

Cashing Out: Liquidity-Based Gamblification and Market Governance in Video Games

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EXTENDED ABSTRACT

Gaming-gambling convergence has become an important concern across game studies, gambling studies, and regulatory debates. Existing research has examined loot boxes, gacha, skin gambling, problem gambling, and the legal classification of random rewards in considerable depth. This paper focuses on a specific but under-theorised dimension of this debate: cash-out. Here, cash-out refers not only to direct withdrawal into real money, but also to the broader market processes through which random rewards, virtual items, skins, in-game currencies, and accounts become tradable and convertible into economic value. The paper asks two questions: RQ1: How do secondary markets create cash-out possibilities for random rewards in video games? RQ2: How can liquidity controls, inspired by anti-speculation mechanisms in financial markets, help govern gambling-like game economies? The study is not tied to a single jurisdictional definition of gambling. Instead, it develops a cross-jurisdictional policy framework intended to inform consumer-protection and gambling-regulatory debates in contexts where transferability and real-world monetary value affect the treatment of random-reward systems.

This paper does not treat cash-out as a necessary condition or primary source of gambling-related harm, but it is a crucial mechanism through which random rewards acquire exchange value, speculative value, and market-mediated risk. Paid loot boxes are linked to problem gambling regardless of whether their contents can be cashed out (Zendle et al. 2020); cash-out is therefore not a necessary condition of harm. It remains, however, a meaningful and under-researched lever for limiting the speculative, market-mediated dimension of gamblification. Loot boxes and gacha systems can be gambling-like because they involve paid chance-based outcomes. However, their gambling-like character is intensified when the resulting rewards circulate through liquid markets. Under these conditions, virtual rewards are no longer merely consumable play objects or signs of in-game status. They can become asset-like commodities whose value depends on scarcity, resale expectations, market demand, and the imagined judgments of other market participants.

This argument builds on several strands of existing scholarship. Research on loot boxes and gacha has highlighted the psychological and structural similarities between random reward systems and gambling, including their relationship to problem gambling and legal debates over "money or money's worth" (Drummond and Sauer 2018; Zendle and Cairns 2018; Xiao and Henderson 2024). Studies of virtual economies and real-money trading have shown that virtual assets can accumulate authentic economic value through platform-based and external markets (Castronova

2001; Heeks 2010; Lehdonvirta 2009). Research on speculation further suggests that gambling and financial speculation can converge when participants act on uncertainty, resale expectations, short-term price movements, and expectations about how other actors will value an asset (Arthur et al. 2016; Keynes 1936; Lee et al. 2023). More recent research shows that paid loot boxes with transferable content remain present on Steam and can possess real-world monetary value (Xiao and Henderson 2024), while Counter-Strike skins have also been analysed as high-volatility alternative digital assets with substantial historical market returns (Reichenbach 2025). Yet these insights remain fragmented across disciplines, leaving cash-out unexamined as a liquidity continuum across the wider digital games ecosystem.

Drawing on market microstructure and liquidity theory, the sociology of assetization, and financial approaches to speculation control (Birch and Muniesa 2020; Kyle 1985; O'Hara 1995), this paper develops a liquidity-based approach to gamblification. Cash-out is conceptualised not as a binary legal condition, but as a continuum shaped by six dimensions adapted from the liquidity dimensions of financial markets—transferability, priceability, tradability, transaction speed, market depth, and real-money convertibility—each an observable and, in principle, measurable attribute of a given game market. From this perspective, the risks of random reward systems escalate when game assets become highly liquid, rapidly tradable, and subject to speculative expectations.

Methodologically, this paper adopts a comparative typological approach. It constructs a typology of cash-out channels in contemporary gaming by comparing prominent cases selected to span contrasting market structures and degrees of liquidity: skin and item markets in *Counter-Strike: Global Offensive/Counter-Strike 2* (Valve and Hidden Path Entertainment 2012; Valve 2023) and *Dota 2* (Valve 2013); gold trading and service-based real-money trading in *World of Warcraft* (Blizzard Entertainment 2004); lower-liquidity account-based markets surrounding *League of Legends* (Riot Games 2009); and grey-market account trading in gacha games. These cases illustrate different cash-out channels, including platform-mediated trading, internal market systems, third-party item marketplaces, and account trading. Comparing cases across the six dimensions above, the typology enables graduated distinctions between degrees of cash-out, rather than treating game economies as simply gambling or non-gambling.

By mapping these channels comparatively, the paper shows how cash-out emerges through different configurations of market infrastructure rather than through direct monetary conversion alone. Therefore, the governance of gambling-like game economies should complement probability disclosure and categorical legal restrictions with more direct attention to market liquidity. Financial anti-speculation mechanisms offer useful regulatory analogies. Practical interventions include trading cooldowns, limits on transaction velocity, repeated-resale caps, position limits for high-value digital assets, and targeted structural friction applied to secondary markets tied to paid random rewards. The paper concludes that liquidity control aims not to eradicate player economies entirely, but to diminish the structural conditions under which random rewards transform into highly liquid, speculative, and potentially exploitative assets.

BIO

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