

The Video Game Industry in the EU: Business Model and International Taxation in The CEE Region

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Abstract: The European video game industry relies heavily on creative labor, with substantial work performed in Central and Eastern Europe (CEE). Taxable income from creative activities is often allocated to jurisdictions where intellectual property (IP) is legally owned rather than where artistic value is created. This paper examines how international tax rules, transfer pricing practices, and IP-based business models shape profit allocation in the EU video game industry, with particular focus on CEE economies. The study employs comparative legal and tax analysis of OECD and EU frameworks, supported by secondary industry data and a hypothetical case study. Findings suggest that current OECD/EU transfer pricing frameworks may inadequately capture value created by creative labor in IP-intensive industries, systematically favoring jurisdictions where IP is legally owned over those where it is developed. The paper concludes with policy recommendations for CEE countries and EU-level reforms aimed at aligning taxation with economic substance and value creation.

Keywords: video game industry, transfer pricing, intellectual property taxation, creative labor, Central and Eastern Europe, Base Erosion and Profit Shifting

JEL Classification codes: H25, H26, F23

INTRODUCTION

The global video game industry has emerged as one of the most lucrative segments of the creative economy, generating revenues exceeding USD 196 billion annually in 2023 and employing an estimated hundreds of thousands of creative professionals worldwide (Bain & Company, 2024). Within the European Union, the industry exhibits a distinctive geographical pattern: while major publishers and intellectual property (IP) holders concentrate in Western Europe—particularly the United Kingdom, France, and Nordic countries—substantial game development activities, including artistic creation, programming, and quality assurance, are performed by studios in Central and Eastern European (CEE) countries such as Poland, Czech Republic, Romania, and Bulgaria (Laaninen & Wessman, 2023; Ecorys & KEA, 2023).

This geographical distribution reflects economically rational decisions. CEE countries offer highly skilled creative and technical labor at competitive costs, favorable business environments, and substantial public support for creative industries (Polish Investment and Trade Agency, 2024; World Intellectual Property Organization, 2024). However, this division of labor creates significant challenges for international taxation. Legal structures governing profit allocation within multinational game development enterprises frequently result in taxable income being attributed to jurisdictions where IP rights are registered, licensed, or

monetized—typically Western European countries, Ireland, or extra-EU jurisdictions such as Switzerland—rather than CEE countries where creative value is generated (Dunnagan, 2023; Lyonnet & Rabineau, 2023).

This misalignment appears particularly pronounced in the video game industry due to sector-specific characteristics. Video games are quintessentially IP-intensive products: economic value resides primarily in copyrights, trademarks, and patentable technologies rather than tangible assets (Dimita, 2023; Oguguo, 2024). The industry's reliance on complex intra-group structures—involving parent companies, development subsidiaries, publishing entities, and licensing arrangements across multiple jurisdictions—creates opportunities for tax planning that may shift profits away from high-labor, moderate-tax CEE countries toward low-tax IP holding jurisdictions (Oguguo, 2024; OECD, 2024).

From legal and policy perspectives, this raises fundamental questions about tax fairness, economic substance, and the effectiveness of international tax rules in capturing value created by creative labor (Baert, 2024; Laudage, 2023). The BEPS initiative and the EU's Anti-Tax Avoidance Directives (ATAD) sought to address profit shifting and ensure taxation where economic activities occur and value is created (Baert, 2024). However, application of these principles to creative labor—particularly in industries characterized by IP-centric business models—remains contested and practically complex (Baert, 2025; Laudage, 2023).

This paper examines the intersection of international tax law, transfer pricing regulation, and IP-based business models in the EU video game industry, with particular focus on implications for CEE economies. The analysis proceeds as follows: Section 1 reviews the theoretical and empirical literature. Section 2 describes the methodology. Section 3 presents findings on business models, the tax framework, and transfer pricing practices. Section 4 discusses policy implications and recommendations.

1 LITERATURE REVIEW

The intersection of intellectual property taxation and creative industries has attracted growing scholarly attention, particularly following the OECD's Base Erosion and Profit Shifting (BEPS) initiative. Screpante (2024) provides a comprehensive analysis of OECD transfer pricing guidelines and their limitations in capturing value creation, arguing that current rules insufficiently account for people functions—human capital and creativity—in IP-intensive industries. Similarly, Laudage (2023) documents residual challenges of the BEPS project in addressing profit shifting in digital and creative sectors.

The video game industry specifically has been examined from intellectual property and economic perspectives. Dimita (2023) and Oguguo (2024) document the IP-intensive nature of game development, demonstrating that economic value resides primarily in copyrights, trademarks, and patentable technologies. The European Commission's study (Ecorys & KEA, 2023) maps the geographical distribution of game development within the EU, confirming the concentration of development activities in CEE countries. Švelch and Houška (2025) and Marszałkowski et al. (2023) provide detailed analyses of CEE development ecosystems, particularly in Czech Republic and Poland.

Transfer pricing in digital and IP-intensive industries has been examined by Jędrzejewski (2024), who identifies particular challenges of value chain analysis and intangible asset valuation. The OECD Transfer Pricing Guidelines (2022) acknowledge the difficulty of applying arm's length principles to unique intangibles, while Actions 8–10 of the BEPS project sought to better align outcomes with value creation (OECD, 2015). The effectiveness of these reforms remains contested: Baert (2024; 2025) and Screpante (2024) document continued gaps between policy intent and practical application in creative industries.

At the EU level, Baert (2024) and Mičúchová (2023) analyze regulatory responses including ATAD I and II, and proposals for formulary apportionment. TaxWatch UK (2023) provides empirical documentation of specific profit-shifting structures in the gaming sector. The literature thus establishes a clear research gap: while transfer pricing in digital industries has been examined broadly, the specific intersection of creative labor valuation and CEE profit allocation in game development remains underexplored.

2 METHODOLOGY

This paper adopts a qualitative, desk-based research design combining comparative legal and tax analysis with secondary data review. The comparative analysis examines transfer pricing and profit allocation frameworks at three levels: OECD guidelines (Transfer Pricing Guidelines 2022; Model Tax Convention 2017; BEPS Action Points), EU directives (ATAD I and II; Pillar Two Directive), and selected national implementations in CEE Member States, specifically Poland and Czech Republic, selected on the basis of their documented significance in the EU video game development landscape (Ecorys & KEA, 2023; Marszałkowski et al., 2023).

Secondary data sources include industry reports (Ecorys & KEA, 2023; WIPO, 2024; Marszałkowski et al., 2023), policy analyses published by the European Parliamentary Research Service (Baert, 2024; Baert, 2025; Laaninen & Wessman, 2023), tax watchdog publications documenting specific corporate structures (TaxWatch UK, 2023), and academic legal and economic literature. A hypothetical case study is employed as an analytical instrument to illustrate profit allocation mechanisms under current transfer pricing rules, drawing on documented industry parameters (OECD, 2022; Screpante, 2024). The case study is intended as illustration rather than empirical evidence.

The paper is explicitly framed as a theoretical-analytical contribution. It does not draw on primary empirical data such as interviews or proprietary transfer pricing documentation. The analytical framework focuses on the functional separation between creative value generation in CEE jurisdictions and commercial value capture elsewhere—a structural feature identified in the literature and examined through the lens of OECD transfer pricing methodology and EU tax law.

3 RESULTS AND DISCUSSION

3.1 Business Models and Value Chains in the Video Game Industry

The contemporary video game industry is characterized by a complex division of labor across jurisdictions, driven by specialization, cost optimization, and access to talent pools. At the apex of the value chain are major publishers—companies such as Electronic Arts, Ubisoft, Take-Two Interactive, and Activision Blizzard—who control IP rights, marketing, and distribution channels. These entities typically headquarter in the United States or Western Europe, with substantial operations in some cases routed through jurisdictions such as Ireland for tax optimization purposes (TaxWatch UK, 2023).

CEE countries have become major development hubs. Poland hosts over 400 game development studios, including globally recognized entities such as CD Projekt (The Witcher series, *Cyberpunk 2077*) and Techland (*Dying Light* series) (Marszałkowski et al., 2023). According to publicly available financial disclosures, CD Projekt reported consolidated revenues of PLN 1.03 billion in 2023 with corporate income tax paid in Poland—demonstrating that wholly-owned IP development enables profit retention in CEE jurisdictions. Czech Republic is home to Warhorse Studios (*Kingdom Come: Deliverance*) and Bohemia Interactive (*Arma*

series). Romania, Bulgaria, and Baltic states have also developed significant development clusters (Stojkovski, 2023).

The video game development process involves multiple stages: pre-production (concept, narrative, mechanics prototyping), production (character art, animation, programming, audio, quality assurance), post-production (localization, updates, DLC), and publishing and distribution (marketing, monetization, platform negotiations). The first three stages are frequently performed in CEE studios, while the final stage remains controlled by Western European or US-based publishers—creating a functional separation between creative value generation and commercial value capture (Švelch & Houška, 2025; Marszałkowski et al., 2023).

CEE studios operate under four main business models with differing tax implications. Under Contract Development Services (Model 1), the studio acts as a pure service provider without owning IP rights, compensated on cost-plus basis with markups of 5–15%—minimizing taxable profits in CEE jurisdictions. Under Cost-Sharing Arrangements (Model 2), development costs are shared among group entities proportionally to expected benefits; while theoretically enabling studios to retain portions of IP, such arrangements are often structured to minimize CEE tax exposure. Under Independent Developer with Publisher Agreement (Model 3), studios retain IP ownership but accept unfavorable revenue-sharing terms. Under Wholly-Owned IP Development (Model 4, exemplified by CD Projekt), studios develop and publish independently, retaining full commercial control. Model 1 predominates for CEE studios engaged with multinational publishers (OECD, 2022; Screpante, 2024).

3.2 International and EU Tax Framework

Profit allocation across jurisdictions is governed by two competing principles: the source principle (taxing rights in the jurisdiction where income is generated) and the residence principle (taxing rights where the taxpayer is resident). These conflict in IP-based business models where the source of income is ambiguous (OECD, 2017; Arnold, 2023). Most bilateral Double Taxation Treaties follow the OECD Model Tax Convention: Article 7 permits source-state taxation only where a permanent establishment (PE) exists; Article 12 allocates royalty taxation primarily to the beneficial owner's residence state, enabling royalty flows from operating entities to low-tax IP holding jurisdictions with reduced or, in some cases, no source taxation (OECD, 2017; Suárez Serrano et al., 2022).

The EU's Anti-Tax Avoidance Directives (ATAD I and II) implemented BEPS recommendations, requiring Member States to adopt interest limitation rules, CFC rules, general anti-abuse rules, and hybrid mismatch rules (Council Directive 2016/1164/EU; Council Directive 2017/952/EU). Particularly relevant to the video game industry are BEPS Actions 8–10, aligning transfer pricing outcomes with value creation for intangibles, and Action 5, governing IP box regimes through the nexus approach requiring substantial R&D activity in the jurisdiction granting preferential rates (OECD, 2015a). However, effectiveness in the video game industry context—where CEE studios are legally structured as low-margin service providers while IP ownership and commercialization occur elsewhere—remains limited (Screpante, 2024; Baert, 2025).

3.3 Transfer Pricing and Profit Allocation

Transfer pricing is governed by the arm's length principle, requiring intra-group transactions to be priced as between unrelated parties (OECD, 2017; Article 9 OECD Model Tax Convention). For creative services, the Cost Plus method and Transactional Net Margin Method (TNMM) predominate: CEE studios' profits are determined by applying markups to costs, irrespective of commercial success, treating creative labor as commodity service input and allocating residual profits to IP owners (OECD, 2022; Screpante, 2024).

Case Study: Warhorse Studios and the Embracer Group Acquisition. The acquisition of Prague-based Warhorse Studios s.r.o. by Koch Media GmbH (a subsidiary of THQ Nordic AB, now Embracer Group) in February 2019 illustrates the IP transfer mechanism concretely. Prior to

the acquisition, Warhorse operated as a Model 4 entity: it owned the full IP for Kingdom Come: Deliverance including PC publishing rights, and retained commercial profits in the Czech Republic. In 2018, the studio generated net revenues of approximately EUR 42 million with a reported adjusted EBIT of approximately EUR 28 million, according to company disclosures (Embracer Group, 2019). The acquisition price of EUR 42.8 million encompassed all intellectual property rights, which were subsequently reallocated to IP rights and goodwill in the Swedish parent's consolidated accounts with a five-year amortization period (Embracer Group, 2019). Following the transaction, Warhorse appears to have transitioned from a profit-retaining IP owner to a development studio operating within a Swedish-headquartered holding structure. The game has cumulatively sold over 5.5 million copies; revenues from Kingdom Come: Deliverance II and future titles are now allocated within the group under intra-group transfer pricing arrangements governed by Embracer's policies rather than remaining in the Czech jurisdiction. This case exemplifies how foreign acquisition can transform a CEE studio from Model 4 (full profit retention) toward lower-margin functional profiles, potentially resembling Model 1 (cost-plus service provision), with IP ownership and associated returns potentially migrating to the acquiring jurisdiction—precisely the misalignment this paper analyses. Structurally, this outcome reflects three recurring limitations of current transfer pricing rules: the over-reliance on comparability analysis that undervalues unique creative outputs (OECD, 2022; Jędrzejewski, 2024); the treatment of legal IP ownership assignments as economically neutral despite their fundamental impact on profit allocation (Screpante, 2024); and the inadequate recognition of people functions—human capital and creativity—as primary drivers of value in creative industries (Laudage, 2023).

3.4 Reform Proposals at International Level

Despite BEPS reforms, current international tax rules fail to adequately capture profits in CEE jurisdictions where creative value is generated. Scholars have proposed several modifications. Formulary apportionment would allocate profits based on formula factors—employment, assets, and sales—rather than arm's length pricing of individual transactions, directly recognizing creative labor as a profit-generating factor (Mičúchová, 2023). Mandatory profit split methods for transactions involving unique intangibles and significant people functions would explicitly allocate returns to creative labor rather than defaulting to cost-plus (OECD, 2022; Screpante, 2024). Expanded significant economic presence concepts would capture substantial workforces in source jurisdictions even without formal PEs (Baert, 2024).

3.5 Recommendations for CEE Countries and EU Level

CEE Member States should pursue: (1) strengthened transfer pricing enforcement with dedicated resources for challenging cost-plus arrangements in creative industries; (2) unilateral defensive measures including withholding taxes on royalty payments to group entities in low-tax jurisdictions and CFC rules; (3) renegotiation of Double Taxation Treaty provisions to limit royalty article benefits for intra-group IP licensing and expand PE definitions; (4) support for local IP development through tax incentives enabling studios to build proprietary IP under Models 3 and 4; and (5) regional coordination on exchange of information and joint negotiating positions in EU forums (Baert, 2024; Baert, 2025; Arnold, 2023).

At EU level, the Pillar Two Directive (Council Directive 2022/2523/EU) implementing a global minimum tax of 15% will constrain some profit shifting, though the rate may be insufficient and implementation complex (Baert, 2024). Revival of the Common Consolidated Corporate Tax Base (CCCTB) proposal with formulary apportionment based substantially on labor, assets, and sales would most directly address the structural problem (Mičúchová, 2023; Baert, 2024). Enhanced public country-by-country reporting would illuminate profit allocation patterns and create reputational pressure (Baert, 2025). More aggressive European Commission scrutiny of IP box regimes—as reflected in recent state aid litigation, including the Apple/Ireland case,

although its implications for IP taxation remain debated (Court of Justice of the European Union, 2024)—could further constrain arrangements failing economic substance tests.

CONCLUSION

The European video game industry exemplifies the challenges of taxing creative labor in IP-intensive, globally integrated economies. While creative value is substantially generated in CEE countries—where skilled workers design, program, and produce artistic and technical content constituting video games—taxable profits systematically accrue to Western European and extra-EU jurisdictions where IP is owned, managed, or licensed. This misalignment reflects the structure of international tax rules, particularly transfer pricing methodologies that treat creative labor as routine service inputs entitled only to cost-plus returns, while allocating residual profits to legal owners of intangible assets.

Current reforms—BEPS, ATAD, Pillar Two—have not fundamentally addressed this problem. While constraining the most egregious forms of profit shifting, they leave intact core transfer pricing methodologies and IP ownership structures that systematically favor capital over labor, legal form over economic substance, and Western Europe over CEE in profit allocation. Meaningful reform would require reconceptualizing how international tax rules treat creative labor: recognizing that profits in creative industries are widely argued to be driven primarily by human capital and creative talent, not merely by legal ownership of intangible assets.

This study has several limitations. The analysis relies exclusively on secondary sources and does not include primary empirical data such as interviews with tax practitioners or studio executives, nor access to actual transfer pricing documentation. The hypothetical case study, while grounded in documented industry parameters, cannot capture the full complexity of actual intra-group arrangements. The rapidly evolving regulatory landscape—particularly ongoing Pillar Two implementation—may affect the validity of some conclusions over time.

Future research could address these gaps through: empirical studies of actual transfer pricing documentation in CEE game studios; comparative quantitative assessment of tax revenue losses in specific CEE jurisdictions before and after BEPS implementation; longitudinal analysis of post-Pillar Two profit allocation outcomes in the gaming sector; and comparative case studies of studios operating under Model 1 versus Model 4 structures to assess the relationship between IP ownership and tax outcomes in practice.

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