RBC Global Asset Management

Screening the future of entertainment

The Emerging Markets Equity team

- As of 2019, 55% of global entertainment and media revenues were digital, this is expected to rise to 62% by 2023.
- We expect the growth of E-sport to prosper more in emerging markets versus developed economies due to the regional demographics.
- Our research ranks China and Taiwan as the top two countries based on attractiveness of their respective future entertainment industries.

Introduction

Every year the area of digital media and entertainment accounts for an ever greater part of revenues for the global entertainment and media industry. Digital revenues continue to grow in importance, driven by relatively new high-growth entertainment sectors such as electronic sports (E-sports), subscription-based audio, video services and virtual reality. Simultaneously, more traditional forms of entertainment (books, cinemas, magazines, newspapers and radio) have been decreasing in importance for the overall industry.

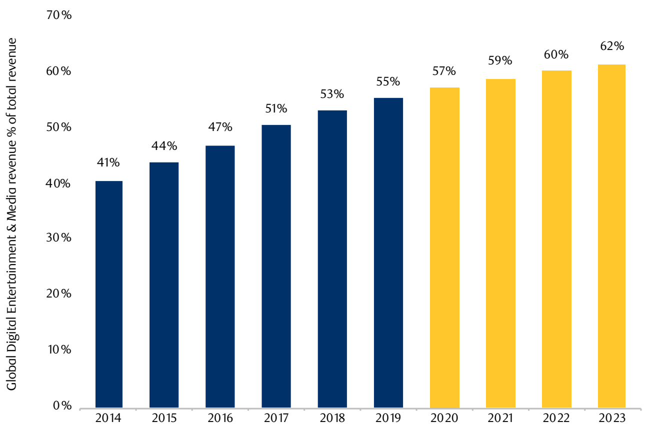
Technology has been an enabler for these new trends and we expect this to persist in the long term and to accelerate further following the COVID-19 pandemic. With the growing democratisation and penetration of smartphones and other electronic devices, consumers are increasingly able to access digital media content at anytime and anywhere.

Digital revenues on the rise

Spending on entertainment is shifting more towards digital platforms. As of 2019, 55% of global entertainment and media revenues were digital and this proportion is expected to continue to increase in future (Exhibit 1).

There has been a consistent shift in the consumption of entertainment, away from traditional entertainment and media platforms such as paper-based media and cinemas, to digital platforms, such as over-the-top (OTT) audio and video services and video games.[1]

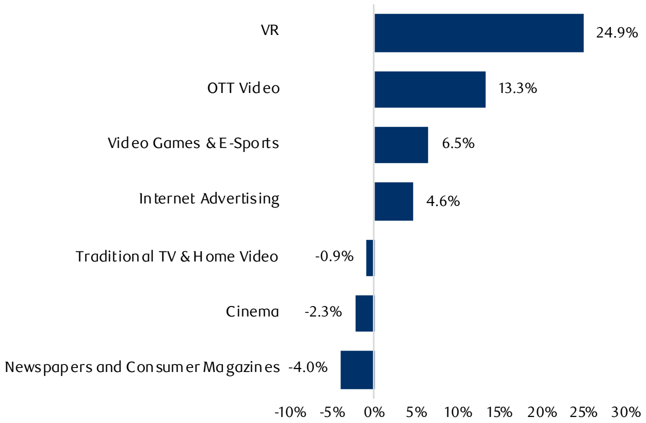
Exhibit 1: Proportion of digital revenues in global entertainment and media continues to rise



Source: PwC Global Entertainment & Media Outlook. Data as at December, 2019. NOTE: yellow highlights = expected figures (PwC estimates).

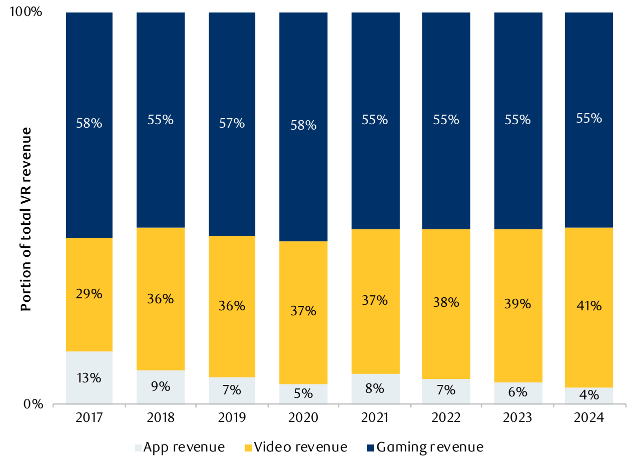
[1] Over-the-top (OTT) media services refers to media offered directly to consumers via the internet, as such bypassing cable, broadcast, and satellite platforms, the types of companies which traditionally act as controllers or distributors of such content. The term is most often used to describe subscription-based audio or video-on-demand services that offer access to content. OTT services are most often accessed via computers, smartphones or Smart TVs.

Exhibit 2: Expected compound annual revenue growth of segments in entertainment and media - 2019-2024



Source: PwC Global Entertainment & Media Outlook. Data as at December, 2019.

Exhibit 3: Gaming is responsible for the majority of VR revenue 2017-2024



Source: Global Entertainment & Media Outlook 2020-2024 PwC, Omdia. The industrial uses of VR are usually via specialised VR apps which explains the "App revenue" portion. Data as at December, 2020.

> "There has been a significant increase in the number of people viewing E-sports globally and in some cases it exceeds that of large traditional sports events."

Looking at the expected future growth rates for different types of entertainment and for media sectors, the areas with the highest expected annual growth rates all lie within the digital sphere. Over the period 2019 - 2024, virtual reality (VR), OTT services, internet advertising and video games & E-sports are expected to show the strongest growth while traditional methods (mentioned above) are expected to drop over the same period (Exhibit 2).

Virtual reality

VR is expected to be the fastest-growing area within entertainment and media in the next few years. VR is essentially a digitised reality where individuals are able to interact with a digital environment that could be either computer generated or captured by video. Interaction with the virtual environment is enabled through specialised hardware, usually in the form of "VR headsets" that the user has to wear.

VR technology is utilised across industries ranging from automotive to healthcare and education. For instance, companies in the automotive sector utilise VR in the vehicle development process and in the healthcare sector, professionals use VR to hone their skills prior to working on humans however the main area of revenue growth for VR is gaming. As such, over 50% of total revenue from the VR sector currently comes from gaming and this trend is likely to remain constant (Exhibit 3). We believe that gaming is currently the prevalent form of VR usage because of the uniquely immersive nature of the games where gamers are virtually active within the game itself. This enhances the overall gaming experience as opposed to engaging with games simply via a computer screen.

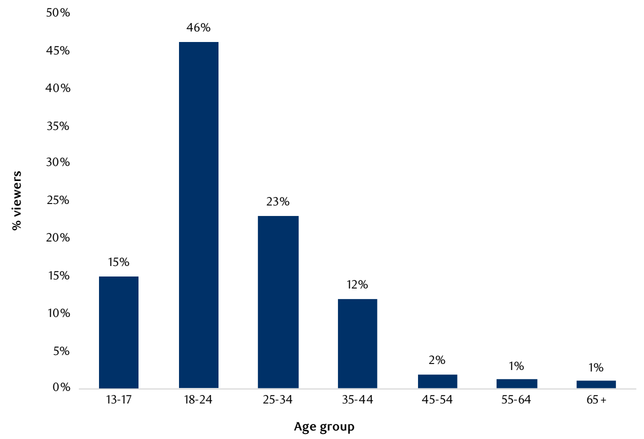
E-sports

One of the most promising growth areas within gaming, and indeed entertainment and media in general, is E-sports. E-sports refers to a genre of competitive and organised gaming that revolves around multi-player game franchises. The players of E-Sports games are watched and followed by millions of fans all over the world who attend live events or tune in on TV or online.

There has been a significant increase in the number of people viewing E-sports globally and in some cases it exceeds that of large traditional sports events. For instance, the number of viewers for the three biggest E-sports championship events was greater than for some of the most popular traditional sports events like the NBA Finals (basketball) and the Stanley Cup (ice hockey). The prize money for the biggest E-sports tournaments is also comparable to prize pools for the largest traditional sports tournaments. For example, The International 2019 E-sports tournament had a prize pool of roughly USD34m which is more than the prize money of the largest traditional sport events[2].

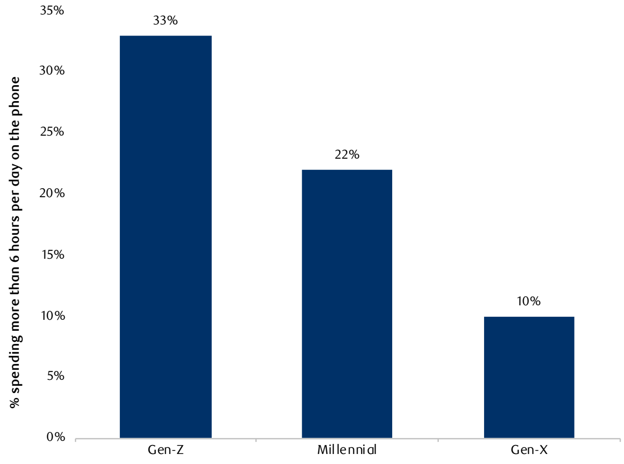
[2] Source: https://www.esportsearnings.com/tournaments, 2019.

Exhibit 4: More than 60% of e-sports viewers are under the age of 24



Source: Superdata Research, BofA Merrill Lynch Global Research. Data as at December, 2019.

Exhibit 5: Gen Zers spend 6 hours or more on their phones per day than Millennials and Gen X[4]



Source: McKinsey. Focused on the Asia Pacific region. Data as at June, 2020.

Generation Z are a key driver of E-sports growth
The growth of the E-sports industry has been driven by the so-called Generation Z (Gen Z).[3] According to BofA Merrill Lynch, more than 60% of E-sports viewers are under the age of 24 (Exhibit 4). We believe that the potential for E-sports-driven growth is greater in EM countries than in the developed world because the population in EM is younger and this bodes well for sustained long-term growth for the E-sports industry in the region.

An important characteristic of the Gen Z cohort is their affinity to technology. According to Pew Research, people in the Gen Z population have little or no memory of a world without internet and smartphones. The Gen Z group spends more of their time on mobile phones than other population cohorts (Exhibit 5). According to McKinsey research, in the Asia Pacific region, 33% of people in the Gen Z group spend six hours or longer a day on their mobile phones, which is considerably longer than other age groups. Because of their use of technology and strong following of E-sports, we think people in the Gen Z category will continue to be an important influence for future growth in E-sports and gaming.

Our research on the future of entertainment by country

We developed a country scorecard to assess the future opportunities and risks within the entertainment sector across emerging economies (Exhibit 6). The scorecard was based on three broad parameters:

1) Macro factors: the potential growth of entertainment by considering the absolute size of a country's Gen Z population and percentage rate of urbanisation.

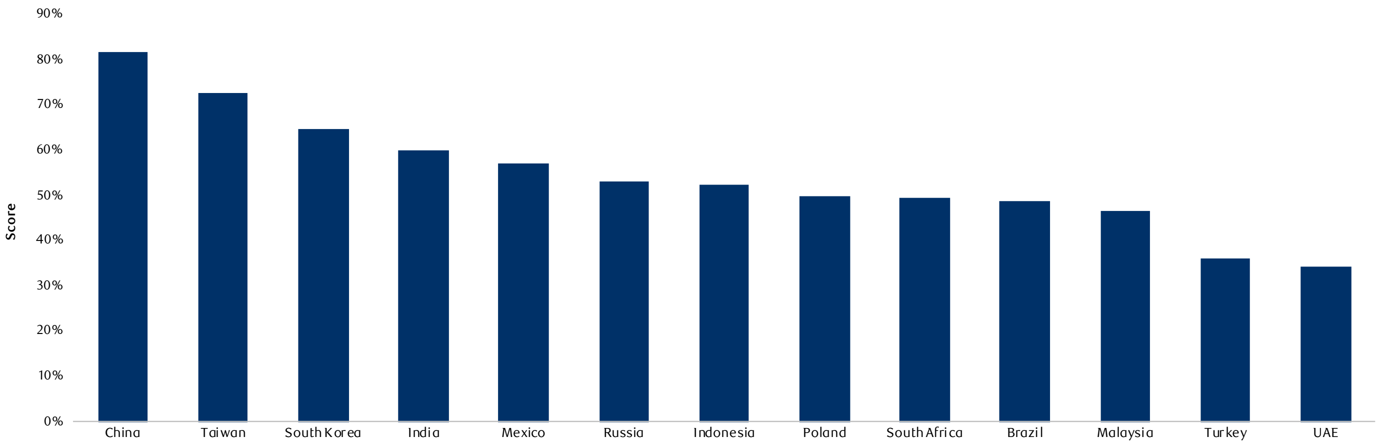
2) Digital connectivity and content consumption: the outlook for digital entertainment based on a country's broadband, smartphone and 5G penetration.

3) E-sports and gaming: the growth outlook for E-sports and gaming by comparing the value of a country's E-sports industry to GDP and the expected future growth rate of the mobile gaming sector.

Country highlights
China and Taiwan rank first and second in the scorecard in terms of the attractiveness of their respective future entertainment industries. According to UN DESA statistics, as of 2020 China has a particularly large Gen Z population compared with other EM countries, around 340m.[5] China

[3] Gen Z refers to those born between 1996 and 2015.
[4] Gen X refers to those born between 1965 and 1980 and Millennial refers to those born between 1981 and 1995.
[5] Source: UN DESA Population statistics, as of 2020.

Exhibit 6: Future of entertainment country scorecard



Source: RBC Global Asset Management, EM Future of Entertainment scorecard. Data as at September, 2020.

also has a relatively high urbanisation growth rate and a larger E-sports and gaming industry than other countries.[6] Although Taiwan's Gen Z population and urbanisation growth rate is lower than China's, the Taiwanese economy has a particularly high level of digital connectivity compared with other EM countries.[7] This is indicative of Taiwan's potential to capitalise on digital entertainment trends: for example, Taiwan has the highest smartphone penetration in EM at 97%.[8]

We have found that a number of companies in China benefit from the growth in E-sports, gaming and OTT audio and video. Tencent is exposed to popular franchises like League of Legends, Clash of Clans and Fortnite, through its stakes in a number of leading game developers. In addition, Tencent owns stakes in some major foreign video games publishers such as Activision Blizzard and Ubisoft that have published popular franchises such as Call of Duty and Assassin's Creed. Outside of gaming, the online video market is dominated by the big three internet companies: Alibaba with Youku, Baidu with iQiyi, and Tencent with Tencent Video. Finally, Tencent Music is the market-leading OTT audio streaming service in China.

India scores well as it has the highest population of Gen Z of all the EM countries, even larger than that of China.[9] We therefore believe that the potential for Gen Z-driven entertainment consumption is particularly high in India. India also has the highest expected urbanisation growth rate in the EM universe.[10] Despite its potential for large-scale entertainment consumption, India ranks third in our scorecard because its digital connectivity is inferior compared with that of China and Taiwan.[11]

Although South Korea's Gen Z population and urbanisation rates are lower than China's and India's, we think that South Korea has a lot of potential in the area of digital entertainment.[12] According to our analysis, South Korea is positioned particularly well to capitalise on the growth of E-sports and mobile games as it is where E-sports initially took off in EM. As such, South Korea has the largest E-sports value-to-GDP of all EM.[13] South Korea also has a high level of smartphone penetration (80%) and is expected to lead the way in 5G penetration among EM countries.[14]

We believe that South Korean gaming companies are well positioned to benefit from future growth in mobile gaming. Com2Us, Netmarble and NCSoft all have solid gaming franchises and a strong following from their respective gamers. It is also worth mentioning HYBE, formerly known as Big Hit Entertainment, which is the agency of the South Korean K-Pop band BTS as the company is benefitting from the growing popularity of K-Pop music globally.

6 High urbanisation growth rate: UN DESA Population Division - World Urbanization Prospects 2018 revision. 2019-2025 5 year CAGR calculated utilizing annual urban population data. China game revenue Euromonitor, WorldBank, CLSA, as of 2019.
7 RBC Global Asset Management, RBC Emerging Markets Equity team internal research.
8 Source: CLSA, as of 2019.
9 Data from UN DESA Population Division - World Population Prospects August 2019. 2020 population reference date as of 1 July 2020. Gen Z population (thousands) (population between ages 5-24)
10 UN DESA Population Division - World Urbanization Prospects 2018 revision. 2019-2025 5 year CAGR calculated utilizing annual urban population data
11 This is because India have a lower fixed broadband penetration, smartphone penetration and expected 5G penetration in 2025 than other countries in the scorecard. The sources behind this are: World Telecommunication/ICT Indicators Database) - 2019, CLSA and GSMA The Mobile Economy reports 2019/2020
12 RBC Global Asset Management, RBC Emerging Markets Equity team internal research.
13 So apparently this refers to gaming revenue as a % GDP which was used as a proxy to measure the size of the e-sports and gaming industry. We might need to change the wording slightly. Source is Euromonitor as of 2019.
14 Smartphone penetration: CLSA as of 2019. Expected 5G penetration in 2025: GSMA The Mobile Economy reports 2019/2020

Conclusion

The RBC Emerging Markets Equity team's thematic research helps inform our top-down investment positioning. In the case of the future of entertainment, it has highlighted both risks and opportunities for companies exposed to the strong industry trends. It has reinforced the structural opportunity within digital entertainment, especially within E-sports, gaming and subscription-based media services which we maintain exposure to in our portfolios. It has also highlighted risks to traditional media which is something to consider when analysing EM companies that are exposed to this area.

ABOUT THE AUTHORS

Christoffer Enemaerke, CFA

Portfolio Manager, Emerging Markets Equities
RBC Global Asset Management (UK) Limited

CFA (2016); MSc (Finance and Accounting) (2012), BSc (Business Administration and Economics) (2010), Copenhagen Business School, Denmark.

Christoffer is a Portfolio Manager on the RBC Emerging Markets Equity team at RBC GAM specializing in Korea and Malaysia. He started his career in 2012 at the investment management division of a Nordic-based financial services group in Copenhagen. In his role as a graduate trainee and research associate, he focused on bottom-up fundamental analysis of companies in the Asia ex-Japan universe.

We hope you enjoyed our research insights. For further information please visit the RBC Emerging Markets Equity Team page.

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