



An International Review of Financing For Video Game Companies



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About Interactive Ontario and Our Study Partners



Interactive Ontario

Interactive Ontario (IO) is the trade association that represents producers of video games and interactive digital media (IDM) in Ontario. We work hand-in-hand with all stakeholders to foster the economic and

creative growth of our sector. Our members produce and export video games, extended reality applications (VR, AR, MR), eLearning content, and other innovative interactive digital entertainment and edutainment applications.

Through advocacy, connections, insights, resources, programs, and building meaningful partnerships with other organizations, Interactive Ontario is dedicated to positioning Ontario as a leader on the world stage.

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Introduction

1. The Context

The video games industry has been described as the driving force of the digital revolution responsible for innovative content, products and business models. Canada is a global player in the industry and Canadian companies excel in creative and technological development. However, access to capital has been identified as a critical challenge.¹ Within this context, Communications MDR was retained to review public and private financing measures and opportunities that exist in international jurisdictions.

The goals of this study were twofold:

- Review and describe the financing ecosystems that support companies in other jurisdictions, including identification and description of the private and public financing mechanisms that companies have access to.
- Extract lessons that can be learned and potential innovations that could be applied or considered for the Canadian context to ensure a continued competitive financing landscape for Canadian companies.

2. Approach and Methodology

This study examined the following selected peer jurisdictions: the United Kingdom (UK), the United States (US), France, Germany, the Netherlands, the European Union (EU), the Nordic Region (Sweden, Finland, Denmark and Norway), Israel. To the extent that information was available, the study also included South Korea, Singapore and Japan. In approaching the study, the consultants employed a review of web-based literature and information on the selected jurisdictions, for which Annex 1 contains a selected bibliography. The consultants also conducted twenty-two key informant interviews with industry representatives, financiers and investors drawn from the selected jurisdictions. Annex 2 includes the list of interviewees.

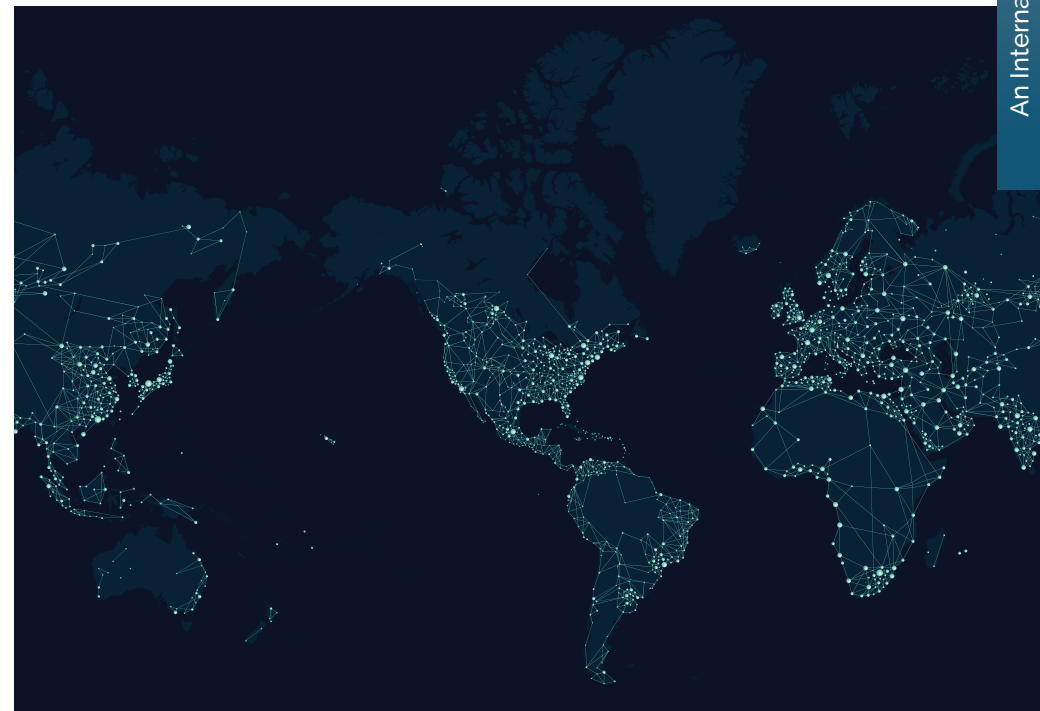
¹ Interactive Ontario, *Measuring Success: The Impact of the Interactive Digital Media Sector in Ontario*, 2019.

3. Report Structure

This report is divided into eight sections:

- Section I provides an overview of key trends in the financing of video game companies;
- Sections II to VII present the findings for each of the jurisdictions examined; and
- Section VIII identifies lessons learned for the Canadian context.

A glossary is provided at the end of this report.



I. Key International Trends in the Financing of Video Games

1. The Big Picture: Growth Fueling Investment in the Video Game Sector

1.1 An Expanding Market, Mobile Phones and Social Media

The video games industry is experiencing a period of intense growth, fueled by significant global opportunities. In 2020, the global gaming market was expected to generate USD \$159.3B (CAD \$200.7B), growing at a rate of 9.3% year-over-year.² Some believe the sector will reach over USD \$189.3B (CAD \$237.9B) in 2021.³

“The video games industry is experiencing a period of intense growth, fueled by significant global opportunities.”

The global COVID-19 pandemic has accelerated growth of video game sales across all verticals as the market continues to expand. Global videogame revenue surged by 18% for mobile games in 2020, followed by a 16% year over year increase for console games. For their part, the markets for handheld gaming devices increased by 12% in 2020, while PC games increased by 13%.⁴ A fourth segment is emerging, representing new technologies, such as immersive games for virtual reality (VR) and augmented reality (AR) platforms, which increased by 11%, and games streaming, which saw 9% growth year-over-year in 2020.⁵

The factors that help explain this growth are an expanding, more diverse customer base amongst women and players in emerging economies and the growth of

game distribution platforms into virtual social spaces and entertainment venues.⁶ As has often been noted, the emergence of mobile phones and social media catapulted the games industry from a niche market of core players to a global, mass market. In the past decade virtual and social spaces have been a growing trend, as games platforms and ecosystems provide social hubs for player interaction.⁷

1.2 Games as a Service and the Free-to-Play Model

The games-as-a-service business model is attracting significant new investment. Whereas a decade ago games were largely boxed and sold as physical disks for consoles, today, many successful games are service-based. Games as a service, analogous to the software as a service (SaaS) business model, allows companies to monetize video games through a model of continuous revenues, increasingly based on a free-to-play launch followed by ongoing microtransactions or downloadable content (DLC).⁸

Developers deploy a continuous stream of new content intended to engage players over time. Data generated by user interaction provides a higher level of predictability on a game's commercial potential.

The free-to-play model has been said to be one of the most profitable types of video game models in the modern age. More than 85% of total video game industry revenue comes from free-to-play games⁹, driven by high demand for in-game items.¹⁰ It is interesting to note that some industry players are diversifying their portfolio, as the larger PC and Console games companies have seized on opportunities in the mobile games space.¹¹

2 New Zoo, *Global Games Market Report 2020, Light Version*, June 25, 2020.

3 New Zoo, *Games Esports and Mobile Trends to Watch in 2021*, industry whitepaper, 2021.

4 Statista, “Spending increase on video gaming worldwide in 2020, by category,” retrieved from <https://www.statista.com/statistics/1181455/spending-video-gaming-category/>.

5 Statista, “Spending increase on video gaming worldwide in 2020, by category,” retrieved from <https://www.statista.com/statistics/1181455/spending-video-gaming-category/>.

6 Wallace Witkowski, “Videogames are a bigger industry than voices and North American sports com-bined, thanks to the pandemic,” *Market Watch*, December 22, 2020.

7 *The Israeli Video Games Ecosystem: Converging Technologies, Emerging Opportunities*, Deloitte, 2018.

8 Mario Stefanidis, “The Rise of Gaming as a Service,” Blog entry, Roundhill Investments, October 30, 2020, retrieved from <https://www.roundhillinvestments.com/research/esports/the-rise-of-gaming-as-a-service>.

9 WePC, “Video Game Industry Statistics in 2020,” retrieved from www.wepc.com/news/video-game-statistics/.

10 Ilker Koksul, 2019, Op. Cit.

11 Activision Blizzard, “Activision Blizzard to acquire King Digital Entertainment for \$5.9 billion,” Press Release, November 2, 2015, retrieved from <https://investor.activision.com/news-releases/news-release-details/activision-blizzard-acquire-king-digital-entertainment-59>; Peter Adams, “EA buys Glu Mobile for \$2.4 B in Quest to quickly scale mobile games business,” *Marketing Dive*, February 11, 2021, retrieved from www.marketingdive.com/news/ea-buys-glu-mobile-for-24b-in-quest-to-quickly-scale-mobile-games-business/594892/.

1.3 Increasing Consolidation in the Video Games Sector

The video games sector is dominated by large, publicly traded companies. In recent years, consolidation in the sector has accelerated as the games industry – particularly mobile games – matures. In the past decade a growing number of large games companies have been making strategic investments in other games companies. Their significant acquisitions have the ultimate aim of building out the games ecosystem through portfolios of successful games companies.

The consolidation in the sector is also providing opportunities for smaller game studios. Companies with strong teams and games can continue with their development and growth after having been acquired. A number of larger strategic investors in Europe are based in Sweden, including Embracer Group (formerly THQ Nordic and Nordic Games Publishing – sixty companies), Stillfront Group (fifteen studios), EG7 Group (sixteen companies) and Modern Times Group (MTG – multiple acquisitions).¹² In terms of the largest buyers, Chinese technology company Tencent, the largest video games company in the world and owner of Supercell, Riot Games¹³, and Ontario-based Digital Extremes, spent 2020 deviating from its past acquisitions strategy to focus on smaller and earlier-stage companies, closing a number of deals outside China, in Japan, Norway, France, Germany and the UK.¹⁴ (See Figure 1.) The company owns TiMi Studio Group, which recently opened a new AAA studio in Montreal.¹⁵

The number of mergers and acquisitions (M&As) accelerated in 2020 and continued in 2021. Large publicly traded games companies such as Electronic Arts and Microsoft led with their respective acquisitions of other large games companies Codemasters and Zenimax, in deals reported in the billions of dollars.¹⁶ More recently, Microsoft announced its multi-billion deal to buy Activision Blizzard, while Take Two Interactive is acquiring Zynga in another deal worth billions of dollars.¹⁷ Other deals included Embracer Group's acquisition of Gearbox, and Tencent's purchase of Sumo and the sale of Glu to EA.¹⁸

1. The Big Picture: Growth Fueling Investment in the Video Game Sector¹⁷

INVESTOR	NUMBER OF DEALS	TOTAL DEAL VALUE (\$ MILLION)	INVESTMENT FOCUS
Tencent	38	USD \$4,000M (CAD \$5,000M)	Broad
Embracer	26	USD \$1,400M (CAD \$1,760M)	PC & Console, Mobile
Stillfront	6	USD \$1,160M (CAD \$1,460M)	Mobile
Zynga	3	USD \$2,270M (CAD \$2,850M)	Mobile
Microsoft	2	USD \$7,500M (CAD \$9,430M)	PC & Console
Electronic Arts	1	USD \$7,500M (CAD \$9,430M)	PC & Console
MTG	7	USD \$1,200M (CAD \$1,510M)	Esports, Mobile
AppLovin	4	USD \$536M (CAD \$673.7M)	Mobile
Kakao Games	6	USD \$500M (CAD \$628.5M)	PC & Console, Mobile
Enad Global 7 (EG7)	3	USD \$339M (CAD \$426.1M)	PC & Console, Mobile
Scopely	3	USD \$250M (CAD \$314.2M)	Mobile

¹² Stillfront corporate website: www.stillfront.com/en/; Sam Desatoff, "Embracer Group's games business grew by 31% last year," *GameDaily.biz*, May 20, 2020; Dean Takahashi, "Embracer Group acquires 12 game studios and a PR firm (updated)," *Venture Beat GamesBeat*, November 17, 2020; James Batchelor, Editor-in-Chief, "Embracer Group acquires 13 studios: Here's everything you need to know," *GamesIndustry.biz*, November 18, 2020; "Mobile gaming firm Big Blue Bubble to be acquired by Sweden's EG7," *London Inc*, August 27, 2020, retrieved from <https://londonincmagazine.ca/2020/08/27/big-blue-bubble-sold/>; EG7 Completes the Acquisition of Day-break Game Company, Press Release, Enad Global 7 AB (EG7), December 22, 2020, retrieved from <https://news.cision.com/enad-global-7-ab--publ-/r/eg7-completes-the-acquisition-of-daybreak-game-company.c3260721>; MTG acquires Hutch - a leading developer and publisher of mobile racing games, Press Release, MTG, December 8, 2020, retrieved from www.mtg.com/press-releases/mtg-acquires-hutch-a-leading-developer-and-publisher-of-mobile-racing-games/; Hanna Hoikkala and Anton Wilen, "Sweden Gaming Stocks Crowned Lockdown Winners, With More to Come," *Bloomberg*, December 21, 2020.

¹³ Jonathan Shieber, "Gaming companies are reportedly the next targets in the US government's potentially broader Tencent purge," *Tech Crunch*, September 18, 2020; Steven Messner, "Every game company that Tencent has invested in," *PC Gamer*, August 9, 2020.

¹⁴ James Batchelor, Editor-in-Chief, "Tencent made record number of games M&A deals in 2020," *GamesIndustry.biz*, January 22, 2021.

¹⁵ Danielle Partis, "Tencent's TiMi opens new studio in Montreal," *Games Industry Biz*, July 20th, 2021, retrieved from www.gamesindustry.biz/articles/2021-07-20-tencents-timi-opens-new-studio-in-montreal.

¹⁶ Romain Dillet, "EA to acquire Codemasters for \$1.2 billion," *Tech Crunch*, December 14, 2020; "Microsoft to acquire ZeniMax Media and its game publisher Bethesda Softworks," *Microsoft*, September 21, 2020, retrieved from <https://news.microsoft.com/2020/09/21/microsoft-to-acquire-zenimax-media-and-its-game-publisher-bethesda-softworks/>.

¹⁷ Aaron Weinman, "Here are Wall Street's top M&A predictions for the red-hot gaming space as rivals rush to compete with Microsoft's \$70 billion Activision Blizzard buy," *The Insider*, January 20, 2022.

¹⁸ Marie Dealessandri, "M&A activity reached \$85 bn value in 2021," *Games Industry Biz*, January 13, 2022.

“With more business angels and venture capitalists investing in game companies than ever before, game development studios today have unprecedented opportunities to access private capital to launch and grow their companies.”

2. Key Trends in the Financing of Video Game Companies

2.1. Greater Availability of Private Capital

With more business angels and venture capitalists investing in game companies than ever before, game development studios today have unprecedented opportunities to access private capital to launch and grow their companies.¹⁸ VCs and angel investors are now a critical component of a broader category of investors from which game developers seek financing.¹⁸ In 2020, private investment in the video game sector increased by 77% over 2019, to a total of USD \$13.2 B (CAD \$16.6B).¹⁹

According to interviewees, venture capitalists and individual investors were once hesitant to invest in video game companies because they did not feel qualified to judge the commercial potential of what they perceived to be “hits-driven businesses.” However, interest has grown for the video games sector on the part of traditional venture capitalists who normally invest in technology companies, fueled by a number of convergent and complementary factors: the worldwide expansion of markets for mobile, console and PC games, the global penetration of smart phones capable of supporting high end game experiences, and significantly increased revenue opportunities afforded by service based games, which can sustain their relationships with paying players over a long term.

Investors have also noted the resilience of the industry to economic shocks like the COVID-19 pandemic, as well as prominent initial public offerings (IPOs) at very high valuations.²⁰ One recent example is Israeli company Playtika, whose IPO earlier in 2021 had an initial valuation of USD \$11B (CAD \$13.8B).²¹ The strong growth in publicly traded video game companies is fueling interest.²² Disruption is also said to attract investor interest, such as the ongoing growth of new platforms and services, which provide additional opportunities to reach audiences.²³

VCs invest in game companies where there is a strong team and talent, and where there is a clear exit strategy for their investment, such as an acquisition of the

company by another, or an initial public offering (IPO).²⁴ Game companies that are more likely to get funding have a long-term, strategic approach to developing and publishing their games and growing their business. There is now a whole generation of new game startups that are regularly accessing private equity.²⁵

¹⁸ Jason Della Rocca, “Game Studio Funding: The Right Investor at the Right Stage,” Canadian Media Fund, February 21, 2019, retrieved from <https://trends.cmf-fmc.ca/game-studio-funding-the-right-investor-at-the-right-stage/>.

¹⁹ David Bloom, “Video Game Sector Scores Record \$13.2 Billion in 2020 Investments, M&A,” Forbes, February 4, 2021.

²⁰ Ari Levy, “How indie game makers turned Roblox into a \$30 billion company,” CNBC, March 9, 2021, retrieved from <https://www.cnbc.com/2021/03/09/roblox-ipo-how-game-developers-built-a-30-billion-platform.html>; Ari Levy, “Playtika poised to lead rush of gaming IPOs in 2021, fueled by mobile binge during pandemic,” CNBC, January 15, 2021, retrieved from <https://www.cnbc.com/2021/01/15/playtika-kicks-off-gaming-ipo-in-2021-followed-by-roblox-applovin.html>; David Bloom, 2021, Op. Cit.

²¹ Dean Takahashi, “Mobile game maker Playtika goes public at \$11 billion valuation,” Venture Beat GamesBeat, January 15, 2021.

²² Simon Carless, “Embracer, studio acquisitions and the ‘growth stock bubble’ 1 opinion,” Games In-dustry.biz, February 3, 2021.

²³ Danielle Partis, Editor, “PGC Digital: ‘Disruption is something that draws investor interest,’ says Transcend Fund’s Shanti Bergel,” Pocket Gamer.biz, November 12, 2020.

²⁴ Dean Takahashi, “Early-stage investors tackle the coronavirus’ effect on game investing,” Venture Beat GamesBeat, April 28, 2020.

²⁵ Danielle Partis, Editor, “PGC Digital: ‘Disruption is something that draws investor interest,’ says Transcend Fund’s Shanti Bergel,” Pocket Gamer.biz, November 12, 2020.

Figure 2:
25 Most Active VCs
Investing in Games
in 2020²⁶

INVESTOR	NUMBER OF DEALS	TOTAL DEAL VALUE (\$ MILLION)	NUMBER OF LEAD DEALS	FOCUS
Bitkraft Ventures	21	USD \$134.5M (CAD \$169.1M)	16	Seed, series A
Galaxy Interactive	19	USD \$124.1M (CAD \$156M)	12	Seed, series A
Andreessen Horowitz (a16z)	9	USD \$347.8M (CAD \$437.2M)	7	Series A +
Makers Fund	11	USD \$175.2M (CAD \$220M)	9	Seed, series A
London Venture Partners	8	USD \$43.5M (CAD \$54.7M)	6	Pre-seed, seed
Konvoy Ventures	10	USD \$43.5M (CAD \$54.7M)	6	Seed, series A
Play Ventures	16	USD \$45.7M (CAD \$57.4M)	6	Esports, Mobile
KKR	2	USD \$45.7M (CAD \$57.4M)	2	Series B +
March Gaming	4	USD \$44.5M (CAD \$55.9M)	3	Seed, series A
Sisu Game Ventures	11	USD \$128.5M (CAD \$161.5M)	5	Pre-seed, seed
VGames	9	USD \$14.5M (CAD \$18.2M)	5	Seed
Index Ventures	2	USD \$106M (CAD \$133.2M)	2	Series B +
Golden Ventures	4	USD \$39.5M (CAD \$49.7M)	2	Seed, series A
Serena Capital	4	USD \$11.8M (CAD \$14.8M)	4	Seed
1Up Ventures	7	USD \$28.4M (CAD \$35.7M)	2	Seed, series A
Altos Ventures	2	USD \$176M (CAD \$221.2M)	1	Series A +
General Catalyst	3	USD \$51.2M (CAD \$64.4M)	1	Series A +
Courtside VC	3	USD \$36M (CAD \$45.3M)	1	Seed, series A
EQT Ventures	2	USD \$13.3M (CAD \$16.7M)	2	Series A +
Initial Capital	4	USD \$15.9M (CAD \$20M)	2	Seed, series A
Transcend Fund	3	USD \$20M (CAD \$25.1M)	1	Seed
Lightspeed Venture Partners	2	USD \$1,780M (CAD \$2,240M)	1	Series A +
Bumble Ventures	2	USD \$3.2M (CAD \$4.02M)	2	Seed
Colopl Next	3	USD \$71 M (CAD \$89.2 M)	0	Seed, series A
Everblue Management	4	USD \$26 M (CAD \$32.7 M)	0	Seed, series A

²⁶ *Airtable*, retrieved from <https://airtable.com/shrYeGEeclthDV8F9/tblEe1nDgCXcDqDWI?backgroundColor=blue&viewControls=on>.

“The increasing number and size of VC funds dedicated to games are providing investment opportunities to video game companies at different stages of their growth, including very early stage investments such as pre-seed financing and even the incubation of new companies.”

2.2 Greater Number of Games-Focused Venture Capital Funds

Since 2014, industry veterans, whether drawn from the executive ranks of large publishers or former developer entrepreneurs, have accounted for about half of all private venture capital funding.²⁷ Dedicated games venture funds first were established about ten years ago, notably with London Venture Partners. In recent years their number has been increasing, and there are estimated to be twenty to thirty funds operating today that are either game-specific or have games within their general target.²⁸ Some reports indicate that 10% of investment in games is from games-focused VCs, with the balance invested by generalist VCs.²⁹

In the past two or three years, games-focused VCs have raised significant amounts of money for new video games investment funds, ranging from USD

\$25M (CAD \$31M) to over USD \$250M (CAD \$314M) per fund, thanks to growing interest from traditional VCs, large corporate investors and high net worth individuals. Games focused VCs now exist in the UK, Finland, Sweden, the US, Germany, Israel, Singapore and Japan. Some of the larger gaming companies have created their own VCs with an investment focus in video games, such as the Playtika Israel Fund,³⁰ and Russian games publisher My.Games' MGVC.³¹

Figure 3: Games Focused VC Funds and Their Volumes³⁶

FUND NAME	VOLUME (\$)
Galaxy Interactive	USD \$260M (CAD \$327M)
Griffin Gaming Partners	USD \$235M (CAD \$295M)
Makers Fund	USD \$200M (CAD \$251M)
Bitkraft Ventures	USD \$183.5M (CAD \$231M)
Hiro Capital	USD \$150M (CAD \$189M)
London Venture Partners	USD \$138M (CAD \$174M)
MGVC	USD \$100M (CAD \$126M)
March Gaming	USD \$60M (CAD \$75M)
Konvoy Ventures	USD \$60M (CAD \$75M)
VGames	USD \$60M (CAD \$75M)
Transcend Fund	USD \$50M (CAD \$63M)
Play Ventures	USD \$40M (CAD \$50M)

Some VC games funds have a more regional focus, such as VGames, which aims to invest in companies based in Israel and Eastern Europe. Some Nordic funds have a focus on Nordic game companies. However, increasingly, video games investment funds are expanding their focus to include companies³² from around the globe.

The increasing number and size of VC funds dedicated to games are providing investment opportunities to video game companies at different stages of their growth, including very early stage investments such as pre-seed financing and even the incubation of new companies. Recently, the San Francisco-based Transcend Fund raised USD \$50M (CAD \$63M) to invest in early-stage game companies. Six pillars driving its investments are: technology, scale, speed, audience, platform and interaction.³³

As shown in Figure 3, the largest games-focused VCs have over USD \$1.5B under management.³⁴ The three largest funds are US-based Galaxy Interactive (USD \$260M – CAD \$327M), Griffin Gaming Partners (USD \$235M – CAD \$295M) and Makers Fund of Singapore (USD \$200M – CAD \$251.4M). Bitkraft Ventures, which has USD \$183.5M (CAD \$230M) under management recently announced that it is raising USD \$200M (CAD \$251M) for a second fund and a further USD \$100M (CAD \$125.7M) for an additional, opportunity fund.³⁵

According to investors interviewed in other jurisdictions, the bulk of financing rounds remain clustered around the seed and early stages, though there is evidence of a maturing sector in terms of mega rounds and exits. Figure 4 highlights examples of high profile Seed, Series A and Series B rounds in the sector in the last two years.

²⁷ Funding data is based on all financing rounds over \$20M since 2014, which covers over 80% of the sector's total deal value. Source: White Star Capital, *Mapping the Gaming Esports VC Landscape*, July 6, 2020, retrieved from <https://medium.com/venture-beyond/mapping-the-gaming-and-esports-vc-landscape-eca062502dca>.

²⁸ Dean Takahashi, "Game investments in Q2 2020: Fewer deals, but bigger value at \$7.8 billion," *Ven-ture Beat GamesBeat*, July 16, 2020.

²⁹ Dean Takahashi, "Games One: Here's the top 15 venture capital funds that invest in games," *Ven-ture Beat GamesBeat*, February 21, 2021.

³⁰ Yasmin Yablonko, "Playtika sets up \$400M Israel investment fund," *Globes*, January 29, 2018.

³¹ "MGVC enters top-10 gaming venture funds list," *Press Release, My Games*, February 19, 2021, retrieved from <https://my.games/en/news/101>

³² Dean Takahashi, July 16, 2020, *Op. Cit.*

³³ Danielle Partis, November 12, 2020, *Op. Cit.*

³⁴ Dean Takahashi, February 17, 2021, *Op. Cit.*

³⁵ Dean Takahashi, February 21, 2021, *Op. Cit.*

³⁶ My Games, *Press Release, Op. Cit.*

Figure 4: Examples of Video Games that Received Early Stage (Seed, Series A and B) Venture Capitals³⁷

DATE	GAME TITLE	INVESTMENT	STAGE	LEAD VC
May 2020	Statespace	USD \$15M (CAD \$19M)	Series A	Khosla Ventures
April 2020	Guided	USD \$7M (CAD \$9M)	Series A	Matrix Partners
April 2020	Superplus Games	USD \$5M (CAD \$6M)	Seed	Makers Fund
March 2020	Robin Games	USD \$7M (CAD \$9M)	Seed	London Venture Partners
March 2020	Genvid	USD \$33M (CAD \$42M)	Series B	Huya
November 2019	FanAI	USD \$8M (CAD \$10M)	Series A	Marubeni
September 2019	VENN	USD \$17M (CAD \$21M)	Seed	Bitkraft Ventures &
April 2019	Polystream	USD \$12M (CAD \$15M)	Series A	Eldridge Industries

2.3 Equity Investments by Private Companies and Business Angels Are on the Rise

A recent trend identified by interviewees is equity investments in independent video game studios made by other video game companies. These are typically for a minority stake in a company. Examples include Danish-based Nordic Games, a division of Nordisk Film, and Remote Control Productions (RCP), based in Germany.

The maturing of the sector has led to a large number of business angel investors, usually former games industry executives and entrepreneurs. Business angel investors are individuals who invest in start-up businesses, normally in the early stages. Angel investments usually happen at the stage where the founders don't have enough evidence to raise financing from venture capital investors.³⁸ As such, business angels fill the gap between friends and family and more formal VC funds. Like VCs, business angels focus on companies with experienced teams and recurring revenue business models.³⁹

Angel investors (or "business angels") are increasingly joining together to form angel groups, networks or collectives in order to access quality deals, conduct better due diligence and increase the diversification of their investments, and lower their risk.⁴⁰ Some business angels are pooling their resources to make larger

investments, sometimes in deals led by VCs.⁴¹ Business angels, their networks and syndicates have become increasingly sophisticated in their investing process with solid due-diligence, term sheets, and shareholder agreements which foresee board seats, anti-dilution clauses, and firm exit goals.⁴² In some countries, governments have created tax breaks for angel investors as well as early stage funds with favourable terms for business angels' co-investment.⁴³

While some business angel investors invest purely for profit, others look to make an impact with their funds by investing in industries they are passionate about, such as in the videogame industry.⁴⁴

2.4 Private Funders Can Provide a Source of Project Financing

Private funds led by business angels provide an alternative source of project-based financing for independent game developers. These funders provide an alternative to traditional publisher deals. By taking a "developer first" approach, these funds aim to support independent game companies to develop and grow independently. Deals typically revolve around a revenue-sharing model, though some may also

involve equity financing. Most project based private funders have a focus on PC and Console games, where they have the greatest expertise.

Game Seer Venture Partners launched their €10 M (CAD \$15M) fund in 2019. Led by video games digital distribution veterans, the fund invests in multiplatform PC and console game development projects. Game Seer aims to identify promising games at an early stage, with the goal of recouping through a share in revenues. Projects are funded at levels between € 100K (CAD \$148K) and € 1.5M (CAD \$2.2M).

A number of private funds are aimed at supporting diverse developers. Wings Interactive invests in indie games led by women and marginalized genders (to a cap of USD \$500K – CAD \$629K) in exchange for a share of revenues. The Fairchild Initiative is a USD \$2M (CAD \$2.5M) Fund dedicated to projects led by Black creators and studios in exchange for a share of revenues. These funds are global in their scope. The Moonrise Fund provides early prototype financing from USD \$100K (CAD \$126K) to USD \$250K (CAD \$314K) to American studios that are founded by women, BIPOC or queer creators in exchange for equity in the company.⁴⁵

37 White Star Capital, an early stage venture capital firm, Mapping the Gaming Esports VC Landscape, July 6, 2020, retrieved from <https://medium.com/venture-beyond/mapping-the-gaming-and-esports-vc-landscape-eca062502dca>.

38 How to be an angel investor in the games industry, Elite Game Developers, retrieved from <https://elitegamedevelopers.com/how-to-be-an-angel-investor-in-the-games-industry/>.

39 EIF Venture Capital, Private Equity Mid-Market & Business Angels Surveys 2020, European Investment Fund, EIF Working Paper 2021/71, February, 2021.

40 Alejandro Cremades, "How Angel Investors and Angel Groups Work," Forbes, September 25, 2018.

41 Interviews

42 Compendium of European Co-Investment Funds with Business Angels, European Association of Business Angels, Seed Funds and Early Stage Market Players (EBAN), 2017.

43 Compendium of European Co-Investment Funds with Business Angels, European Association of Business Angels, Seed Funds and Early Stage Market Players (EBAN), 2017.

44 Alejandro Cremades, 2018, Op. Cit

45 Wings Fund corporate website: <https://wingsfund.me/about/>; Kowloon Nights corporate website: www.kowloonights.com/fairchild; Rebekah Valentine, "Glitch CEO launches early stage Moon-rise Fund," GamesIndustry.biz, January 13, 2021; Alex Calvin, "Moonrise is a new early stage fund from Glitch CEO Karr," PC Games Insider, January 14, 2021.

Other private project funds led by games industry veterans include the Indie Fund in the US and the Midgame Fund in the Netherlands.⁴⁶ These funds offer investments at the discretion of business angels participating in the fund.

Venture Capital Fund Kowloon Nights, a global, USD \$100M (CAD \$126M) video game investment fund is the largest project-based fund, dedicated to supporting independent developers of premium PC and console games. Launched in 2018, the company invests in projects with budgets ranging from USD \$500K (CAD \$629k) to USD \$ 5M (CAD \$6M) at all stages of development and marketing. Deals are based on revenue sharing and allow developers to retain the ownership of their IP and sequel rights. Figure 5 provides a summary overview of private project funders discussed here.

2.5 Crowdfunding Platforms Provide Funding

Crowdfunding platforms provide an alternative source of seed financing to game developers. The equity crowdfunding platform FIG has since 2015 provided curated video game projects with an opportunity to raise equity financing. By 2019, twenty-two video games had been financed through the platform, eight of which were returning revenues to investors.⁴⁷ Equity crowdfunding is also popular with game developers in Korea. Video game developers also continue to use rewards-based platforms like Kickstarter and Indiegogo.⁴⁸

2.6 Public Guarantees Are Encouraging Private Lending

Across the UK and Europe, a small number of banks lend to developers and publishers, many of them backed by public loan guarantee programs. For example, the £24M (CAD \$42M) Creative Growth Finance Debt Fund provides loans to creative businesses for innovative projects, through a partnership between Creative England and the Triodos Bank. Loans are secured through a debenture against the company. Private banks in other European jurisdictions offer loans guaranteed by the Creative Europe Loan Guarantee facility. Loans made by lenders are guaranteed through the European Investment Fund. UK based

Figure 5: Private Project Funders and Volume

INVESTOR	COUNTRY OF ORIGIN	VOLUME	TYPE OF DEAL	FOCUS
Game Seer	Germany	€11.1M (CAD \$15M)	Revenue share	PC & Console
Fairchild Initiative	Hong Kong	USD \$2M (CAD \$2.5M)	Revenue share	PC & Console, Black-led companies
Moonrise Fund	United States	Undisclosed	Equity investment in the company	Women, BIPOC or queer founders
Wings Interactive	Undisclosed	Undisclosed	Revenue share	Women and Gender Marginal led projects
Indie Fund	United States	Undisclosed	Full recoupment + revenue share	Independent game developers
Midgame Fund	Netherlands	Undisclosed	Revenue share	Independent game developers in the Netherlands
Kowloon Nights	Hong Kong	USD \$100M (CAD\$126M)	Revenue share	PC & Console

“Crowdfunding platforms provide an alternative source of seed financing to game developers.”

private lending platform, Sugar, which stands for 'Scale Up your Games and Apps Revenue', has since 2019 been providing data-driven marketing loans to video games studios to help them scale up without having to raise equity finance. In some situations, depending on the metrics of the game or app, loan levels may be increased. Loans are based on live data analysis and aim to be automatic.⁴⁹

46 Megan Farokhmanesh, "New funding models can help riskier games – and might change studios in the process," *The Verge*, March 4, 2021

47 "The Changing Face of Video Game Crowdfunding," *Variety*, March 18, 2019.

48 Zach Miller, "Top Crowdfunding Sites for Gaming," *The Balance: Small Business*, May 30, 2019.

49 Annie Musgrove, "UK fintech startup Sugar snags £1.5 million to help scale gaming and app studios," *TechEU*, November 2nd, 2020; Alistair Hardaker, "FinTech lender to gaming sector raises £1.5 million to expand team," *BusinessCloud*, November 3, 2020.

II. The United States

1. About the Industry

The US is home to the largest game industry in the world. The country has some of the world's largest video game companies, with estimated revenues of about USD \$25B (CAD \$31.4B) in 2019.

The video game industry in the US has spurred the development of several large public companies. Five of the world's largest publicly traded video game developers and publishers are based in the US (Activision Blizzard Inc., Electronic Arts, Take-Two Interactive Software, Zynga Inc. and Glu Mobile), with a combined market capitalization⁵⁰ of USD \$137B (CAD \$172B).⁵¹

The US is a hotbed for new companies and small "indie gaming" enterprises. A rapid rise in the number of companies in recent years suggests a high number of smaller companies.⁵² There are in total 1,785 video game sector companies, of which 1,518 are developers.⁵³ California is home to the largest number of video game industry companies in the US, with over 600 companies.⁵⁴

2. Public Funding

2.1 Direct Funding

There is no national direct funding program.

2.2 Indirect Funding

Federal R&D Tax Credit

The R&D Tax Credit is one of the most significant tax incentives available. It can represent a significant financial advantage to businesses, allowing both reduced tax liability and cash back for reinvestment or other needs. The Credit applies to software development activities that would be undertaken by game developers.⁵⁵ The program provides a 20% tax credit against eligible expenditures, and can be carried forward for up to twenty years.

3. Private Funding

3.1 Venture Capital

Private equity has become a principle source of financing for many video game companies in the US from both angel investors and venture capital firms. The US is home to a number of investment funds led by successful video game entrepreneurs. The country was also the first to innovate with the accelerator model of investment, such as Y Combinator founded in 2005.⁵⁶

Venture capitalists play a significant role in providing successful startups and mid level companies with the opportunity to scale and grow. Of the twenty-five most active VC investors in games in 2020, thirteen were US based venture capital companies: Galaxy Interactive, Andreessen Horowitz, Makers Fund, Konvoy Ventures, KKR, March Gaming, 1Up Ventures, Altos Ventures, Courtside VC, General Catalyst, Transcend Fund, Lightspeed Venture Partners and Everblue Management.

While there are many VCs in the US investing in video games, a few are notable for their particular focus in this sector, such as Galaxy Interactive, Transcend Fund, 1Up Ventures and Griffin Gaming Partners. There is also significant activity in mergers and acquisitions. Zynga, Microsoft, Electronic Arts (EA), Scopely, Take Two Interactive and Epic Games are amongst the large video game companies recently involved in mergers and acquisitions of other video game companies.⁵⁷

As can be seen in Figure 6, from January 2017 to May 2020, a total of 266 companies in the US video games sector attracted over USD \$5.5B (CAD \$6.9B) in private investment from angels and venture capitalists.⁵⁸ Video game developers attracted the greatest amount of investment, with 179 companies attracting investments worth almost USD \$3.5B (CAD \$4.4B). These companies averaged four investors each.

During the same period, a total of USD \$664M (CAD \$835M) was raised by five video game publishers, averaging twenty-seven investors each. In addition, forty-six game portals and platform companies attracted USD \$181M (CAD \$228M) in investment, for five investments on average in each of these firms. Thirty-four companies providing game developer tools (engines, services, design software, etc) attracted USD \$1.2B (CAD \$1.5B) in investment, averaging seven investments each. Two hardware manufacturers raised USD \$2M (CAD \$2.5M), through an average of four investors each.

3.2 Crowdfunding

Over the past decade, crowdfunding has become an important source of private individual contributions and investments in video game companies. The average number of video games funded yearly since

⁵⁰ Market capitalization refers to how much a company is worth as determined by the stock market.

⁵¹ The Entertainment Software Association, *Video Games in the 21st Century: The 2020 Economic Im-pact Report*, 2020, prepared by: Simon Tripp et al, TEconomy Partners, LLC.

⁵² Rebecca Simon, et al, *Future Proofing the Video Game Industry in California*, Miliken Institute, 2018.

⁵³ Entertainment Software Association, *Video Games in the 21st Century: The 2020 Economic Impact Report*, 2021.

⁵⁴ Entertainment Software Association corporate website: <https://www.theesa.com/video-game-impact-map/>.

⁵⁵ Jeffrey Feingold, "How to get R&D tax credits for video game developers," Tax Point Advisors, Sep-tember 9, 2020, retrieved from <https://taxpointadvisors.com/blog/view/how-to-get-rd-tax-credits-for-video-game-developers>.

⁵⁶ Y Combinator corporate website: www.ycombinator.com/.

⁵⁷ Invest Games, retrieved from <https://investgame.net/investors>.

⁵⁸ Entertainment Software Association, 2020, Op. Cit.

“Equity crowdfunding platforms have emerged dedicated to facilitating investments by private individuals into specific video game projects.”

Figure 6: Angel and Venture-Backed Video Game Industry Companies with Completed Financing Deals (January 2017 to May 2020)⁵⁹

CATEGORY	DESCRIPTION	NUMBER OF FUNDED COMPANIES	CAPITAL RAISED	AVERAGE NUMBER INVESTORS
Video Game Developer	Companies developing video games	179	USD \$3,490.7M (CAD \$4,396.3M)	4
Portal/Platform	Online platforms, social gaming networks, chat platforms, curated content, online retail of games, cloud services	46	USD \$180.7M (CAD \$227.1M)	4
Inputs to Video Game Development	Engines, services, design software, management systems, etc	34	USD \$1,186.4M (CAD \$1,481.2M)	7
Video Game Publisher	Companies publishing video games (and not developing)	5	USD \$663.2M (CAD \$883.6M)	27
Hardware	Consoles, video cards, etc.	2	USD \$2M (CAD \$2.51M)	4

2012 is 360 and 2018 was only slightly below that, at 352.⁶⁰ Kickstarter famously attracted over US \$1B (CAD \$1.25B) in pledges for video games from 2009 to 2019.⁶¹ Equity crowdfunding platforms have emerged dedicated to facilitating investments by private individuals into specific video game projects. One such platform is FIG.

Launched in August 2015, FIG was envisioned to create a path to crowd-based investment for independent developers.⁶² Through FIG, developers raise capital from the crowd to help produce the game. Once the studio releases the game, FIG continually divides the revenue produced by it amongst investors, the

studio and itself. FIG then distributes dividends to investors based on the number and percentage of shares they own.⁶³ Two games successfully crowdfunded on FIG are Outer Wilds and What the Golf.⁶⁴ Whereas most private investments may take up to a decade to provide a return to investors, FIG has accelerated the process. In 2020, FIG was acquired by Irish equity crowdfunding site Republic.⁶⁵

3.3 Private Funds

Some business angels provide funding through a number of innovative private funds such as the Indie Fund and the Moonrise Fund.

Indie Fund

The Indie Fund was created as an alternative to publisher funding. With a steering committee comprised of successful independent developers, Indie Fund offers project funding without milestones and a generous repayment and revenue share arrangement (25% after recoupment).⁶⁶ The revenue share is capped at double the Fund's investment or until 2 years have passed since the game's release.⁶⁷

Moonrise Fund

Launched by Glitch CEO, Evva Karr, the Moonrise Fund is an early stage equity fund investing in video game companies with equity investments of US \$120K (CAD \$151K) to US \$250K (CAD \$314K).

⁵⁹ Entertainment Software Association, 2020, Op. Cit.

⁶⁰ Variety, March 18, 2019, Op. Cit.

⁶¹ Trin Garritano, "\$1 billion (and counting) pledged to games," The Kickstarter Blog, April 16, 2019, re-trieved from <https://www.kickstarter.com/blog/1-billion-and-counting-pledged-to-games>.

⁶² Variety, March 18, 2019, Op. Cit.

⁶³ Robert Waldo, "3 promising video game investments to consider with Fig," Investor Place, August 30, 2020.

⁶⁴ Devin Coldewey, "Republic acquires Fig, adding games to its startup crowdfunding platform," Tech Crunch, April 17, 2020.

⁶⁵ Devin Coldewey, 2020, Op. Cit.

⁶⁶ Variety, March 18, 2019, Op. Cit.

⁶⁷ Indie Fund website: <https://indie-fund.com/articles/Updated-Investment-Model>.

III. The European Union

1. About the Industry

The European video games industry was estimated to be worth USD \$29.6B (CAD \$37.2B) in 2020, accounting for 19% of global revenues.⁶⁸ There were 4,906 game development studios operating in the EU in 2018. The European Games Developer Federation (EGDF) represents 2500 game developers, most of them SMEs.

The EGDF has called for better support through a whole of ecosystem approach, i.e. providing support for clusters, incubators, accelerators, creative hubs, networks, digital platforms, and professional organisations. It is believed that functioning incubators and partnerships will ensure easier access to private capital and business support, providing a path to growth over the long term.⁶⁹ The EGDF has also called for increasing the budget for grants targeting games with experimental and innovative content.⁷⁰

2. Public Funding

2.1 Direct Support

Creative Europe Development Support for Video Games

The European Union established Creative Europe in 2014, a funding program that provides support for the creative and cultural sector. From 2014 to 2020, the Creative Europe budget totalled €1.46B (CAD \$2.17B).

The development of video games prototypes for all platforms is eligible for support between €10K (CAD \$15K) and €150K (CAD \$223K) to a maximum of 50% of total eligible costs.⁷¹

The goal is to increase the video games sector's capacity to develop works with potential in both EU and global markets. However, the program has been criticized for its focus on narrative storytelling games and lack of representation from the video game sector amongst recipients of the fund.⁷²

“The goal is to increase the video games sector's capacity to develop works with potential in both EU and global markets.”

In 2019, the share of the Creative Europe budget dedicated to the game industry amounted to only 0.02 % relative to the size of the sector.⁷³ In 2020, for all of the EU, a total of thirty video games received funding, capped at a maximum of €150K (CAD \$223K) per project.⁷⁴ It has been pointed out that this underrepresentation presents lost opportunities given the video games sector's economic significance and potential for innovation.

Horizon Europe EIC Accelerator Pilot Program

The European Innovation Council (EIC) Accelerator pilot provides funding to high risk, high potential SMEs, including young companies and start-ups with European or global ambitions, such as game development studios. Companies must be established in a EU Member State or a Horizon 2020 associated country. Phase One funding assists in assessing the technical feasibility and commercial potential and develop it into a credible business plan, with a lump sum grant of €50K (CAD \$74.2K). Phase Two helps develop the business concept further into a market-ready product, service or process aligned with the company's growth strategy. Funding is available in the form of a grant up to €2.5M (CAD \$3.7M) and with additional equity financing of up to €15M (CAD \$22M).

2.2 Indirect Support

Creative Europe Loan Guarantee Facility

Cultural SMEs in Europe are said to have greater challenges in accessing finance. This is attributed to the lack of familiarity with the cultural sector by financiers and the intangible nature of intellectual property (IP). To address these challenges, the European Commission established a loan guarantee facility in 2016 aimed at incentivising banks and other financial intermediaries to extend loans to SMEs within the cultural and creative sectors. Managed by the European Investment Fund, the Cultural and Creative Sectors Guarantee Facility (CCSGF) will guarantee up to €2B (CAD \$3B) of new loans for thousands of cultural and creative SMEs, backed by €250M (CAD \$371M) designated by the European Commission.⁷⁵ The video game sector is eligible.

68 Global Games Market Report (Free Version), Newzoo, 2020.

69 David Mainus et al. Hamburg Institute of International Economics, *Exploiting the Cross-Sectoral Potential of the Game Industry Through Political Support at the EU Level*, Baltic Game Industry, 2020. To address these challenges, the European Commission has designated over EUR 250 million to guarantee loans for enterprises from creative sectors.

70 European Game Developer Federation (EGDF), "How to Enable Digital Growth in Europe?", EGDF corporate website, retrieved from <http://www.egdf.eu/documentation/3-enabling-digital-growth-with-public-funding/creative-europe/>.

71 Creative Europe (2014-2020) Media Sub-Programme Call for Proposals, retrieved from https://eacea.ec.europa.eu/sites/eacea-site/files/devvg2020_en_0.pdf.

72 Interviews

73 David Mainus, 2020, Op. Cit.

74 Creative Europe, "List of Selected Projects," retrieved from https://eacea.ec.europa.eu/sites/eacea-site/files/eacea_19_2019_dewvg_list_of_selected_projects_for_website.pdf.

75 European Commission, "Access to finance for the Cultural and Creative Sectors," *Shaping Europe's Digital Future*, March 16, 2021.

Covering up to 70% of lenders' individual losses, to a maximum of 25% of lender's overall portfolio of loans, the public loan guarantee has become increasingly popular. There are currently fifteen financial intermediaries in eleven EU countries participating in the program.

At the end of 2019, debt financing of €424.4M (CAD \$629.4M) was made available to 1,547 SMEs (and to 2,013 projects, as some companies benefit from more than one loan, to finance projects worth over €1.08B (CAD \$1.6B).

France was an early adopter of the Creative Europe Loan Guarantee Facility. In 2017, IFCIC, a specialized French public lending institution, signed onto the loan guarantee program, for which it was anticipated that over 300 SMEs in the cultural and creative sectors would obtain access to finance.⁷⁶ Since 2017, IFCIC has operated loan funds and guarantees of €160M (CAD \$237.3M).⁷⁷ These loans are unsecured and may be used to finance working capital, investment for growth, and project financing.⁷⁸

According to interviewees, there has been less uptake of the program in northern Europe, where lenders are said to be more risk averse and less experienced in cultural lending. The loan guarantee program provides information to lenders who lack expertise in financing the creative industries.⁷⁹

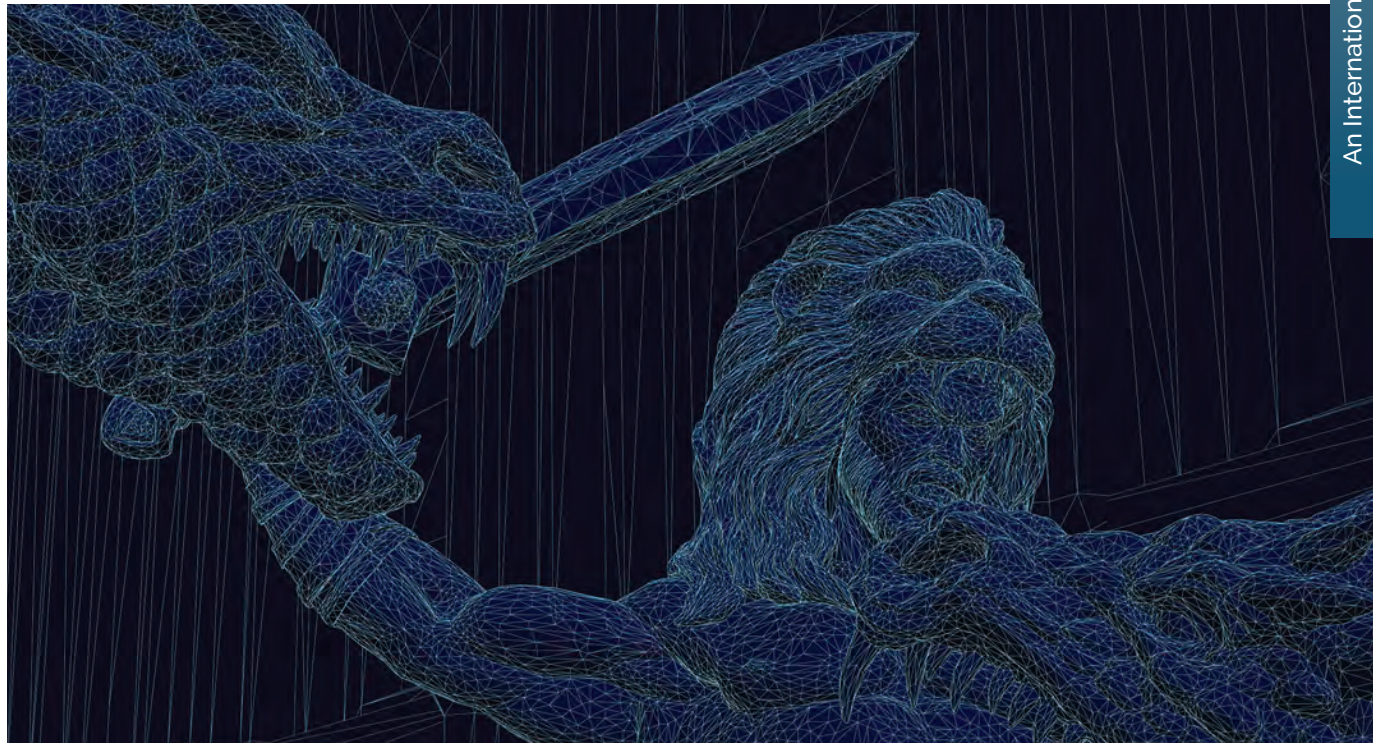
While in theory, video game companies have access to the Creative Europe loan guarantee facility, available through Finora Capital since March 2020, the loan facility is said not to have benefitted the Finnish video games sector, due to a lack of uptake by Finnish banking institutions.

The European Commission and the European Investment Fund (EIF) are revising the program to allow for more flexibility in repayments of loans, to give more security to the financial institutions. For its part, the European Game Developers Association has lobbied for broadening the program to extend equity funding for game studios, as there are perceived to be more investors than lenders interested in this industry. According to interviewees, in some jurisdictions it has been difficult to interest lenders to participate in the loan guarantee program.⁸⁰

The European Angels Fund

An initiative of the EIF, the European Angels Fund (EAF) provides matching co-investment financing to business angels investing in innovative companies. The Fund enters into long-term co-investment framework agreements with business angels who provide a predefined amount of equity as upfront financing for future investments. The total amount available under an individual agreement ranges from €250 K to €5 M.

The EAF has a current investment capacity of over €800 M, with more than €330 M already committed to over 120 business angels across Europe. These in turn have a portfolio of more than 800 SME co-investments. Agreements currently exist with Vækstfonden in Denmark, and with Business Finland. With resources provided through the EAF, these funders have created co-investment funds for angel investors.⁸¹



76 "Over EUR 130 million of loans for cultural and creative SMEs in France and across Europe," Euro-pean Investment Fund, December 22, 2017, retrieved from https://www.eif.org/what_we_do/guarantees/news/2017/ifcic-france.htm.

77 "Jeu Vidéo - Fonds d'avances Participatives en faveur du Jeu Vidéo (FPJV)," Lesaides.fr, retrieved from https://les-aides.fr/fiche/a5RlCnlGxfTeBGZeTUzZ4_Vm/ifcic/jeu-video-fonds-d-avances-participatives-en-faveur-du-jeu-video-fpjh.html.

78 IFCIC corporate website: <http://www.ifcic.eu/>.

79 European Commission, March 16, 2021, Op. Cit.

80 EGDF corporate website, Op. Cit.

81 European Angels Fund, European Investment Fund website, retrieved from https://www.eif.org/what_we_do/equity/eaf/index.htm.

IV. Selected Jurisdictions in Western Europe

1. The United Kingdom

1.1 About the Industry

UK consumers spent £4.4B (CAD \$7.6B) on video games in 2020, up 17.7% over 2019.⁸² The industry comprises over 2300 companies, of which 99.5% are SMEs (employing fewer than 250 people) and 73% are micro studios (employing less than five full-time staff).⁸³ The UK is also home to international and European global games companies.⁸⁴

The UK offers a wide range of public supports to the financing of independent video game studios, including direct and indirect support for video game development projects and companies. Direct support for projects is provided through the UK Games Fund, while indirect support is available through the Video Games Tax Relief (VGTR) and the SME R&D Tax Relief. Direct support for video game companies is provided through training programs.⁸⁵ The Enterprise Investment Scheme, and in particular the Seed Enterprise Investment Schemes, provide indirect support to video companies, by providing tax reliefs for investors to improve the industry's access to private investment.⁸⁶

The industry points to the VGTR as enabling the sector to grow strongly. Since its introduction in 2014, the number of people employed in the UK games sector increased by 8.9% per year, compared to an average of 3.1% decline yearly from 2008 to 2011.⁸⁷ The cost and risk of games development are effectively being reduced by the VGTR, incentivizing investment in the games industry.

Investment incentive schemes such as the Enterprise Investment Scheme (EIS) and in particular the start-up oriented Seed Enterprise Investment Scheme (SEIS) are said to have provided attractive frameworks for investment by individual investors.⁸⁸

1.2 Public Funding

1.2.1 Direct Funding

The UK Games Fund

The UK Games Fund provides £4M (CAD \$7M) annually to early-stage games development businesses in the UK. The Fund offers two tiers of funding: grants of up to £25K (CAD \$43K) to prototype new games, and grants of up to £50K (CAD \$87K) for more advanced projects.⁸⁹

The industry has noted that further resources are needed to scale up video games businesses. In 2020, The Independent Game Developers Association (TIGA) called on the UK government to enhance the UK Games Fund, to provide additional resources, and to introduce a Video Games Investment Fund (VGIF) that could provide matching funding of between £75K (CAD \$130K) and £500K (CAD \$867K) to games developers nationwide, for original IP game projects to improve games businesses' ability to access finance. Funding up to £100K (CAD \$173K) would be in the form of grants, with greater amounts provided as soft loans (i.e. with favourable terms for companies) that match investments from other sources.

Such a fund would enhance studios' access to finance, promote the development of original IP and encourage studio growth.⁹⁰ In February 2021, the Minister of State noted that the department is looking into TIGA's proposal for the creation of a new, large-scale video games investment fund.⁹¹

Creative Growth Finance Debt Fund

The Creative Growth Finance Debt Fund is a project of Creative England,⁹² in partnership with the Triodos Bank UK. Creative companies, including video games companies, have access to a total pool of £24M (CAD \$13.9M). The Fund provides access to loans of £100K – £500K (CAD \$173K – \$867K), with fixed interest rates from 7% – 15%, depending on the risk profile. Eligible companies must have recent annual revenues of at least £300K (CAD \$519K).⁹³ Loans are secured through a debenture⁹⁴ against the business.⁹⁵

⁸² James Batchelor, "UK spending on video games reached £4.4 billion in 2020," *GamesIndustry.biz*, March 3rd, 2021.

⁸³ Suzi Stephenson, "TIGA Research Reveals UK Video Games Industry Has Been Expanding At Fastest Rate Ever Recorded," TIGA, October 19, 2020, retrieved from <https://tiga.org/news/tiga-research-reveals-uk-video-games-industry-has-been-expanding-at-fastest-rate-ever-recorded>.

⁸⁴ UKIE, *Playing on: The UK games and interactive entertainment industry during the COVID-19 pandemic*, 2020.

⁸⁵ Cassandra Khaw, "UK government makes £4 million available to help fund indie game development," *Ars Technica*, December 10, 2015.

⁸⁶ Cassandra Khaw, 2015, *Op. Cit.*

⁸⁷ Suzi Stephenson, "TIGA proposes increase in VGTR to boost the UK's video games industry," TIGA, February 1, 2021, retrieved from <https://tiga.org/news/tiga-proposes-increase-in-vgtr-to-boost-the-uks-video-games-industry>.

⁸⁸ *Economic Impact of the Creative Industries: How Scotland can grow sustainable TV and film, and video games industries*, TIGA. Submission to the Economy, Energy and Tourism Committee's inquiry into the creative industries, January 8, 2014. EIS funds are arrangements in which a professional fund manager acts as a nominee for a number of investors, making investments in qualifying companies on their behalf. The EIS rules give tax relief to the investors on the basis that they are the beneficial owners of the shares.

⁸⁹ "Government confirms it is considering TIGA's proposal for a Video Games Investment Fund," Press Release, March 2, 2021, retrieved from https://www.gamasutra.com/view/pressreleases/377047/Government_Confirms_it_is_considering_TIGAs_proposal_for_a_Video_Games_Investment_Fund.php.

⁹⁰ Cassandra Khaw, 2015, *Op. Cit.*

⁹¹ Suzi Stephenson, "TIGA's submission to the 2020 HM Treasury spending review," TIGA, November 11, 2020, retrieved from <https://tiga.org/news/tiga-submission-to-the-2020-hm-treasury-spending-review>.

⁹² "Government confirms it is considering TIGA's proposal for a Video Games Investment Fund," Press Release, March 2, 2021, *Op. Cit.*

⁹³ *Creative England is a not-for-profit industry body that promotes the development of creative companies. Founded in 2010, it was formed by the consolidation of a number of regional film commissions after the UK government dismantled the UK Film Council. It is funded by both public (British Film Institute) and private investment, and aims to support original storytellers, driving diversity, collaboration and growth in the creative screen industries. Source: Michael Rosser, "Creative England and Creative Industries Federation to merge," September 26, 2019.*

⁹⁴ Creative England, "Creative Growth Finance," retrieved from <https://www.creativeengland.co.uk/wp-content/uploads/2020/06/CGF-Business-Loan-FAQs-02.06.20.pdf>.

⁹⁵ *In the UK a debenture is a long-term security yielding a fixed rate of interest, issued by a company and secured against assets.*

⁹⁶ Creative Growth Finance, retrieved from <https://www.creativeengland.co.uk/creativegrowthfinance/>.

1.2.2 Indirect Funding

Video Games Tax Relief (VGTR)

The Video Games Tax Relief provides British video game companies with a tax rebate of up to 20% of qualifying game production expenditures where taxes are owed (i.e. on a profitable game) to reduce a company's tax liability. For companies whose game incurs a loss, the rebate can be claimed in the form of a cash payment at a rate of 25%.⁹⁷ At least 25% of expenses must be incurred in a European Economic Area (EEA) state.⁹⁸ The VGTR may be claimed on the lower of: 1) 80% of the total qualifying expenditure, or 2) the actual qualifying expenditure incurred in the EEA.

"The VGTR was introduced to enable the UK video games industry to compete on a more level playing field with its counterparts in countries including the USA and Canada"

The VGTR was introduced to enable the UK video games industry to compete on a more level playing field with its counterparts in countries including the USA and Canada. In 2018-2019, 350 video games received an estimated tax relief of £161M (CAD \$180.3M).⁹⁹

An evaluation of the VGTR in 2017 found that it had helped developers to improve their access to finance by de-risking projects for investors.¹⁰⁰ TIGA has recently proposed an increase to the VGTR from 25% to 32%, arguing that a 32% rate of VGTR would result in more investment and promote the development of new IP.¹⁰¹

SME R&D Tax Relief

Video game companies may be eligible for R&D tax reliefs. Eligible companies can make an additional deduction of 130% of their qualifying costs from their yearly profit, as well as the normal 100% deduction, to make a total 230% deduction. For companies with losses, the relief provides a payable tax credit worth up to 14.5% of a surrenderable loss.¹⁰² A reported 40% of UK game developers had a budget dedicated to R&D in 2019.¹⁰³ The SME R&D tax relief is available to companies with fewer than 500 staff and annual revenues under £100M (CAD \$173M).¹⁰⁴

R&D Expenditure Credit

Devised for large companies, and not eligible to be used in conjunction with the VGTR, The R&D Expenditure Credit provides a 13% taxable credit on qualifying R&D expenditures. The credit is payable as cash, or can be claimed against a company's tax liability. Claims may go back two full years. Large companies are those employing over 500 staff, or with total annual gross revenues of over €100M (CAD \$148M) and more than €86M (CAD \$127.3M) in gross assets.¹⁰⁵

Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS)

The EIS and SEIS provide a tax incentive to individuals who invest in early-stage companies. EIS provides an incentive for companies looking to grow their business, while the SEIS is designed to help startups to raise capital.¹⁰⁶

Through the EIS, income tax relief may be claimed by investors on amounts equivalent to 30% of their investments, capped at £2M, where at least £1M in invested in knowledge intensive companies. Up to 100% of capital gains from the investment may be eligible for a tax deferral if the amount is reinvested through the EIS within 3 years.

Through the SEIS, investors can claim tax relief on 50% of their investments. Investments that may be claimed are capped at £100K. Company directors are eligible for tax relief on their investments in their company. Up to 50% of capital gains from the investment may be exempt from tax, to a maximum of £50K.

Sales of shares are tax exempt where the shares have been held for a minimum of three years. Tax reliefs may be claimed up to five years following the year of investment.¹⁰⁷

Most seed investment schemes in the UK benefit from SEIS tax relief provided by the UK government to investors investing in the seed round (for companies less than two years old).¹⁰⁸ Gaming companies have benefitted from these schemes.

The availability of tax reliefs through the EIS and SEIS are an important driver of investments in screen-based businesses, acknowledged by 27% of respondents in a survey of investors.¹⁰⁹ In 2018-2019, 3,905 companies raised a total of £1,824M (CAD \$3,162M) thanks to the EIS. The largest share of companies receiving investments

97 Myriad Associates, *Video Games Tax Relief*, retrieved from <https://www.myriadassociates.com/services/video-games-tax-relief/>.

98 *A Guide to Video Games Tax Relief*, TIGA in association with Grant Thornton, 2020, retrieved from <https://www.granthornton.co.uk/globalassets/1-member-firms/united-kingdom/pdf/publication/tiga-a-guide-to-video-games-tax-relief.pdf>.

99 UKIE, *Video Games Tax Relief*, based on data obtained from HMRC Management Information Systems, retrieved from https://ukiepedia.ukie.org.uk/index.php/Video_Games_Tax_Relief_VGTR.

100 "Nick Pettigrew et al, *Video Games Tax Relief Evaluation: Research report for HM Revenue and Customs*, Ipsos Mori Research Institute, March 2017, page 28.

101 "Government confirms it is considering TIGA's proposal for a Video Games Investment Fund," Press Release, March 2, 2021, Op. Cit.

102 A company may surrender a loss and convert it to a payable tax credit. A surrendered loss may not be carried forward to future years. Source: <https://www.gov.uk/guidance/corporation-tax-creative-industry-tax-reliefs>; HMRC, *Research and development tax relief*, retrieved from <http://www.hmrc.gov.uk/gds/cird/attachments/rdsimpleguide.pdf>.

103 "With record-breaking revenue, the UK game industry is blowing up," *Venture Beat GamesBeat*, March 18, 2019.

104 *Government of UK corporate website* retrieved from <https://www.gov.uk/guidance/corporation-tax-research-and-development-tax-relief-for-small-and-medium-sized-enterprises>; See also Cassandra Khaw, 2015, Op. Cit.

105 *UK Government website*: <https://www.gov.uk/guidance/corporation-tax-research-and-development-tax-relief-for-large-companies>.

106 *UK Business Angel Market 2020*, UK Business Angels Association and British Business Bank, 2020.

107 *UK Government, Guidance: Tax relief for investors using venture capital schemes*, retrieved from <https://www.gov.uk/guidance/venture-capital-schemes-tax-relief-for-investors#tax-reliefs-you-can-claim>.

108 *Government of the United Kingdom website*, retrieved from www.hmrc.gov.uk/seedis.

109 *Investing in Screen-focused Businesses: The Angels' Perspective*, UK Business Angels Association and Creative England, in partnership with the BFI, July 2020.

were in the information and communications sector, which includes video games, accounting for over 30% of all companies.¹¹⁰ In all, eight out of ten UK angel investments are said to be made under the SEIS/EIS.¹¹¹

2.3 Private Funding

Equity investment from individual investors is said to be a popular source of finance for UK video game developers, with one study noting that about a third of developers had accessed private equity.¹¹² The EIS and SEIS are a potential indicator of the size of angel¹¹³ investments in the UK.

The UK is reported to be the number one European angel market.¹¹⁴ The vast majority of business angel investments are being made in the seed, start up and early stages of corporate growth.¹¹⁵ A small number of business angels (6% according to one report)¹¹⁶ are investing in games companies.¹¹⁷ More industry-knowledgeable lead angels, better deal-flow (i.e. quantity of investment opportunities available at a given time within a region or market)¹¹⁸ and better access to market intelligence are key recommendations from business angels to increase investing in this sector.

As can be seen in Figure 7, there are private VC funds in the UK that invest in games. It is interesting to note that the KUJU Startups Fund aims to invest in companies eligible for SEIS tax relief. London Venture Partners is headed by experts from the games sector, and is dedicated to investing in the games ecosystem. The VC continues to make investments in new video game companies.¹¹⁹ Hiro Capital is a new €100M (CAD \$148M) fund launched in 2019, to back the future UK and EU leaders in the global games, e-sports and digital sports markets. With an investing team that is experienced in this sector, the fund aims to invest in UK and European games and esports. PROfounders Capital is headed by successful entrepreneurs who identify with startup founders and provide resources for the community of founders they have created.¹²⁰ DN Capital is a global early-stage venture company based in London, Berlin and San Francisco, with investments in a wide range of technology companies, including games, in Europe and North America.¹²¹

¹¹⁰ HM Revenue & Customs, *Enterprise Investment Scheme Seed Enterprise Investment Scheme and Social Investment Tax Relief: Statistics on companies raising funds*, May 2020.

¹¹¹ Nicholas Richards, "17 most active EIS investment funds in the UK," *Seed Legals*, January 10, 2020.

¹¹² *Economic Impact of the Creative Industries: How Scotland can grow sustainable TV and film, and video games industries*, TIGA, Submission to the Economy, Energy and Tourism Committee's inquiry into the creative industries, January 8, 2014.

¹¹³ *In the UK, an angel investor is defined as an individual who has made at least one equity investment in a small unquoted business that is not owned by their spouse, child or grandchild. The investee business may be at start-up stage, or in the early stages of development, or more established and looking for further growth. The investment may be made by an individual acting alone, or through an angel syndicate, network or club.* Source: *UK Business Angel Market 2020*, Op. Cit.

¹¹⁴ *UK Business Angel Market 2020*, Op. Cit.

¹¹⁵ *UK Business Angel Market 2020*, Op. Cit.

¹¹⁶ *Investing in Screen-focused Businesses: The Angels' Perspective*, 2020, Op. Cit.

¹¹⁷ *UK Business Angel Market 2020*, Op. Cit.

¹¹⁸ *Deal flow is a term used by investment bankers, venture capitalists and angel investors to describe the rate at which business proposals and investment pitches are being received.* Source: Investopedia, retrieved from <https://www.investopedia.com/terms/d/dealflow.asp>.

¹¹⁹ Dean Takahasi, "Early-stage investors tackle the coronavirus' effect on game investing," *Venture Beat GamesBeat*, April 28, 2020.

¹²⁰ *PROfounders Capital corporate website* retrieved from www.profounderscapital.com/webacked.

¹²¹ *DN Capital corporate website* retrieved from www.dncapital.com/.

"The UK is reported to be the number one European angel market."



Figure 7: Selected Private Equity Funds with Investments in Video Game Companies

COMPANY	INVESTMENT STAGE	INVESTMENT FOCUS	NOTABLE INVESTMENTS
KUJU Startups Fund	Seed stage investment	Games for mobile, tablet, PC, Xbox 360, Wii and 3DS by UK companies eligible for SEIS tax relief	Powerstar Golf, Zumba Fitness, World Party, Rabbids Rumble, Silent Hill: Down-pour, Art Academy, Crush 3D
Initial Capital	Seed and early stage investment	Technology companies with a focus on games, consumer services and technology enablers for mobile, tablet and other touch devices	Dazzle Rocks, Resolution Games, Ministry of Games, Another Place Productions, Koyoki, Brainbow, Yazino, Supercell
London Venture Partners	Seed stage	Games, mobile apps, social games for PC, mobile or tablet, by European and North American companies in the digital games sector	Shark Punch, Gumbug Games, PlayRaven
Hiro Capital	Post-seed stage, at Series A and B	Games, esports and digital sports; sector-specific applications of cloud, mobile, streaming, big data, AI, wearables, AR and VR technologies.	None announced yet.
DN Capital	Seed stage, Series A and B	E-Commerce, marketplaces, enterprise software, mobile and digital media	IPeak - Brain Training, DOJO MADNESS, Shark Punch
PROfounders Capital	Early stage	Mobile, e-commerce, travel, digital media and Games for mobile, tablet, PC	Small Giant Game, Mangahigh.com, Armada

Overall, access to venture capital, corporate venture capital funds and bank finance remains very difficult to access for many developers.¹²² One source notes that only 2% of game studios are accessing corporate venture capital funds.¹²³

According to TIGA, 43% of games businesses are held back by a lack of capital. Many studios are said to continue to struggle to scale-up. Lack of access to financing is attributed to uncertainty about consumer demand, a lack of collateral, a lack of a track record, and the intangible nature of IP.¹²⁴

¹²² Suzi Stephenson, "TIGA Research Reveals UK Video Games Industry Has Been Expanding At Fastest Rate Ever Recorded," TIGA, October 19, 2020, retrieved from <https://tiga.org/news/tiga-research-reveals-uk-video-games-industry-has-been-expanding-at-fastest-rate-ever-recorded>.

¹²³ Mary Loritz, "London-based Hiro Capital launches a €100 million fund for UK and EU gaming and esports startups," EU-Startups, October 14, 2019.

¹²⁴ Economic Impact of the Creative Industries: How Scotland can grow sustainable TV and film, and video games industries, TIGA. Submission to the Economy, Energy and Tourism Committee's inquiry into the creative industries, January 8, 2014.

"... only 2% of game studios are accessing corporate venture capital."

2. France

2.1 About the Industry

The French games market generated €5.3B (CAD \$7.9B) in 2020, registering year over year growth of 11.3%.¹²⁵ There were over 1,130 video game industry companies based in France in 2019. Of these, 70% were involved in game development. In all, 93% of studios are independent game developers. Over half (54%) of companies are said to be fewer than five years old.¹²⁶ Fifteen percent of studios have annual revenues of over €1M (CAD \$1.5M).

In spite of available financing, videogame development remains very challenging in France, particularly for younger companies due to the challenge of accessing financing.¹²⁷ In 2019, self financing accounted for 50% of total production budgets.¹²⁸

The video game sector in France benefits from a wide range of public support, including direct and indirect financing for video game development projects and to support the growth of video game companies. Direct support for projects is provided through the Support Fund for Video Games of the Centre National du Cinéma et de l'Image Animée (CNC), while the Cultural and Creative Industries (CCI) funds of BPI France (Banque Publique d'Investissements) are aimed at companies positioned for growth. Indirect support is available through the Video Game Tax Credit (CIJV) and the Research Tax Credit (CIR). Video game companies can benefit from indirect financing through tax credits to private investors, as well as through public debt financing support available through the IFCIC Loan Guarantee and Equity Loan Fund for Video Games (FPJV).

2.2 Public Funding

2.2.1 Direct Funding

Support Fund for Video Games (FAJV)¹²⁹

The Support Fund for Videogames (FAJV) provides €3.5M (CAD \$5.2M) in financing¹³⁰ to French video game developers for activities leading to a prototype. Support is in the form of a subsidy and/or recoupable

advance, up to 35% of the budget or €20K (CAD \$30K).¹³¹ The Fund also provides subsidies of up to 50% of costs in the development stage to a maximum of €200K (CAD \$297K).

According to the Syndicat National du Jeux Vidéo (SNJV), over €20M (CAD \$30M) has been distributed to video game companies through the Fund.¹³² Overall, 53% of French game developers reported having accessed the Fund at one time.¹³³ In 2019, the Fund accounted for 8% of total budgets, based on an industry-wide survey of French video game companies.¹³⁴

Audiovisual and Multimedia Research and Innovation Network¹³⁵ (RIAM)

Operated in partnership with the French Public Investment Bank (BPI France), RIAM provides financing for Research and Development (R&D) programs carried out by SMEs operating in the screen-based industries. Funding is available for between 30% and 50% of eligible costs, and can be provided either in the form of a grant, which may be combined either with a recoupable advance or a zero-interest loan. In 2018, €1.2M (CAD \$1.8M) was allocated to seven projects related to the video game sector.¹³⁶

In France, each €1 (CAD \$1.48) of support funding is said to generate €8 (CAD \$12) of additional investment.¹³⁷

Cultural and Creative Industries (CCI) funds of BPI France

The Cultural and Creative Industries (CCI) Fund of BPI France invests in minority stakes, ranging from €0.4M to €10M (CAD \$0.6M to CAD \$15M), in French companies in the cultural and creative industries sectors.¹³⁸

In 2019 the CCI Fund invested €18.8M (CAD \$27.9M) into nine companies, including the videogame developer Tactical Adventures, and FLCP & Associates (Focus Home Interactive), a videogame publisher.¹³⁹ In 2020, €1.45B (CAD \$2.15B) were mobilized to support French cultural industries through BPI France, coupled with an additional €1B (CAD \$1.48B) in 2021. These funds will support investment, mentoring and innovation.¹⁴⁰

125 Syndicat des éditeurs de logiciels de loisirs, *L'essentiel du jeu vidéo : Bilan du marché français 2020, March 2021*, cited in Marie Dealessandri, "French games market reaches record high of €5.3bn | France Annual Report," *GamesIndustry.biz*, March 3, 2021.

126 *Annual Survey of the Video Game Industry in France, 2020 Edition*, Syndicat national du jeu vidéo, 2020.

127 Syndicat national du jeu vidéo, *Baromètre annuel du jeu video en France, Édition 2020*.

128 Syndicat national du jeu vidéo, *Baromètre annuel du jeu video en France, Édition 2020*.

129 Centre National du cinéma et de l'image animée, *Fonds d'aide aux jeux video*, retrieved from https://www.cnc.fr/professionnels/aides-et-financements/jeu-video/fonds-daide-au-jeu-video-fajv_191468.

130 Centre National du cinéma et de l'image animée, *Bilan 2019 : Jeu Vidéo, 2020*.

131 Direction générale des entreprises, "Le soutien de l'état en faveur du jeu vidéo," *entreprises.gouv.fr*, retrieved from <https://www.entreprises.gouv.fr/fr/numerique/politique-numerique/soutien-de-l-etat-faveur-du-jeu-video>; "Comment financer un jeu vidéo indépendant?" *Kiss Kiss Bank Bank*, October 8, 2019, re-trieved from <https://blog.kisskissbankbank.com/actualites/financer-jeu-video-independant/>; Video-games Funding Guide, *Creative Europe Desk Denmark*, 2016; Jacob Rosenzweig et al, "How govern-ments are sparking growth in creative industries," *BCG*, March 22, 2018, retrieved from <https://www.bcg.com/publications/2018/how-governments-are-sparking-growth-creative-industries>.

132 Syndicat national du jeu vidéo corporate website retrieved from <http://snjv.org>.

133 Syndicat national du jeu vidéo, *Baromètre annuel du jeu video en France, Édition 2019*.

134 Syndicat national du jeu vidéo, *Baromètre annuel du jeu video en France, Édition 2020*.

135 Centre National du cinéma et de l'image animée, *Réseau Recherche et Innovation en Audiovisuel et Multimédia*, retrieved from https://www.cnc.fr/professionnels/aides-et-financements/industries-techniques-innovation-et-relief/reseau-recherche-et-innovation-en-audiovisuel-et-multimedia-riam_191500.

136 Centre National du cinéma et de l'image animée, *Bilan 2019 : Jeu Vidéo, 2020*.

137 German Games, *German Games Fund*, retrieved from <https://www.game.de/en/positions/german-games-fund/>.

138 "L'écosystème du jeu vidéo sur le chemin de la maturité," *La Tribune*, January 7, 2020.

139 BPI France, *Rapport annuel 2019*.

140 BPI France corporate website retrieved from <https://www.bpifrance.fr/>.

2.2.2 Indirect Funding

Video Game Tax Credit (CIJV)

The Video Game Tax Credit provides video game companies established in France with access to a tax reduction of 30% of expenditures related to the creation of a game, to a maximum of €6M (CAD \$9M) per company per year.¹⁴¹ Companies must have development costs greater than €100K (CAD \$150K). Qualifying games must meet cultural and originality criteria.

The forty projects approved in 2018 benefitted from financial support equivalent to €40M (CAD \$60M).¹⁴² Since 2008, the CIJV has contributed to over 200 projects by 100 companies.¹⁴³ In 2020, €48 M (CAD \$71M) were allocated to the Video Game Tax Credit.¹⁴⁴

In 2019, 37% of French video game companies accessed the CIJV. These tax credits represented 11% of production budgets, on average. However, for younger companies accessing the tax credit is more difficult.¹⁴⁵

Research Tax Credit¹⁴⁶ (CIR)

Videogame companies also have access to the Research Tax Credit (CIR), which supports business research projects up to 30% of eligible expenditure. A further tax credit of 20% of eligible expenditures is available to support the process or product innovation work of SMEs up to 20% of eligible expenditure.¹⁴⁷ However, in 2019, the CIR did not contribute to the financing of any French videogames.¹⁴⁸

YIC (young innovative companies) Tax Exemption¹⁴⁹

Young companies that invest over 15% of their spending on R&D may obtain a tax exemption for their first two fiscal years. In addition, their R&D department may benefit from a partial exemption from taxes on salaries for up to seven years (i.e. businesses less than eight years old).¹⁵⁰

SME Investment Tax Reduction (IR-PME)¹⁵¹

IR-PME, also called the "Madellin" tax reduction, provides a tax reduction of 25% to individual investors on their investments in SMEs. This includes direct investments in an SME or via a crowdfunding platform (to a maximum of €50K (CAD \$74K) per person); and investments

through a French investment fund (FIP) or a mutual fund for investments in innovation (FCPI), the latter two each capped at €12K (CAD \$18K) per person.¹⁵² The tax reduction is in effect to the end of 2021.

Public Debt Financing

Through the Institut pour le Financement du Cinéma et des Industries Culturelles (IFCIC), over €20M (CAD \$30M) in debt financing is available to support the growth of French cultural businesses.¹⁵³ IFCIC loans are unsecured (no guarantee, security, mortgage or insurance required). In 2019, bank loans contributed 5% to overall video game development budgets.¹⁵⁴

Equity Loan Fund for Video Games (FPJV)¹⁵⁵

Equity loans are available through IFCIC's FPJV.¹⁵⁶ These are loans that will convert to equity at a future date, providing companies more rapid access to capital than through a round of equity fundraising. They are intended to finance investments by video game companies in the production, exploitation, distribution and promotion of video games eligible for support through the CNC, as well as investments in the company.¹⁵⁷ Equity loans leverage bank financing to provide companies with high growth potential with access to financing that avoids the necessity for their own capital or a private bank loan.¹⁵⁸ In 2019, equity financing represented 3% of financing to video game developers.¹⁵⁹

2.3 Private Funding

The oldest angel network, Investessor, has a membership of over 300 business angels on the Isle of France, and an online investment platform, WeLikeStartup, which connects investors to companies seeking financing. Amongst the games invested in by business angels in this network are mobile game developer and publisher Voodoo, Army Defender, Playme!, and Enquête à Versailles sous Louis XIV: Avec Vauban! For its part, Femmes Business Angels represents women investors. The videogame Playme! has also been funded through this network.¹⁶⁰

In the VC space, Paris-based technology investor Serena Capital has invested in French video games companies. These investments include USD \$14M (CAD \$18M) in

¹⁴¹ Centre National du cinéma et de l'image animée, *Crédit d'Impôt Jeu Vidéo*, retrieved from https://www.cnc.fr/professionnels/aides-et-financements/jeu-video/credit-dimpot-jeu-video_121078.

¹⁴² Centre National du cinéma et de l'image animée, *Bilan 2019 : Jeu Vidéo*, 2020.

¹⁴³ *Tax Credit for Video Games*, retrieved from [https://jointhegame.fr/pdf/Tax-credit-for-video-games-\(TCVG\).pdf](https://jointhegame.fr/pdf/Tax-credit-for-video-games-(TCVG).pdf).

¹⁴⁴ *Projet de loi de finances pour 2020 : Médias, livre et industries culturelles*, *Rapport parlementaire*, retrieved from <https://www.senat.fr/rap/19-140-319/l19-140-3196.html>.

¹⁴⁵ *Syndicat national du jeu vidéo, Baromètre annuel du jeu video en France*, Edition 2020.

¹⁴⁶ *Crédit d'impôt recherche (CIR)*, retrieved from <https://www.service-public.fr/professionnels-entreprises/vosdroits/F23533>.

¹⁴⁷ *Direction générale des entreprises, "Le soutien de l'état en faveur du jeu vidéo"*, *entreprises.gouv.fr*, retrieved from <https://www.entreprises.gouv.fr/fr/numerique/politique-numerique/soutien-de-l-etat-faveur-du-jeu-video>; *Join the Game France website* retrieved from <https://jointhegame.fr/why>.

¹⁴⁸ *Syndicat national du jeu vidéo, Baromètre annuel du jeu video en France*, Edition 2020.

¹⁴⁹ *BPI France, Le régime des jeunes entreprises innovantes*, retrieved from <https://bpi.france-creation.fr/encyclopedie/aides-a-creation-a-reprise-dentreprise/aides-a-innovation/jei-jeune-entreprise>.

¹⁵⁰ *Survey of Global Investment and Innovation Incentives : France*, *Deloitte, October 2020*; *Les Startup vous disent merci, votre impôt aussi ! Tacotax*, retrieved from <https://www.tacotax.fr/guides/defiscalisation/defiscalisation-entreprise-travail/start-up>.

¹⁵¹ *Annick Berger, "Investissement dans une PME : la réduction d'impôt enfin majorée"*, *Capital*, August 12, 2020; *Olivier Decarre, "IR-PME : la réduction d'impôt de 25% s'applique depuis ce lundi"*, *Mieux vivre*, August 10, 2020.

¹⁵² *Oliver Cheilan, "IR-PME : la réduction d'impôt majorée à 25% pourrait être prolongée en 2021"*, *Bour-sier.com*, November 13, 2020; *"Investir dans les PME : la réduction d'impôt Madelin IR-PME est portée de 18% à 25%"*, *Boursorama*, August 11, 2020.

¹⁵³ *Syndicat national du jeu vidéo corporate website* retrieved from <http://snjv.org/>; *Videogames Funding Guide*, *Creative Europe Desk Denmark*, 2016.

¹⁵⁴ *Syndicat national du jeu vidéo, Baromètre annuel du jeu video en France*, Edition 2020.

¹⁵⁵ *IFCIC, Jeu Vidéo - Fonds d'avances Participatives en faveur du Jeu Vidéo (FPJV)*, *Les-aides.fr*, retrieved from https://les-aides.fr/fiche/a5RlCnLxGxfTeBGZeTUzZ4_Vm/ifcic/jeu-video-fonds-d-avances-participatives-en-faveur-du-jeu-video-fpjuv.html.

¹⁵⁶ *Videogames Funding Guide*, *Creative Europe Desk Denmark*, 2016; *"Comment financer un jeu vidéo indépendant?"* *Kiss Kiss Bank Bank*, *Op. Cit*.

¹⁵⁷ *IFCIC, "Jeu Vidéo"*, retrieved from <http://www.ifcic.fr/vous-etes-une-entreprise-culturelle/jeu-video.html>.

¹⁵⁸ *Le gouvernement se mobilise en faveur des industries culturelles et créatives et renforce les dispositifs de financement existants*, *Ministère de l'économie et des finances et Ministère de la Culture*, France.

¹⁵⁹ *Syndicat national du jeu vidéo, Baromètre annuel du jeu video en France*, Edition 2020.

¹⁶⁰ *Videogames Funding Guide*, *Creative Europe Desk Denmark*, 2016.

Figure 8: Selected Private Equity Funds with Investments in Video Game Companies

COMPANY	INVESTMENT STAGE	INVESTMENT FOCUS	NOTABLE INVESTMENTS
Serena Capital	Seed to Series B	Scalable Digital companies, based in France	Powder, Darewise, 8SEC Studios, Shadow
IDinvest Partners	Early and later stage	Music platforms, video games companies (social, games platforms, with games), PlayStation, healthcare, software companies	Pretty Simple Games, Curse, Social Point, Plumbee, Kobojo, Plumbee, eRepublik Labs, Kobojo, Grand Cru, Mediastay, Zeturf, Winamax, and Curse.
Iris Capital	Early stage to growth equity	Digital economy, social and new digital media, Internet and mobile services, Cloud Computing, new networking and software technologies, Video games	Yodo1 (mobile game developer and publishing platform in China)
I-Source Gestion	Early stage	Corporate software (business applications and software tools), multi-media technologies, software, telecommunication systems and services, internet, embedded systems, managed services, eco-technologies	Cyanide studio (French video game company)

games social sharing platform Powder and USD \$30M (CAD \$38M) in the cloud gaming platform Shadow.¹⁶¹ Serena Capital recently closed fundraising on a new €300M (CAD \$445M) fund for early stage startups.

In the earlier part of the past decade, some private VC firms based in France invested in games. Paris-based Idinvest Partners invested in a portfolio of game companies in the seed to late stage.¹⁶² Examples of other private investors include the VCs Iris Capital, which invested in the Chinese mobile game platform Yodo, and i-Source Gestion, which invested in the French video game company Cyanide Studio.¹⁶³

Figure 8 provides a summary of investments in video game companies by the VCs discussed here.

¹⁶¹ Romain Dillet, "Powder raises \$14 million for its social app for game clips," Tech Crunch, February 10, 2021. "Video games: The Serena fund invests in two French studios," The Limited Times, July 9, 2020.

¹⁶² "Grand Cru Grabs \$11 M in Series A," VC News Daily, July 30 2013; Roxanne Varza, "Social games publisher Pretty Simple raises €2.5 million from Idinvest," Tech Crunch, May 16, 2011; "Explosive Growth for Pretty Simple's Social Game: Criminal Case: Eight-Digit Revenue Forecast in Only 2 Months," Pretty Simple, Press Release, January 25, 2013, retrieved from <https://www.prnewswire.com/news-releases/explosive-growth-for-pretty-simples-social-game-criminal-case-eight-digit-revenue-forecast-in-only-2-months-188339551.html>

¹⁶³ "Amusement Cyanide expands to Montreal," MCV Develop, November 26, 2007, retrieved from <https://www.mcvuk.com/development-news/amusement-cyanide-expands-to-montreal/>.

"... only 2% of game studios are accessing corporate venture capital."



3. Germany

3.1 About the Industry

Today, there are approximately 622 companies based in Germany operating in the games sector, of which the vast majority are game developers. The sector is comprised of a large number of independent game companies, and larger developers including international companies.¹⁶⁴ German game companies attracted €120M (CAD \$178M) in domestic sales, out of a total of €2.2B (CAD \$3.3 B) in games sales in 2017.¹⁶⁵ The market has grown rapidly in recent years, achieving total games sales of €6.5B (CAD \$9.7B) in 2019 and €8.5B (CAD \$12.8B) in 2020.¹⁶⁶

In Germany, video game companies benefit from a range of public direct and indirect support, including the German Games Fund, which provides matching grants for game development, and the INVEST Grant for Venture Capital, which provides incentives to individual investors to invest in innovative new, small businesses, including game companies. There is not a national tax credit program for video games in Germany, though some German states do provide them.¹⁶⁷

3.2 Public Funding

3.2.1 Direct Funding

German Games Fund

Launched in 2020 by the Federal Ministry of Transport and Digital Infrastructure (BMVI), the German Games Fund provides €50M (CAD \$74M) annually for the development of game prototypes and productions with the ultimate goal of achieving international competitiveness.¹⁶⁸ The Fund is available to German game companies headquartered in Germany and to foreign game companies based in Germany. Funding from the German Games Fund may be combined with regional funding available from German state governments.¹⁶⁹

The Fund provides support to both small and large developer studios to support projects that pass a culture test.¹⁷⁰ Funding takes the form of non-repayable rebate (grant) of 25% to 50% of eligible

game development expenditures. Funding is based on project costs. Projects with eligible costs between €100K (CAD \$150K) and €2M (CAD \$3M) are eligible for a rebate of up to 50%. Those with costs between €2M (CAD \$3M) and €8M (CAD \$12M) may receive a rebate equivalent to 25% to 50%, calculated on a sliding scale. Projects with costs above €8 million will receive a maximum of 25%.¹⁷¹ Funding is automatic (based on eligible expenditures) for project costs of less than €40M (CAD \$59M). For projects with higher eligible costs, a selective process will be used, based on a mix of cultural and economic criteria.¹⁷² Funding for prototypes is also available, to a maximum of 50% of budgets of not more than €400K (CAD \$593K).¹⁷³

“Some state (regional) banks in Germany provide equity financing for innovative startups.”

The German Games Association has determined that as the Fund positively impacts the game development sector in Germany, stimulating new game development and the establishment of new companies, it will require an increase of €5M to €10M (CAD \$7.4M to \$15M) each year for the first five years.¹⁷⁴

IBB Ventures – VC Fund

Some state (regional) banks in Germany provide equity financing for innovative startups. The Investitionsbank Berlin (Investment Bank Berlin) invests in growth Berlin-based companies in the technology sectors and the creative industries through its VC Fund. The Fund, supported by the City of Berlin and the European Union's European Fund for Regional Development, invests in start-ups with innovative technologies or business models, to finance the development and launch of innovative, scalable products or services that can help a company achieve rapid growth.

Companies must be early-stage and led by strong, experienced teams. In exchange for a minority stake in the company, the VC Fund typically makes an initial investment of between €200K (CAD \$296K) and €1M (CAD \$1.5M). Larger investments are also possible. The VC Fund is a matching fund with other investors, which must participate in the company in at least the same amount as the VC Fund.¹⁷⁵

¹⁶⁴ German Games Industry Association website: www.game.de/en/market-data/622-companies-in-germany-develop-an-distribute-games/; see also, German Games Industry Association, *The German games industry 2019/20 Insights, facts and reports*, 2020.

¹⁶⁵ Christof Kerkmann, “German video game producers may get state aid,” *Handelsblatt Today*, August 21, 2018.

¹⁶⁶ German Games Industry Association website: www.game.de/en/market-data/german-video-games-market-2020-2/.

¹⁶⁷ Philipp Thiele and Felix Hilgert, “German Games Industry Presents Model Bill for Development Tax Credits,” *VideoGamesLaw*, January 10, 2017.

¹⁶⁸ German Games Industry Association, *The German games industry 2019/20 Insights, facts and re-ports*, 2020.

¹⁶⁹ Dr. Malte Behrman, *bbw Hochschule Berlin; Game Farm GmbH, Culture, Technology, Business: Financing Strategies for Game Development in Europe*, BGZ Berliner Gesellschaft, November 2020.

¹⁷⁰ German Games corporate website retrieved from www.game.de/en/positions/german-games-fund/.

¹⁷¹ German Games corporate website retrieved from www.game.de/en/an-overview-of-the-games-industry-in-germany/.

¹⁷² German Games corporate website retrieved from www.game.de/en/german-games-funding/; <https://www.game.de/wp-content/uploads/2020/09/funding-guideline-of-computer-games-by-the-German-Federal-Government-English-translation-by-game-Sept-2020-1.pdf>

¹⁷³ German Games corporate website retrieved from www.game.de/en/german-games-funding/; www.game.de/wp-content/uploads/2020/09/funding-guideline-of-computer-games-by-the-German-Federal-Government-English-translation-by-game-Sept-2020-1.pdf

¹⁷⁴ German Federal Ministry of Transport and Digital Infrastructure, *Funding Guideline: Funding of computer games by the German Federal Government*, August 28, 2020, translated to English by German Games.

¹⁷⁵ Investment Bank Berlin website: www.ibb.de/de/foerderprogramme/vc-fonds.html.

3.2.2 Indirect Funding

INVEST – Grant for Venture Capital

Through the Federal Office of Economics and Export Control (BAFA), private individual investors have access to grants when they invest in young, innovative German startups, including video game companies. Business angels may access INVEST grants equivalent to 20% of their investment of at least €10K (CAD \$15K) to a maximum of €3M (CAD \$4.5M) per year, i.e. for a maximum grant of €500K (CAD \$740K) per year, for investments held for at least three years. Investors can also access an “exit” grant to offset capital gains taxes (equivalent to a capital gains tax exemption), equal to 25% of investors’ profit, to a maximum of 80% of the original investment.¹⁷⁶

R&D Tax Incentive

Effective January 1, 2020 the R&D Tax Incentive provides a tax allowance (grant) of 25% for eligible R&D costs incurred in Germany relating to certified R&D projects, to a maximum of €1M (CAD \$1.5M) per company group per year. The incentive applies to R&D labour costs. Companies may also claim 60% of subcontracting costs for outsourced R&D activities. The incentive is available to all companies, regardless of their size or level of revenues.¹⁷⁷

3.3 Private Funding

In recent years, two new venture capital funds dedicated to the games industry have emerged in Germany. Headed by veteran digital game distributors, Game Seer Venture Partners Created a €10M fund in 2019 to invest exclusively in game projects over three years. The company co-finances games development projects and participates in profits. The company aims to invest between €100K and €1.5M (CAD \$148K and CAD \$2.2M) in three to five high-quality games at an early stage each year. This style of investing is in contrast to VC investments, which focus on the long-term company growth. Gameseer’s first investment in 2019 was in the game *The Waylanders*.¹⁷⁸

Bitkraft is a venture capital firm founded by game company veterans, which specializes in early and mid-stage investments in games, esports and interactive media.¹⁷⁹ The company has made over 50 investments, investing USD \$70M (CAD \$88M) since its inception in 2017, and recently raised USD \$165M (CAD \$208M) of new investment capital for its first regular Venture Fund.¹⁸⁰

¹⁷⁶ German Federal Ministry for Economic Affairs and Energy corporate website retrieved from www.exist.de/EN/Network/Partners/Invest/inhalt.html. Companies must have fewer than 50 employees, be younger than 7 seven years old, with headquarters in the EU and operating in Germany and total annual sales of less than 10M euros. A total of 10 shareholders per company is permitted, as are eligible investments that may later be converted to loans.; German Games corporate website re-trieved from <https://www.game.de/en/funding-institutions/>; “Startup Grants in Germany: The Ultimate Guide, Spinlab, May 27, 2019, retrieved from <https://www.spinlab.co/blog/public-grants-startups-germany>.

¹⁷⁷ German Ministry of Finance website: www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Steuern/Steuerliche_Themenbereiche/Forschungszulage/2020-04-08-forschungszulage-introartikel.html; See also German Ministry of Education and Research website: <https://www.bescheinigung-forschungszulage.de/>; and Deloitte, *Survey of Global Investment and Innovation Incentives: Germany*, October 2020, retrieved from <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-survey-of-global-investment-and-innovation-incentives-germany-2020.pdf>.

¹⁷⁸ Dean Takahashi, “Game Seer Venture Partners will invest \$11.1 million in game projects,” *Venture Beat GamesBeat*, September 16, 2019, *Game Seer* corporate website retrieved from www.game-seer.com/2019/07/03/gamer-smart-money/.

¹⁷⁹ *Bitkraft Esports Ventures* corporate website retrieved from www.bitkraft.de/.

¹⁸⁰ Tobias Seck, “Bitkraft raises \$165 M Funding for its Bitkraft Venture Fund 1,” *The Esports Observer*, August 27, 2020.

“In recent years, two new venture capital funds dedicated to the games industry have emerged in Germany.”

4. Netherlands

4.1 About the Industry

In 2018, the Dutch games industry consisted of 575 companies, attracting almost €300M (CAD \$443M) in revenues. Companies are small, employing seven people on average. Compared to 2015, companies have been scaling up, with forty companies now employing between eleven and one hundred people.¹⁸¹ The industry generally specializes in mobile games, small-scale PC games and browser games.¹⁸²

Video game startups in the Netherlands typically use their own resources, or small grants through the Creative Industries Fund, to bootstrap their operations.

4.2 Public Funding

4.2.1 Direct Funding

Creative Industries Fund

The Creative Industries Fund provides grants for creative industry companies in the Netherlands. A total of €1.5M (CAD \$2.2M) per year is available for video game development through the digital culture stream. Co-financing is available for which the maximum grant is published at each application deadline. In 2020, the maximum grant awarded under this component was €40K (CAD \$59K). In addition, startup grants are available without need for co-financing, to a maximum of €7.5K (CAD \$11K).

4.2.2 Indirect Funding

R&D Tax Credit

The Promotion of Research and Development Act (WBSO) provides a wage tax credit for qualifying R&D activities. The credit is equivalent to 32% of the first €350K (CAD \$519K) on eligible wages and payroll expenditures for established companies, and 40% for start-up companies. Eligible expenditures after the first €350K (CAD \$519K) may access a tax credit at a rate of 16%.¹⁸³

“Investors note that there is a need for a public matching fund targeted to the video games industry that would enhance the value of investments being made by private business angels.”

Dutch Innovation Box

Through the Dutch Innovation Box tax incentive, video game companies may be eligible for a reduced general income tax rate (from 25% to 9%) on income earned from self-produced intangible assets.¹⁸⁴

These tax incentives were said by interviewees to be significant for some companies.

4.3 Private Funding

There exist angel investors, former founders, with a focus on investing in video game companies. One such example is the Mid-Game Fund, an investment syndicate comprised of over 20 successful Dutch games entrepreneurs who provide recoupable loans for game development projects in the Netherlands. Loans may be forgiven should the game fail.¹⁸⁵

Investors note that there is a need for a public matching fund targeted to the video games industry that would enhance the value of investments being made by private business angels.¹⁸⁶

Only a few venture capital investments have been made in Dutch video game companies. These include investments by Solid Ventures into Cool Games in 2012 and by Linden Mobile Ventures in Lunagames in 2013.¹⁸⁷

¹⁸¹ Dutch Games Garden, *Games Monitor: The Netherlands 2018*.

¹⁸² “A closer Look at the Dutch Games Industry,” Dutch Games Association, May 18, 2015, retrieved from <https://dutchgamesassociation.nl/2015/05/18/closer-look-dutch-games-industry/>

¹⁸³ “Innovation Box,” Consultants International, October 5 2020, retrieved from https://www.tax-consultants-international.com/read/innovation-box; Incentive for Research and Development Cost in the Netherlands, Tax Consultants International, retrieved from https://www.tax-consultants-international.com/read/wbso?tmpl=taxci_print_cs.html

¹⁸⁴ Willem Jan Paardekooper, R&D Partner, EMEA R&D incentives guide, KPMG, March 2017.

¹⁸⁵ MidGame Fund corporate website retrieved from <https://midgame.fund/terms>.

¹⁸⁶ Interviews.

¹⁸⁷ “BoosterMedia Secures €1.75 M Funding Round from Truffle Capital and Solid Ventures,” Cool Games, February 8, 2012; “Dutch mobile game developer Lunagames gets €400,000 investment from Linden Mobile Ventures, Linden Mobile Ventures, Press Release, July 15, 2013, retrieved from <https://lindenmobileventures.pr.co/53325-dutch-mobile-game-developer-lunagames-gets-400-000-investment-from-linden-mobile-ventures/>

V. Selected Jurisdictions In the Nordic Region

1. Norway

1.1 About the Industry

There were 388 video games companies in Norway in 2018. These companies had total revenues of €37M, primarily from exports.¹⁸⁸ The majority of Norwegian game companies are sole proprietorships yet to publish their first game.¹⁸⁹ The number of active game developers with revenues from published games is estimated to be only about thirty companies. Amongst active companies, the majority are small, with fewer than ten employees. Fifteen of the largest game developers in Norway account for the majority of revenues.¹⁹⁰

1.2 Public Funding

1.2.1 Direct Funding

Norwegian Film Institute

The Norwegian Film Institute (NFI) provides funding to Norwegian video game developers for games that can pass a cultural test. In 2018, the NFI allocated €700K (CAD \$1M) for the development of ten computer games.¹⁹¹ The Norwegian Games Room Strategy 2020-2022, announced in 2019, promised additional funding for video games through the NFI.¹⁹²

1.2.2 Indirect Funding

SkatteFUNN is a fiscal incentive that provides a tax deduction for R&D project costs at a rate of 20% of eligible costs. This fiscal incentive is said to provide a significant source of funding for the fifteen largest gaming companies.¹⁹³

1.3 Private Funding

One of the challenges in the Norwegian games sector is the lack of private investment, which is said to be limiting the sector's growth.¹⁹⁴

“One of the challenges in the Norwegian games sector is the lack of private investment, which is said to be limiting the sector's growth.”

¹⁸⁸ “Gaming in Norway: an industry in the making,” Game Hub Scandinavia, December 19, 2016, re-trieved from <https://gamehubscandinavia.dk/gaming-norway/>; Swedish Games Industry, Game Developer Index, 2020.

¹⁸⁹ “Gaming in Norway: an industry in the making,” Game Hub Scandinavia, December 19, 2016, Op. Cit.; Spillerom Dataspillstrategi 2020-2022 [Game Room Video Game Strategy 2020-2022], Kulturdepar-temetet, Norway.

¹⁹⁰ Eivind Torgersen, University of Oslo, “Are Norwegian game developers too keen on perfection?” Partner.ScienceNorway.no, July 30, 2020.

¹⁹¹ Norwegian Film Institute corporate website retrieved from www.nfi.no/eng/news/2018/norwegian-film-institute-supports-10-computer-games.

¹⁹² Spillerom Dataspillstrategi 2020-2022 [Game Room Video Game Strategy 2020-2022], Kulturdepar-temetet, Norway.

¹⁹³ Game Room Video Game Strategy 2020-2022, Op. Cit.

¹⁹⁴ Dylan Moran, “The Growth in Norwegian Game Studios,” Gamasutra, November 9, 2017.



2. Sweden

2.1 About the Industry

There were 435 game development companies in Sweden in 2019, with annual revenues of €2.3B (CAD \$3.4B).¹⁹⁵ Four companies had revenues of over €100M (CAD \$148M) each. A majority of Swedish game companies are said to be profitable and thirteen are publicly traded.¹⁹⁶

The industry is growing rapidly, with over half of all companies established in the last five years. Of the publicly traded game companies, ten made their initial public offering (IPO) in the past five years.¹⁹⁷

Amongst the factors driving growth are serial entrepreneurs launching new companies, as well as frequent and large investments in recent years. The number of companies launched by experienced game developers is growing, as is the number of companies creating new related companies.¹⁹⁸

2.2 Public Funding

2.2.1 Direct Funding

There is currently an absence of public support, whether in the form of tax incentives or startup grants targeting video game companies. Smaller companies in particular face significant challenges in obtaining early stage financing to develop their video games.¹⁹⁹

Loans from ALMI Invest

The publicly owned Swedish venture investor, ALMI Invest, provides loans at reduced rates guaranteed by the European Investment Fund. These include Micro Loans of up to €30K (CAD \$45K) to very early stage startups, and growth loans of €25K (CAD \$37K) or more. New companies without access to capital can obtain Micro Loans. Growth loans support innovation and are backed by the EIF. These are offered at low costs to borrowers for investments or working capital.²⁰⁰

2.2.2 Indirect Funding

Reduced Social Security Contributions for R&D

Sweden provides an R&D tax credit to qualified

companies, reducing their employer social security contributions by 20% for employees who spend a minimum of 75% of their working hours to R&D activities (at least fifteen hours per month). Maximum salary base for the tax credit is SEK 919K (CAD \$134K) per month, per group of companies.²⁰¹

ALMI Invest Co-Investments

ALMI Invest provides public venture capital for early stage, scalable businesses registered in Sweden with proven commercial potential. Through co-investments with business angels and institutional investors, ALMI Invest acts as a bridge to private capital for small (fewer than 20 employees) Swedish companies in a wide range of economic sectors, including video games.²⁰² With approximately €200M (CAD \$296M) under management, first round investments from ALMI are usually in the range of €200K - €450K (CAD \$296K to CAD \$667K). Over time, companies may receive up to €1.1M (CAD \$1.6M).²⁰³

ALMI investments in video games companies have included Sideline Labs (2019), Flarie (2017); Forgotten Key (2016) and Pieces Interactive (2015).²⁰⁴ ALMI has also invested in related video games services companies Lurkit (2020) and the Internet Gaming Database (2018).²⁰⁵

2.3 Private Funding

Sweden has a very active mergers and acquisitions market in the video games sector, typically led by experienced games companies. Between January and November 2020, thirty-eight investments and acquisitions were reported, with a total approximate value of €1.3B (CAD \$1.9B). Thirty-five deals included a Swedish company as purchaser and in 9 cases a Swedish company was the seller. In 2019 there were forty-six new mergers and acquisitions reported, with a total value of €425M (CAD \$630M).²⁰⁷

One of the largest Swedish game companies, Embracer Group, is a leading corporate group, acquiring video games companies in Sweden, the Czech Republic and New Zealand. In the summer of 2020, Embracer Group announced eight new

acquisitions made directly by the parent company or through its subsidiaries. Recent acquisitions by Embracer Group include Gearbox Software, Easybrain, Qauntic Lab, Coffee Stain Studios, 4a Games, Sola Media, Pow Wow Entertainment, DECA Games, Saber Interactive and Tarsier. For its part, Swedish-based Enad Global 7 (EG7) acquired 100% of Canadian video game company Big Blue Bubble in 2020.²¹⁰

¹⁹⁵ Swedish Games Industry, *Game Developer Index*, 2020.

¹⁹⁶ Swedish Games Industry, *Op. Cit.*

¹⁹⁷ Swedish Games Industry, *Op. Cit.*

¹⁹⁸ Swedish Games Industry, *Op. Cit.*

¹⁹⁹ Swedish Games Industry, *Op. Cit.; Interviews.*

²⁰⁰ "ALMI Business Partner," *European Monitoring Centre on Change*, Eurofound, retrieved from www.eurofound.europa.eu/observatories/emcc/erm/support-instrument/almi-foretagspartner-business-enterprise.

²⁰¹ Willem Jan Paardekooper, 2017, *Op. Cit.*; Ernst & Young, *Worldwide R&D Incentives Reference Guide*, 2020.

²⁰² ALMI Invest corporate website retrieved from <https://www.almi.se/almi-invest/om-almi-invest/>.

²⁰³ "Almi Business Partner," *European Monitoring Centre on Change*, Eurofound, retrieved from <https://www.eurofound.europa.eu/observatories/emcc/erm/support-instrument/almi-foretagspartner-business-enterprise>

²⁰⁴ ALMI Invest corporate website retrieved from <https://www.almi.se/almi-invest/nyheter/almi-invest-investerar-i-spelbolaget-sideline-labs/>; "Former King-topp and Almi Invest join the gaming app Flarie," *Breakit*, April 26, 2017; "Pieces will conquer the world with their own computer games," ALMI Invest, *Press Release*, March 9, 2015, retrieved from <https://www.mynewsdesk.com/se/almi/pressreleases/pieces-ska-eroevra-vaerlden-med-egna-dataspel-1127489>; "Almi Invest invests in the gaming company Forgotten Key," ALMI Invest, *Press Release*, May 26, 2016, retrieved from <https://www.mynewsdesk.com/se/almi/pressreleases/almi-invest-investerar-i-spelbolaget-forgotten-key-1418780>.

²⁰⁵ ALMI Invest corporate website retrieved from www.almi.se/almi-invest/nyheter/almi-invest-investerar-i-dataspelsplattformen-lurkit/; Peter Lundegårdh, "Database for games takes in millions," *Di Weekend*, February 13, 2018.

²⁰⁶ Swedish Games Industry, *Op. Cit.*

²⁰⁷ Swedish Games Industry, *Op. Cit.*

²⁰⁸ Swedish Games Industry, *Op. Cit.*

²⁰⁹ "Embracer Group" entry in *Crunchbase website* retrieved from https://www.crunchbase.com/organization/embracer-group/company_financials.

²¹⁰ "Big Blue Bubble Sold," *London Magazine*, August 27, 2020, retrieved from <https://londoninmagazine.ca/2020/08/27/big-blue-bubble-sold>.

3. Finland

“Business Finland’s funding approach is unique and highly regarded in the European games industry for its integration of financing support with coaching and peer-to-peer learning opportunities that support growth.”

3.1 About the Industry

In 2018, there were 230 video game companies in Finland, with total revenues of €2.2B (CAD \$3.3B) and over a billion people playing their games around the world.²¹¹ Finland has had great success in the mobile games sector, with companies like Rovio and Supercell, who have taken advantage of the opportunities afforded by digital distribution and free to play models. Global giants AMD, Nvidia, EA, Ubisoft and Unity operate in Finland.

3.2 Public Funding

3.2.1 Direct Funding

Entertainment Finland Program

Business Finland is the national funding body for technology-based startup companies in Finland, including video game companies. Support is available for companies developing content or services for global markets, with the goal of moving companies towards scalable global business, attracting foreign investments, increasing the number of companies with revenues of over €10M (CAD \$15M), and achieving global success for Finnish brands.

Business Finland’s funding approach is unique and highly regarded in the European games industry for its integration of financing support with coaching and peer-to-peer learning opportunities that support growth, exports, business models, finance and R&D. Clients have access to networking support, advice, and access to Business Finland’s business networks to build out

their global networks and seize market opportunities.²¹² Companies may receive support for up to 75% of the eligible project costs, to a maximum of €1.25M (CAD \$1.85M), which includes a grant of up to €500K (CAD \$741.5K) and a loan of up to €750K (CAD \$1.1M).

Between 2012 and 2017 Finnish game companies supported by Business Finland attracted approximately €100M (CAD \$148M) in private funding. The companies that have received support from Business Finland include Supercell, Small Giant Games, Grand Cru, Future Play, Shark Punch, Singa and GameRefinery.²¹³ Business Finland also shares knowledge with the national games industry association, Neogames.

While Business Finland provides some companies with early stage funding, and connections to investors outside Finland, the challenge for very small studios with a creative focus is a lack of access to very early funding, such as project based funding. Interviewees pointed to the need for a fund that could provide smaller grants of up to €50K (CAD \$74K) for young startups to develop their games and learn about running their business. This would provide opportunities for skills development that would ultimately strengthen the sector.

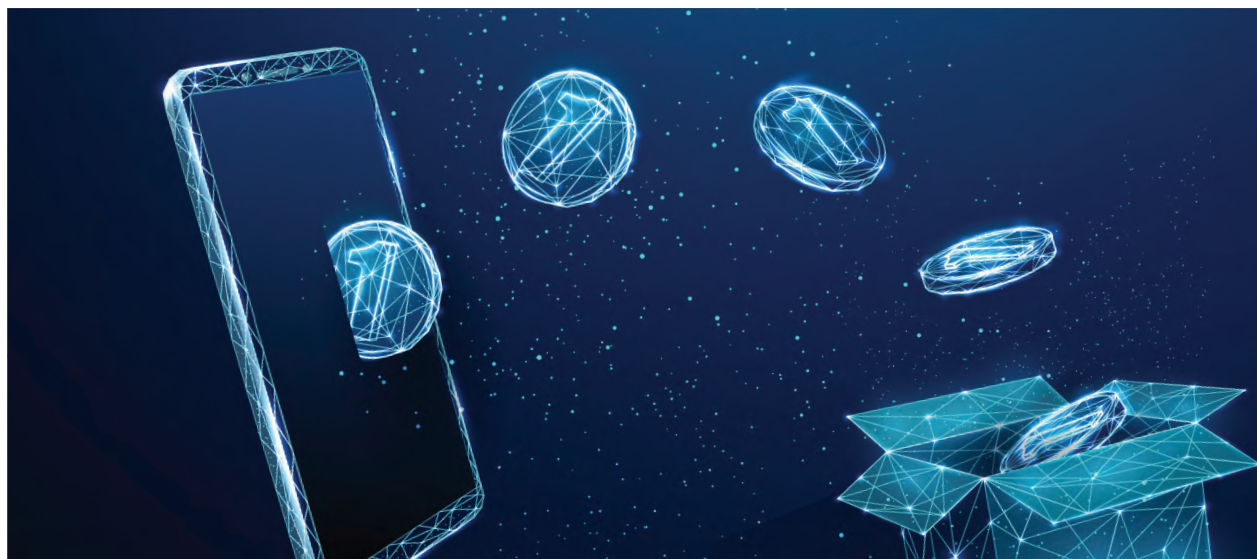
3.2.2 Indirect Funding

There are no national indirect funding programs available in Finland.

²¹¹ Swedish Games Industry, Op. Cit.

²¹² Swedish Games Industry, Op. Cit.

²¹³ Business Finland corporate website retrieved from www.businessfinland.fi/en/for-finnish-customers/services/funding/tempo-funding/game-business-funding.



3.3 Private Funding

Finland is home to a number of investment firms created by former game company founders with a focus on investing in video games companies (in Finland and elsewhere).²¹⁴ These include Play Ventures Fund, Sisu Game Ventures and Nordic Games Ventures.²¹⁵ (These are shown in Figure 9, below.)

Established in 2014, Sisu Game Ventures focuses on companies in the Nordic region.²¹⁶ While seed funding is very rare in Finland, Sisu Ventures are said to be making very early stage investments.

Play Ventures has a focus on early stage investing in free-to-play game studios and games services startups from around the globe. With total investment funds of USD \$70M (CAD \$88M),²¹⁷ Play Ventures is backed by video game companies Rovio, Modern Times Group (MTG), and Huuuge Games CEO Anton Gauffin.²¹⁸ Play Ventures currently has a portfolio of 20 companies in which it has invested, including Finland-based Redhill Games, Vietnam-based Gamejam, and Turkey-based Bigger Games.²¹⁹

Nordic Game Ventures invests exclusively in early stage game development and games ecosystem companies in the Nordic region (Denmark, Finland, Iceland, Norway and Sweden).²²⁰

214 *The Israeli Video Games Ecosystem: Converging Technologies, Emerging Opportunities*, Deloitte, 2018.

215 "Rovio Entertainment has acquired Darkfire Games - Copenhagen based mobile games studio," Rovio Entertainment Corporation, Press Release, June 3, 2020, retrieved from <https://www.globenewswire.com/news-release/2020/06/03/2042670/0/en/Rovio-Entertainment-has-acquired-Darkfire-Games-Copenhagen-based-mobile-games-studio.html>

216 "Sisu Game Ventures," entry in Crunchbase website retrieved from <https://www.crunchbase.com/organization/sisu-game-ventures>.

217 Play Ventures corporate website retrieved from <https://www.playventures.vc/>; "Play Ventures" entry in Crunchbase website retrieved from https://www.crunchbase.com/organization/play-ventures/recent_investments.

218 Dafizeck Bin Daud, "Gaming VC firm Play Ventures closes first fund at \$40m," Tech in Asia, August 22, 2019.

219 "Play Ventures: Demystifying Fundraising: 5 Steps to Pitching Success," Presentation by Phylcia Koh, Investment Analyst, Play Ventures, 2021.

220 Nordic Game Ventures corporate website retrieved from <https://nordicgameventures.com/>.

221 "Sisu Game Ventures," entry in Crunchbase website retrieved from https://www.crunchbase.com/organization/sisu-game-ventures/recent_investments.

222 "Play Ventures," entry in Crunchbase website retrieved from https://www.crunchbase.com/organization/sisu-game-ventures/recent_investments; "Play Ventures," entry in Crunchbase website retrieved from https://www.crunchbase.com/organization/sisu-game-ventures/recent_investments; "Play Ventures," entry in Crunchbase website retrieved from https://www.crunchbase.com/organization/play-ventures/recent_investments.

223 Nordic Game Ventures corporate website retrieved from <https://nordicgameventures.com/>.

Figure 9: Selected Private Equity Funds with Investments in Video Game Companies

COMPANY	INVESTMENT STAGE	INVESTMENT FOCUS	NOTABLE INVESTMENTS
Sisu Game ²²¹	Seed, Venture Round and Series A	Video Games companies	Dazzle Rocks, 1939 Games, Surplus Games, Mainframe Industries, Coherence, Utopos Games, Doppio Games, Immersal
Play Ventures Fund ²²²	Seed, Early Stage	Video Games companies, eSports companies	Colossi Games, Mobile Premier League, Savage Game Studios, mod.io, Bigger Games, Potato Play, TrapLight Games, Bright Star Studios, Reworks, unrd
Play Ventures Fund ²²³	Early stage	Nordic video game developers and games ecosystem companies	Quicksave Interactive Ltd., Supremacy Games, Akribian, Localize Direct, StageZero

"Support is available for companies developing content or services for global markets, with the goal of moving companies towards scalable global business..."

4. Denmark

4.1 About the Industry

In 2018, there were 159 games companies in Denmark, with total revenues of €123M (CAD \$182M). The most profitable 10% of all companies account for over 90% of revenues. SYBO Games' Subway Surfers has had upwards of 2.5 billion downloads, and was named the most often downloaded mobile game of the past decade by App Annie.²²⁴ In recent years, growth has been taking place in small and mid-sized companies.²²⁵

4.2 Public Funding

4.2.1 Direct Funding

Game Plan

Through the Game Plan, the Danish Film Institute (DFI) provides about DKK 15M (CAD \$3M) per year in grants for the development and production, launch and promotion of Danish companies' video games. The focus of this program is cultural in nature, with a view to strengthening and contributing to the quality and diversity of Danish video games.²²⁶

Support is available to a maximum of DKK 100K (CAD \$20K) for the development and prototyping of new games.

Projects with a functioning demo may receive production support of up to DKK 1.5 M²²⁷, to a maximum of 50% of project costs. The fund also supports international minority coproductions (where the Danish production company has a minority stake in the project). Projects supported in production may also access a grant for up to 50% of costs relating to the project's launch and promotional costs.²²⁸

4.2.2 Indirect Funding

Growth Fund

The Growth Fund (Vaekstfonden) is the Danish government's DKK 12B (CAN \$2.5M), investment fund, which provides loans and capital investments to startups. The Fund provides seed and venture capital, including pre-seed financing to video game companies, through

co-investments with business angels and capital investments in funds that invest in other funds, known as a fund of funds of FOF in the technology sector. The Fund also provides knowledge and networking for financial institutions and investors seeking to expand their business in Denmark.²²⁹ The Fund recently launched a new program to help increase the pool of liquidity available on the stock market for IPOs.²³⁰ The Growth Fund has in recent years made investments in esports companies, including GamerzClass and BLAST (esports tournament organizer).²³¹

Backed by the Cultural and Creative Sectors Guarantee Facility of Creative Europe and the European Investment Fund, the VAEKStfonden also provides loans for amounts up to DKK 15M (CAD \$3M) with a maturity of up to ten years to creative industry companies. Bedtime Digital Games received an EU-guaranteed loan from *Vaekstfonden* in 2019.²³²

R&D Tax Credit

In Denmark, companies may obtain a tax refund of up to 22% on losses where they have eligible R&D costs, to a maximum refund of DKK 5.5M (CAD \$1.1M).²³³

4.3 Private Funding

One of the oldest and most established film companies in the Nordic Region, Nordisk Film launched Nordisk Games in 2016 with a team that includes experienced game company founders and investors. With a 110-year history of successful filmmaking, the company was attracted to the games sector for its commercial potential in international markets.

Nordisk Games, makes equity investments in mid-level Nordic and European game development studios with proven growth potential. Nordisk Games typically takes a minority stake for its investments.²³⁴ The company has a current portfolio of seven companies, including Flashbulb Games, Avalanche Studios, Kogama.com, Reto Moto, Star Stable, Raw Fury and Nitro Games. The company has had one exit, Avalanche Studios, which it fully acquired in 2018 for USD \$103M (CAD \$130M).²³⁵

224 Matthew Forde, "Seven years on: How SYBO Games ran up 2.5 billion downloads for Subway Surfers," *PocketGamer.biz*, July 4, 2019; "SYBO Games: Creative Evolution," *Case Study, Creative Denmark*, retrieved from <https://www.creativedenmark.com/cases/sybo-games-creative-evolution/>; *Danske Indholdsproducenter I tal 2018 [Danish Content Producers in Figures 2018]*, Danish Producer Association, 2019.

225 Danish Producer Association, 2019, *Op. Cit.*; *Swedish Game Industry, Game Developers Index*, 2020.

226 Danish Film Institute, "Games and Cross Media," retrieved from <https://www.dfi.dk/en/english/funding/games-and-cross-media>.

227 Creative Europe, *European Game Support Systems*, 2015; *Videogames Funding Guide*, Creative Europe Desk Denmark, 2016.

228 Danish Film Institute Corporate website retrieved from <https://www.dfi.dk/branche-og-stoette/stoette/spilordningen>; Danish Film Institute, *Vilkar For Stotte Til Spil [Terms and Conditions for Support for Games]*, June 1, 2017.

229 Vaekstfonden corporate website retrieved from <https://vaekstfonden.com/>.

230 Heather Farbrough, "Nothing rotten in the state of Denmark's startups," *Forbes*, September 29, 2018.

231 "GamerzClass Secures \$1M Financing, Refreshes Board of Directors," *Coinsmart*, September 4, 2020, retrieved from <https://zephyrmet.com/gamerzclass-secures-1m-financing-refreshes-board-of-directors/>.

232 European Investment Fund, "Bedtime Digital Games: art, science & business," retrieved from https://www.eif.org/what_we_do/guarantees/case-studies/ccs-bedtime-digital-games-denmark.htm.

233 Ernst & Young, *Worldwide R&D Incentives Guide*, 2020.

234 Nordisk Games corporate website retrieved from <https://www.nordiskgames.com/#approach-link>.

235 "Nordisk Games entry in Crunchbase website retrieved from https://www.crunchbase.com/organization/nordisks-film/company_financials.

VI. Israel

1.1 About the Industry

The Israeli gaming ecosystem is made up of 360 companies, primarily in mobile/web platforms, social/casual games and technology development. The industry attracted revenues of USD \$2.5B (CAD \$3.14B) in 2019.²³⁶

While the majority of companies are small, employing fewer than ten employees, Israel has also spawned global successes Playtika and Plarium.²³⁷ The "startup nation" has the highest number of startups per capita, about 6000 in all, and averages 600 new startups each year.²³⁸

Interviewees noted that angel investors were a significant source of financing for games startups until 2019, supported by the Angel's Law investment incentive of the Israeli government, which has since sunset.

The Israeli industry is a relative newcomer to the global video games scene, but has reached significant accomplishments within a short period of time. One issue facing the local industry is a lack of access to public or private funding, particularly for companies with a focus on innovative content, and for seed and pre-seed stage companies.²³⁹

2. Public Support

2.1 Direct Funding

There are no national direct funding programs available in Israel.

2.2 Indirect Funding

There are no national indirect funding programs available.

3. Private Support

With its highly active technology and innovation sector, Israel has the world's highest level of venture capital per capita. The VC industry in Israel is characterised

by the prevalence of seed and early stage financing.²⁴⁰

As the video games industry has matured, a growing number of seasoned professionals are launching their own companies, investing in game companies and in one case, launching a dedicated VC.

Bootstrapped startups typically have access to angel investments. Investments by business angels were encouraged through Israel's Angel's Law, which provided incentives for private investors from 2011 to 2019.

In 2021, VGames, led by industry veterans, became the first venture fund that invests exclusively in game companies, raising USD \$60M (CAD \$75M).²⁴¹ The company's investment focus is video games companies in Israel and Eastern Europe. The company currently has an investment portfolio of 10 companies.

In recent years, the largest Israeli video game companies have been investing in and acquiring other game companies. One of the largest such companies, Playtika, acquired numerous companies before launching its own investment fund aimed at mid-level companies, Playtika Growth Fund. Between 2018 and 2019, Playtika acquired Israeli-based Jelly Button Games, German-based Wooga, Austria's Supertreat and Finland-based Seriously.²⁴²

"The Israeli industry is a relative newcomer to the global video games scene, but has reached significant accomplishments within a short period of time."

²³⁶ "Game On: How gaming is transforming Israel's startup ecosystem - and the world," *CTech*, January 6, 2021, retrieved from www.calcalistech.com/ctech/articles/0,7340,L-3885822,00.html.

²³⁷ Amit Kling and Omri Rosen, "Game Changers: The evolution of Israel's video game industry," *CTech*, October 3, 2020, retrieved from www.calcalistech.com/ctech/articles/0,7340,L-3852630,00.html; Deloitte, 2018, *Op. Cit.*

²³⁸ Deloitte, 2018, *Op. Cit.*

²³⁹ Deloitte, 2018, *Op. Cit.*

²⁴⁰ *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, OECD, 2015.

²⁴¹ Dean Takahashi, "VGames raises \$30M for game-focused investment fund in Israel," *Venture Beat GamesBeat*, July 15, 2020.

²⁴² Dean Takahashi, "Playtika's IPO filing reveals \$2.3B in revenues and \$2.3B in debt," *Venture Beat GamesBeat*, December 22, 2020; Noam Goldberg, "7 Israeli Companies Bringing their A-Game to the Global Gaming Industry," *No Camels*, May 15, 2019.

VII. Selected Jurisdictions in Asia Pacific

1. South Korea

1.1 About the Industry

South Korea is the world's fourth largest market for video games after the US, China and Japan, with a 6.2% share of the global market.²⁴³ In the first quarter of 2020 alone there were 13 billion downloads of game apps in the country.²⁴⁴ There were an estimated 888 game developers in South Korea in 2017.

“Seoul is said to have become the “Hollywood of professional gaming”

In the past decade, the Korean game industry has been growing 9.8% on average annually with exports of about USD \$6.4B (CAD \$8B) a year.²⁴⁵ Just over half, USD \$3.8B (CAD \$4.8B), are mobile game exports. Esports originated in Korea and is one of the country's most profitable and popular cultural exports.²⁴⁶ Seoul is said to have become the “Hollywood of professional gaming”.²⁴⁷

In Korea, the mobile platform has replaced the PC platform as the core video game platform since 2017, with over half of all gamers playing on mobile devices.

1.2 Public Funding

1.2.1 Direct Funding

The Korea Creative Content Agency (KOCCA)

KOCCA was established by the Korean Broad-casting Institute, the Korea Game Agency, and the Korea Culture & Content Agency with the aim of promoting Korean content to the world. KOCCA has helped Korean

gaming startups scale up through investments into their HR training and infrastructure. It operates programs to support content firms and to help Korean startups go global, including investment and commercialization support. Some of these include the Global Game Hub Center, Popular Culture & Art Support Center, CKL Business Support Center, CKL Planning Center, and the Story Creation Center (Ilsan Center).²⁴⁸

In addition, KOCCA is looking to develop VR and AR Esports in Korea. South Korea's Culture Ministry supported the growth of e-Sports, creating the Korea e-Sports Association (KeSPA) in 2000, which is responsible for managing large e-Sports events.²⁴⁹

1.2.2 Indirect Funding

There are no national indirect funding programs available in Korea.

1.3 Private Funding

Crowdfunding

Since 2016 it has been possible for game companies to raise equity capital via crowdfunding. Since 2018, individual investors may invest up to KRW 10M (CAD \$11K) per year, and up to KRW5M (CAD \$5.6K) in a single company. Popular crowdfunding platforms in South Korea are WADIZ, Tumbllbug and CROWDY.²⁵⁰

Venture Capital and Business Angel Investments

Venture capitalists are active in Korea, making investments in technology startups, including games companies with strong, experienced teams focused on export markets. Venture capitalists invested KRW 73.4B (CAD \$82.4M) in games companies in 2018.²⁵¹

Large games companies are acquiring smaller ones, and such acquisitions have become a preferred means of exiting for companies backed by venture

capital. In recent years, major publisher Nexon Korea has acquired mobile game companies, such as Big Huge Games (US) and Embark Studios (Sweden) and crypto exchange Bithumb.²⁵² Nexon has more than 60 games across more than 190 countries.²⁵³ NCSOFT has also been acquiring mobile games companies, most recently Carbine Studios (US).²⁵⁴

In 2017, the Japanese messaging app company LINE entered the games space by launching its games publishing arm LINE Games in South Korea.²⁵⁵

²⁴³ White Paper on Korean Games, KOCCA, 2020.

²⁴⁴ Tae-jun Kang, “Can South Korea Boost Its Economy by Turning to Gaming?” *The Diplomat*, May 11, 2020.

²⁴⁵ Song Seung-hyun, “Korea to relax regulations on game industry to lead global market,” *The Korea Herald*, May 7, 2020; “South Korea \$9.8 Billion Video Game Market to 2026 - Focus on Mobile, Down-load, Online Games, Gaming Networks,” *Intrado Globe Newswire*, November 3, 2020, retrieved from <https://www.globenewswire.com/news-release/2020/11/03/2119249/0/en/South-Korea-9-8-Billion-Video-Game-Market-to-2026-Focus-on-Mobile-Download-Online-Games-Gaming-Networks.html>

²⁴⁶ White Paper on Korean Games, KOCCA, 2020

²⁴⁷ Mark Episkopos, “A Gaming Giant? South Korea is Ready to Dominate Global Esports,” *The National Interest*, June 21, 2020.

²⁴⁸ KOCCA corporate website retrieved from <https://seoulz.com/the-korea-creative-content-agency-kocca/>.

²⁴⁹ KOCCA corporate website retrieved from <https://seoulz.com/the-korea-creative-content-agency-kocca/>.

²⁵⁰ *Game Start-up Guide Book*, PWC, 2019.

²⁵¹ PWC, 2019, *Op. Cit.*

²⁵² Yogita Khatri, “South Korean gaming giant Nexon is preparing to acquire crypto exchange Bithumb for about \$460 million: Report,” *The Blockr*, January 7, 2021.

²⁵³ Ruby Leung, “Korean Gaming Giant Nexon To Spend \$1.5 Billion On Global Entertainment Companies,” *Forbes*, June 2, 2020.

²⁵⁴ “NCSOFT” entry in *Tracxn website* retrieved from <https://tracxn.com/d/acquisitions/acquisitionsbyNCSOFT>; PWC, 2019, *Op. Cit.*

²⁵⁵ James Batchelor, “Line Corporation opens games publishing arm,” *Games Industry.biz*, July 11, 2017.

2. Singapore

2.1 About the Industry

There are about 120 companies in the video games sector, of which about two thirds are developers. Game companies form part of Singapore's thriving startup culture.²⁵⁶ Singapore is home to the video games platform Sea (formerly Garena), one of Singapore's unicorns, as well as Razer and Secretlab, which are globally prominent lifestyle brands amongst gamers today.²⁵⁷

Over the past decade, Singapore has put in place various programs to support SMEs and startups, with a focus on promoting greater innovation and productivity and improving digital technology adoption aimed very broadly at innovation sectors.²⁵⁸

2.2 Public Funding

2.2.1 Direct Funding

Startup SG Founder Program

Enterprise Singapore operates the SGD \$150M (CAD \$140M) Startup SG Program to ensure a robust pipeline of innovative startups in Singapore, including providing support for video game startups. The Founder stream of the program provides first-time entrepreneurs with startup capital and mentorship support through Accredited Mentor Partners, who assist the startups with advice, learning programs and networking contacts. Enterprise Singapore provides the startups with a capital grant of SGD \$50K (CAD \$47K). Startups are required to raise and commit SGD \$10K (CAD \$9.3K) as co-matching fund to the grant.²⁵⁹

2.2.2 Indirect Funding

Early Stage Venture Fund

The Early Stage Venture Fund (ESVF) of the National Research Foundation partners with venture capital firms to co-invest with third party investors in startups. Some of these partners have investments in video game companies. It's estimated that SGD \$100 M

(CAD \$93.5M) has been injected into startups so far, with a focus on Series A investments. The government has announced it plans to invest another SGD \$28M (CAD \$26M) into the program.²⁶⁰

2.3 Private Funding

There are more than 100 venture capital firms in Singapore ranging from independent limited partnership venture capital firms to corporate-backed venture capital firms.²⁶¹ Play Ventures, discussed above, is the only Singapore-based VC dedicated to investing in games companies.

256 Enterprise Singapore website, retrieved from <https://www.enterprisesg.gov.sg/media-centre/news/2019/august/local-game-developers-go-global>; "Top 23 Venture Capital Firms and Angel Investors in Singapore," Rivkin, retrieved from <https://www.rivkin.com/blog/top-22-venture-capital-firms-and-angel-investors-in-singapore/>.

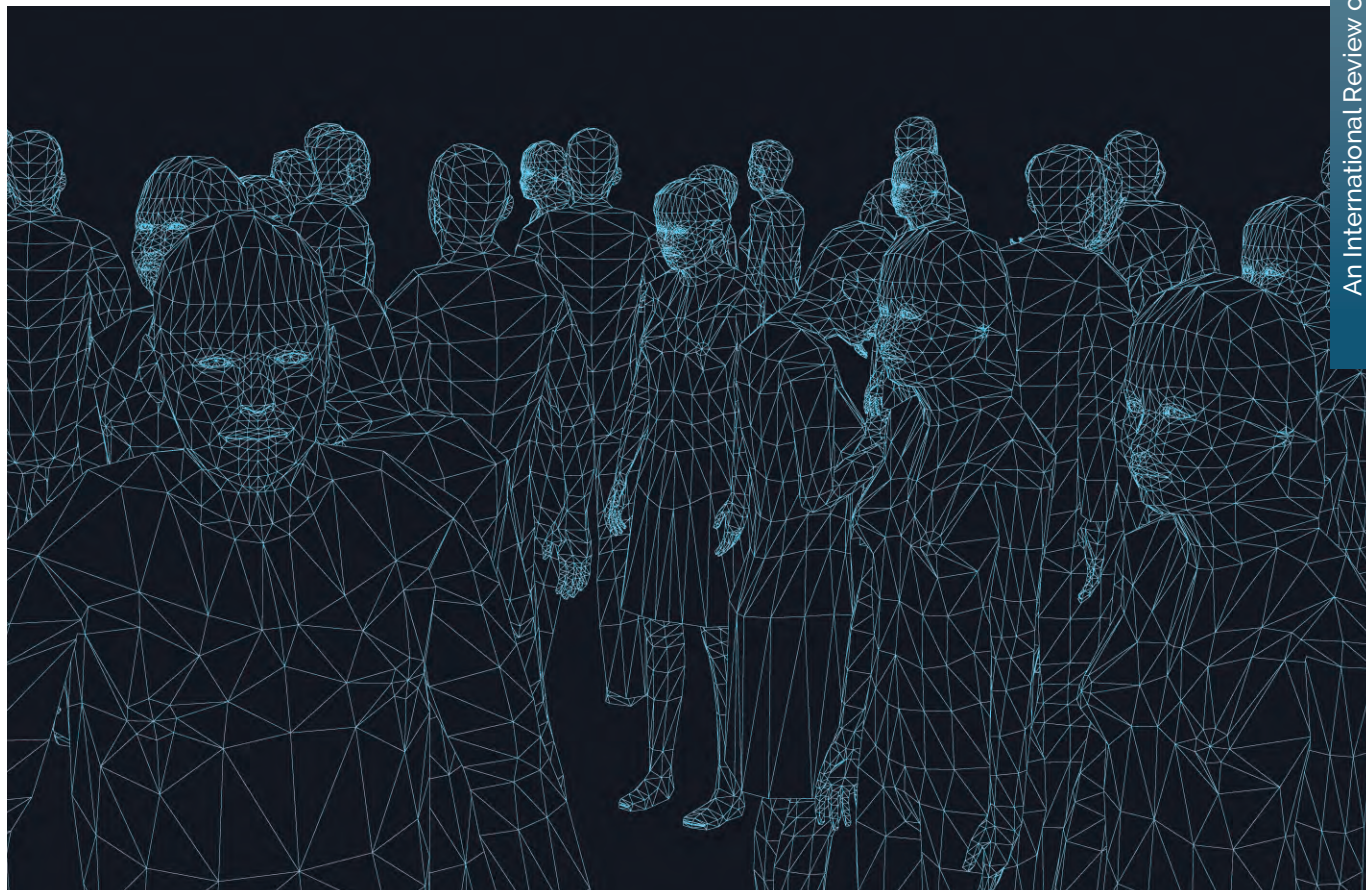
257 Tang See Kit, "Several measures in place to support local video gaming, e-sports industries: Chan Chun Sing," CNA International Edition, September 4, 2019, retrieved from <https://www.channelnewsasia.com/news/singapore/government-support-local-video-gaming-esports-industries-11871970>.

258 Ernst & Young, Singapore Budget 2020 synopsis, 2020.

259 Startup SG corporate website retrieved from <https://www.startupsg.gov.sg/programmes/4894/startup-sg-founder>.

260 Rivkin, Op. Cit.

261 Rivkin, Op. Cit.



3. Japan

3.1 About the Industry

Japan is the third largest video games market in the world after the US and China, with revenues of USD \$19B (CAD \$23.9B) in 2019. Mobile game revenues make up the largest share of this market.²⁶² An industry leader during the decades prior to the turn of the millennium, Japan has been a games powerhouse, home to companies like Nintendo, Sega, Capcom, and Square Enix producing internationally recognized franchises that have gone on to influence countless games developed elsewhere in the world.²⁶³

The country has not yet given rise to a strong sector of independent games studios. Not many examples exist of Japanese game publishers signing deals with Japanese independent developers. While startup culture is relatively recent, it is anticipated that the number of Japanese independent game developers will grow as game creation and distribution tools become more accessible, and independent game development proliferates as a business standard in other parts of the world.²⁶⁴

A deal that has recently attracted attention in the Japanese game industry is the hit console game "Tensui no Sakunahime", developed by Japanese indie game company Edelweiss and released by Marvelous.²⁶⁵ Initiatives such as the BitSummit showcase, organized by the Japan Independent Games Aggregate, are nourishing the sector, providing promotion and networking opportunities for Japanese indie game developers.²⁶⁶

2.2 Public Funding

2.2.1 Direct Funding

Startup SG Founder Program

A challenge for independent game developers in Japan is a lack of public funding for independent game development. Going as far back as the mid 1980s the Japanese government has never provided financial support for the development of console, PC or mobile games. One of the reasons put forward is the constant expansion of the Japanese games market since the 1980's.²⁶⁷

2.2.2 Indirect Funding

Angel Investment System

Introduced in 1997, the Angel Tax System has been revised on a number of occasions to promote greater investment by business angels in high potential companies.²⁶⁸ The Angel Tax System offer investors an income reduction at the time of the investment and loss relief at the time of exiting the investment that is more favourable than provided for in the baseline tax system. Under the system an individual investor in a start-up may deduct a portion of the amount invested from their total income for the year. The investment is also fully deductible from capital gains income in the same year. Investors may also carry forward any losses on the sale of their investment for three years.²⁶⁹

Cool Japan Fund

The Cool Japan Fund participates as a co-investor in equity and venture capital in companies that can promote Japanese culture and cultural products in foreign markets.²⁷⁰ The Fund invested in mobile game development studio Mobile Planet, alongside LINE Ventures and seven other investors.²⁷¹

2.3 Private Funding

With funding from games focused VC Makers Fund, and sponsored by Microsoft's ID@Xbox indie program and Kickstarter, the developer accelerator Asobu was launched in 2020 to support Japanese independent game startups. Asobu provides digital and physical workspace, facilitates networking and aims to foster a sense of community amongst independent game developers.²⁷²

Independent game development companies in Japan are accessing investments from large game companies and from venture capital funds. LINE Ventures, based in Japan has invested in a number of Japanese video games startups, including Wonder Planet, mentioned above, and mobile games studio Translimit.²⁷³ LINE Ventures is a company of the LINE Corporation, creator of the LINE messaging app in Japan. East Ventures is a venture capital firm with offices in Jakarta, Tokyo and San Francisco, which invests in commerce, games

and mobile services. The firm's co-founder and Managing Partner is Willson Cuaca, who is also the CEO of Apps Foundry. East Ventures has invested in over 150 companies across Asia and the US.²⁷⁴ Other Global games-focused VCs have made investments in Japanese startups, including Sisu Game Ventures, which invested in Third Verse, a VR games developer, in 2020. Bitkraft invested in PlayBrain, an Esports content platform, in 2016.²⁷⁵ Generalist VCs, such as JAFCO, Japan Asia Investment, and Globis Capital Partners are investing in video games in Japan.²⁷⁶

²⁶² Statista website retrieved from <https://www.statista.com/outlook/dmo/digital-media/video-games/japan#market-globalRevenue>; "What you should know about the Japanese games industry," Digital Marketing for Asia, July 20, 2020, retrieved from <https://www.digitalmarketingforasia.com/what-you-should-know-about-the-japanese-game-industry/>.

²⁶³ Diane Gabrielle Tremblay, "The Geography of Clusters: The Case of the Video games Clusters in Montreal and In Los Angeles," in *Urban Studies Research*, August, 2013.

²⁶⁴ "Inside Japan's Growing Indie Game Scene," *Variety*, May 28, 2018.

²⁶⁵ Marvelous corporate website retrieved from <https://www.marv.jp/special/game/sakuna/>.

²⁶⁶ Bitsummit corporate website retrieved from <https://bitsummit.org/en/important-information-concerning-bitsummit-the-8th-bit-coronavirus/>.

²⁶⁷ Interviews.

²⁶⁸ *Financing High-Growth Firms: The Role of Angel Investors*, OECD Publishing.

²⁶⁹ "What tax incentive schemes exist to encourage PE/VC investment?," Thomson Reuters.com, Janu-ary 1, 2019, retrieved from [https://ca.practicallaw.thomsonreuters.com/3-525-3665?transitionType=Default&contextData=\(sc.Default\)&firstPage=true](https://ca.practicallaw.thomsonreuters.com/3-525-3665?transitionType=Default&contextData=(sc.Default)&firstPage=true).

²⁷⁰ Cool Japan Fund corporate website retrieved from <https://www.cj-fund.co.jp/>.

²⁷¹ "Gaming Startups in Japan," September 9, 2019, retrieved from <https://tracxn.com/explore/Gaming-Startups-in-Japan>.

²⁷² Jeff Grubb, "Support community' Asobu wants to grow indie gaming in Japan," *Venture Beat GamesBeat*, September 15, 2020; Brian Ashcraft, "How to Create an Indie Game Revolution in Japan," *Kotaku*, September 15, 2020.

²⁷³ "Gaming Startups in Japan," September 9, 2019, retrieved from <https://tracxn.com/explore/Gaming-Startups-in-Japan>.

²⁷⁴ Rivkin, Op. Cit

²⁷⁵ "Gaming Startups in Japan," September 9, 2019, retrieved from <https://tracxn.com/explore/Gaming-Startups-in-Japan>.

²⁷⁶ Interviews.

VIII. Lessons Learned from Other Jurisdictions

1. Game Developers Have Access to Both Public and Private Financing

This study shows that video game developers in the selected jurisdictions examined for this report have access to both public and private financing to develop their games and grow their companies. There are differences between jurisdictions in the types of financing available through public funding sources, ranging from grants for early stage project development to tax incentives and growth financing in the form of loans and equity investments.

Direct public funding for video game development is available in all European jurisdictions examined, as well as in Singapore. Many of these programs have a cultural focus, with amounts available to developers ranging from tens of thousands to millions of Euros. Public funding from Finland and Sweden has a commercial focus. In addition to grants, Finland provides inexpensive loans to video game developers to match private investment. The agency also supports companies to achieve investor readiness and facilitates private investment through its business and investor networks. Sweden provides loans to early stage video game startups, intended to fill a gap in the market.

Grant programs in the UK and the Netherlands are the focus of lobbying efforts to increase funding levels. Industry associations in the UK are lobbying for a £25M (CAD \$43M) investment fund to support project development. The Dutch Industry Association is lobbying for a co-funding or co-investment program in the Netherlands that would have as its focus investments in the video games sector. Interviewees also noted the absence of a program in Finland that could support the development of young startups with smaller cultural grants (of up to €50K or CAD \$74K) to develop their skills.

The US, Israel and Korea provide no direct public funding support for the development of video games.

2. Some Jurisdictions Have Financing Instruments to Stimulate Private Investment

European jurisdictions examined for this report provide tax credits to developers. R&D and production tax credits are available to video game developers in the UK and France. The Netherlands, Norway, Sweden and Denmark provide an R&D tax credit. The German Games Fund provides a rebate on expenditures that affords a similar level of predictable financing as a tax credit. In other jurisdictions, the US provides an R&D tax credit to video game companies (note that some US states also have their own incentives such as tax credits).

Many jurisdictions have developed additional financing instruments to stimulate greater private investment in video game companies. Investment incentives are part of a broader set of policy tools for supporting young, growing and innovative businesses and are seen as important to drive private investment. In most cases, these have taken the form of tax incentives or public co-investment.²⁷⁷

Angel investing is encouraged in many countries as a way to attract both financing and entrepreneurial expertise to startups. Tax incentives offered either up front, at the time of investment, or at exit, are intended to increase the number of business angels and the total amount invested. Typically, investments must be held for a number of years.

Tax incentives are offered to individual angel investors in the UK, France and Japan. The highly regarded Seed Enterprise Investment Scheme (SEIS) provides individual UK investors with a tax credit both at the time of investment and on their capital gains. France and Japan offer individual investors the possibility to reduce their taxable income based on a portion of their investments made in startup companies. Japan also provides the possibility of reducing taxable capital gains income.

Interviews conducted for this study reveal that incentives that encourage private investment are appreciated by investors. One study ranked the Seed Enterprise Investment Scheme (UK), the SME Income Reduction scheme in France and Germany's INVEST Capital Venture Grants as amongst the top five investment incentives available to investors in the EU, while Japan's Angel Tax System was noted as a best practice case.²⁷⁸

Germany's INVEST grant for venture capital provides individual investors with a cash rebate on a portion of their investments. Investors may also access a grant to offset some of their capital gains taxes. Such favourable tax treatment when exiting investments is an important consideration mentioned by some investors interviewed for this report.

These and other jurisdictions examined have developed programs for venture capital and loan guarantees intended to supplement the availability of finance for development and growth, particularly focused on SMEs. As one study notes, "support in the form of venture capital assistance or loan guarantees is intended in the first instance to provide the resources that firms need to grow."²⁷⁹

Sweden's ALMI Invest, the Danish Growth Fund, Singapore's Early Stage Venture Fund and the Cool Japan Fund are co-investors alongside business angels and venture capital funds in early stage video game companies. The state-owned financier BPI France provides equity financing to creative industry companies to support growth and innovation. France is notable for providing mezzanine financing (a mix of debt and equity financing) to creative industry companies that complements private funds.

²⁷⁷ *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, OECD, 2015.

²⁷⁸ *Financing High-Growth Firms: The Role of Angel Investors*, OECD, 2011.

²⁷⁹ OECD, 2015, *Op. Cit.*

In the past decade, European jurisdictions have sought to extend the use of mezzanine financing to SMEs with lower credit ratings and smaller funding needs than the companies commonly served by commercial financiers. As in France, these mechanisms require private funds to complement public funding. Funding is provided directly through a special agency under a specific program. Typically, these programs contain “some mix of unsecured (subordinated) loans with a mechanism for participation in the sales, earnings or profits of the company, when performance is good. All of these mechanisms require private funds to complement public funding, and all require SMEs to pass various tests of financial viability in order to qualify for official support.”²⁸⁰

Backed by public financial institutions such as the European Investment Fund, there is growing interest from private banks to provide debt financing to video game companies. For example, loans and loan guarantee facilities have been developed by public and private lenders in France and the UK. However, it was noted by interviewees that publicly backed debt financing while theoretically available, has not yet materialized in the northern European jurisdictions of Germany or the Nordic countries. This is attributed to a lack of experience with lending to the creative industries.

3. Games-Focused VCs Led by Industry Veterans Have Emerged in Some Jurisdictions

The past few years have seen a significant increase in the availability of financing for the video games sector from private investors. The number of dedicated venture capital funds established to invest in game sector companies is growing quickly, usually led by industry veterans. While some VCs have a focus in their geographic area, such as the Nordic Games Ventures, the majority are looking globally to seed their investments. Games focused VCs have emerged in the US, the UK, Germany, Finland, Israel, Singapore and Japan. Interest is also growing amongst more generalist VCs who see significant new investment opportunities in the video games sector.

Former games executives and founders continue to be active in the games sector, investing in projects and

companies as single angel investors, or pooling their resources with other angels. In some cases, business angels or groups of angels are creating dedicated funds to support video game projects. This source of financing is intended to fill a gap in the private funding ecosystem and is often based on revenue sharing arrangements. Such angel led funds exist in the US, the Netherlands and France. Kowloon Nights, which has a global focus, is based in Hong Kong. Overall, the US provides the greatest number of private funding sources from VCs, business angels and private funds.

Some companies are turning to dedicated, equity crowdfunding platforms to raise seed financing, particularly in jurisdictions without public sources of project financing. Video game companies, notably in the US and Korea, are raising funds on dedicated equity financing platforms. Figure 10 provides a summary overview of the types of financial available in the jurisdictions examined for this report. More detailed tables summarizing each jurisdiction can be found in Annex 3.

“The past few years have seen a significant increase in the availability of financing for the video games sector from private investors.”



Figure 10: Summary of Funding Available in Selected Jurisdictions²⁸¹

	US	UK	EU	FR	DE	NL	NO	SE	FI	DK	IL	KR	SG	JP
PUBLIC FUNDING														
Grants and Contributions														
Video Games Tax Incentive														
R&D Tax Incentive														
Investor Tax Incentive														
Equity Financing														
Venture Capital														
Loans/Loan Guarantees														
PRIVATE FUNDING														
Generalist VC														
Games focused VC														
Private Project Funding														
Equity Crowdfunding														

²⁸¹ Key: US United States; UK United Kingdom; EU European Union; FR France; DE Germany; NL Netherlands; SE Sweden; DK Denmark; IL Israel; KR Republic of Korea; SG Singapore; JP Japan.

4. Considerations For Canada

This is a time of unparalleled opportunity for private sector financing and growth in the video games sector globally. Opportunities exist at all stages of growth and across the value chain from content to back-end technologies to data providers in the space.²⁸²

According to interviewees, Canada's public funding support is attractive to some VCs and individual investors.²⁸³ Investors note the particularly efficient and supportive financial environment in Quebec, where video game companies may access a combination of grants, loans, loan guarantees, tax credits and equity financing.²⁸⁴ They also noted that the most important consideration driving VC investment decisions is the experience and proven track record of the team (i.e. management and creative team) leading the company.

Skills and strategic vision are seen as key ingredients in companies accessing private financing. The literature points to a need to support SMEs in developing a long-term strategic approach to business financing, improving the quality of the business planning in startup companies, particularly in riskier industry segments.²⁸⁵ This includes company-level understanding of the opportunities for financing at different stages of the startup lifecycle, the advantages and risks associated with different financing instruments and how to leverage these sources. In addition to increasing awareness of financing opportunities, a need for skills, such as those that would enable companies to meet the due diligence requirements of investors, is said to be driving the development of training and mentoring programs.²⁸⁶

With more international investors seeking to deploy capital at various stages, including at pre-seed stages, experienced developers with proven track records have more opportunities than ever to finance their companies. However, it was observed by at least one informant that amongst the thousands of pitches they receive from video game developers each year, only a dozen or so are from Canadian developers.

It is time to ensure that Canadian companies have the resources, knowledge, networks, experienced teams and opportunities to be ready to access new sources of financing available in the market. To do so, Canadian companies must be able to compete on the global stage.

Competition is fierce. Canadian jurisdictions must ensure that their current incentives are internationally competitive in order to maximize economic growth. In particular, there is an urgent need to level the playing field by updating the crucial video games tax credit incentives. Video game companies in Canada also need access to new economic incentives, such as investor tax credits and loan guarantees designed for the video game sector. Jurisdictions worldwide, including Quebec, have taken action in this regard, providing such incentives and positioning their industries to seize significant job creation opportunities afforded by the soaring demand for video games.

As it has often been said, Canada has what it takes to compete. Governments in Canada must act now to ensure that it can.

²⁸² Connie Loizos, "This new venture fund has more than \$180 million to invest in interactive entertainment startups," *Tech Crunch*, April 4, 2018.

²⁸³ Interviews. European Investment Fund, *Be Creative - Call The Bank! - Cultural and Creative Sectors Guarantee Facility, Presentation*, Brussels, March 22, 2019.

²⁸⁴ Interviews.

²⁸⁵ *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments*, OECD, 2015.

²⁸⁶ OECD, 2015, *Op. Cit.*



"This is a time of unparalleled opportunity for private sector financing and growth in the video games sector globally."

Annex 1: Selected Bibliography

A Guide to Video Games Tax Relief, TIGA in association with Grant Thornton, 2020.

Access to finance for the Cultural and Creative Sectors: Shaping Europe's Digital Future, European Commission, March 16, 2021.

Annual Survey of the Video Game Industry in France, 2020 Edition, Syndicat national du jeu vidéo, 2020.

Baromètre annuel du jeu video en France, Edition 2020, Syndicat national du jeu vidéo.

Baromètre annuel du jeu video en France, Edition 2019, Syndicat national du jeu vidéo.

Be Creative - Call The Bank! - Cultural and Creative Sectors Guarantee Facility, European Investment Fund, Presentation, Brussels, March 22, 2019.

Behrman, Dr. Malte, bbw Hochschule Berlin; Game Farm GmbH, Culture, *Technology, Business: Financing Strategies for Game Development in Europe*, BGZ Berliner Gesellschaft, November 2020.

Bilan 2019 : Jeu Video, Centre National du cinéma et de l'image animée, 2020.

Compendium of European Co-Investment Funds with Business Angels, European Association of Business Angels, Seed Funds and Early Stage Market Players (EBAN), 2017.

Danske Indholdsproducenter I tal 2018 [Danish Content Producers in Figures 2018], Danish Producer Association, 2019.

Daubeuf, Clementine, Enumerating the role of incentives in CCI production chains, Cicerone, May 11, 2020.

Die Computer und Videospieleindustrie in Berlin [The computer and video game industry in Berlin], Projekt Zukunft, 2018.

Economic Impact of the Creative Industries: How Scotland can grow sustainable TV and film, and video games industries, TIGA, Submission to the Economy, Energy and Tourism Committee's inquiry into the creative industries, January 8, 2014

EIF Venture Capital, Private Equity Mid-Market & Business Angels Surveys 2020, European Investment Fund, EIF Working Paper 2021/71, February, 2021.

Enabling Digital Growth with EU Funding, European Games Developer Federation, 2018.

Enterprise Investment Scheme Seed Enterprise Investment Scheme and Social Investment Tax Relief: Statistics on companies raising funds, HM Revenue & Customs, May 2020.

Financing High-Growth Firms: The Role of Angel Investors, OECD, 2011.

Game Developer Index 2020, Swedish Games Industry, 2020.

Games Monitor: The Netherlands 2018, Dutch Games Garden, 2019.

Game Start-up Guide Book, PWC, 2019.

Incentives in Germany, Germany Trade and Invest, Issue 2020.

Investing in Screen-focused Businesses: The Angels' Perspective, UK Business Angels Association and Creative England, in partnership with the BFI, July 2020.

Le gouvernement se mobilise en faveur des industries culturelles et créatives et renforce les dispositifs de financement existants, Ministère de l'économie et des finances et Ministère de la Culture, France (brochure).

Mapping the Gaming Esports VC Landscape, White Star Capital, July 6, 2020.

Measuring Success: The Impact of the Interactive Digital Media Sector in Ontario, Interactive Ontario, 2019.

New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments, OECD, 2015.

Paardekooper, Willem Jan, R&D Partner, *EMEA R&D incentives guide*, KPMG, March 2017.

Pettigrew, Nick, et al, *Video Games Tax Relief Evaluation: Research report for HM Revenue and Customs*, Ipsos Mori Research Institute, March 2017

Playing on: The UK games and interactive entertainment industry during the COVID-19 pandemic, UKIE, 2020.

Preparation Assignment – Market Fiches, European Investment Fund, 2019.

R&D Tax Incentives: United States, Country Profile, OECD, 2017.

Simon, Rebecca, et al, *Future Proofing the Video Game Industry in California*, Miliken Institute, 2018.

Spillerom Dataspillstrategi 2020-2022 [Game Room Video Game Strategy 2020-2022], Kulturdepartementet, Norway.

The Games Industry of Finland, 2018, Neogames, 2019.

The German games industry 2019/20 Insights, facts and reports, German Games Industry Association, 2020.

The Israeli Video Games Ecosystem: Converging Technologies, Emerging Opportunities, Deloitte, 2018.

Torgersen, Eivind, University of Oslo, "Are Norwegian game developers too keen on perfection?" *Partner. ScienceNorway.no*, July 30, 2020.

Tremblay, Diane Gabrielle, "The Geography of Clusters: The Case of the Video games Clusters in Montreal and In Los Angeles," in *Urban Studies Research*, August, 2013.

Tripp, Simon, et al, TEconomy Partners, LLC, *Video Games in the 21st Century: The 2020 Economic Impact Report*, The Entertainment Software Association, 2020.

UK Business Angel Market 2020, UK Business Angels Association and British Business Bank, 2020.

Videogames Funding Guide, Creative Europe Desk Denmark, 2016.

White Paper on Korean Games, KOCCA, 2020.

Worldwide R&D Incentives Reference Guide, Ernst & Young, 2020.

Annex 2: List of Interviewees

1. **Malte Barth**, Founding General Partner, BITKRAFT Ventures
2. **Michael Cheung**, General Partner, Makers Fund
3. **Jason Chapman**, Managing Partner, Konvoy Ventures
4. **Derk de Geus**, Chairman, Dutch Games Association, and Partner, Midgame Fund
5. **Jason Della Rocca**, Co-founder, Execution Labs
6. **David Gardner**, Partner, London Venture Partners
7. **Graham Gockley**, Principal, Transcend Fund
8. **Fedor val Halpern**, Co-founder and Strategic Director, MeetToMatch
9. **Thorsten Hamdorf**, Director of Market Research, German Games
10. **Koopee Hiltunen**, Director, Neogames
11. **Jari-Pekka Kaleva**, Managing Director, European Games Developer Federation
12. **Yoji Kawaguchi**, Secretary General, Japan Online Game Association (via email)
13. **Phylcia Koh**, Investment Analyst, Play Ventures
14. **Audrey Leprince**, Co-Founder, Wings Interactive and Board Member, Syndicat national du jeu vidéo, Co-Founder, The Game Bakers
15. **Hendrik Lesser**, Founder, Remote Control Productions and President, European Games Developer Federation
16. **Daniel Mironov**, Principal, VGames
17. **Sho Sato**, CEO, Ludimus Consultancy and Mentor, GameFounders
18. **Tim Scott**, Head of Policy, Ukie
19. **Samuli Syvähuoko**, Founding Partner, Sisu Game Ventures
20. **Mickkel Wieder**, Managing Director, Nordisk Games
21. **Bertrand Vernizeau**, CEO and Investment Partner, Game Seer Venture Partners
22. **Zach Zahari**, Principal, Galaxy Interactive

Annex 3: Summary of Financing Sources in Selected Jurisdictions

1. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in the United States

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
N/A at the federal level			
INDIRECT FUNDING SUPPORT			
Federal R&D Tax Credit	Tax credit of up to 20% of eligible expenditure for R&D. Can be carried forward for 20 years.	Businesses undertaking R&D, including game developers.	Software development undertaken by game developers.

2. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies Provided by the European Union

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
Creative Europe Development Support for Video Games	Subsidies from €10K (CAD \$14.8K) and €150K (CAD \$222.5K) to a maximum of 50% of total eligible costs.	Video game developers established in a EU Member State	The development of video games prototypes for all platforms
Horizon Europe EIC Accelerator Pilot Program	Phase 1: Grant of €50K (CAD \$74.2K). Phase 2: Grant up to €2.5 M (CAD \$3.7M) and additional equity financing of up to €15M (CAD \$22.3M)	Game development studios established in a EU Member State or a Horizon 2020 associated country	Phase One – Assessment of technical feasibility and commercial potential, business plan. Phase Two – development of market-ready product, service or process aligned with the company's growth strategy.
INDIRECT FUNDING SUPPORT			
Creative Europe Loan Guarantee Facility	Loan guarantee to participating lenders, covering up to 70% of lenders' individual losses, to a maximum of 25% of lender's overall portfolio of loans.	SMEs established in a EU Member State and selected by an eligible lender.	Unsecured loans to finance working capital, investment for growth and project financing.
European Angels Fund	Provides matching co-investment financing to business angels to invest in innovative companies. Amounts available under each agreement range from €250 K to €5 M.	Funders established in a EU member state.	Creation of co-investment funds for angel investors.

3. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in the United Kingdom

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
UK Games Fund	Grants of up to £25K	Video game developers	Video game prototyping and development costs
Creative Growth Finance Debt Fund	Loans of £100K – £500K, with fixed interest rates from 7% – 15%. Repayment term of four years, with a capital repayment holiday of six months. Management fee of 5%.	Creative industries companies, including Video Games, with recent annual revenues of £300K.	Activities relating to corporate growth.
INDIRECT FUNDING SUPPORT			
UK Video Games Tax Relief	Tax rebate of up to 20% of eligible costs to reduce a company's tax liability. Cash rebate at rate of 25% for companies claiming a loss.	Video game developers	Video game development costs.
UK SME R&D Tax Relief	Tax deduction of up to 230% of qualifying costs; and 14.5% payable tax credit on surrendered losses.	SME companies (fewer than 500 employees and revenues less than €100M (CAD \$148M)).	Must be part of a specific project to make an advance in science or technology and must relate to the company's trade.
UK R&D Expenditure Credit	Tax credit of 13% on eligible R&D expenditures.	Large companies (over 500 employees and revenues of more than €100M (CAD \$148M) and €86M (CAD \$127.3M) in gross assets.	Must be part of a specific project to make an advance in science or technology and must relate to the company's trade.
UK Enterprise Investment Scheme	Tax relief (i.e. 30% tax credit, deferred or eliminated capital gains tax, loss write-off, reduction or elimination of inheritance tax).	Venture capital investors	Investments in early-stage SMEs
UK Seed Enterprise Investment Scheme	Tax relief (i.e. 50% tax credit, deferred or eliminated capital gains tax, loss write-off, reduction or elimination of inheritance tax).	Venture capital investors	Investments in early-stage SMEs

5. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in Germany

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
German Games Fund	<p>Non-repayable rebate of 25% to 50% of eligible production costs. No funding cap. €50M (CAD \$74.2M) available annually for five years to 2024.</p> <p>Funding for prototypes to a maximum of 50% of budgets of not more than €400K (CAD \$593.2K).</p> <p>Funding may be combined with German regional funds.</p>	Small and large German and foreign video game developers established in Germany.	Prototyping and development of video games that pass a cultural test.
IBB Ventures – VC Fund	<p>Matching equity investments (equivalent to other investors) in exchange for minority stake in companies. Typical investments are between €200K (CAD \$296K) and €1M (CAD \$1.5M). Larger investments are also possible.</p>	Berlin-based early stage companies in the technology sectors and creative industries.	Development and market launch of innovative products or services with high commercial potential to support company growth.
INDIRECT FUNDING SUPPORT			
Invest Grant for Venture Capital	<p>Grants to private individual investors equivalent to 20% of their investment of at least €10K (CAD \$14.8K) to a maximum of €3 M (CAD \$4.45M) per year.</p> <p>Exit grants to offset capital gains taxes (equivalent to a capital gains tax exemption), equal to 25% of investors' profit, to a maximum of 80% of the original investment.</p>	Young, innovative German startups, including video game companies.	Angel investments in German companies that are held for a minimum of three years.
R&D Tax Incentive	<p>Tax allowance (grant) of 25% of eligible R&D costs in Germany.</p> <p>Maximum annual allowance of €1M (CAD \$1.5M) per corporate group.</p>	All companies regardless of number of employees or revenues.	R&D labour costs and 60% of subcontracting costs for outsourced activities.

6. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in the Netherlands

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
Creative Industries Fund	Co-financing of video game development to a maximum amount published each deadline. A total of €1.5M (CAD \$2.2M) is available per year. A maximum of €7.5K (CAD \$11K) of financing for projects without need for co-financing.	Video game developers established in the Netherlands.	Development of video games.
INDIRECT FUNDING SUPPORT			
R&D Tax Credit	Wage tax credit. On first €350K (CAD \$519K): Established companies: 32% Startups: 40% After the first €350K (CAD \$519K): 16% tax credit rate.	Startups and established companies in the Netherlands.	Wages and payroll expenditures for qualifying R&D activities.
Dutch Innovation Box	Reduction of general tax rate from 25% to 9%.	Companies established in the Netherlands.	Taxable income earned from self-produced intangible assets.

7. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in Norway

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
Norwegian Film Institute	Development financing. A total of €700K (CAD \$1M) allocated to 10 projects in 2018.	Video game developers established in Norway.	Development of video games that pass a cultural text.
INDIRECT FUNDING SUPPORT			
SkateFUNN	Tax deduction at a rate of 20% of eligible costs.	Companies established in Norway.	Eligible R&D project costs.

8. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in Sweden

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
ALMI Invest Loans	<p>High interest Micro Loans of €30K (CAD \$45K) to very early stage startups, and Lower interest Growth Loans of €25K (CAD \$37K) or more, backed by the EIF.</p> <p>The loan provides up to 100% of the investment required.</p>	SME companies with growth potential and fewer than 250 employees, including companies in the video game sector.	<p>Micro loans provide financing to new companies with difficulty accessing capital.</p> <p>Growth loans support innovation companies and can be used for investments or working capital.</p>
INDIRECT FUNDING SUPPORT			
Reduced Social Security Contributions for R&D	Tax credit on employer payroll contributions at the rate of 20% of employees' salaries to a maximum of SEK 919K (CAD \$134K) per month, per group of companies.	Employees working on R&D activities at least 75% of the time and 15 hours per month.	R&D activities.
ALMI Invest Co-Investments	Co-investments with business angels and VCs. first round investments in the range of €200K - €450K (CAD \$297K to CAD \$667K). Over time, companies may receive up to €1.1M (CAD \$1.6M).	Startups with growth potential and fewer than 250 employees, including companies in the video game sector.	First round financing that acts as a bridge to private capital.

9. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in Finland

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
Entertainment Finland Program	<p>Business Finland provides up to €1.25 M (CAD \$1.85M) – i.e., a grant of up to €500K (CAD \$741.5K) and a loan of up to €750K (CAD \$1.1M).</p> <p>Funded companies are provided coaching and peer-to-peer learning opportunities that support growth, exports, business models, finance and R&D.</p>	Support for companies, including video game sector companies, developing content or services for global markets that have the potential to become scalable global businesses, and to attract foreign investments.	Activities relating to product development, exports, business models, finance and R&E.
INDIRECT FUNDING SUPPORT			
N/A			

10. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in Denmark

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
Game Plan	<p>Grants to a maximum of DKK 100K (CAD \$20K) for development and prototyping</p> <p>Grants for production to a maximum of 50% of costs and DKK 1.5M.</p> <p>Grants for production launch and promotion to a maximum of 50% of costs.</p>	Danish video game developers.	<p>Development and prototyping of new games.</p> <p>Production, launch and promotion of video games with a working demo.</p>
INDIRECT FUNDING SUPPORT			
Growth Fund	<p>Loans backed by the Creative Europe loan guarantee for up to DKK 15M (CAD \$3M)</p> <p>Co-invests in pre-seed, seed and venture capital financing for startups.</p> <p>Knowledge and networking for financial institutions and investors.</p>	Danish startups	
R&D Tax Credit	Tax credit at a rate of 22% to a maximum of DKK 5.5M (CAD \$1.1M).	Companies with losses and eligible R&D costs.	R&D activities

11. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in Korea

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
KOCCA	Programs to support companies to go global.	Content creators, including video game developers.	HR training and infrastructure International business development.
INDIRECT FUNDING SUPPORT			
N/A			

12. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in Singapore

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
Startup SG Founder Program	Startup capital grant of SGD \$50K (CAD \$46.7K) and mentorship support.	First-time entrepreneurs	Video game development
INDIRECT FUNDING SUPPORT			
Early Stage Venture Fund	Co-investments with third party investors.	Singapore startups	Series A investments

13. Summary of Public Direct and Indirect Funding for Video Games and Video Game Companies in Japan

FUND/SCHEME	DESCRIPTION OF AVAILABLE FINANCING	ELIGIBLE RECIPIENT	ELIGIBLE ACTIVITY
DIRECT FUNDING SUPPORT			
N/A			
INDIRECT FUNDING SUPPORT			
Cool Japan Fund	Co-investor in equity and venture investments.	Japanese companies, including video game companies.	Companies that can promote Japanese culture and cultural products in foreign markets, including video game companies.
Angel Investment System	Taxable Income Reduction on investments by private individuals. Reduction of personal taxable income equivalent to portion of investment amount. Reduction of taxable capital gains income equivalent to 100% of investment.	Angel investors with taxable income.	Investments in Japanese startups held for 3 years or more.

Glossary

Acquisition: The establishment of control in one business entity by another, often with the assistance of private equity. Third party acquisition is a common Exit Mechanism for private equity funds.

Angel Investment: (High-risk) investments made by private early stage investors typically in the form of seed financing towards startup businesses. Angel investment comprises a financial contribution in addition to the investment of time, expertise and connections that the investors also provide in exchange for ownership equity in the startups.

Angel Investors: Private investors who choose to make seed and early-stage investments into startup companies. Besides investing their capital, angel investors also support their investee companies with mentoring and advice, expertise and network connections. Angel investors are also commonly referred to as business angels.

Co-investment: Two or more investors in a given transaction. Also known as syndication. The average rate of co-investment is the total number of investments made in the total number of deals in a given period.

Convertible loan: A convertible loan is a loan that will either be repaid or, in most cases, convert to an equity investment, typically at an agreed upon future date or a qualifying round of equity fund raising. Convertible loans allow companies to access financing more quickly than through an equity funding round.

Debenture against a company: A loan secured against a borrower's assets.

Debt/Debt Financing: Borrowed money that needs to be paid back. The entrepreneur rents the money for a specific period of time and promises to pay interest on the money for a specific period. This can be in the form of loans provided by banks for working capital or major purchases and loan guarantees, which may refer to programs through which governments assume a private debt obligation if the borrower defaults. Most loan guarantee programs are established to correct perceived market failures by which small borrowers, regardless of creditworthiness, lack access to the credit resources available to large borrowers.

Dilution: The reduction in the ownership percentage of current investors, founders and employees caused by the issuance of new shares to new investors.

Early Stage Financing: Capital provided to a young or emerging company to facilitate its growth and development, as illustrated in Seed Financing and Start-up Financing.

Equity: Shares or other securities that represent an ownership interest in a company.

Equity loan: See convertible loan.

Exit: Exiting an investment by selling or transferring one's ownership stake in the company. Typically, the options to "exit" from a VC investment are to merge the company with another company, have it acquired or make an initial public offering (IPO).

Expansion Financing: Capital provided to a company to facilitate its growth and development objectives.

Financings and Investments: Each transaction involving a private equity fund or funds in a given portfolio company represents one round of financing. Each financing is made up of one or more investments, depending on the presence of co-investors. Financings are also known as deals.

Follow-on Financing: A supplementary round of financing in an existing portfolio company that builds on its original financing, generally in line with business growth and development. Venture-backed firms are often engaged in multiple follow-on deals.

Fund: The pool of capital established for the purposes of private equity activity. Often a Management Company will be responsible for several funds that may vary according to mandate or investment period.

Funding: This term is used as a synonym of "financing". It refers to the amount of money that is needed for a business venture to take off. For example, a new business owner may seek a certain amount of funding for their startup company. This "raised" capital can be used to launch their venture as well as to sustain their company until monetary profit can be generated.

Fundraising: The activity whereby a private equity fund seeks to raise new Capital Commitments from external sources of supply.

Gaming: comprises companies offering products or services for console and PC gaming, Virtual Reality/Augmented Reality gaming, mobile gaming and esports games.

Government Fund: A government-owned private equity fund, usually organized through a federal or provincial agency or crown corporation.

Initial Public Offering (IPO): The sale or distribution of the privately held stock of a Portfolio Company on public markets for the first time. This is a common Exit Mechanism for private equity funds, especially venture capital funds.

Investment Round: A set of one or more investments made in a particular company by one or more investors on essentially similar terms at essentially the same time.

Investor Types: The key players in the private equity industry, based on particular fund structures and sources of capital supply. In the United States, private equity is dominated by Private-Independent Funds, while Canadian activity is diversified across several major groups. They include the following:

- Corporate funds: Subsidiaries of financial or industrial corporations;
- Government funds: Agencies or crown corporations owned by government;
- Institutional investors: Funds managed inside certain large institutions;
- Retail Funds: Funds (e.g., LSVCCs, PVCCs) established with benefit of government tax credits to individuals;
- Private-Independent Funds: Funds structured on Limited Partnerships and related vehicles;
- Foreign investors: Non-resident private equity funds or corporations active in Canada;
- Other investors: Investors with an interest in specific private equity deals, but without a permanent market presence.

Lead Investor: the investor or investment organization taking primary responsibility for organizing an investment round in a startup. The lead investor typically negotiates the terms of the investments, often invests the largest amount, and serves as the primary liaison between the startup and the other investors.

Mergers and Acquisition (M&A): An M&A transaction often refers to a larger company buying a startup, thereby the startup's operating units are transferred or consolidated with other entities.

Mezzanine Financing: also called subordinate financing, is a hybrid of debt and equity that isn't secured by specific company assets. Instead, it's based on historic and expected future cash flows of the company.

Multiple: Return on investment (ROI) expressed in the number of times the initial investment was regained.

Portfolio: The collection of all of the companies invested in by an angel investor or venture capital fund (VC).

Seed capital: Money provided by angel investors, friends and family to the founders of a start-up at its initial stage of development.

Private Equity: The generic term for the private market reflecting all forms of equity or quasi-equity investment. In a mature private equity universe, there are generally three distinct market segments: Buyout Capital, Mezzanine Capital and Venture Capital.

Raising Capital: Refers to obtaining capital from angel investors or venture capital sources.

Returns: The total proceeds an investor gets back from an investment, usually after an exit. It can be expressed as multiple or the percentage of the total proceeds divided by the total investment. Some calculate the returns annualized and call them internal rate of return (IRR). Some also consider a value increase in the share price due to a new investment round at a higher price a "return" even though no proceeds were actually paid out. Returns also come from dividend payments or interest paid on loans.

Round Size: The total amount of money a startup received during one funding round.

Scale-ups: defined as fast-growing start-up companies that grow to more than \$10M by their 5th year of revenue, they constitute a large chunk of employment and revenue of all startups in their cohort once they reach maturity.

Seed Financing: Capital provided to facilitate commercialization of new product concepts, often from laboratories, research centres or entrepreneurs. If successful, a seed financing may result in a start-up.

Size of Financings: Transactions defined according to their respective sizes. In the venture capital realm, there are four categories of deal sizes.

- Very small deals: Less than \$500K;
- Small deals: Less than \$1M;
- Mid-sized deals: Between \$1M and \$5M;
- Large deals: Greater than \$5M.

Specialized Fund: A private equity fund strategy whereby the focus is on specific investment targets (e.g., sectors, stages of development), as distinct from a balanced fund, whereby a wide range of investment targets is pursued.

Stages of Development: Critical points on the growth continuum for firms assisted by venture capital and other types of private equity. Typically, a venture-backed company receives cumulative rounds of financing to facilitate its progression from one stage of development to the next.

Early Stages of Development:

- Seed stage: A developing business entity that has not yet established commercial operations and needs financing for research and product development.
- Start-up: A business in the earliest phase of established operations and needs capital for product development, initial marketing and other goals.
- Other early stage: A firm that has begun initial marketing and related development and needs financing to achieve full commercial production and sales.

Late Stages of Development:

- Expansion: An established or near-established company that needs capital to expand its productive capacity, marketing and sales.
- Acquisition/Buyout: An established or near-established firm that needs financing to acquire all or a portion of another business entity for growth purposes, such as an acquisition for expansion financing.

Startup: A company in the early stages of development, which seeks to create a new product or service under significant uncertainty whether the product, team and business model will succeed.

Syndication: The pooling of smaller investments invested by several investors. Often the expectation of professional venture investors and startups is to deal with fewer investor parties.

Valuation (pre and post money): The estimation of the economic worth of companies, assets or liabilities. There is a range of different methods for determining such value, the development stage of a company or the industry in which it operates usually dictate which method to use. Typically, angels and VCs distinguish between pre-money valuation and post-money valuation.

- Pre-Money Valuation: Company value immediately before funding. As an example, if post-money valuation equals CAD \$2.5M and the company raised CAD \$500K then the pre-money valuation will be equal to CAD \$2M.
- Post-Money Valuation: Company value immediately after funding. As an example, if the pre-money valuation equals CAD \$2M and the company subsequently raises CAD \$500K, the post-money valuation will total CAD \$2.5M.

Venture Capital: is a means by which financing is provided to high growth potential start-ups and/or small businesses by venture capitalists, sometimes also known as angel investors (usually high net worth individuals and venture capital firms) in exchange for equity in the business. Although venture capital is usually provided to start-ups, there are different forms of venture capital that can be provided according to the stage the business is in. The five main forms of venture capital include:

- Seed Capital –Low-level financing provided by the founder's assets, friends or family for pre-production stage and its main purpose is just to convince venture capitalists why the company's idea is worth investing in.
- Start-Up Capital – Following incorporation, the production process has begun and there are a few units ready to be sold. However, money is needed to begin marketing and advertising in order to acquire customers.
- Early Stage Capital –This funding usually goes towards manufacturing, production facilities and additional marketing. The amount funded here is relatively much higher than previous stages.
- Expansion Stage –Once the business starts growing (typically in 2 to 3 years), funding is used to expand into additional markets and diversification.
- Bridge/Pre-Public stage – This stage is generally when the business is just about to go public. Funds received at this stage are used for mergers and acquisitions, price reductions, and financing steps towards an IPO (Initial Public Offering).

Sources:

www.angelcapitalassociation.org/faqs/#What_is_the_difference_between_angels_and_venture_capitalists_

www.argusglobal.co/venture-capital-fund-management/?gclid=CjoKCQiAvvKBBhCXARIsACTePW-ZuGswFwajbAogHywKRCwaJmbBNXc68ahimLmdIA3O4PAhijY4CtMaAq48EALw_wcB

www.bdc.ca/en/articles-tools/money-finance/get-financing/how-to-buy-business-with-mezzanine-financing

<https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/deloitte-analytics/deloitte-nl-data-analytics-onderzoeksrapport-scale-up-the-experience-game.pdf>

<https://fleximize.com/articles/009206/debentures>

Canadian Venture Capital and Private Equity Association website: <http://www.cvca.ca/resources/glossary.aspx>;

National Angel Capital Organization website: http://www.angelinvestor.ca/Our_Community.asp

Riding, Alan L. "On the Care and Nurture of Loan Guarantee Programs." Financing Growth in Canada. Paul J. N. Halpern, ed. University of Calgary Press, 1997, cited in Wikipedia: http://en.wikipedia.org/wiki/Loan_guarantee

Venture Capital Industry Review, Business Development Bank of Canada, February 2011

EBAN, Measuring Angel Market Data 2020 Guidebook, <https://www.eban.org/wp-content/uploads/2020/12/Guidebook-on-Measuring-Angel-Market-Data-EBAN-Data-2.pdf>



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