



This article on the gaming sector is a mix between some personal thoughts and experiences of the author, and insights into an analytical framework. It also looks at whether the industry is sustainable and responsible.

Video games

Just addictive or is there more to it?

Children should be forced to play video games one to two hours per day at school. This sounds like an outrageous statement from a video games addict, but this is actually a recent proposition coming from a postdoctoral researcher at the Belgian university KU Leuven. In this article we shed some light on the world of video games, we discuss whether the gaming sector is a good place to put your money and whether it should be excluded from an ESG (Environmental, Social and Governance) perspective. To be clear beforehand, we at DPAM do not invest in gambling in our sustainable portfolios and like to stress that there is a significant **difference between gambling and (video) gaming**.

In recent years we have had a **positive view on the gaming sector** as there have been some fundamental changes the market still hasn't fully grasped yet. Firstly, the view that game developers are inherently hit-or-miss business models with volatile earnings is becoming obsolete. Not only has the industry consolidated throughout the years, it has become less reliant on a few titles and many titles have a much longer earnings cycle. Secondly, digital sales significantly increase margins for game developers and this is even more positive relatively for console owners (Microsoft, Nintendo, Sony). Moreover, **a growing amount of revenues** is coming from in-game item purchases, again enabled by the move to digital platforms. If your best friend masters a certain game better than you, few can resist the temptation to buy a certain upgrade (e.g. a better sword) to challenge him. It should be straightforward that these in-game sales, along with increasingly popular digital subscriptions, come with very high margins. According to a recent article in the Financial Times, digital subscriptions and in-game purchases now account for as much as 70% of the global gaming market¹.

Finally, and this is still relatively unknown, there is a **huge opportunity** for eSports and advertisements. Imagine every city in your country, next to your well-known football team, has a team

that plays a particular video game. These players, as much as their football counterparts, are stars in their own right, making more money than most common hard working people. Weekly games against other teams are watched by thousands of fans. **Welcome to eSports**. This is exactly what Activision and Tencent have set up in recent months for their blockbuster games (Overwatch and League of Legends respectively). Overwatch teams have been sold for \$20m a piece and Tencent is looking to create a \$15bn eSports industry in the next five years (that's bigger than The North American theatrical box-office). *Nonsense* you might say? Well the world championship final of League of Legends had 43m viewers beating the NBA finals and most other big sports competition finals. Some of the few events still dwarfing the major eSports finals are the Superbowl and the UEFA Champion League Final. For now. Please find below a photograph taken at the 2014 (2016) League of Legends World Championship final in Seoul (Los Angeles) to illustrate the madness. The final prize pool reached \$6.7 million, triple the Tour de France prize pot. The winner took home more dollars than the singles champion of Wimbledon. And make no mistake: this game has filled stadiums in the U.S, Canada, Germany and all across the world. **The most popular League of Legends player worldwide**, codenamed Faker, can't set a foot in public in South Korea without being recognized and got an entire stadium in the U.S. to cheer for just going onstage. The BBC just announced they will bring four hours of live eSports coverage every weekend for the next six weeks. This follows an earlier announcement from Belgian Sports Eleven that it will broadcast six hours of live eSports weekly. Logically, the more viewers these games lure, the higher the advertising opportunities. To conclude, without even mentioning the ever increasing installed base of consoles and the humongous opportunity billions of smartphones are bringing, we can safely say the video games sector is a very interesting sector to look for investment opportunities.

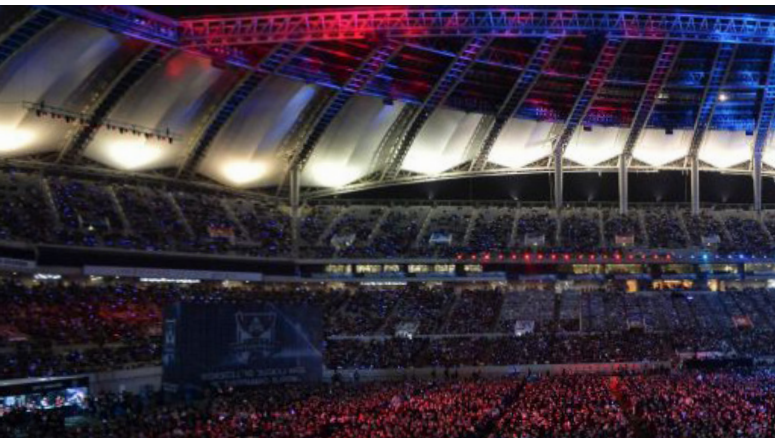


Image credit: Reddit

However, **are these companies going against DPAM's views from an ESG perspective and should we therefore ban these companies from our sustainable funds?** According to popular belief, the answer would be yes. Contributing to this belief is the massive media attention when mass killings like the notorious Columbine High School shooting are associated with youth playing violent video games. Parents around the world are increasingly worried when their children are spending more and more time playing games, seemingly completely isolated from the outside world. Consequently, playing video games has often been associated with violence, depression and addiction for a long time. As with many things in life, reality is much more nuanced and complicated than one might think. The *raison d'être* of active investors is to see through popular belief and to dig deeper to find opportunities.

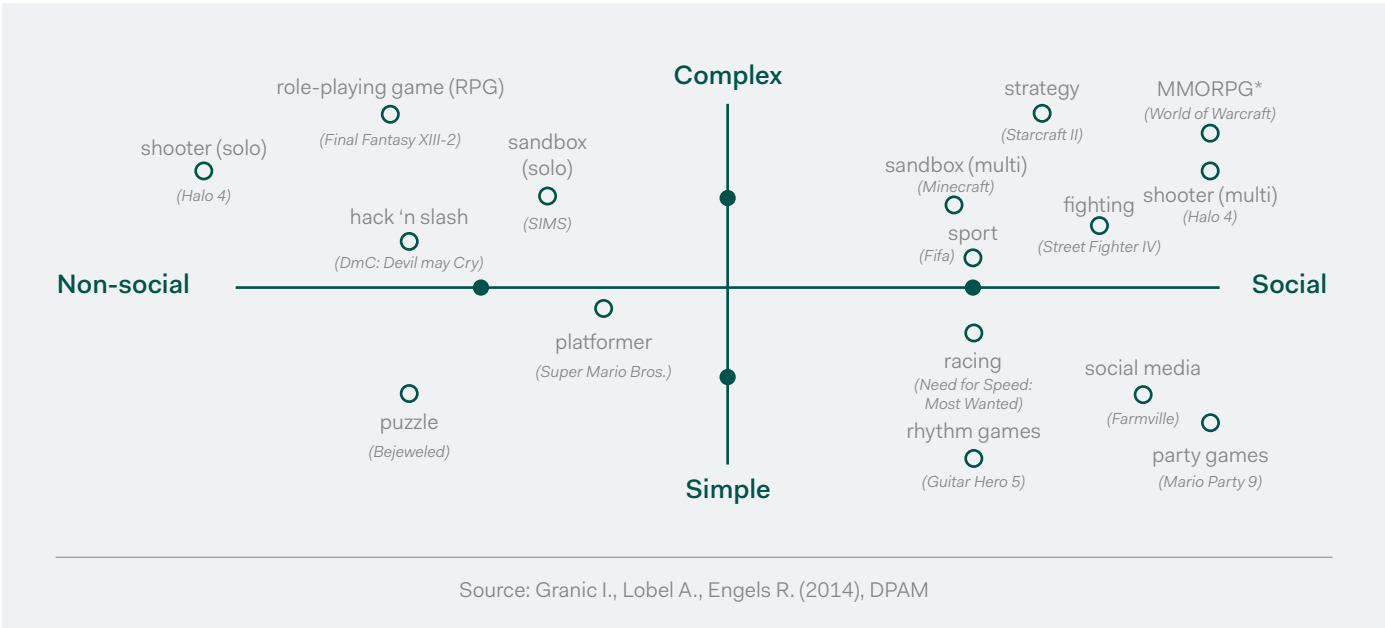
In the following chapter, we shall look into some academic research into the subject.

It must be stressed there is a **massive diversity in videogames** and therefore hard to jump to conclusions on video games. There are different genres of games, they can be played cooperatively or competitively, online or offline with friends or alone. As the picture below demonstrates, Granic, Lobel and Engels (2014) depict the genre

in two dimensions: the level of complexity and extent of social interaction. They also provide an overview of academic research and argue that a balanced perspective is needed on both positive and negative effects of gaming. Early academic research focused on the negative effects of gaming² but they argue games have changed dramatically over time, becoming increasingly complex, diverse, realistic and social in nature. Based on their findings, the authors suggest that video games provide youth with immersive and compelling social, cognitive and emotional experiences. In addition, these experiences might enhance mental health and well-being in children and adolescents. Among others, Tear & Nielsen (2013) suggest that even the most violent video games on the market fail to diminish subsequent prosocial behavior. A more recent study by Kovess-Masfety et al. (2016) has found that playing video games may have positive effects on young children.

Video game playing is often a collaborative leisure time activity for school-aged children. These results indicate that children who frequently play video games may be socially cohesive with peers and integrated into the school community. ”

To us, these positive results are no big surprise. For instance, we see strategic game Starcraft, one of the most popular online games of all times, as a very complex version of Chess, whereby one needs to think rapidly and five steps ahead. Minecraft, after Tetris the most sold game of all time, is a Lego-like game where players construct their own unique structures and sharing those with friends. However, yours truly understands the dangers of gaming, having played video games for up to 16 hours per day for many years (isolated, online games were in its infancy) as a teenager. But, maybe I should also be thanking Activision, Electronic Arts and the likes for getting my college degree?



On top of this, a team behind a new charitable foundation called The Near Future Society asked developers to embrace games as a tool for critical thinking,

an antidote to a cultural landscape in which fake news, bias and extremism are increasingly powerful force

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They see games as the largest provider of critical thinking education in the world. An example we like to highlight is the upcoming game Detroit from Sony Interactive, where any action you take has immediate consequences on the characters and world around you. Shooting defenseless opponents in wargames typically has few consequences, but in this game, things are different.

And finally, how does the industry address ESG (environmental, social, governance) challenges?

In sum, at DPAM we think the video game sector is an interesting sector to invest in from a fundamental perspective. From an ESG perspective we argue the sector should not be written off without looking at the full picture.

Research is still in its infancy but there are positive effects of gaming that should not be disregarded. We do acknowledge the dangers of video games, therefore we welcome game developers to proactively engage in socially responsible ways. To give but one example, Tencent, one of the largest positions in our sustainable funds, has imposed play time and spending limits for kids on a top-grossing game 'Honor of Kings'. But no matter what one thinks, gaming is set to become a bigger part of our lives and of our children's. **We think it is important to distinguish between gambling and gaming because they are often confused with each other or used as synonyms.** They are something different. Gambling is a controversial sector and hence excluded from DPAM's sustainable strategies. Gaming on the other side is rather new and has developed a set of different approaches like an educational or collaborative focus. Furthermore the gaming industry built a stable sustainable business model. Gaming is becoming a more and more integral part of daily life and will change certain habits as other technologies (e.g. the smartphone) did before.



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1 <https://www.ft.com/content/b53d239e-503a-11e7-a1f2-db19572361bb>

2 For example, two large-scale survey studies have found that 3% of Dutch (van Rooij, Schoenmakers, Vermulst, van den Eijnden, & van de Mheen, 2011) and about 8% of U.S. youth (Gentile, 2009) who play video games exhibit pathological symptoms of addiction (i.e., damage to family, school, or psychological functioning).

Granic I., Lobel A., Engels R. (2014). The benefits of playing video games. *American Psychologist* vol.69, no.1, 66-78

Kovess-Masfety et al. (2016) . Is time spent playing video games associated with mental health, cognitive and social skills in young children? *Social psychiatry and Psychiatric epidemiology*. March 2016, Volume 51, issue 3, pp349-357.

Tear M. J. & Nielsen M. (2013). Failure to demonstrate that playing violent video games diminishes prosocial behavior. *PLOS ONE*, 8, e68382. Doi:10.1371/journal.pone0068382 van Rooij, A. J., Schoenmakers, T. M., Vermulst, A. A., van den Eijnden, R. J. J. M., & van de Mheen, D. (2011). Online video game addiction: Identification of addicted adolescent gamers. *Addiction*, 106, 205–212.