/12/16	Core/casual gamers	✓✓	A follow-up to *The Stick of Truth*, we don't see it as an AAA. Powerhouse brand with a lot of Facebook fans. It will be available for PC, PS4, and Xbox One.
For Honor	14/02/17	Mostly core gamers	✓✓	New IP and fresh concept, low competition. The solo campaign is convincing and completes last year's multiplayer mode. It will be available for PS4, Xbox One and PC.
Steep	Dec. 2016	Mostly core gamers	✓	New AAA IP revealed (for PS4, Xbox One and PC). This is an open-world action sports game. Few competition on that segment. First class live services (great potential for digital content sales), as *The Crew* last year. It originally started as a demo for *Wildlands*.

Source: Bryan, Garnier & Co (✓ Weak; ✓✓ Good; ✓✓✓ Excellent).

What we saw from Ubisoft at E3 completely validates the group's full-year guidance for sales of EUR1.7bn, underlying EBIT before stock-options (non-IFRS EBIT) of around EUR230m (margin of 13.5%, +140bp over one year) and high FCF generation. **This scenario is backed by: 1/** the launch of five AAA games (vs four last year), **2/** further high growth in digital revenues (35% of sales) and **3/** robust growth in the back catalogue (around 30% of sales, especially thanks to *The Division* and *Far Cry Primal* and to a lesser extent, *Rainbow Six Siege*). After that, note that the group is to launch its *Assassin's Creed* franchise in cinemas (on 21st December 2016), thereby further promoting the brand on a global level and opening the base of potential players for the launch of the next game (probably at end-2017), In the meantime, note that the group is set to **reach these targets without launching an *Assassin's Creed* game and this should be seen as a genuine performance by the group, proving that it has totally made up for its historical dependence.** Finally, note that we expect no delays in games leading to an operating accident since Ubisoft needs to prove that it does not need Vivendi and that it can remain independent (in this respect, Vivendi is exerting positive pressure).

Management is therefore well under way to delivering its 2018/19 plan, namely for sales of EUR2.2bn (CAGR of 16.4%), underlying EBIT margin before stock options of 20% (around 800bp vs. 2014/15) and FCF of EUR300m. **These targets are based on gross margin of more than 80% via: 1/** the launch of around five AAA games a year, enabling generation of 40m units altogether (solely based on existing franchises, assuming quantity assumptions already reached in the past and an installed base of PS4/Xbox One consoles of 130m units at end-2018 namely a CAGR of 33%), and **2/** a digital segment set to total 45% of sales, with 28% in digital distribution and 17% in digital contents (vs. 32% in 2015/16 with 23% and 9% respectively). **The lion's share of the improvement in margin is set to stem from growth in digital (around 5%) and the rest from a larger line-up and a better mix (3%).** Higher leverage in digital is set to stem from additional pay content since this is more profitable than another of its blockbusters (we estimate margins at 80-100%). This is also the reason why the group intends to launch more multi-player games (which include more associated digital services).

Finally, in our view, Ubisoft now has two major assets that should help it reach its medium-term guidance: 1/ there is no reason why one of the group's games could not reach 15m units in its first year on the market in a relatively near future (*The Division* and/or *Watch Dogs 2* could be the first while the previous record was hit with *Assassin's Creed III* which totalled 12.5m units over 2012/13), **and 2/** the group is now capable of managing large online games, namely attracting a wide community of players with a high level of quality (re: the excellent scores obtained by *The Division* in specialised press reports), together with an efficient online service (in terms of both services and the technologies behind the services). This also enables it to conquer new territories such as Russia, Brazil and a few Asian countries (for example, if we add together China, Taiwan and Hong Kong, this region would be the eighth largest for the group in terms of the number of players for its *Assassin's Creed* and *Rainbow Six* games).

Fig. 2: Main financial items from fiscal years 2014/15 to 2018/19e

EURm	14/15 reported	15/16 reported	Cons. 16/17e	BG 16/17e	Cons. 17/18e	BG 17/18e	BG 18/19e
Sales	**1,463.8**	**1,394.0**	**1,706.4**	**1,706.3**	**1,833**	**1,945.1**	**2,200.0**
Y/Y change (%)	*45.3%*	*-4.8%*	*22.4%*	*22.4%*	*7.4%*	*14.0%*	*13.1%*
Non-IFRS EBIT	**170.7**	**169.0**	**234.8**	**235.0**	**296.9**	**335.0**	**445.0**
As % of sales	*11.7%*	*12.1%*	*13.8%*	*13.8%*	*16.2%*	*17.2%*	*20.2%*
IFRS EBIT after SO	**139.4**	**136.8**		**219.0**		**319.0**	**429.0**
As % of sales	*9.5%*	*9.8%*		*12.8%*		*16.4%*	*19.5%*
Net profit after SO	**87.0**	**93.4**	**145.8**	**148.9**	**195.3**	**221.6**	**301.5**
As % of sales	*5.9%*	*6.7%*	*8.5%*	*8.7%*	*10.7%*	*11.4%*	*13.7%*
Adj. net profit after SO	**103.1**	**116.0**		**148.9**		**221.6**	**301.5**
As % of sales	*7.0%*	*8.3%*		*8.7%*		*11.4%*	*13.7%*
FCF	**176.3**	**-191.5**		**250.4**		**226.1**	**305.3**
Net debt	**-197.7**	**44.2**		**-206.2**		**-432.3**	**-737.6**
Gearing	*-20.2%*	*4.3%*		*-17.7%*		*-31.1%*	*-43.6%*

Sources: company consensus (03/06/16); Bryan, Garnier & Co ests.

2.2. Ubisoft's fundamental valuation

The Ubisoft share reacts primarily to events linked to both:

- **1/ its sector:** the consoles cycle, professional trade fairs (there are four major ones each year), competitive intensity, the macro-economy (especially in the casual segment namely, consumer games) and M&A activity in the sector.
- **2/ its specific news:** launches/delays in its main games, acquisition of teams, technologies, brands and licences, and speculation.

In the table below, we have set out our **fundamental valuation of Ubisoft** (on which we have calculated our Fair Value). **It is based on 12-month forward multiples of the past two console cycles,** applied to our estimates for 2016/17e (taking into account a more distant time-frame in the sector would not be reasonable). **Since consoles were not connected during these cycles** (whereas this year, 35% of Ubisoft's sales is likely to stem from digital) **and that publishers had no revenues beyond video games** (whereas today they sell all types of by-products), **we have applied a premium of 15% to these ratios** (this is a minimum since it does not include cinema, which is new and therefore difficult to value today)**.**

Fig. 3: Forward multiples of the past two console cycles

	EV/Sales	EV/EBIT	PE
Last two console cycle historical average ratios (excl. the Internet bubble)	1.10	14.6	32.0
Ratios after a 15% premium	1.27	16.8	36.8
Implied valuation for Ubisoft in FY 16/17 (EURm)	2,087.4	3,414.5	4,759.6
Average valuation per share (EUR)		**34.0**	

Sources: Thomson Reuters; Bryan, Garnier & Co ests.

By applying this method, **our FV works out to EUR34 per sh**are. Note that the share is now no longer very far from its fundamental valuation (remaining upside potential stands at 3%).

2.3. UBI is becoming a safe haven stock since it is speculative

Although we consider the current share price is not far from valuing the group's fundamentals for this year (our EUR34 FV includes no speculative premium), **momentum is favourable** (no delay in games on the cards) and **speculation offers strong support. We therefore advise investors to play these themes** (see our section on speculative valuation).

All credible scenarios point to an increase in the share price:

- Vivendi maintains/increases its stake, adding weight to speculation. Note that Vivendi already has 20.10% of the capital and 17.76% of voting rights vs the Guillemot family with 8.71% and 15.71% respectively.
- Vivendi launches a takeover bid (we do not expect this before 2017).
- The Guillemot family increases its stake (reinvestment of EUR151m stemming from the transfer of its stake to Vivendi, i.e. a rise in Ubisoft's capital of 4.1%).
- The group communicates more and delivers healthy fundamentals in order to show that it can remain independent.
- Ubisoft brings in a strategic and/or financial partner, which increases its stake, to help it remain in control of the group. This is the "option 1" raised by Ubisoft.

- Ubisoft merges with a peer (US, Chinese, Japanese etc…), thereby generating complementary aspects and synergies. This is the "option 2" raised by Ubisoft.

We believe in speculation and would highlight Vivendi's appetite and speculation. However much the media group has destabilised Ubisoft's long-term ambitions by acquiring Gameloft (we have always stated that by 2020 and later, once Ubisoft and Gameloft have the same 100% online business model, the Guillemot family would merge the two or sell one of them in order to focus on the other), it is now obliged to get its hands on Ubisoft, since it would make no sense to own Gameloft alone (sweetening its bid twice and finally paying EUR8 per share only makes sense if it can obtain Ubisoft afterwards). This is especially true in that Vivendi has no debt problems (net cash position of EUR4.8bn at end-Q1). Our sources indicate that Vivendi is receiving CVs from games developers interested in working for the group if Ubisoft were to fall into its hands and is also contacting developers itself with the same aim in mind. **Finally, we do not believe that Vivendi would take the huge risk of taking control of Ubisoft without making a formal and correct takeover bid** (namely without paying a premium to shareholders). We believe that Vivendi is well aware of what's at stake, especially in a sector where the corporate culture is very strong, and this is also why it made a bid for Gameloft. Indeed, if it is not already case, the group is likely to rapidly see the light at the next Ubisoft shareholder's meeting on 29th September. On this date, **Vivendi should clearly request representation on the Board of Directors, although we do not think it will be successful** since giving the group a seat would open the possibility to a gradual rise in control, which is not at all beneficial for Ubisoft shareholders.

Note that in its recent communication to the French financial markets regulator, the AMF (when it crossed the 20% ownership threshold on 17th June), **Vivendi repeated for the second time that it "did not envisage filing a takeover bid for Ubisoft or taking control"**. Having written this, **it can no longer launch a bid for the company for a six-month period.** In contrast, this does not stop it from buying shares on the market, and **if it were to exceed the 30% threshold**, **it would then be obliged to make a bid for all of the company's capital.** Consequently, in concrete terms, **nothing can actually stop Vivendi from changing its mind and bidding for the whole company.**

As such, we consider that Ubisoft has become a genuine refuge stock. This is what we expected with Vivendi's entry into the capital at the end of last year, when we considered that investors would now value the entire cycle (our valuation is based on historical 12m forward multiples of the past two cycles, to which we have added a 15% premium, notably driven by the group's digital exposure, that we have applied to 2016/17), whereas historically, the market played the stock more from a three/six-month perspective. The most recent test was the announcement of Brexit, when the share price fell by just 2.85% compared with 8.04% for the CAC 40. **We would therefore not be surprised if the share started to reflect its speculative premium, hence our valuation simulation in the event of a takeover.**

2.4. A possible takeover bid by Vivendi?

2.4.1. Speculative valuation in the event of a takeover: EUR40-51 per share

Note that when we initiated coverage of Ubisoft in our note of 9th September 2014 (at a price of EUR12.67), **we already simulated a takeover valuation.** Indeed, we mentioned that in general, takeovers of console players start to take place in the second or third year after the launch of new-generation machines (the time needed for the potential buyer to identify which player has taken the cycle well). Vivendi announced it was taking a stake in Ubisoft in mid-October 2015, or almost two years after the Xbox One and PS4 consoles were launched. **Our simulation at the time pointed to a valuation of EUR34.2 per share, which at the time represented upside of 171% relative to the recent share price and +38% over the average of the past two cycles.** The current share price is close to this level and is exactly our Fair Value, whereas it actually only now values the group's fundamentals. This means that **Ubisoft has delivered far better than we expected in operating terms and above all, that investors have started to value Ubisoft over the cycle as a whole** (which is normal since Vivendi entered the capital). At the time, our speculative valuation was based on multiples of major recent transactions or takeover attempts made by peers in the sector, which we applied to our estimates for 2014/15 and 2015/16.

We have decided to use the same method, given that speculation is present and we believe in it. We therefore still believe that a **bid for Ubisoft could go ahead on the following multiples**: EV/sales of 2.3x in year N and 2.2x year N+1, P/E of 31x year N and 25.9x in year N+1. **Moreover, since management is opposed to a takeover, we consider that this is minimum level to convince the family.** Indeed, we believe that **whatever happens, Ubisoft can no longer be entirely independent in its management, such that the bid price is what will make the difference** (its future is in the hands of its shareholders).

Fig. 4: Minimum valuation in the event of a takeover of Ubisoft

x	EV/Sales (n)	EV/Sales (n+1)	PE (n)	PE (n+1)
Acquisition multiples	2.3	2.2	31.0	25.9
12m fwd implied valuation for Ubisoft (EURm)	4,280		4,896	
Ubisoft's valuation per share (€)	**37.2**		**42.5**	

Source: Bryan, Garnier & Co ests.

By applying these multiples to our estimate for the current FY 2016/17 figures for coming years, our current valuation in the event of a takeover works out to EUR40 per share (upside of 21% to yesterday's closing price). If we only take into account 2017/18, it works out to EUR51 (upside of 55%). Since Vivendi is unlikely to make an offer before 2017, we estimate the credible speculative valuation range at between EUR40 (minimum) and EUR51 (maximum), to convince current shareholders and oblige the family to accept the offer (as was the case with Gameloft). **In a takeover scenario, we see EUR40 as a real minimum since if the potential buyer does not offer a clear premium from the start, it will attract other players** (unlike Gameloft, there will be no shortage of counterbids). In addition, we reiterate the fact that **now that Vivendi has got its hands on Gameloft, it is extremely motivated to acquire Ubisoft.** As such, **if it wants to reach its goal, it will have to show its cash right from the start.**

A hostile takeover bid could therefore succeed in terms of the "success of taking control". In contrast, if Vivendi really intends to have the necessary means to succeed in the video games industry, by taking the lowest amount of risk, it will have to favour a friendly solution (by declaring that it does not want to launch a bid to the AMF, Vivendi is buying time, i.e. six months, in order to calm the situation).

2.4.2. What win/win scenario for Vivendi and Ubisoft?

In our view, a friendly solution could involve the famous **premium to share price** (we see no bid before 2017, with an offer close to the middle of our range, namely EUR45) **and the nomination of Ubisoft's CEO** (Yves Guillemot) **at the head of the new Vivendi Video Games division** (which therefore includes Gameloft). **In our view, this would be a way of guaranteeing that star**

developers and creators stay in the group (this risk is lower in the mobile games segment). Indeed, since Mr Guillemot is highly appreciated and has strong support from his teams, there would be no risk of acquiring an empty shell.

In addition, it is interesting to note the difference in reaction to this assumption between Gameloft's CEO (Michel Guillemot) and Ubisoft's (Yves Guillemot). At our roadshow with Gameloft's CEO at end-March 2016 (i.e. before the successful takeover bid by Vivendi), Michel Guillemot stated that he would "never" work under the management of Vincent Bolloré, and that if the takeover bid were to succeed, he would resign and create a new start-up company. This scenario proved entirely true. In contrast, on the fringes of the E3 trade fair, **when we asked Ubisoft's CEO if he would be interested in heading up Vivendi's Video Games division** (made up of Ubisoft and Gameloft bearing in mind that the transfer of the latter would enable the new entity to make up its lag relative to rivals in terms of the weight of digital in sales i.e. 44%e) **if Vincent Bolloré promised him full independence,** he did not have the same skin-deep reaction as his brother. **He avoided answering the question** (on the pretext that this situation was not yet on the agenda), **but he did not say "no".** We conclude that **this scenario, which would be a winning one from all perspectives (Ubisoft's shareholders, employees, the Guillemot family and Vivendi) remains entirely possible.** Admittedly, Mr Bolloré does not tend to keep directors in place and generally tends to replace them with his own people, but on the other hand, neither does he tend to implement takeover bids and increase the price twice... but he did so this time round. **We believe Vivendi wants to add a genuine 5th pillar to its media group: 1/** Canal+ (TV), **2/** Studiocanal (movie), **3/** Universal Music Group (music), **4/** Dailymotion (Internet), **and 5/** Ubisoft/Gameloft. **It intends to be an equivalent of Time Warner** (the only example of a media group also succeeding in video games) **but with European roots.**

The video games industry is extremely sensitive and we would warn Vivendi of one fundamental factor: **managing talents in video games is very different from managing pure creative teams in the media industry** (advertising, TV, cinema, music…). **Video games developers are indeed creative teams but with a strong technological bias** (salary alone is not enough to keep them in place, they need a technological challenge and the scope to take risks). **Yves Guillemot has proved that he knows how to manage this type of profile and indeed, this is what has enabled him to create strong intellectual property that has then been transformed into franchises** (Ubisoft boasts three of the largest launches of new industry brands: #1 *The Division*, #3 *Watch Dogs* and #4 *Assassin's Creed* and has two in the Top 3 of the current cycle: *Watch Dogs* and *The Division*).

Fig. 5: Shareholding structure at Ubisoft

%	Capital	Voting rights
Vivendi	20.10	17.76
Guillemot family	8.71	15.71

Source: Bryan, Garnier & Co.

3. What to take away from E3 2016

The Electronic Entertainment Expo (E3) organised each year by the Entertainment Software Association (ESA), **is the largest global trade fair dedicated to the video games sector.** The 2016 edition took place from 14th to 16th June in Los Angeles (at the Convention Center), with events by console makers and games publishers on the fringes of the exhibition. Some **250 exhibitors and 50,300 sector professionals took part**, more than at the Game Developers Conference (March, San Francisco), the Tokyo Game Show (September, Chiba) and Gamescom (August, Cologne).

That said, we found this year's E3 particularly calm with fewer exhibitors than usual (not all the space was filled). **This trade fair seems to have lost some of its status as a key event where all the major announcements are made.** Indeed, a number of major players were absent: Nintendo, this being a recurring event since the group has had little to present for a few years now, but also more surprisingly, the two leading publishers, Activision Blizzard and EA, who turned their backs on the exhibition this year. **We believe that a number of major players are gradually giving in to the wave of proprietary events, such as Apple's keynote,** which helps place the company in the limelight and create more of a buzz. In all, **Ubisoft boasted the largest and most attractive booth of all the games developers present.** We believe that E3 could well experience a quiet phase in coming years, as it did during 2007 and 2008. It remains to be seen whether the trade fair will manage to renew itself and if dematerialisation in the sector does not end up taking a toll on this type of physical event.

Fig. 6: Events we attended at E3 or on the fringes of the exhibition

Date	Event
Sunday 12th June	Electronic Arts' press conference
	Bethesda's press conference
Monday 13th June	Microsoft Xbox briefing
	Ubisoft's press conference
	Sony's press conference
	PC Gaming Show (AMD and PC Gamer)
Tuesday 14th June	Ubisoft's analysts & investors day
	E3 opening ceremony
	Small group meeting with Take-Two's management
Wednesday 15th June	E3 tour games testing
	Small group meeting with Ubisoft's management
	Game demonstrations on Ubisoft stand
Thursday 16th June	E3 tour games testing
	E3 closing ceremony

Source: Bryan, Garnier & Co.

3.1. Feedback from Ubisoft conference

Ubisoft strengthened our confidence in the two games most awaited for 2016/17 (*Watch Dogs 2* on 15th November 2016 and *Ghost Recon Wildlands* on 7th March 2017) **and even ending up convincing us with its new brand *For Honor*** (we liked the solo campaign which is very complementary with the multiplayer version unveiled last year, due out on 14th February 2017). As expected, the publisher announced its new **intellectual property named *Steep*** (December 2016). While every new brand is a potential risk, we consider that risk on this open-world extreme sports game looks limited (Ubisoft already launched games for the *Shaun White* brands with the *Snowboarding* and *Skateboarding* episodes between 2008 and 2010 and controls open worlds) and estimate that the break-even point is not very high (probably close to 1.5m units, the game is partly financed by advertising partners GoPro and Red Bull). The group presented a bit more of *South Park The Fractured But Hole* (6th December 2016, the next part of the *The Stick of Truth*), which we still struggle to consider an AAA game, and confirmed the launch of *Just Dance 2017* (for October 2016, on the main consoles and next year on the NX). In a somewhat more negligible manner, it announced an extension for *The Division* on 28th June, the launch of *Grow Up* (a follow-up of its platform game *Grow Home*, in August), *Trials of the Blood Dragon* (*Trials* and *Far Cry: Blood Dragon* combined in a single title available immediately) and two small virtual reality games (*Eagle Flight* and *Star Trek: Bridge Crew*, which are more immersion experiences rather than fully-fledged games, we expect no take-off in RV before H2 2017). **In all, Ubisoft delivered its best presentation of all the E3s that we have seen over the past 10 years.** It focused on games to be launched during the year, its line-up is diversified and full of triple-A games, it presented numerous gameplay sequences (and did not fall into the same errors of some rivals who only showed trailers), and its titles could all be played at its booth. **In contrast, we were disappointed that the console makers** (Sony and Microsoft) **barely highlighted the Ubisoft games during their conferences** (contrary to previous years).

Fig. 7: Our impressions of the main games shown by Ubisoft at E3

Games	Launch date	Target audience	Our impression at E3	Our comments
Watch Dogs 2	15/11/16	Core gamers	✓✓✓	Massive fan base (16m unique players LTD), 85% of players will by the sequel. 2.5x bigger world and 50 co-op missions to drive retention. The game (for PS4, Xbox One and PC) has the potential to sell 15m units on its 1st FY. PS4 players will receive all DLC 30 days before everyone else.
Ghost Recon: Wildlands	07/03/17	Core gamers	✓✓✓	First open-world military shooter. Fully coop enabled. UBI's largest action adventure open world game, for PS4, Xbox One and PC.
South Park : The Fractured But Hole	06/12/16	Core/casual gamers	✓✓	A follow-up to *The Stick of Truth*, we don't see it as an AAA. Powerhouse brand with a lot of Facebook fans. It will be available for PC, PS4, and Xbox One.
For Honor	14/02/17	Mostly core gamers	✓✓	New IP and fresh concept, low competition. The solo campaign is convincing and completes last year's multiplayer mode. It will be available for PS4, Xbox One and PC.
Steep	Dec. 2016	Mostly core gamers	✓	New AAA IP revealed (for PS4, Xbox One and PC). This is an open-world action sports game. Few competition on that segment. First class live services (great potential for digital content sales), as *The Crew* last year. It originally started as a demo for *Wildlands*.

Source: Bryan, Garnier & Co (✓ Weak; ✓✓ Good; ✓✓✓ Excellent).

3.2. Feedback from console maker conferences

3.2.1. Microsoft: rich hardware communication but very clumsy

Microsoft announced the launch of a new version of its Xbox One, the "Xbox One S", which is smaller and more powerful. The console is to have embedded power, an Ultra HD Blu-Ray reader and gaming HDR and will be compatible with all past, present and future games. It should be available as of **early August with a basic 500Go version at just USD299** (USD349 for 1 To and USD399 for 2 To).

This box is to fill the transition period before the arrival of **"Project Scorpio" at the end of 2017,** which Microsoft claims will be "the most powerful games console ever manufactured". Indeed, the console will have a new GPU with calculation power of six teraflops (or 4.5X that of the Xbox One and 40% more than the PS4 Neo according to reliable sources), eight cores, and 320Go/s in bandwidth for flash memory. **Even though it is presented as being a new console, in reality the machine is a boosted and improved version of the Xbox One** (a type of second-generation Xbox One), notably with an interface for compatibility with virtual reality games, capacity to handle ultra HD 4K video format (both via streaming with Netflix and via physical supports since the Blu-ray reader changes for a 4K model), access to more powerful, fluid and attractive games (HDR management is added for better graphics and brighter colours) and a new game controller (with a different covering, still dialoguing via infrared with the console but compatible via Bluetooth to work with PC's as well). Note that the console will be retro-compatible with the entire Xbox One games library and accessories.

We consider that by announcing the Xbox S, Microsoft has above all decided to rapidly close the gap that has emerged with Sony in the current generation (sales of the Xbox One have been virtually half of those of the PS4 since they were launched in 2013). **In contrast, the group was very clumsy in presenting its Project Scorpio so soon.** In our view, Microsoft is taking the huge risk of confusing potential consumers by announcing two new machines at the same time. Indeed, how will they convince a player to buy the Xbox One or the Xbox One S for the Christmas period this year whereas a third console, Project Scorpio, presented as being the "most powerful", is due to be launched next year?

Another announcement: the Xbox Play Anywhere. Here the aim is to be able to play a game both on a console (via Windows Experience on the Xbox One) and on a PC (via Windows 10), and to break the barrier between the two categories of players by enabling them to play together or against each other. The new controller, with its wireless connection making it compatible with a PC, is entirely relevant here. Fewer than 15 or so games are said to be compatible (this only works with digital copies). Finally, with a view to improving the Xbox Live experience, Microsoft has broadened social functions such as the creation of clubs (guilds) and the creation of a platform for creating e-sport tournaments (Arena) and communities. **In contrast, no mention was made of the Kinect** (neither new functions nor games) and **virtual reality was almost not mentioned.** Indeed, while the group presented its HoloLens (augmented reality glasses) at the E3 in 2015, there was no question of it this time round. As such, nothing can be expected in this field before Project Scorpio at end-2017.

In terms of games, Microsoft was less impressive. Although its line-up is extensive with more than eight exclusive games this year), it was not very surprising in itself (it was focused on already announced titles), with a still dominant share of shooting games which are struggling to stand out from one another. In particular, the group presented *Gears of War 4*, *Forza Horizon 3*, *Halo Wars 2*, *Forza Horizon 3*, *We Happy Few*, *State of Decay 2*, *Inside, Recore…*

3.2.2. Sony: focus on software and virtual reality

A few days before the opening of E3, Andrew House (CEO of Sony Interactive Entertainment) **confirmed rumours that a more powerful PS4 was being developed** but announced that it would not take part in the trade fair. This version has the codename Neo. Mr House indicated that it was not intended to replace the current PS4, which confirms that it is not a genuinely new console. The two consoles will be on sale for the whole of the current cycle and the Neo is to round out the PS4. We understand that the Neo will benefit from retro-compatibility, better graphics, a 4K resolution (instead of the standard 1,080p) and that it will be adapted to the PlayStation VR virtual reality headset. **No technical, price or launch date details were provided. Since the exhibition, rumours even suggest a possible presentation and launch at the end of the year.**

During the press conference at the E3, the console maker highlighted its PlayStation VR virtually reality headset, announcing that it would be available on **13th October for USD400**, and that 50 games would benefit from it by the end of the group's tax year. In contrast, it is difficult to know at this stage how many of these will be truly adapted games and not just simple virtual reality experiences. The games *Farpoint*, *Batman Arkham VR*, *Resident Evil Biohazard*, *Star Wars Battlefront X-Wing VR Mission* et de *Final Fantasy XV* were mentioned in particular.

Contrary to Microsoft, Sony presented concrete items on the current console, whether in terms of its virtual reality headset or games available. Here again, it stood out from its US rival by presenting a **convincing line-up with a genuine depth and awaited titles.** In particular, it presented a new *God of War*, *Horizon Zero Dawn, Days Gone*, *The Last Guardian*, *Detroit Become Human*, *Spiderman PS4, Death Stranding*… However, very few launch dates were provided, thereby leaving doubts as to the year in which the games presented would be launched.

3.2.3. Match results: Sony beats Microsoft again

Microsoft is increasingly aiming to position its console as a living room entertainment and games hub as was indeed the initial aim of its Xbox One. The group intends to offer open access to all of the games in its ecosystem, whether on its console or on PC. Its aim is clear, namely to make the console as accessible as possible to consumers (more entertainment functions on its machine, an affordable price and exclusivities). **That said, its message was confusing with a joint announcement of two future machines** (the Xbox One S and the Project Scorpio) **and a lack of aggressiveness and originality on the games sides, with virtual and augmented reality almost ignored.**

Sony, meanwhile favoured efficiency by making an effort to present concrete factors rather than future promises. Indeed, the group presented contents for its current console, which has the largest installed base (already more than 40m consoles sold). The same goes for virtual reality, which should be accessible as of this year on the PS4, with the launch of the PlayStation VR headset in mid-October. In short, the group managed to seduce gamers with convincing "wow-effect" games. **It is also set to present its bumped-up Neo console, again, once it is finished with a sufficient portfolio of games for launch** (contrary to Microsoft's Project Scorpio, which has been unveiled too early in our view).

4. Our sector scenario

4.1. Our view of the current situation

We expect four major publishers to win the market in 2016 (Activision Blizzard, EA, Ubisoft and Take-Two Interactive) **but with a larger number of launches.** The last quarter is set to see a build-up of AAA games, and especially multiplayer FPS (first person shooting games). As of next year, the number of new brands should start to become more rare (a natural move as the cycle advances) **with a slight increase in development costs** (in the first years of a cycle, the simple fact of having games available helps sell them, but then publishers are obliged to spend more on development to exploit functionalities more and machine innovations) **and marketing costs** (low marketing at the start of the cycle since the first adopters are already aware, and then an opening to casual players via virtual reality requiring more advertising). **For console makers, Sony is in the lead, followed by Microsoft,** whereas **Nintendo is lagging well behind** (the Wii U is struggling to find an audience, bearing in mind that only household games are selling for this machine). In mid-June, we estimate global console sales (sell-through i.e. sales to consumers) at around **41m for the PS4, slightly more than 21m for the Xbox One and just 13m for the Wii U** (although it was launched a year prior to its rivals).

In 2017, all the console makers will have new products. **Nintendo is to stake everything on the launch of its new console, the NX, in March.** We believe this is the group's last chance to avoid a fate like that of Sega (i.e. a console maker relegated to being a simple game publisher). Indeed, after the success of the Wii, the manufacturer has clocked up failure after failure both for its living room consoles and handheld consoles. We estimate that Nintendo has made the reasonable choice of waiting until it has a sufficient line-up and the backing of third-party publishers before launching its NX. Ubisoft notably provided its back-up on the fringes of E3 by estimating that it could be a way of winning back the Wii audience (which has left the sector or moved into mobile games). At this stage, we have no information on the new machine, which was not unveiled at E3. That said, **several rumours that we consider credible speak of a hybrid machine, mid-way between a living room console and a portable console.** In addition, in recent years, we have noted that mobile games (especially since the arrival of smartphones and then tablets) have killed off the portable console market. Console makers have ended up integrating this fact themselves (the PS4 and Xbox One are compatible with tablets, and Nintendo has placed a native tablet on its Wii U). As such, we expect no real new portable consoles in the future.

Concerning the mobile game segment, **while publishers have begun to take an interest in this segment in recent years** (especially Japanese publishers), **we have noted an acceleration recently** (both on the part of specialists and more generalist groups with Nintendo the last to open up to it). We could mention in particular the acquisition of King Digital by Activision Blizzard, Gameloft by Vivendi and a majority stake in Supercell by Tencent (the largest operation in the video games industry at USD8.6bn for 84.3% of the capital). Competition is therefore set to intensify (if console makers put their least well qualified developers on the subject since mobile games are now an integral part of their online strategies), **and since the majority of games are free-to-play, publishers should not neglect the marketing dimension in this segment** (to be present in the top 100 and improving monetisation of the games).

4.2. A 2013/20e cycle with a peak in 2018

In the video games sector, Asia is the main market with more than 40%e market share ahead of North America (30%e), Europe/Africa (25%e) and South America (5%e). Since the Asian market is very specific and in the hands of local players, the main listed games publishers are very exposed to it (although this could change since, after 13 years of suspension, China has temporarily authorised console sales since January 2014). **As such, the US market is most representative of the western market (accounting for 50%e) and sets the first trends that arrive in Europe a few months later.** The most reliable data for this region is that from NPD Group. Note however that the institute only publishes in-store sales in the industry in the US and therefore only represents a fraction of the industry (slightly more than 50% of sales in this region and 40% in Europe).

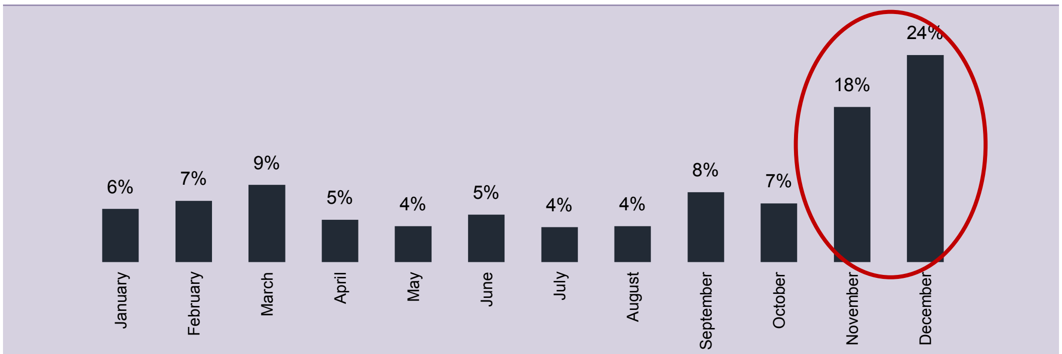
Since the beginning of the year, packaged video game sales have dropped 3% relative to last year in the US. Clearly, physical sales are not set to return to double-digit growth rates seen in the past. Indeed, **like music, the video games industry has witnessed a clear fundamental trend towards dematerialisation** (both digital distribution and microtransactions in games via the sale of digital contents).

Fig. 8: Growth in packaged video game sales in the US over 2000/2016 (in value)

%	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
January	2	16	4	0	18	0	-5	53	12	10	-12	-5	-38	1	-25	6	-10
February	5	-11	45	-5	5	13	-12	32	48	9	-15	-5	-23	-36	-9	7	-10
March	20	-15	33	8	-6	31	-8	16	64	-17	10	-16	-25	-1	-27	-3	8
April	27	-13	11	39	-3	9	16	-1	69	-22	-22	26	-42	-17	-10	13	-21
May	4	10	31	20	-17	30	-10	33	42	-17	4	-19	-32	-31	57	-25	18
June	4	23	27	-9	12	2	15	22	61	-29	-15	-12	-29	-10	-3	21	
July	-1	26	11	4	27	-10	19	11	41	-26	-8	-17	-23	-19	-15	0	
August	-12	18	43	4	1	0	18	23	13	-15	-14	-34	-9	23	-21	-10	
September	-26	-8	50	-10	44	-24	29	47	-6	5	-6	3	-18	52	-36	-3	
October	13	-20	74	-15	35	-24	1	40	36	-18	6	3	-25	12	-27	-3	
November	1	28	7	7	11	-17	14	63	11	-3	3	11	-11	-24	-1	-7	
December	-9	24	7	13	-1	-3	6	37	15	-7	-8	-14	-26	-17	-2	-3	
Total	-1	10	21	5	8	-3	7	34	27	-10	-6	-6	-23	-9	-12	-2	

Sources: NPD Group; Bryan, Garnier & Co.

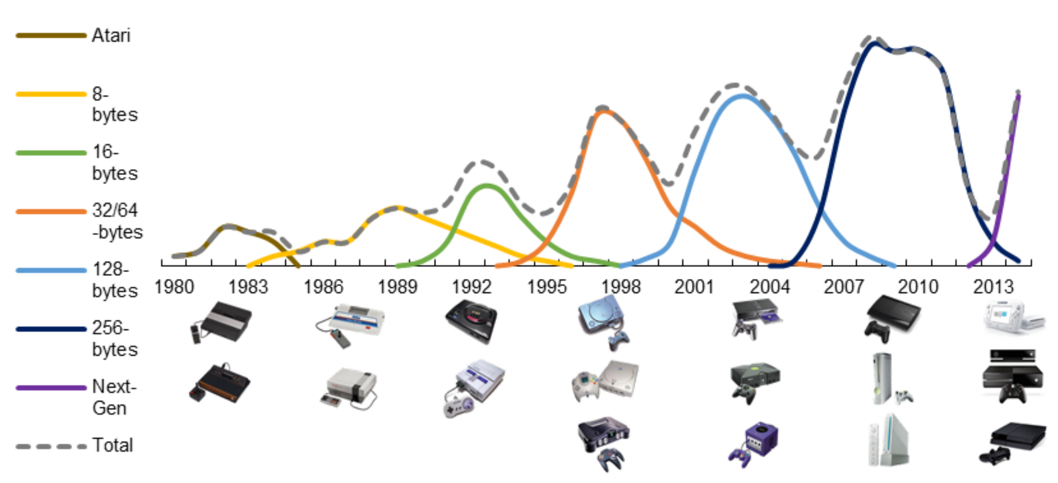
Fig. 9: Average monthly breakdown over 2009/15 of video games sales in the US



Sources: NPD Group; Bryan, Garnier & Co

We are now forecasting a 2013/20e console cycle (vs. 2013/2019 previously), **namely two years more than the traditional duration** (one year prompted by the entertainment functions included in the consoles and another year owing to the bumped-up console versions from Microsoft and Sony and the launch of the Nintendo NX in 2017). The previous cycle lasted eight years with no real updating in hardware, which is unlikely to be repeated this time. Indeed, video game sales plummeted since developers had exhausted the capacity of the consoles and could no longer innovate. **As such, we have pushed back our cycle peak forecast for hardware from 2017 to 2018 (and thus in 2019 for the software)**. This is the last year before an annual slowdown in hardware sales, even if the rising share of digital sales at players and virtual reality should help them cushion a large share of the down-phase before new platforms are launched.

Fig. 10: The different console sales cycles over 24 years



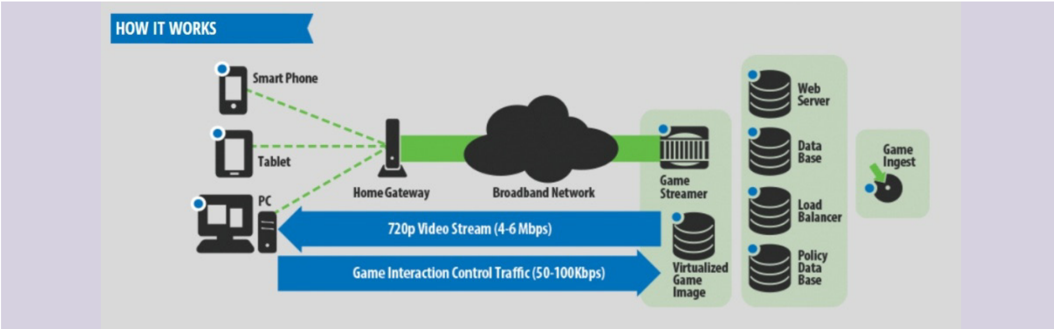
Sources: Games Investor Consulting; VGChartz; Bryan, Garnier & Co ests.

In all, we estimate that at the end of the cycle (2020), all of the major players should have more than 50% of their sales exposed to digital (MMO, online games, season pass/DLC, mobiles, micro-transactions…). Note that this segment is rapidly expanding (+20%e), is non-cyclical and carries higher margins than traditional packaged video games (30% better). This dematerialisation is notably driven by consoles that are increasingly connected (the Xbox One and PS4 were the first to genuinely focus on this) and leverage is harboured in digital content especially (almost only margins). We estimate that **digital will be the first factor to naturally improve profitability at publishers and enable them to generate additional cash to finance innovations of large budget multi-platform triple A games** (open world, virtual/augmented reality etc.).

4.1. What to expect beyond 2020e?

Concerning a more distant future, we consider that set-top boxes and online stores of manufacturers and publishers point to the **advent of a fully dematerialised industry, namely the cloud gaming era,** involving powerful video games running on remote servers (streaming technology). Users therefore no longer own the game and only need a screen (the machine's power is no longer important) and an excellent internet connection (fibre optic) to receive video and audio flows with an acceptable latency period. Cloud gaming should be seen as a video game on demand service like VOD (video on demand) on TV. **Each publisher's offer would be like a bouquet of channels to which the player could have access via a unit rental or subscription system.** In addition to making video games more democratic and very profitable, cloud gaming should be a way of highlighting publishers with quality contents. We consider this as a **fundamental trend**, **the roll-out of which will depend on political decisions associated with the availability of fibre optic for the widest number of people.** For this reason, a genuine offer of this type is unlikely to become really available before 2020e, at best.

Fig. 11: Cloud gaming scheme



Source: CiiNOW.

Fig. 12: Cloud gaming favours publishers and consumers

Positive for		Negative for	
Traditional publishers	**Consumers**	**Console makers**	**Retailers**
Steadier revenue streams and more profitability with no exposure to console cycles.	No need for powerful equipment.	End of consoles and accessories.	Elimination of packaged game, consoles and accessories sales.
Wider target audience. Lifetime of games extended. Higher percentage of sales kept (70% vs. 55% before).	Multiple platforms: Windows XP, Vista, or .Windows 7, on Mac OS X, iPhone, iPod Touch, tablets, TV.	End of royalties.	End of used game market.
Lifetime of games extended.	Game less expensive.		
End of exclusivity to one platform. Ability to make improvements in real time. Focus on quality. Saving of console makers' royalties (20% of selling price). Higher sales (no piracy and no used game market). Ability to analyse data statistics.	Broader game portfolios. No need to download or buy in stores.		

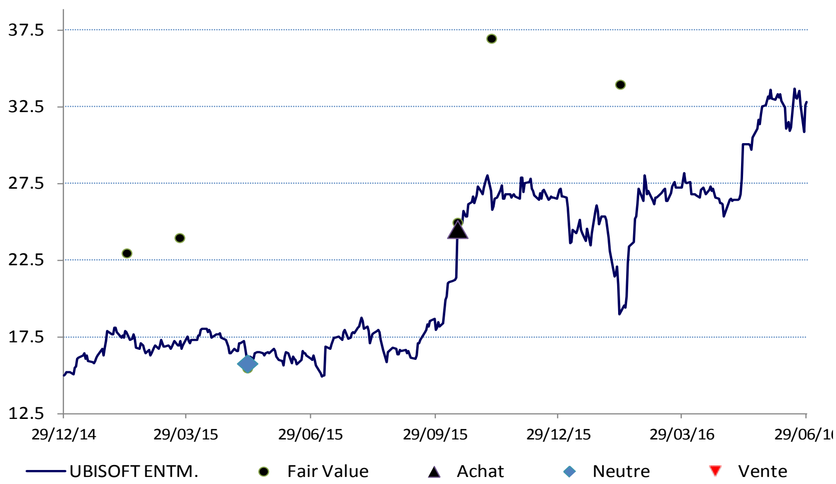
Source: Bryan Garnier & Co

Consequently, we see three possible scenarios for the period beyond 2020:

- a **new generation of consoles co-existing with cloud offers**,
- **current consoles lasting over time** (via remote updating, such that hardware no longer needs to be changed),
- no more consoles **but only cloud gaming offers** (subscriptions).

Price Chart and Rating History

Ubisoft



Ratings		
Date	**Ratings**	**Price**
15/10/15	BUY	EUR21.385
13/05/15	NEUTRAL	EUR15.8
09/09/14	BUY	EUR12.67

Target Price	
Date	**Target price**
12/02/16	EUR34
09/11/15	EUR37
15/10/15	EUR25
13/05/15	EUR15.5
24/03/15	EUR24
13/02/15	EUR23
09/09/14	EUR21

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Bryan Garnier stock rating system

For the purposes of this Report, the Bryan Garnier stock rating system is defined as follows:

Stock rating

BUY — Positive opinion for a stock where we expect a favourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential upside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

NEUTRAL — Opinion recommending not to trade in a stock short-term, neither as a BUYER or a SELLER, due to a specific set of factors. This view is intended to be temporary. It may reflect different situations, but in particular those where a fair value shows no significant potential or where an upcoming binary event constitutes a high-risk that is difficult to quantify. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

SELL — Negative opinion for a stock where we expect an unfavourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential downside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

Distribution of stock ratings

BUY ratings 56.8%　　NEUTRAL ratings 33.8%　　SELL ratings 9.5%

Research Disclosure Legend

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14	Analyst disclosure	The analyst hereby certifies that neither the views expressed in the research, nor the timing of the publication of the research has been influenced by any knowledge of clients positions and that the views expressed in the report accurately reflect his/her personal views about the investment and issuer to which the report relates and that no part of his/her remuneration was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in the report.	Yes
15	Other disclosures	Other specific disclosures: Report sent to Issuer to verify factual accuracy (with the recommendation/rating, price target/spread and summary of conclusions removed).	No

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Please see the section headed "Important information" on the back page of this report.

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