Keywords Studios (LON: KWS)

SELL: £ 20.55

Equity Research Division 22st December 2020

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Basic Information*	
Last Closed Price	£ 27.90
12M Target Price	£ 20.55
+/- Potential	-46.79%
Bloomberg Ticker	KWS LN EQUITY
GICS Sector	Technology
GICS Sub-Industry	Software & Tech Services

12 Month Price Performance

Company Description

Keywords Studios Plc provides technical and consulting services to the video games industry as an external development partner. The company, founded in 1998 in Ireland, has since expanded its operation geographically across 21 countries and laterally with expertise in seven service lines.

Key Financials*	
Market Cap(GBP)	1.842 billion
Basic Shares O/S	73.963 million
52-Wk High	£27.50
52-Wk Low	£11.60

mln (EUR)	FY18A	FY19A	FY20E	FY21E
Gross profit	95.908	120.229	137.907	141.522
YoY growth	73.92%	25.36%	14.70%	2.62%
EBITDA	34.873	44.004	63.022	75.704
EBITDA margin	13.9%	13.5%	17.27%	18.55%
Net income	14.903	9.909	35.886	47.004
EBIT	22.685	21.542	47.322	59.604

(*) Share price and market cap. in GBP (London Stock Exchange); financials in EUR (Irish reporting entity).

We are initiating coverage of Keywords Studios PLC with a SELL rating and a £ 20.55 12M target price.

2020HY Earning Highlights

- 8.0% Organic Revenue growth (H1 2019: 17.3%) supported by growth across all lines
- Robust liquidity position with net cash of €101.0m (H1 2019: net debt €9.0m)
- New shares placing in May 2020 which raised net proceeds of €110m
- Completed 3 acquisitions since placing
- Adjusted EPS of 25.25

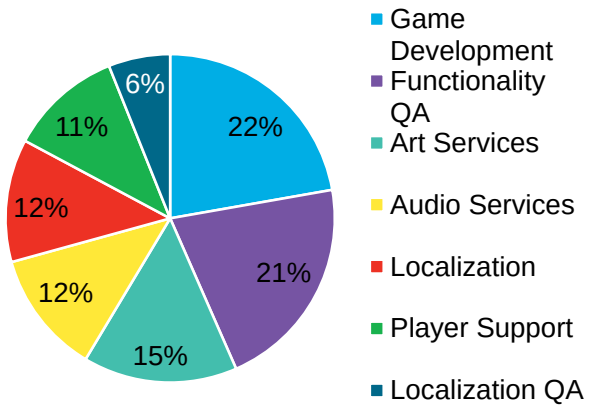
SUMMARY

Keywords Studios is the leading player in the games service sector within the video games industry. Over the past decade, the industry as a whole has been expanding at double-digit growth rates, fueled by the explosive growth of mobile devices and rapid hardware developments. Even before the pandemic, player engagement has been on the rise due to the socialization of gaming. Continued industry headwinds will have knock-on growth effect for Keywords' serviceable market.

Keywords' organic growth has been augmented by its active M&A strategy. Both growth pillars have produced impressive expansions in both top and bottom line, as well as the actual service lines, making Keywords the largest player in its highly fragmented sector.

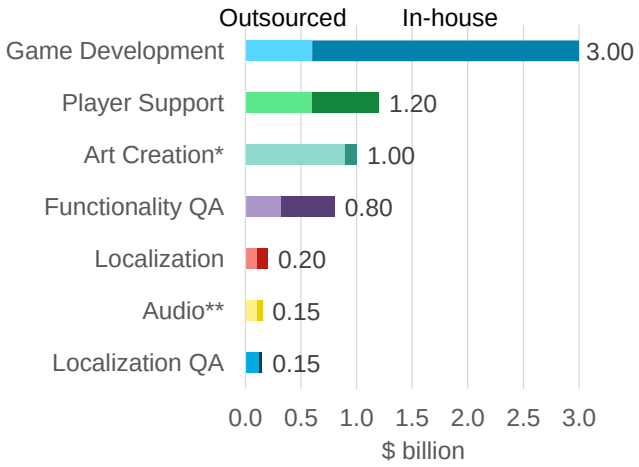
Overall, Keywords operates a highly scalable business model with a dominant industry position and stellar financial performance. High expectations have produced an incredible run on the stock market, with the stock rising 75% over the past year. We now view such expectations as too unrealistic without any further aggressive changes to the long-term strategy such as lateral expansion into a neighboring sector, or drastically increased leverage. A stock correction may be due within the next year.

Figure 1: Revenue breakdown by service line, HY2020



Source: Company reports

Figure 2: Market size and proportion of outsourcing, 2019



Source: Company reports. Note:
****Excludes Marketing Services***
*****Audio Localization only***

Company Overview

Keywords Studios Plc is an international technical and creative services provider to the global video games industry. By making acquisitions a key growth engine, Keywords has become the largest provider of outsourced services in a highly fragmented sector. Its client base includes 23 of the world's top 25 most prominent game companies in revenue terms. The company is headquartered in Dublin, listed in London, and serves clients from its 60+ Studios across 21 countries.

The Studios are currently organized around seven main service lines, serving the entire game development cycle:

- *Art Services*: creation of graphical art assets for video games, and marketing services
- *Game Development*: external development services for game developers and publishers
- *Audio Services*: multi language voice-over, original language voice recording, music, sound design and accessibility
- *Functionality Quality Assurance (QA)*: discovery and documentation of defects, compatibility testing, etc.
- *Localization*: translation of in-game text, audio scripts, cultural and local adaptation, packaging and marketing materials
- *Localization QA*: identification of out of context translations, truncations, overlaps, spelling, grammar, aggregating and cultural issues
- *Player support*: customer care services

Keywords' revenue consists of fixed fees for the services rendered to its clients, who retain full intellectual property rights of the games. The company does not participate in revenue-share agreements based on the success, or otherwise, of the titles it has worked on.

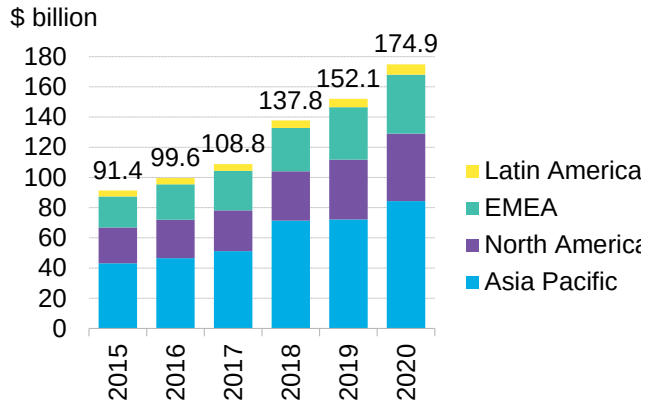
Industry Outlook

According to latest estimates from Newzoo, a games market research house, the global video games industry, bolstered by increased demand resulting from the coronavirus lockdown, will reach $174.9 billion in total revenues in 2020. Over the next three years, it will grow at a CAGR of 7.6% to $217.9 billion. With the lockdown expected to provide only transitory revenue boosts, this growth rests of such long-term drivers as proliferation of mobile devices, streaming platforms, social media, and advances in gaming technology such as augmented and virtual reality.

Keywords specializes in the service provider segment of this industry, whose size is estimated by company management at a much smaller $6.5 billion

as of 2019 (Figure 2). This market remains nascent and highly fragmented. Despite retaining a dominant market share, Keywords' revenue of £ 326.5 million in 2019 accounts for only a small part of its addressable market, with the remainder coming from local, single-service studios with limited scale. The demand side, however, is much more consolidated. The bulk of the games development segment is shared between a handful of leading publishers, such as Tencent, Nintendo, and Electronic Arts.

Figure 3: Games industry market size by region



Source: Newzoo, Statista

Given the aforementioned state of the market, it can be characterized as follows:

- *High threat of new entrants*: barriers to entry are still quite low given fragmentation, capital requirements are low due to the creative nature of the sector. Instead, talent retention is key.
- *High bargaining power of buyers & Low bargaining power of suppliers*: the size mismatch between clients and service providers is significant; options available to clients are abundant, switching costs are low since the sector is project-based.
- *Low threat of substitutes*: The most credible threat of substitute to the outsourcing model is in-house development. Yet even giant game developers like Sony and Microsoft outsource sizeable chunks of their workflows.
- *High internal rivalry*: low level of consolidation, large number of small, niche players. One-stop shop players, the likes of Keywords, are rare. Clients still deal with dozens of these small vendors to cover various aspects of a single game project.

Market trends

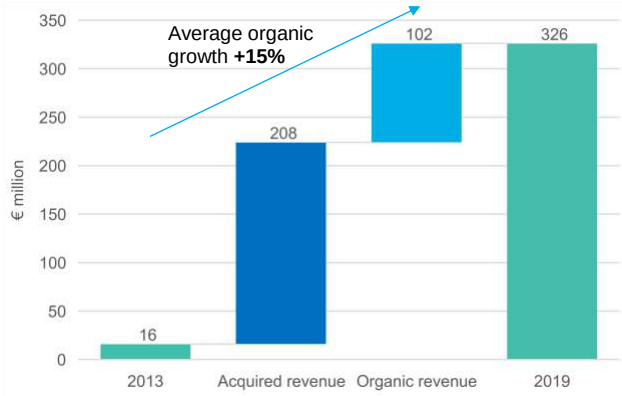
Notwithstanding, as the sector matures, most of the above characteristics will gravitate towards the opposite end of the spectrum. The following market trends are expected to expedite the transition.

Games as a service (GaaS) – GaaS is a continuing revenue model that enables publishers to monetize their games after the initial release by incrementally adding new contents. As a clear step away from the one-off hit-or-miss nature of game development, it can alter the power dynamic between clients and service providers by deepening their relationships and increasing switching costs. GaaS is expected to incentivize vendors to expand their service offerings, possibly via consolidation. Another crucial aspect of GaaS is that it allows on-demand streaming of games from the hosting company's servers to the player's device. By circumventing the need for costly high-end gaming hardware, it enables a wider range of players to access technically demanding games, while negating piracy concerns.

Increased reliance on outsourcing – Over the long run, economics provide a powerful argument for outsourcing. It offers game developers cost and time effectiveness, staffing flexibility, and in-depth expertise as they avoid expanding in-house teams for short-term projects. Historically, the key deterrent to outsourcing has been the complexity of dealing with too many vendors simultaneously. With consolidation, such concern will become less relevant, and the resulting higher reliance on outsourcing should in turn spur higher preference for vendors with broader service portfolios. As such, the threat of substitutes is expected to remain low.

Increased technical complexity of games – AAA-scale titles such as Grand Theft Auto V cost hundreds of millions of dollars in total and required a large number of technically competent vendors. For such a complex project, developers prefer one-stop shop solutions, not only for synergistic benefits but also to protect IP rights. They also value a proven track record, which will also skew the selection process towards larger-scale, more experienced vendors.
Generally, the market has trended favorably for Keywords and, vice versa, the company has positioned itself well to preempt these trends. Since its IPO on the London Stock Exchange in 2013, Keywords has adopted acquisitions as a key pillar of growth, though its organic growth remains impressive (Figure 4). After 47 acquisitions in seven years, this buy-to-grow strategy has diversified its service lines to enable cross-selling and increase customer loyalty. As a result, barriers of entry rise as it becomes increasingly difficult to replicate the breadth and depth Keywords' offerings.

Figure 4: Revenue breakdown by source, 2019



Source: Company reports

SWOT Analysis

Strengths

Customer Base – Keywords' customer base consists of mature blue chip companies that are loyal and well-diversified. No single client accounts for over 6.2% of its revenue in 2019. Clients' willingness to integrate with Keywords' team and technical solutions greatly enhances stickiness, making it hard to replace.

Scale – As the sole video game service provider of scale, a position attained after seven years of first-mover acquisitions, Keywords possesses a unique capacity to respond to large-scale flagship projects, while staying open to all types of client demand that would otherwise be untapped by niche vendors with limited scale and scope.

Resilience to the COVID-19 crisis – Historically, the gaming industry has weathered past recessions quite well. For Keywords, the crisis has had a limited impact in the first two quarters of 2020. All seven service lines, except for Localization, maintained positive growth. Localization, whose clients were disrupted by work from home transitions, eventually recovered in Q32020. As a whole, the company also successfully transitioned to work from home mode, shielding itself from any further worsening on the health crisis.

Weakness

Limited foothold in China – China is among the world's top 2 largest video game market revenue-wise (the other being the U.S) and is projected to outstrip the rest of the world in future growth. However, Keyword's operations in the country are still lagging those in the rest of the world in terms of growth. In 2019, four years after the first Chinese studio was opened, China still accounts for only 0.2% of Group revenue. This can be expected because China has a relatively mature art creation service line and houses the majority of world's outsourcing providers. Naturally, competition here is much stiffer.

Opportunities

Favorable conditions for continued acquisition-based growth – Given continued central bank support, Keywords can obtain affordable capital for its strong, high-quality acquisition pipeline. On the other hand, the economic downturn resulting from the pandemic has also increased the company's bargaining power, enabling it to acquire target on favorable terms.

Lateral expansion into related sectors – Keyword's CEO Andrew Day has hinted at possible forays into the entertainment industry by leveraging the Marketing Services sub-service line. A potential use case would be production of animated trailers for films. Gamification of content also represents an opportunity for Keywords to target such sectors as e-learning, e-retail, etc. The company maintains an open interest in acquisitions or joint ventures in these areas.

Emergence of e-sports – The rise of e-sports, whose top-tier events, such as the League of Legends World Championship, garner over 100 million views, is a growth catalyst for the entire industry. Such events also require extensive marketing support, which falls in the domain of Keywords' fast-growing Marketing Services arm.

Threats

Disruption of the outsourcing model – A key thesis for continued reliance on outsourcing is the labor-intensity of game development. Should advances in software tools boost productivity, the case for outsourcing will be on more shaky grounds. This may be especially true in emerging markets, where high-end games may remain cost-prohibitive for some time.

New entrants from non-game industries – just as Keywords' expertise may prove applicable in other non-game industries, there exists a potential opportunity for outsourced service providers in these sectors to enter the video game industry, challenging Keywords' leading position. Some examples of these potential challengers include localization companies such as Lionbridge Technologies and RWS Group.

Figure 5: Liquidity - Current Ratio

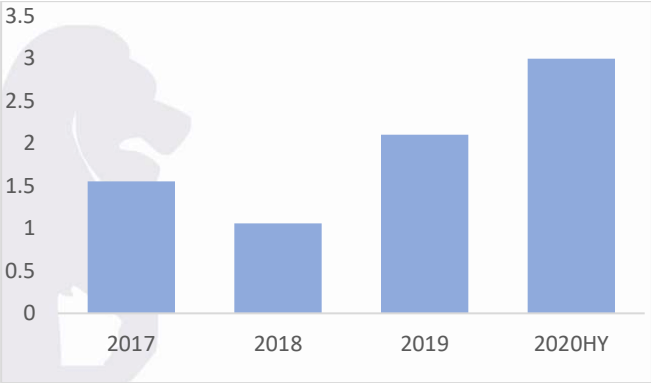


Figure 6: Solvency ratios

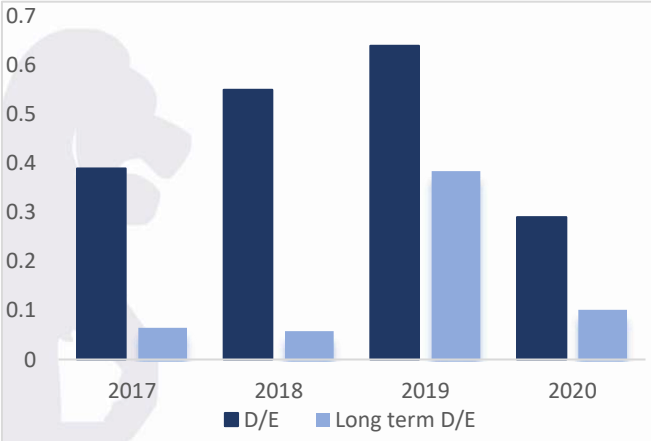
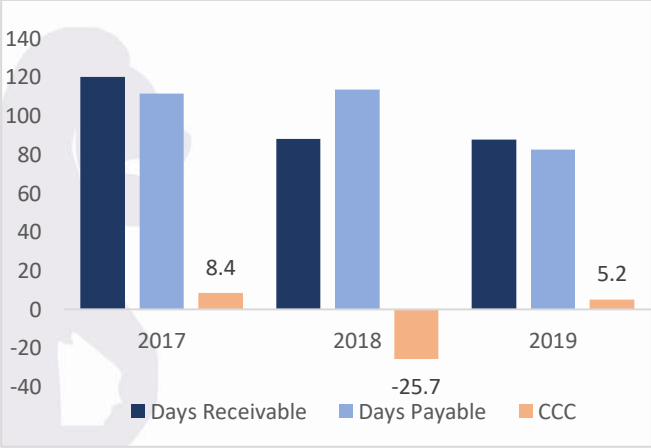


Table 1: Net Financial Position

€/000	2017	2018	2019	2020HY
Cash and equivalents	30,374	39,871	41,827	101,213
Short term debt	-18,943	-40,071	-7,821	-8,262
Long term debt	-337	-230	-73,837	-23,943
NFP	11,094	-430	-39,831	69,008

Figure 5: Cash Conversion Cycle



Financial Analysis

Keywords Studios PL is characterized by an extremely strong funding structure, with a very low degree of leverage. However, the company also shows a weak profitability, with both return on equity and return on assets significantly below the industry average. The financial statement analysis has been conducted computing ratios and other measures to assess liquidity, cash conversion cycle, solvency and profitability.

Liquidity

Liquidity analysis is usually conducted employed the two key-measures, quick ratio and acid test. In Keywords' case however, due to the IT-based activity as a game services provider, the difference between the two ratios loses its meaning. To assess the company liquidity, it is simply necessary to consider the current ratio (current assets/current liabilities) as the inventory is null. The ratio has particularly improved in the last four years apart from year 2018, when there has been a jump in current liabilities due to a significant rise in the amount of short-term loans. The overall trend of the ratio is still positive, and the better liquidity can be explained by increasing cash and equivalents and stable current liabilities.

Solvency

Keywords Studios PLC funding structure mainly consists of shareholders equity. In particular the debt-to-equity ratio (total liabilities/total shareholders' equity) has shown an increasing trend until 2019 with a significant reduction in 2020 interim results. The values, always below to 1.0x, confirm a solid funding structure for the company and low risk associated to financial leverage. The situation is even more if clear looking at the long-term D/E ratio which excludes from the computation company's current funding from its supplier and from deferred taxation, and whose values have been extremely close to 0 in the last four years. Even if total liabilities showed an increasing trend equity has grown even more steadily maintaining the ratio low. In particular, in May 2020, the Company completed a placing of 6.900.000 of new ordinary shares issued at a price of € 16.23 per share, representing approximately 10.5% of the issued share capital prior to the placing and - net of transaction costs - the placing raised approximately € 110mln, which have been credited to "Merger reserve" due to the particular nature of the operation (share for share exchange). Another key metric, the net financial position, also shows a solid value. The position has been negative in the last year while is positive for € 69mln as of 2020 interim results. The value includes from 2019 also lease liabilities disclosure, due to new IFRS 16 adoption.

Figure 8: Profitability Ratios

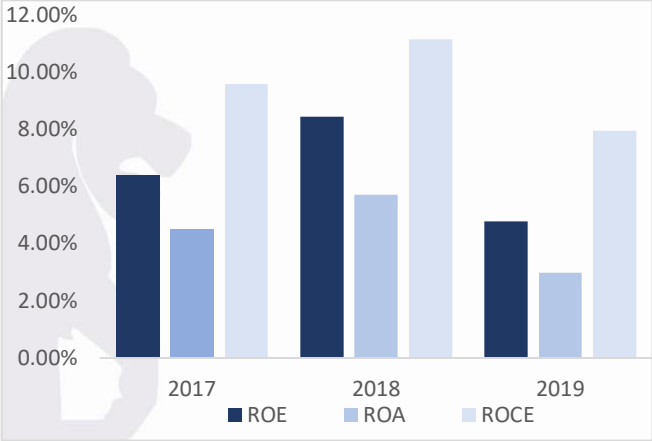
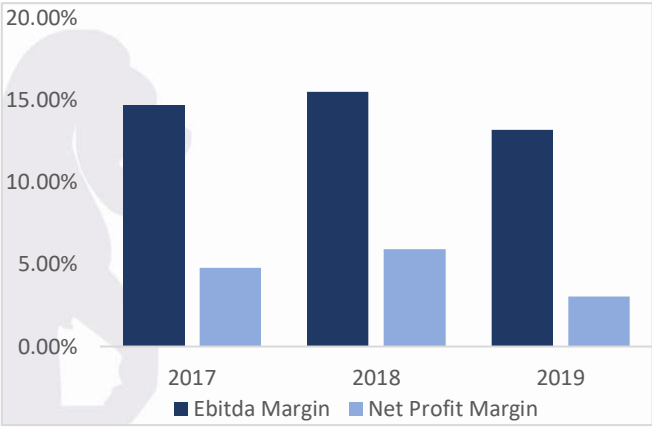


Table 2: DuPont Analysis

	2017	2018	2019
Net Profit Margin	0.05	0.06	0.03
Asset Turnover	1.36	0.96	0.98
Equity Multiplier	1.42	1.48	1.60
ROE	6.38%	8.43%	4.77%

Figure 9: Margins



In particular, the company recognized around € 21mln of lease liabilities (both short and long-term) at the end of 2019 and another € 14mln on new leases contracts as 30th June 2020. At the same time loans and other borrowings widely decreased due to € 64mln repayments made in the first half of 2020.

Cash Conversion Cycle

Due to the particular nature of the company as service provider, inventory is null. Consequently, the Cash Conversion Cycle is influenced only by days payables and days receivables and it shows a slightly positive value. This means that the company has a certain balance between incoming payments from clients and payments to suppliers.

To the positive CCC it is associated with a positive Net Working Capital (computed as the amount of accounts receivables net of accounts payable) confirms that the company is financing its clients more than it gets financed by its suppliers. With particular focus to revenue recognition and credit sales, for all service lines excluding Game Development, contracts do not extend to more than one year so there is no need of analysis about unsatisfied performance obligations.

Profitability

The company has shown a decreasing return on equity (ROE) from 9.02% of 2017 to 4.77% in 2019, which is significantly lower than the industry average and main competitors. As a result, also the return on assets (ROA) is particularly low and showed a decreasing trend during the last three full years.

An intuitive analysis of the low values and the decreasing trend can be made by decomposing ROE with DuPont analysis. In particular, one of the first explanations might be an extremely low Net profit Margin meaning that just a little percentage of revenues is turned into profits (e.g. 3% in 2019). With a deeper looking at the income statement it is possible to observe that, given an adequate gross profit, the relevant negative components are represented by administrative expenses, share option expenses, acquisition and integration costs and amortization of intangible assets. All these cost sources give as a result an operating profit which is six times lower than the gross profit. In addition, given stable contribution of the Equity Multiplier, ROE decreasing trend can be explained by the worsening of both Net profit Margin and Asset Turnover.

Both ROCE and EBITDA Margin have declined in 2019, compared to 2018 and, as for return on equity and return on assets, stand at lower levels compared to the industry ones.

Valuation

We have performed our analysis by following two main approaches:

1. An intrinsic valuation concerning the DCF model;
2. A relative valuation with market multiple of comparable companies;

DCF analysis

Free Cash Flow to Firm Approach

Among the indirect evaluation methods, we choose the DCF model, a quantitative method used to estimate the value of an investment based on its expected future cash flows. DCF analysis attempts to figure out the value of an investment today, based on projections of how much money it will generate in the future. This applies to both financial investments for investors and for business owners looking to make changes to their businesses, such as purchasing new equipment.

We computed the fair value of a stock irrespective of the prevailing market conditions by employing an asset side DCF, which takes into consideration the FCFF and the discount rate (WACC). If the value obtained from the DCF is lower than the current trading price of shares, then the stock is overvalued and qualifies for a sell, and vice versa. The obtained target price is £ 20.55 which, compared with the current value of the stock and considering also the previous qualitative analysis, resulted in a (SELL) recommendation.

WACC	5.39%
TV growth rate	2.26%
PV explicit forecast (€/000)	212,823
TV (€/000)	1,861,206
PV TV (€/000)	1,428,258
Enterprise Value (€/000)	1,641,081
NFP (€/000)	69,000
Equity Value (€/000)	1,710,081
N shares (in millions)	73,964
Share Target Price in EUR	23.12
Share Target Price in GBP	20.55

The Enterprise Value has been computed through an explicit FCFF forecast until 2024 plus the Terminal Value. More in details, we assumed a constant FCFF growth rate of 2.26% embedded in the TV after 2024.

The main assumptions and components used to compute the cost of equity are an essential part of our DCF model. For our computation we decided to use:

- **RISK FREE RATE**: we took the current 10 years German Bund yield (-0.53%)
- The **EQUITY RISK PREMIUM** (5.96%) which represent the premium an investor will have to receive to invest in the stock market instead of a risk free.
- The **BETA** (0.853) as the specific risk of a company

Beta Computation

Beta coefficient of the security indicates the portion of the security return that is explained by the return of the market portfolio. It is the systematic risk of the security considered. In order to compute the Beta of the company, we decided to use the market model. It measures the relationship between the return of the security and the return of the market (market index) in a given period (estimation window).

We put in comparison the security's return with those of FTSE, which was considered the Market Index. In doing so, we applied, as required by the model, an OLS regression between the streams of returns of the stock and market index. We considered 2 different return's frequencies and estimation windows:

- 2 year-weekly
- 2 year-daily

To assess the most reliable and significant regression we considered the regression line with higher Adjusted R2. This factor measures how much of the security returns (dependent variable Y) is explained by movements of the independent variable X (the market index), in terms of variance. In other words, higher values of Adjusted R2, the more the variance of stock returns is captured by the market variability of stocks' returns.

Cost of equity

For its calculation, we will use the Capital Asset Pricing Model (CAPM), a theory that is based on stock's volatility and level of risk compared to the general market. Therefore, we can assume that that the expected cost of capital **Re** or expected rate of return $\boldsymbol{E(rF)}$ for company is:

$$k_{eF} = E(r_F) = r_f + \beta_{Fm} \times [\, E(r_m) - r_f]$$

Where rf is the expected return of a risk-free asset, $E(rm) - rf$ the market risk premium, and βFm is the sensitivity Keywords shares to the systematic market risk.

Due to the extremely low level of leverage of Keywords, the impact of the cost of debt on WACC was negligible and, as a consequence, FCFF and TV have been discounted employing a weighted average cost of capital equal to the cost of equity.

Market Multiples Approach

We have excluded from our analysis several competitors because their core business is different from our target company's one and their size does not allow us to make a reliable peer analysis; such a decision is based on the observation that, in the majority of cases, their offer is limited to a specific segment of products. Furthermore, we decided to mention a company specialized in localization (RWS Holding Plc) in order to make specific comparisons for this source of revenue.

The peers selected have been the following: Silicon Studio Corporation, Tose Co Ltd (both focused on game outsourcing); Frontier Development Plc, Bandai Namco (both focused on self-published games and outsourced products) and RWS Holding Plc.

	ROA	ROE	EBIT	EPS
Keywords	2.98%	4.77%	4.41%	0.19
Silicon studio	0.35%	0.65%	0.54%	0.02
Tose	3.21%	3.81%	3.64%	0.24
Frontier Developments	13.55%	18.60%	15.35%	0.44
Bandai Namco Holdings	8.63%	12.15%	11.58%	2.01
RWS Holdings	7.97%	11.63%	9.13%	0.18

The mean and the median of the table above exclude Keywords from the calculation, in order to provide a better summary measure of the pull of peers found.

Description of the selected comparables

Silicon Studio Corporation is a remarkable game outsourcing company with its headquarters situated in Japan. It develops games according to the client's specifications as well as search engines like YEBIS, a platform designed by Silicon Studio for 3D computer games. Year on year, Silicon Studio had revenues fall by -8.17%, although the company grew net income from a loss of £ 715.17M to a gain of £ 157.00M. Another thing worth mentioning is that Silicon Studio appears to have a strong balance sheet with enough cash in the capital structure to pay down 100% of the liabilities.

Tose Co Ltd is one of the most experienced game outsourcing companies with about 30 years of game development and functionality QA. Over the years, it has developed more than 1100 games for different platforms in various stages of game development. Some of the reputable companies that have partnered with Tose include Walt Disney Japan, Nintendo, Konami, Gamepot and Cyberfront. In the last year, Tose had net income fall by -9.06%. Despite rising revenues, an increase in the cost of goods sold as a percentage of sales was the main component in the falling net income.

Frontier Developments Plc is engaged in developing non-game applications and video games for the entertainment sector. The Company's segments include self-published and external publishers. Its games are developed using its COBRA cross-platform technology, allowing code and resources developed on personal computers to be compiled and run on XBox360, PlayStation, iPhone operating system (iOS) and Nintendo WiiU. Year on year, Frontier's revenues fell by -15.14%. This, along with an increase in selling, general and administrative costs, has contributed to a reduction in net income of -11.65%.

Bandai Namco Holdings Inc. uses distinctive system features to produce a variety of games for several consoles. For instance, they developed long-running series' videogames such as Naruto Shippuden, Dragon Ball, and Mobile Suit Gundam. The company can count on the needs of a wider audience. Consequently, Bandai Namco has an advertising section used to organize concerts and events to help your product meet the right audience. In 2019, Bandai Namco's net income fell by -9.02% despite its relatively flat revenues. Although cash reserves fell by £140M, the company used £190M in investing activities and also paid £280M in financing cash flows.

RWS Holding Plc is a British company which offers translation and localization, intellectual property support solutions and life sciences language services. Year on year RWS Holdings PLC grew revenues 16.22% from £343,09M to £398,65M, while net income improved by 59.75%. Moreover, in 2019, RWS increased its cash reserves by 23.11%. The company earned £70.36M from its operations for a Cash Flow Margin of 19.78%. The main industries covered by the firm are automotive, banking & finance, media & entertainment and e-commerce.

Methodologies and results

We have performed a market multiples approach analysis to check the results obtained through the DCF. First of all, we took the market multiples of the comparables previously mentioned.

We used equity side and asset side multiples to assure a double check on our results.

On the one hand, as for the equity side, we decided to consider the P/E ratio (one of the most diffused tools to determine the relative value of a company's shares) and the P/Book ratio in order to compare peers' market capitalizations to their book values.

On the other hand, regarding the asset side, we selected EV/Sales, EV/EBITDA and EV/EBIT to observe simultaneously both the market appreciation of companies' franchising power and

market appreciation of different capital, focusing on the revenues-costs structure.

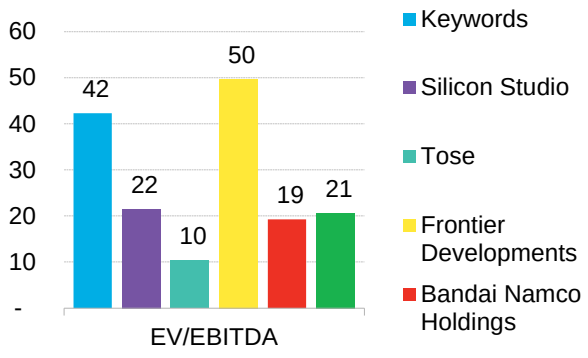
In the following tables we reported the results of our computations, based on 2019 financials:

	EV/Sales	EV/EBITDA	EV/EBIT
Keywords	5.58	42.34	70.30
Silicon studio	0.69	21.58	63.12
Tose	0.83	10.37	12.94
Frontier Developments	11.98	49.70	54.86
Bandai Namco Holdings	2.75	19.24	24.88
RWS Holdings	4.53	20.68	26.04

	P/B	P/E
Keywords	789.38	124.88
Silicon studio	2.52	479.16
Tose	1.11	29.17
Frontier Developments	963.44	60.78
Bandai Namco Holdings	4.50	37.62
RWS Holdings	397.42	36.37

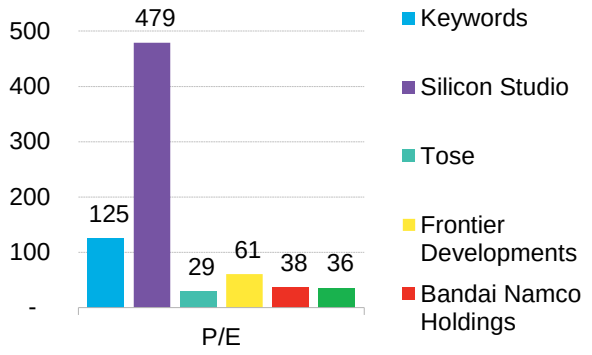
Asset side multiples indicate that Keywords' main strength is the sustainable costs and expenses structure (as shown by an EV/EBITDA above the average) which does not take into account financing decisions or fiscal issues.

Figure 10: Asset-side ratios



While equity side multiples show that Keywords' stock price, compared to earnings per share, is slightly higher than the average. Moreover, it appears to be thinly capitalized (as shown by the P/B ratio analysis).

Figure 11: Price-earnings ratio



Investment Risks

Acquisitions and Integration risks – Keywords considers acquisitions an integral part of its short- to medium-term growth. With such reliance on acquisitions naturally the risk of failed integration of newly acquired ventures, both culturally and operationally. These failures, if any, will reduce any synergistic cost savings and delay benefits from economies of scale.

Client concentration risk – Keywords' target market, the game publishing industry, is highly concentrated. While acquisitions in this space have generally slowed, Keywords still run the risk of overdependence on a small number of clients. Any breakdown is these key relationships would cause significant damage. The risk is accentuated by the potential for larger clients to shift from outsourcing to in-house teams.

Human resource risk – On a macro level, Keywords compete directly with tech giants for engineering talents. Moving forward, this competition will likely intensify and pose a risk to Keywords, given its dependence on human capital. On the sector level, formal education specifically targeted at the game industry remains limited, and it remains uncertain whether this will change in the future.

Appendix

Valuation

€/000	2020E	2021E	2022E	2023E	2024E
Revenue	364,986	408,054	456,204	510,036	570,221
EBITDA	**63,022**	**75,704**	**86,820**	**93,200**	**96,500**
% margin	*17.3%*	*18.6%*	*19.0%*	*18.3%*	*16.9%*
(-) D&A	15,700	16,100	16,650	17,141	17,647
EBIT	**47,322**	**59,604**	**70,170**	**76,059**	**78,853**
(-) interest expense	2,152	1,836	1,741	3,000	4,142
Pre-tax profit	**45,170**	**57,768**	**68,429**	**73,059**	**74,711**
% margin	*12.4%*	*14.2%*	*15.0%*	*14.3%*	*13.1%*
(-) tax expense	9,284	10,763	13,223	13,400	13,577
Net Income	**35,886**	**47,005**	**55,206**	**59,659**	**61,134**
% margin	*9.8%*	*11.5%*	*12.1%*	*11.7%*	*10.7%*

PBT	45,170	57,768	68,429	73,059	74,711
Estimated taxes (19% tax rate)	- 6,324	- 10,976	- 13,001	- 13,881	- 14,195
NOPAT	**38,846**	**46,792**	**55,427**	**59,178**	**60,516**
(+) D&A	15,700	16,100	16,650	17,141	17,647
(-) ΔNWC	- 5,168	- 5,778	- 6,460	- 7,222	- 8,074
(-) Capex	- 12,000	- 12,000	- 12,000	- 12,000	- 12,000
FCFF	**37,378**	**45,114**	**53,617**	**57,097**	**58,089**
Discount Factor	1.05	1.11	1.17	1.23	1.30
Discounted FCFF	**35,400**	**40,622**	**45,813**	**46,294**	**44,693**

DCF	212,823
$gFCFF_{TV}$	2.26%
TV	1,861,206
Discounted TV	1,428,258
Enterprise Value	**1,641,081**
NFP	69,000
Equity Value	**1,710,081**
Shares outstanding (mln)	73,964
Equity Value per share (EUR)	**23.12**
Avg. 1 Year EUR:GBP	0.89
Equity Value per share (GBP)	**20.55**

Assumptions	
Tax rate	19.0%
ERP	5.96%
Beta	0.853
Cost of Equity	5.39%
Cost of Debt	2.62%
WACC	5.39%

Income statement

€/000	2016	2017	2018	2019
Revenue	**96,585**	**151,430**	**250,805**	**326,463**
Cost of revenue	-59,907	-96,345	-154,997	-206,234
Gross profit	**36,678**	**55,085**	**95,908**	**120,229**
Share option expense	-0.686	-1,426	-4,129	-9,775
Costs of acquisition and integration	-1,316	-3,016	-5,296	-4,348
Amortization of intangible assets	-1,629	-3,038	-6,872	-7,318
Other administration expense	-21,588	-31,170	-56,826	-77,246
Operating profit	**11,459**	**16,435**	**22,685**	**21,542**
Interest expense	-2,118	-4,467	-1,316	-4,245
Interest income	0.094	0.026	0.791	0.074
Other income/(expense)	-	-	-0.066	-
Profit before tax	**9,435**	**11,994**	**22,094**	**17,731**
Income tax expense	-3,223	-4,731	-7,191	-7,462
Net income	**6.212**	**7,263**	**14,903**	**9,909**

Balance sheet

€/000	2016	2017	2018	2019
ASSETS				
Cash and cash equivalents	17,020	30,374	39,871	41.827
Trade receivables	13,879	27,473	37,019	43.243
Other receivables	7,778	22,335	23,459	35.413
Total current assets	**38,677**	**80,182**	**100,349**	**120.483**
Property, plant and equipment	5,498	10,111	15,002	22,163
Right of use assets	-	-	-	21,469
Goodwill	46,799	108,062	154,202	175,639
Intangible assets	8,696	23,548	25,884	21,130
Investment in associate	-	-	0.160	-
Deferred tax assets	0.880	1,206	2,967	5,060
Total non-current assets	**61,873**	**142,927**	**198,215**	**245,461**
Total assets	**100,550**	**223,109**	**298,564**	**365,944**
LIABILITIES				
Trade payables	4,822	7,310	7,142	8,027
Other payables	12,431	22,179	41,153	38,712
Loans and borrowings	8,025	18,943	40,071	0.080
Corporate tax liabilities	2,552	3,245	6,665	2,732
Lease liabilities	-	-	-	7,741
Total current liabilities	**27,830**	**51,677**	**95,031**	**57,292**
Other payables	1,592	1,233	1,062	0.285
Employee defined benefit plans	0.826	1,055	1,378	2,049
Loans and borrowings	0.345	0.337	0.230	59,671
Deferred tax liabilities	3,253	7,795	8,488	9,523
Lease liabilities	-	-	-	14,166
Total non-current liabilities	**6,016**	**10,420**	**11,158**	**85,694**
Total liabilities	**33,846**	**62,097**	**106,189**	**142,986**
SHAREHOLDERS' EQUITY				
Share capital	0.654	0.737	0.763	0.780
Share capital – to be issued	8,792	11,620	15,648	5,310
Share premium	19,983	102,054	102,225	102,979
Merger reserve	22,109	28,878	35,996	50,451
Foreign exchange reserve	0.987	-3,504	-1,463	5,764
Shares held in Employee Benefit Trust ("EBT")	-1,434	-1,997	-1,997	-1,997
Share option reserve	1,305	2,545	6,674	16,449
Retained earnings	14,308	20,679	34,529	43,187
Non-controlling interest	-	-	-	0.035
Total equity	**66,704**	**161,012**	**192,375**	**222,958**
Total equity and liabilities	**100,550**	**223,109**	**298,564**	**365,944**

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