

WALKING THE THIRTEENTH FLOOR: THE TAXATION OF VIRTUAL ECONOMIES

Byron M. Huang*

17 YALE J.L. & TECH. 224 (2015)

ABSTRACT

Since the advent of the Internet and the subsequent proliferation of online game worlds, millions of people across the physical world have spent vast amounts of time, money, and energy on virtual realms and their virtual lives. Taxation of transactions involving virtual goods may have been laughable at the outset of virtual reality, but the idea now bears serious consideration due to the growth of online video games into a multi-billion dollar industry.

The IRS began efforts to address taxation of virtual economies in 2007, culminating in minor steps to effect compliance and a report by the Government Accountability Office released in May of 2013. This Article contends that the IRS is losing valuable tax revenue from sales of virtual goods for real money due to a lack of effective guidance in traversing this new frontier. And so, this Article establishes a spectrum of gamer profiles (social, vocational, casual, casual-hardcore, and hardcore) and uses that framework to craft tax compliance strategies in each virtual economy archetype.

In addition, the Article provides brief overviews of popular multiplayer online games in the last decade (World of Warcraft, Second Life, League of Legends, etc.) and discusses the tax consequences of the most prevalent transactions relating to those virtual economies. It goes on to analyze the potential impact of current international taxation discourse on such transactions.

The virtual universe and electronic commerce will only grow—and where income exists, taxation should follow.

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* New York University School of Law, LL.M. in Taxation, expected May 2016. My utmost thanks to Heather M. Field, who inspired me to pursue tax law and guided me through the conceptualization of this piece. This Article's title references a science fiction movie in which the protagonist-creator of a sophisticated virtual reality discovers that his own world is itself a virtual realm. THE THIRTEENTH FLOOR (Columbia Pictures 1999).

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INTRODUCTION

Since the advent of the Internet and the subsequent proliferation of online game¹ worlds, millions of people across the physical world have spent vast amounts of time, money, and energy on virtual realms and their virtual lives. Some are hobbyists, casually flitting in and out of various worlds, vacationing on the surfaces of multiple universes. Some are workers, mining and laboring within virtual reality for real dollars to sustain their physical existence. And some are devotees, crafting online characters—for some, online personas—who become a part of online communities as real and complex as those within the tangible world.

Taxation of transactions within virtual worlds may have been laughable at the outset of virtual reality, but the idea merits serious attention today. Online video games have become a multi-billion dollar industry within the last decade.² This is due in large part to the rise of the Massively Multiplayer Online Roleplaying Game (“MMORPG,” or “MMO”

¹ All instances of “game” or “gaming” in this Article refer to “video games” unless otherwise stated.

² See John Gaudiosi, *New Reports Forecast Global Video Game Industry Will Reach \$82 Billion By 2017*, FORBES, July 18, 2012, <http://www.forbes.com/sites/johngaudiosi/2012/07/18/new-reports-forecasts-global-video-game-industry-will-reach-82-billion-by-2017>.

for short).³ Players tend to become particularly immersed and invested in MMOs because virtual worlds function like real societies. Each person begins as a neophyte at level one and progresses through the world—“leveling up,” gaining new skills and abilities, and learning different professions. Along the way, many choose to join user-created communities called “guilds,” working together with guild-mates to achieve their common and collective aspirations, whatever they may be.⁴

The reach of video games, however, is not limited to hardcore gamers or the highly technologically-inclined. Recent developments in the gaming industry have successfully expanded the market to all walks of life. Since its inception, the Nintendo Wii has been marketed as the family video game machine.⁵ Games like Dance Dance Revolution or Just Dance promote social gaming and virtual entertainment as substitutes for similar activities in the real world.⁶ Mobile phone gaming is an even more recent phenomenon.⁷ For those that may not have time to play at a computer or a video game console hooked up to a television, players may play with millions of others over their service provider’s network.

On all of these different platforms, depending on the structure and nature of the game, players can obtain virtual assets⁸ and currencies that have real-world, readily ascertainable values. One of the most famous anecdotes arose

³ See Emanuel Maiberg, *League of Legends Revenues for 2013 Total \$624 Million*, GAMESPOT.COM (Jan. 24, 2014), <http://www.gamespot.com/articles/league-of-legends-revenues-for-2013-total-624-million-update/1100-6417224/>; *Blizzard Entertainment Statistics*, STATISTIC BRAIN (Dec. 23, 2013), <http://www.statisticbrain.com/blizzard-entertainment-statistics>.

⁴ *Guild Advancement and You*, WORLD OF WARCRAFT (Jan. 21, 2011), <http://us.battle.net/wow/en/blog/2113741/guild-advancement-and-you-1-21-2011>.

⁵ WII U CONSOLE, <http://www.nintendo.com/wii> (last visited Apr. 20, 2015).

⁶ DDR GAME, <http://www.ddrgame.com> (last visited Apr. 20, 2015); JUST DANCE 2015, <http://just-dance-thegame.ubi.com/jd-portal/en-us/home> (last visited Apr. 20, 2015).

⁷ See Alex Cocotas, *Games Top the List of Highest Revenue-Generating Apps in June*, BUS. INSIDER, July 9, 2013, <http://www.businessinsider.com/games-top-the-list-of-highest-revenue-generating-apps-in-june-2013-7> (listing Candy Crush Saga as generating approximately \$633,000 per day); Michael H., *Q4 2013 Games Revenue Doubled on iOS, Quadrupled on Android*, PHONEARENA.COM (Feb. 26, 2014), http://www.phonearena.com/news/Q4-2013-games-revenue-doubled-on-ios-quadrupled-on-Android_id53261.

⁸ Throughout the Article, “virtual goods” will refer to all things virtual, “virtual assets” will refer to all things virtual aside from virtual currencies, “virtual items” will refer to virtual weapons, virtual armor, and any other virtual items aside from virtual currencies, and “virtual currencies” and “virtual gold” will refer to virtual dollars originating from within a given virtual world.

out of the game World of Warcraft (“WoW”), where a highly-ranked player sold a pair of legendary weapons for \$9,500.⁹ Numerous studies have also been done on the effective exchange rate between WoW gold and real-world currencies—at its height, the rate of WoW gold to USD was reported to be 7.41 to 1.¹⁰

The IRS began seriously considering taxation of these economies in 2007, culminating in minor steps to effect compliance¹¹ and a report by the Government Accountability Office (“GAO”) released in May of 2013.¹² The literature thus far has focused on orienting and priming the academic consciousness to taxation issues within the novel context of virtual worlds.¹³ This Article contends that the IRS is losing valuable tax revenue from virtual gaming transactions due to a lack of effective guidance in traversing this new frontier. Even if the IRS were to issue guidance, there would be compliance issues unique to virtual economies. After highlighting these issues, this Article then suggests methods for recapturing tax revenues in the different types of virtual economies.

I begin in Part I by discussing the economies described in the GAO Report and providing relevant examples for each virtual world archetype: closed-flow, open-flow, and hybrid.

⁹ Elizabeth Wachowski, *Rogue with Twin Blades of Azzinoth Sells Account for Almost \$10,000*, ENGADGET (Sept. 16, 2007), <http://wow.joystiq.com/2007/09/16/rogue-with-twin-blades-of-azzinoth-sells-account-for-almost-10>.

¹⁰ Laurence H.M. Holland, *Making Real Money in Virtual Worlds*, FORBES, Aug. 7, 2006, http://www.forbes.com/2006/08/07/virtual-world-jobs_cx_de_0807virtualjobs.html.

¹¹ *Tax Consequences of Virtual World Transactions*, INTERNAL REVENUE SERVICE, <http://www.irs.gov/Businesses/Small-Businesses-&Self-Employed/Tax-Consequences-of-Virtual-World-Transactions> (last visited Aug. 23, 2015).

¹² U.S. GOV’T ACCOUNTABILITY OFFICE, REP. NO. GAO-13-516, VIRTUAL ECONOMIES AND CURRENCIES: ADDITIONAL IRS GUIDANCE COULD REDUCE TAX COMPLIANCE RISKS (2013) [hereinafter VIRTUAL ECONOMIES], <http://www.gao.gov/assets/660/654620.pdf>.

¹³ Bryan T. Camp, *The Play’s the Thing: A Theory of Taxing Virtual Worlds*, 59 HASTINGS L.J. 1 (2007), and Leandra Lederman, “*Stranger Than Fiction*”: *Taxing Virtual Worlds*, 82 N.Y.U. L. REV. 1620 (2007) are the predecessors of all relevant literature. Their progeny constitute the vast majority of articles within this realm of academia. See, e.g., Jeffrey Anand, *Virtual Economies Virtually Unregulated: How Clear Taxpayer Guidance Can Mitigate Tax Compliance Risks*, 43 HOFSTRA L. REV. 253 (2014); William E. Arnold, IV, *Tax Enforcement in Virtual Worlds—Virtually Impossible?*, 40 SYRACUSE J. INT’L. L. & COM. 187 (2012); Adam S. Chodorow, *Ability to Pay and the Taxation of Virtual Income*, 75 TENN. L. REV. 695 (2008); David J. Mack, *ITAX: An Analysis of the Laws and Policies Behind the Taxation of Property Transactions in a Virtual World*, 60 ADMIN. L. REV. 749 (2008); and Theodore P. Seto, *When is a Game Only a Game?: The Taxation of Virtual Worlds*, 77 U. CIN. L. REV. 1027 (2009).

In Part II, I discuss the calculation of income in different virtual economies, refining prior analysis within the subject and expanding the scope beyond that of preceding literature. This Article primarily focuses on the tax consequences of the sales of virtual goods (characters, items, currencies) for real dollars—a set of transactions that has seen incredible growth in recent years.

In Part III, I analyze tax compliance literature, suggest strategies for domestic taxation in each of the virtual economy archetypes, and contextualize the taxation of virtual economies within the current international taxation discourse. This Article establishes a spectrum of archetypal gamer profiles (social, vocational, casual, casual-hardcore, and hardcore) and uses that framework to analyze compliance strategies for each archetype. It concludes that, while IRS guidance on taxation of virtual economies would assist voluntary compliers in reporting their tax liability, hybrid and open-flow economies require withholding and third-party reporting, respectively, to meaningfully effect compliance. The Article further concludes that the traditional facets of international tax law are ill equipped to address the challenges of electronic commerce. However, the emerging concept of a “virtual permanent establishment” may fare better in the context of virtual economies.

Finally, I discuss a recent development in the gaming world in Part IV—the rise of the multiplayer online battle arena, or the “MOBA”—in order to highlight evolving issues in the area of virtual economies and the ways in which the type of analysis in this Article must continue to develop as the landscape continues to change.

I. The Three Archetypes of Virtual Economies

The GAO report defines a virtual economy as “comprised by the economic activities among a community of entities that interact within a virtual setting, such as an online, multi-user game.”¹⁴ A virtual currency is “a digital unit of exchange that is not backed by a government-issued legal tender.”¹⁵ Within the context of virtual economies, virtual currencies are obtained by playing in and interacting with those respective virtual worlds. The vast majority, but not all, of virtual currencies are tied to virtual economies.¹⁶

¹⁴ VIRTUAL ECONOMIES, *supra* note 12, at 3.

¹⁵ *Id.*

¹⁶ The notable exception is Bitcoin, a “decentralized digital currency that uses a peer-to-peer network to move bitcoins around the world.” *Id.* at 5. It is a privately issued, digital currency that is not associated with a virtual economy, intended by its developers to serve as a real world currency,

The GAO report identifies three distinct types of virtual systems: closed-flow, open-flow, and hybrid.¹⁷ In a closed-flow system, the only transactions that exist involve virtual assets and virtual currencies. That is to say, there are no links between the virtual world and the real world. In an open-flow system, all channels between the virtual world and the real world are open: real dollars may be used to purchase virtual dollars and virtual assets; virtual dollars may be exchanged for real dollars; and virtual assets may be sold for real dollars. The GAO report defines “hybrid systems” as frameworks where one or more flows are closed.¹⁸ The most common flows closed within hybrid virtual game economies are the sale of virtual dollars for real dollars and the use of virtual dollars to purchase real world goods and services.¹⁹ The sale of virtual goods, analyzed in subsequent Parts of this Article, operates primarily through online marketplaces.²⁰ Within open-flow economies, the marketplaces are generally sanctioned by the game developers; within effectively hybrid economies, virtual goods are primarily sold through third-party marketplaces.²¹

As a preliminary matter, the GAO has deemed transactions within closed-flow economies non-taxable.²² This is because all channels between the virtual and real worlds are cut off. If there is no possibility of converting virtual assets or currencies to real world dollars, there is no reason it should be taxed.

However, the most popular and profitable video games today simply do not operate as closed-flow systems. The GAO report concedes that some MMOs that choose the closed-flow framework may bleed into the “real economy via third-party transactions.”²³ It contends that “[t]his interaction between the virtual and real economies can be limited by the game’s distributor through terms of use agreements.”²⁴ However, this is not a realistic solution: if the demand and interest in the game are high enough, secondary markets will form, opening

freely exchangeable with real world goods and services. *Id.* However, the discussion of Bitcoin taxation is outside the scope of this Article, as this piece’s primary focus is on virtual economies and their associated transactions.

¹⁸ VIRTUAL ECONOMIES, *supra* note 12, at 4.

¹⁹ *Id.*

²⁰ *See infra* Part II.A.1.

²¹ *See generally infra* Part II.A.

²² VIRTUAL ECONOMIES, *supra* note 12, at 10-11.

²³ *Id.* at 5.

²⁴ *Id.*

flows that were meant to be closed.²⁵ The fact that user agreements expressly forbid such exchanges is irrelevant to the question of whether there is taxable income. The video game worlds that have the largest player bases—and thus, the greatest potential for transactions—will generate markets where players exchange real dollars for virtual goods. And where income occurs, even illegal income, it is taxable.²⁶

The focus, then, should not center on the framework intended by the creators of the virtual world, but rather on the formation of secondary markets. Popular MMOs that were intended to function as closed-flow economies effectively turn into hybrid economies by virtue of third-party marketplaces. Thus, the most fruitful battlegrounds for the recapture of tax revenue are those of hybrid economies and open-flow economies—frameworks where virtual life intersects with reality.

A. *The Hybrid Economy: World of Warcraft*

When *World of Warcraft* was released in 2004, it changed the face of gaming. There had been various self-proclaimed MMOs before then, but this was a genre-defining undertaking. It had strong fundamentals: intuitive character control, solid graphics, categorical roles,²⁷ difficult end-game content, and compelling, detailed lore. The first three qualities appealed to all gamers. The control and graphics were cutting-edge,

²⁵ See VIRTUAL ECONOMIES, *supra* note 13, at 4-5 (“Some MMORPGs operate as a closed-flow system, but some of these closed-flow systems can leak into the real economy via third-party transactions.”).

²⁶ *James v. United States*, 366 U.S. 213, 221 (1961) (holding that embezzled funds are to be included in the gross income of the embezzler); see also *Other Income*, INTERNAL REVENUE SERVICE, <http://www.irs.gov/publications/p17/ch12.html> (last visited Apr. 20, 2015) (“Income from illegal activities, such as money from dealing illegal drugs, must be included in your income on Form 1040, line 21, or on Schedule C or Schedule C-EZ (Form 1040) if from your self-employment activity.”).

²⁷ Often referred to as the trinity in MMOs, the three main roles are colloquially known as “Tank,” “Healer,” and “DPS.” When a group of players enters combat, the role of the “Tank” is to stand between the group and the threat, taking damage from hostile creatures, thus protecting the “Healer” and the “DPS.” The “Tank” will have the most health, armor, and resistance among the members of the group, but will have minimal ability to damage the opposing monsters. The “Healer” restores health to all damaged members, focusing mostly on healing the “Tank.” Generally, the “Healer” has no ability to deal damage and has variable defensive attributes. The term “DPS” stands for “damage per second,” referring to members of the group whose primary role is to attack the threats at hand. The “DPS” have the most damage-dealing capabilities and also have variable defensive attributes. See Brian Green, *Rethinking the Trinity of MMO Design*, GAMASUTRA (Dec. 17, 2009), http://www.gamasutra.com/view/feature/132607/rethinking_the_trinity_of_mmo_.php.

sparking the attention of players and critics alike. The clearly defined roles provided players with a sense of individuality. Building a character was essentially building a virtual analog of yourself, or for some, an alter ego functioning as a virtual projection of your imagination. This allowed the players to immerse themselves within the world, encouraging personal investment in the game itself.

The latter two qualities appealed to different types of gamers. The difficulty of end-game content was of particular interest to hardcore gamers because it required a great deal of skill and coordination. The lore was important in hooking the more casual players—those who were drawn in by a story with crafted historical depth and intricate interactions among the many races and factions of the virtual world.²⁸ In order to fully understand the different types of players important to the Article's compliance analysis (hardcore, vocational, casual-hardcore, casual, social) and the roles of the relevant peripheral entities (the gaming company itself, third-party marketplaces, third-party companies), it is essential to have a basic understanding of how players progress through an MMO. World of Warcraft is the most useful example because it defined the genre and established itself as the measuring stick to which all other such MMOs are inevitably compared.²⁹ Those already familiar with WoW may wish to begin at Part I.2.

1. A Day in the Life

At the outset, players must choose a server to play on. Each server is a separate instance of the World of Warcraft, and players cannot interact with those on a different server.³⁰ The players then choose which faction they belong to, which dictates the pool of races from which they can choose.³¹

²⁸ Just as J.R.R. Tolkien's *Silmarillion* provided Middle Earth's origin myth and millennia of detailed background for his epic trilogy *The Lord of the Rings*, the *Warcraft* enterprise began as a series of real-time strategy games for which its writers created an entire world. See *The Story of Warcraft*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/game/the-story-of-warcraft> (last visited, Apr. 23, 2015). Of course, the *Warcraft* backstory is a pale analog to the depth of Tolkien's universe, but the parallel is nonetheless illustrative.

²⁹ See Chris Thursten, *Five Ways World of Warcraft Changes MMOs Forever*, PCGAMER (Nov. 27, 2014), <http://www.pcgamer.com/five-ways-world-of-warcraft-changed-mmos-forever>.

³⁰ In recent versions of the game, there is increased interaction among servers, but the baseline format for all MMOs dictates that servers are essentially separate worlds.

³¹ In the original launch of World of Warcraft, the Horde faction contained the following races: Undead, Troll, Tauren, and Orc. The Alliance faction contained the following races: Night Elf, Human, Gnome, and Dwarf. New races have been appended in subsequent expansions. See *Races*, WORLD

Characters of a certain race have a limited choice of classes, and consequently, a limited choice of roles they may undertake.³² A player may create multiple characters on any given server, but they must all be of a single faction.

Players begin at level one, in a starting area dictated by the faction and race of their characters. The first leg of the MMO experience is “leveling.” Characters level up by completing quests and defeating enemies. Because many quests call for defeating certain enemies or exploring certain enemy-filled lairs, it is usually most efficient to follow the quest instructions. As characters level, they attain new abilities, upgrade to possess more potent versions of existing abilities, gain more attributes, unlock new areas and dungeons, receive new time-saving utilities, and progress through the storyline. Leveling repeats until a character reaches the maximum level.³³

For many, attaining the maximum level is the true beginning of the game. All equipment gathered up to this point, mostly through quests and five-man dungeon raids, are of average quality.³⁴ The different types of equipment from least rare to most rare are: common, uncommon, rare, epic, and legendary.³⁵ But within most of these types, there is a wide range of quality—while legendary items have little to no deviation in quality within their category, not all epics are

OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/game/race> (last visited Apr. 20, 2015).

³² For example, Warriors and Rogues can never undertake the “Healer” role, and Shamans and Priests can never undertake the “Tank” role. For a more detailed explanation of the role trinity, see *supra* note 27.

³³ The maximum level for the original launch was 60. See Mike Foster, *Azeroth and Beyond: Nine Years of World of Warcraft*, ENGADGET (Nov. 22, 2013), <http://www.engadget.com/2013/11/22/azeroth-and-beyond-nine-years-of-world-of-warcraft>. The newest expansion has a maximum level of 100. See *Warlords of Draenor: Adventuring from 90 to 100*, WORLD OF WARCRAFT (Nov. 8, 2013), http://us.battle.net/wow/en/blog/11473826/Warlords_of_Draenor_Adventuring_from_90_to_100-11_8_2013.

³⁴ See *Lower Blackrock Spire*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/zone/lower-blackrock-spire> (last visited Apr. 23, 2015); *Sunken Temple*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/zone/sunken-temple> (last visited May 16, 2015); *Zul'Farrak*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/zone/zulfarrak> (last visited May 16, 2015). Impromptu groups may form outside any given dungeon. Each group that enters exists as their own instance of the dungeon. In order to be successful, groups must generally be composed of one “Tank,” one “Healer,” and three “DPS.” Groups may seek willing participants to fulfill roles through area-wide chat or the in-game “Looking for Group” function, which aids in expediting the formation process.

³⁵ See *Quality*, WOWPEDIA, <http://wow.gamepedia.com/Quality> (last visited Apr. 23, 2013).

created equal. The rarest items (epics, legendaries) can only be obtained through end-game “raiding.”³⁶

In the original release of World of Warcraft, end-game content could only be completed by groups of forty characters at maximum level.³⁷ The process of trekking through these dungeons is known as “raiding.” Because coordinating that many people is necessarily difficult, only raiding-oriented guilds generally succeed in defeating the most difficult bosses.³⁸ Guilds use websites and in-game messages to communicate raiding schedules to its members.³⁹

At any given time, there are several end-game dungeons for raiding guilds to explore. Each dungeon generally contains progressively more challenging boss encounters. Each boss has a fixed list of items it drops at varying percentages. The items include armor pieces, weapons, rings, precursors to legendary items, and other things—all of which increase the attributes of a given player’s character.⁴⁰ After defeating the boss, raid leaders typically distribute the loot to the raid members. As each boss only usually drops a few items, different guilds implement varying systems for distributing items.⁴¹ A

³⁶ See *Black Temple*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/zone/black-temple> (last visited Apr. 23, 2013); *Blackrock Foundry*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/zone/blackrock-foundry> (last visited Apr. 23, 2013).

³⁷ See *Blackwing Lair*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/zone/blackwing-lair> (last visited Apr. 23, 2015). Subsequent expansions have lowered the maximum number of characters allowed in the most difficult raiding dungeons—twenty-five in the latest expansion and twenty in the next release—in order to make raiding more manageable for the entire player base. See *Warlords of Draenor: Dungeons and Raids*, WORLD OF WARCRAFT (Nov. 9, 2013), <http://us.battle.net/wow/en/blog/11499600/warlords-of-draenor-dungeons-and-raids-11-9-2013>.

³⁸ Guilds are akin to virtual clubs, associations, or organizations. See Lisa Poisso, *WoW Rookie: Joining Your First Guild*, ENGADGET (Mar. 18, 2009), <http://www.engadget.com/2009/03/18/wow-rookie-joining-your-first-guild>. Anyone can create a guild by paying an initial fee (payable in virtual currency). The creator of the guild is known as the Guild Master (“GM”). Only the officers appointed by the Guild Master (“GM”) and the GM herself can invite new members to join. See *Playing Together*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/game/guide/playing-together> (last visited Apr. 23, 2015).

³⁹ See *Roster*, METHOD, <http://www.methodwow.com/board/roster.php?team=world-of-warcraft> (last visited Apr. 23, 2015).

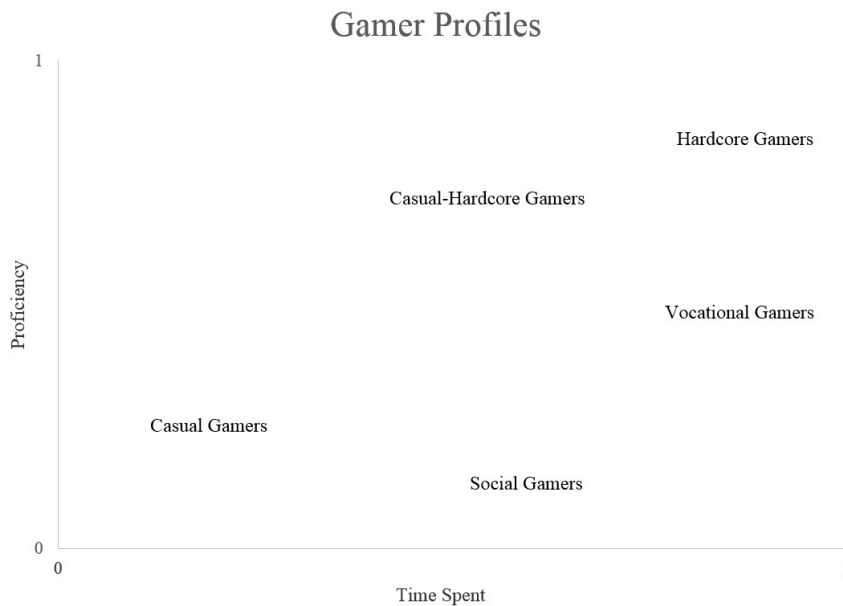
⁴⁰ Each character would have enhanced capabilities in their role: a “Tank” would have more defensive attributes and would be able to withstand more damage; a “Healer” would be able to heal more damage; and a “DPS” would be able to deal more damage. For an overview of these roles, see *supra* note 27.

⁴¹ The most common system used in the elite guilds is known as “DKP,” which stands for “Dragon Kill Points.” Players receive DKP for

character can only complete end-game dungeons once a week, thereby limiting the rate at which guilds can receive items.

2. The Players Within the World

Different types of players are drawn to different aspects of the game.⁴² The types of players can be thought of as data points on a set of X and Y axes with the X-axis measuring the amount of time commitment and the Y-axis measuring the participation in challenging, organized gameplay—a factor mostly controlled by personal skill. The following graph maps the major gamer profiles:



The experience of leveling up is often most meaningful for casual gamers due to their time constraints and comparatively cursory interaction with the virtual world. With only a few

attendance, participating in a boss kill, and various other guild events; officers keep a spreadsheet of members' totals for reference. Whenever an item drops, members within the raid dungeon who want that item privately message the raid leader with their DKP bid. Whomever bid the most wins the item and has that amount subtracted from their DKP account. This ensures that those who devote the most time to the guild will be first in line for the best items, but strategic bidding is necessary to not bankrupt oneself. After all the bidding, each end-game dungeon resets weekly, giving all participating players another chance at the same item at every reset.

⁴² Player profiles exist on a spectrum. The types of players indicated are the broad slices along that spectrum.

sporadic hours to spare, they enjoy journeying throughout the world, taking time to play through the storyline crafted by the authors of the game. They take longer than average to reach maximum level, and when they do, they often do not have the time to commit to raiding. Thus, casual gamers rarely obtain the rarest items through their own efforts.

However, many players wish to feel powerful within a fantasy universe, and casual gamers can attain such power by purchasing virtual goods (items, characters, etc.) from others. As the GAO report notes, World of Warcraft attempts to function as a closed-flow economy through Terms of Use (TOU) agreements, but the popularity of the game has spawned secondary markets in which gamers can purchase virtual gold, virtual items, and even characters.⁴³ The casual gamer acquires these virtual wares through a third-party marketplace that specializes in the sale of those items. This third-party marketplace may act solely in a facilitative capacity, or it may have its own supply of gold, items, and characters to sell. That is to say, some websites only provide a forum for players to sell to other players, while others may have their own source of vocational gamers that work full-time to acquire virtual goods.

Vocational gamers do not play the game for entertainment—it is a living. They gather resources in a mechanical, repetitious way, colloquially known as “farming.” The most easily accessible virtual good for which gamers will pay is in-game currency. Thus, companies that have fleets of players generally choose to farm gold over any other asset.⁴⁴ Gold farming provides a consistent flow of value over time with little required skill,⁴⁵ whereas attempting to gather and sell epic or legendary items from end-game raiding is speculative and requires much more skill. Selling characters is profitable for the same reason. If a gamer wants to enjoy end-game content, but does not have the time or patience to go through leveling, she can purchase a maximum level character with average gear and start her adventures from there.

Hardcore and casual-hardcore⁴⁶ gamers generally do not play the game for monetary profit. Instead, they play for

⁴³ See VIRTUAL ECONOMIES, *supra* note 12, at 4-5.

⁴⁴ See Julian Dibbell, *The Life of the Chinese Gold Farmer*, N.Y. TIMES, June 17, 2007, <http://www.nytimes.com/2007/06/17/magazine/17lootfarmers-t.html>.

⁴⁵ Farming in-game gold is a repetitive task that operates more as a function of time rather than proficiency.

⁴⁶ Casual-hardcore gamers are essentially gamers that would be hardcore if they had sufficient time to play the game, but are interested in raid progression with what time they do have to devote to the game. They are more goal-oriented than casual gamers and have a gaming profile much more attuned to that of hardcore gamers.

entertainment, challenging gameplay, and a sense of accomplishment. As previously mentioned, the end-game dungeons require a raiding party of a relatively large number of people.⁴⁷ In addition, each boss is more difficult than the preceding one, possessing unique abilities that place members of the raid in difficult positions. The boss fights that produce the highest quality virtual assets are like complex puzzles. A guild must sufficiently gear up its raiding party with equipment from previous bosses to hit the prerequisite offensive and defensive benchmarks, but the keys to defeating the most challenging bosses are coordination and experience. When the game's developers release a new boss, only the hardcore gamers will be at the front lines—the vocational gamers do not have the luxury of experimenting,⁴⁸ and the casual gamers do not have the time to play.

In terms of transactions, hardcore gamers rarely purchase virtual assets because they have a comparative advantage in acquiring them. They will, however, sell assets on occasion.⁴⁹ As mentioned previously, one of the most famous character sales was by a player in a top guild.⁵⁰ Through raiding with his guild, he managed to acquire two legendary weapons that formed a set and subsequently sold the entire account for \$9,500.⁵¹

Casual-hardcore gamers have a higher likelihood of purchasing items than hardcore gamers because they do not have as much time to play the game, but may purchase a character capable of journeying effectively through end-game content if they wish to be able to do so. However, casual-hardcore gamers (within the upper center of the “Gamer Profiles” graph) are still generally unlikely to purchase items because their proficiency in gameplay allows them to level characters quickly and their participation in raids will yield the rarest items. This type of player will only purchase items when she has a sufficiently low comparative advantage in the creation of virtual items and characters compared to vocational gamers or third-party companies.

B. *The Open-Flow Economy, Second Life, and Other Trends*

Intuitively, open-flow economies have the greatest likelihood of generating taxable transactions. If the philosophy

⁴⁷ See *Warlords of Draenor: Dungeons and Raids*, *supra* note 37.

⁴⁸ See Dibbell, *supra* note 44.

⁴⁹ Wachowski, *supra* note 9.

⁵⁰ *Id.*

⁵¹ *Id.*

underlying these virtual worlds dictates that all virtual assets and currencies are readily exchangeable with real, tangible assets and currencies, then insofar as that vision is realized, the tax consequences of transactions involving those virtual items should be indistinguishable from those of the real world. The quintessential open-flow economy lies within Linden Lab's Second Life.

Second Life is precisely that: your other life, created and maintained in a virtual world.⁵² This differs greatly from the philosophy of Blizzard (WoW's developer) in World of Warcraft in that there is no ultimate goal in the "game". World of Warcraft is story-driven, with the goal of obtaining the best gear, the rarest equipment, and defeating the most difficult bosses.⁵³ Second Life is simply about living in a virtual reality.⁵⁴ With the exception of several large landmarks, the majority of the Second Life world is user-created.⁵⁵ All interactions and transactions imaginable in the real world can take place within this virtual realm: operating businesses, engaging in various professions, exploring player-created areas, or creating your own.⁵⁶

The most interesting facet of Second Life for taxation purposes is the way in which Linden Lab decided to deal with interactions and transactions between the real world and Second Life's virtual reality: they created the LindeX exchange, which allows users to freely exchange Linden dollars⁵⁷ for USD and vice versa.⁵⁸ The exchange rate has been fairly steady for many years, at between 250LD:1USD and 270LD:1USD.⁵⁹

Second Life's economy is the most expansive in terms of interactions with the real world, allowing in-game assets and money to translate into real-world value.⁶⁰ Several game companies have begun to adopt aspects of this open-flow

⁵² See *Living a Second Life*, ECONOMIST, Sept. 28, 2006, <http://www.economist.com/node/7963538>; see also SECOND LIFE OFFICIAL SITE, <http://secondlife.com> (last visited Apr. 20, 2015).

⁵³ See *Guild Rankings*, WOWPROGRESS, <http://www.wowprogress.com> (last visited Apr. 25, 2015).

⁵⁴ See *Living a Second Life*, *supra* note 52.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ The virtual currency for Second Life.

⁵⁸ See *Buying and Selling Linden Dollars*, SECOND LIFE: ENGLISH KNOWLEDGE BASE, <https://community.secondlife.com/t5/English-Knowledge-Base/Buying-and-selling-Linden-dollars/ta-p/700107> (last visited July 25, 2015).

⁵⁹ See *Is the Linden Dollar a Ticking Time Bomb?*, PIXELSANDPOLICY (Jan. 3, 2010), http://www.pixelsandpolicy.com/pixels_and_policy/2010/01/is-the-linden-dollar-a-ticking-time-bomb.html.

⁶⁰ See *Buying and Selling Linden Dollars*, *supra* note 58.

philosophy in crafting their business models. The most notable example is Diablo III, another Blizzard franchise. Originally, the Diablo franchise was a closed-flow economy, but given the popularity of the game, secondary markets began to develop.⁶¹ These markets, however, have not been as robust as those associated with the World of Warcraft franchise. This is because Diablo does not have as high of a “skill ceiling” as WoW end-game raiding. Not only are the boss encounters in Diablo easier (less intensive mechanics, more straightforward gameplay, less preparation, and fewer prerequisites), but the end-game content can be completed by a party of four, disabling the necessity for guilds and complex coordination.⁶²

Notably, Diablo III created an in-game, Blizzard-sanctioned auction house for players to sell virtual items and assets for real dollars.⁶³ This allowed players that had a great deal of time to procure items and convert their efforts into real-world value. This also seemed to be Blizzard’s answer to third-party marketplaces: players could either violate the TOU agreement and sell to players on a third-party site where transactions were not necessarily guaranteed, or they could use an approved channel to achieve a more stable result. Blizzard took a percentage commission on all sales as a fee for facilitating the transactions.⁶⁴ This marketplace, however, was shut down on March 18th, 2014 due to “contravention of game philosophy.”⁶⁵

⁶¹ See DIABLO III GOLD, <http://www.diabloiiigold.com> (last visited Apr. 29, 2015).

⁶² See *Playing with Friends*, DIABLO III GAME GUIDE, <http://us.battle.net/d3/en/game/guide/gameplay/playing-with-friends> (last visited Apr. 29, 2015) (“[Y]ou can form a party with up to three players (for a total of four players) . . .”).

⁶³ See Russell Holly, *How One Diablo 3 Player Pulled in \$130,000 from the Real Money Auction House*, GEEK (Aug. 13, 2014), <http://www.geek.com/games/how-one-diablo-3-player-pulled-in-130000-from-the-real-money-auction-house-1601959>. It is interesting to consider the reasons why Blizzard might have elected to establish an auction house in Diablo III but not in World of Warcraft. There are two plausible explanations. First, opening an auction house in World of Warcraft risked alienating the WoW userbase. WoW was built on the concept that the best gear could only be obtained through hard work and consistent raiding. If end-game gear could be purchased through Blizzard-sanctioned channels, then a large portion of the player base may have seen it as a betrayal of the spirit of the gear structure. As such, people may have stopped playing WoW. Second, while WoW earns its revenue through monthly subscription fees, Diablo III requires only one up-front purchase. This meant that Blizzard could more easily experiment in Diablo—after all, if players stopped playing the game, no revenue would have really been lost. However, if WoW players stopped playing, Blizzard would no longer generate revenue from those monthly subscriptions, potentially losing millions of dollars.

⁶⁴ See Kyle Orland, *Blizzard to Take up to 15 Percent of Diablo III Real-Money Auction House Sales*, ARS TECHNICA, May 1, 2012, <http://>

Other games have experimented with variations of game subscription fees, imbuing their economies with open-flow facets. Consider Wildstar and EVE Online. NCSoft (the company that created Wildstar) introduced “C.R.E.D.D.,” a currency that is usable to extend game time for a given player.⁶⁶ C.R.E.D.D. can be purchased with real money on the Wildstar website, which in turn can be sold on the in-game Commodities Exchange (“CX”) for virtual in-game gold.⁶⁷ As with most hybrid systems, Wildstar attempts to close certain flows within the economy. For example, C.R.E.D.D. cannot be exchanged in any manner other than through the CX, disallowing transactions for subscription time outside the game-sanctioned auction house.⁶⁸ C.R.E.D.D. cannot be purchased for real money from players—only from NCSoft on the Wildstar website—so that the rates for virtual gold to C.R.E.D.D. are set by the free market within the game itself.⁶⁹ And finally, no virtual assets or currencies, apart from C.R.E.D.D. can be purchased for real money.⁷⁰ However, NCSoft has indirectly, and presumably inadvertently, established a relatively stable exchange rate between in-game gold and real dollars: it has assigned a real dollar value to a unit of C.R.E.D.D., and C.R.E.D.D. will have an in-game gold value determined through operation of the in-game economy.

Once it is established that transactions involving virtual goods occur—even in purportedly closed-flow economies, due to demand from their significant player bases—the focus is then on the taxability of transactions within both hybrid and open-flow economies. The next Part of this Article analyzes the most common transactions involving virtual worlds and discusses the tax consequences of those transactions.

II. On the Calculation of Income

arstechnica.com/gaming/2012/05/01/blizzard-to-take-up-to-15-percent-of-diablo-iii-real-money-auction-house-sales.

⁶⁵ *Diablo III Auction House Comes to a Close*, DIABLO III (Mar. 18, 2014), <http://us.battle.net/d3/en/blog/13354139/diablo-iii-auction-house-comes-to-a-close-3-18-2014>. Having a real money auction house in Diablo essentially sent the message to players that hard cash would always trump in-game time. Because the game’s rarest items could be obtained through mass farming, people were no longer excited about exploring new content—they simply found the most efficient way to farm gold or just purchased the end-game desirables with real money. See Holly, *supra* note 63. Since there was no further difficult content—as there would be in the WoW framework—interest in the game waned.

⁶⁶ See *C.R.E.D.D.*, WILDSTAR, <http://www.wildstar-online.com/en/game/service/credd> (last visited Mar. 13, 2015).

⁶⁷ *Id.*

⁶⁸ See *id.*

⁶⁹ See *id.*

⁷⁰ See *id.*

The two seminal articles on virtual economies, written by Professors Leandra Lederman and Bryan Camp, focus primarily on establishing baseline theories and rationales as to if and why “virtual worlds” should be taxed,⁷¹ speaking only generally of the transactions discussed within this Article. Their analyses center on whether “in-game trades” in the various virtual economy archetypes will result in taxable events, but forego discussing the mechanics of taxable transactions involving both the real and virtual worlds.⁷² With respect to closed-flow and hybrid economies, Lederman and Camp agree that in-game transactions involving solely virtual assets and currencies should not be subject to taxation,⁷³ while transactions involving real dollars should be.⁷⁴ On the matter of open-flow economies, however, their opinions diverge: Lederman believes that while “certain in-kind swaps” such as a trade of “a virtual T-shirt for a virtual pair of jeans” should not be taxed, any sale (involving virtual or real assets) for Linden dollars should be,⁷⁵ while Camp believes that only sales of virtual goods for real dollars should be taxed.⁷⁶

The proceeding analysis will first define the scope of taxable transactions within each virtual economy archetype, refining Lederman and Camp’s discussion by presenting the most

⁷¹ See Camp, *supra* note 13, at 70 (“On the other hand, this Article is premature [I]t is a great academic subject, allowing a fresh look at some very basic tax principles.”); Lederman, *supra* note 13, at 1624 (“This Article analyzes how, *and if*, these transactions should be taxed.”) (emphasis added).

⁷² See generally Camp, *supra* note 13; Lederman, *supra* note 13.

⁷³ See Camp, *supra* note 13, at 2 (“This Article’s central thesis is that . . . player activity that occurs solely within the online virtual world is not gross income under current doctrine, nor should current doctrine change.”); Lederman, *supra* note 13, at 1670 (“There is a strong case . . . for not taxing in-game receipts and trades within game worlds, including sales within those games for virtual currency.”).

⁷⁴ See Camp, *supra* note 13, at 45 (“When a WoW or [Second Life] player receives US\$ for ‘selling’ either a player account or an in-world item on an auction site, the sale produces gross income, regardless of who wins the current legal battles over who has what property rights in virtual items used in-world.”); Lederman, *supra* note 13, at 1625 (“[T]ransactions in game worlds, such as WoW, should not be taxed unless the player engages in a real-market trade (a cash-out rule) . . .”).

⁷⁵ See Lederman, *supra* note 13, at 1665-66 (“[T]he right result is not to tax mere entertainment but to tax profit. Making sales for Lindens taxable does that . . .”).

⁷⁶ See Camp, *supra* note 13, at 70 (“[T]here is no money flowing within either [WoW or Second Life]. There are prizes and there are exchanges, but those are all props in a play. No money flows, only virtual representations of money, units of play. If and when players cash out by selling virtual items or player accounts for United States dollars in Real Money Transactions (RMT), that is when the tax collector will be there . . .”).

relevant taxable transactions that have developed in the past decade. The analysis will then focus on the specific tax consequences that arise from these transactions.

A. Identifying Taxable Transactions

Lederman and Camp’s analyses both distinguish between transactions within “structured” and “unstructured” game worlds—these designations, using the GAO report’s terminology, translate to “hybrid” and “open-flow” economies, respectively. As discussed and demonstrated in Part I, each archetype has unique features, thereby creating distinct sets of transactions and taxable events that must be considered in turn.

1. The Hybrid Economy

Hybrid economy frameworks akin to that in World of Warcraft have several key taxable transactions. The first is the sale of virtual characters. These transactions are taxable because they generate real-world income through the disposition of virtual goods. The primary sellers are vocational gamers and third-party companies, but hardcore gamers with extra time and casual gamers seeking to move on to another game may also engage in these sales.⁷⁷ Third-party companies establish specialized marketplaces where players can come and browse their wares.⁷⁸ Some simply provide a platform for exchanges to occur,⁷⁹ while others specialize in the creation of characters through the labor of vocational gamers.⁸⁰ Although Blizzard does not sanction these types of transactions, World of Warcraft’s popularity has nevertheless created a thriving secondary market.

The second type of transaction is the sale of virtual gold. The large majority of virtual currency sellers are vocational gamers and third-party companies⁸¹—other gamers simply do

⁷⁷ See Wachowski, *supra* note 9.

⁷⁸ See IGE, <http://www.ige.com> (last visited May 2, 2015); IMBUYGOLD, <http://www.imbuygold.com> (last visited May 2, 2015).

⁷⁹ See PLAYERAUCTIONS, <http://www.playerauctions.com> (last visited May 2, 2015) (“The world’s safest player to player trading marketplace for WOW Gold, Runescape Gold, Guild Wars 2 Gold, ArcheAge Gold, Fifa 15 Coins and much more.”).

⁸⁰ See *About Us*, IMBUYGOLD, <http://www.imbuygold.com> (last visited May 2, 2015) (“We are [a] specilized [sic], professional and reliable website for WoW Gold selling and WoW Power leveling service.”).

⁸¹ See Dibbell, *supra* note 44 (“At the end of each shift, Li reports the night’s haul to his supervisor, and at the end of each week, he, like his nine co-workers, will be paid in full. For every 100 gold coins he gathers, Li makes 10 yuan It is estimated that there are thousands of businesses like it all over China, neither owned nor operated by the game companies from which they make their money.”).

not focus on the acquisition of virtual currency for sale. Casual gamers are the primary buyers of gold in hybrid economies because they do not have the time or skill to acquire the items they desire.⁸² Occasionally, hardcore and casual-hardcore gamers may buy characters to facilitate end-game play, or gold to fund their raids.⁸³

The last category of taxable transactions deals with the sale of virtual items (armor, weapons, etc.) for real-world dollars. The sellers in this category of transactions have historically consisted of hardcore gamers because the most valuable virtual items are only obtainable through organized raiding with members that have both high proficiency and ample time.⁸⁴ In addition, there is evidence that the market for high-end virtual items is smaller than that for virtual gold, so it would be unprofitable for vocational gamers to engage in end-game raiding.⁸⁵

To date, there have been few reports of vocational gamers forming end-game raiding parties to gear out characters for sale on third-party marketplaces, but it is conceivable that this would be the next step. In the latest World of Warcraft expansion, the maximum raiding party for the most difficult mode is reduced to twenty characters, down from forty in the original release.⁸⁶ If freelance vocational gamers could efficiently farm the rarest virtual items and sell them for profit, they would be engaged in a partnership, raising thorny issues of valuation, ownership interests, and all other facets of partnership taxation.

Interestingly enough, there is a practice of hardcore raiding guilds “selling raid spots” to the highest bidder.⁸⁷ The transactions of which I am personally aware are all for in-game money to fund the guild’s coffers, but guilds may also have sold

⁸² *See id.* (“For players lacking time or patience for the grind, there has always been another means of acquiring virtual loot: real money.”).

⁸³ *See id.*

⁸⁴ *See* Wachowski, *supra* note 9 (describing the sale of a set of legendary weapons by a member of a top raiding guild); *see also* *Chapter IV: The Late Game*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/game/guide/late-game> (last visited July 19, 2015) (“Max-level endgame raids put your skills to the test like nothing else in World of Warcraft. Knowing how to play your class well is crucial, but being a good team player is even more important. Downing a raid boss takes skill, coordination, and perseverance.”).

⁸⁵ *See* Dibbell, *supra* note 44 (“One day word came down from the bosses that the 40-man raids were suspended indefinitely for lack of customers.”).

⁸⁶ *See supra* note 37.

⁸⁷ *See* David Bowers, *Should Selling Raid Spots Be Allowed?*, ENGADGET (Dec. 31, 2007), <http://www.engadget.com/2007/12/31/should-selling-raid-spots-be-allowed>.

or conceivably could sell these spots for real dollars. The selling of raid spots is an example of a secondary market that is present within the game: gamers who have little to no time to play (the western area of the “Gamer Profiles” graph) may spend virtual or real dollars to purchase a coveted raid spot in a top guild. The high ranking guild can easily do the encounter with fewer than the maximum number of players and can promise certain items the buyer requests by taking that player on each week’s raid until those assets drop.⁸⁸ In this manner, guilds can attain large amounts of in-game currency and essentially “sell” virtual assets to players without going through a third-party marketplace.⁸⁹

2. The Open-Flow Economy

Open-flow economies, especially those akin to that of Second Life, encourage interactions between the real and virtual worlds. Transactions taking place in those economies are transparent and simple to tax because the assets, by virtue of steady exchange rates and robust participation by members, have readily ascertainable real-world values. Game companies that began as closed-flow economies, insisting through TOU agreements that all flows were closed, are now realizing that they may have become hybrid economies through secondary markets. In response, some are taking steps to open channels to provide a more open-flow approach through marketplaces that they themselves control.

Using Second Life as an example, there are two primary types of transactions within open-flow economies: (1) sales and exchanges in game involving only virtual assets and virtual currencies and (2) exchanges of in-game currency for real dollars, and vice versa.⁹⁰ It is clear that the latter type of transaction should result in taxation—gamers are selling virtual items for real-world dollars. Whether the former set should be taxed has been the subject of some debate.

While Lederman believes that all sales and exchanges within “intentionally commodified virtual worlds such as Second Life” should be taxed,⁹¹ Camp would exempt all in-game transactions and only tax sales when the gamer “cashes out.”⁹² Lederman’s position stems from the fact that Linden Lab (the company that created Second Life) actively encourages transactions and interactions between the virtual

⁸⁸ *See id.*

⁸⁹ *See id.*

⁹⁰ *See* Lederman, *supra* note 13, at 1665-70 (describing the relevant trades in Second Life).

⁹¹ *Id.* at 1620.

⁹² Camp, *supra* note 13, at 66.

realm and the real world; Linden Lab's establishment of the LindeX exchange is a testament to that fact.⁹³ If users enter Second Life with the understanding that their actions and exploits in game may translate to real-world dollars, they are on notice of the real-world value of virtual goods. Camp's position recognizes that even in economies like Second Life, forums like the LindeX exchange function as backstops, monitoring all ultimate sales of Linden dollars for real money.⁹⁴ That is to say, even if transactions involving purely virtual assets and currencies in the open-flow virtual world are deemed taxable, those virtual goods cannot be monetized without going through the game company's sanctioned marketplace.

These two viewpoints are actually consistent with one another, but analyze the issue from differing default positions. Lederman's analysis envisions many businesses adding Linden dollars to the forms of payment they accept⁹⁵—a practice occurring only recently with Bitcoin.⁹⁶ While it is technically possible for Linden dollars to mimic Bitcoin's use, it is highly unlikely. There is a fundamental difference between Bitcoin, a decentralized currency created with the intention of being used as a currency, and virtual currencies tied to virtual worlds, currencies that have not historically been traded for real-world goods or services.

However, Linden dollars have a higher potential to create these sorts of transactions than World of Warcraft gold because of the open-flow nature of Second Life. Camp accepts that his "cashing-out" solution will not work if a virtual currency becomes "fully functional," but does not believe that any currently are.⁹⁷ Thus, if Linden dollars become as fungible as real world currencies, Lederman's vision will have come true, and marketplaces like the LindeX exchange will be insufficient to contain taxable transactions. However, due to the nature of virtual currencies tied to virtual economies, it seems unlikely that Linden dollars or any such virtual currency will become "fully functional." It seems sufficient for now to allow the LindeX exchange and future analogs to serve as the sole

⁹³ See *Buying and Selling Linden Dollars*, *supra* note 58.

⁹⁴ See *id.*

⁹⁵ Lederman, *supra* note 13, at 1667.

⁹⁶ However, companies are not truly accepting Bitcoin as payment: "they partner with a middleman—generally Coinbase or BitPay—who takes a customer's bitcoin, immediately converts it into cash, and then deposits the cash in the company's bank account." Jacob Davidson, *No, Big Companies Aren't Really Accepting Bitcoin*, TIME, Jan. 9, 2015, <http://time.com/money/3658361/dell-microsoft-expedia-bitcoin>.

⁹⁷ See Camp, *supra* note 13, at 66.

channel for monitoring the “cashing-out” of gamers in open-flow economies.

As discussed in Part I, there has been a recent trend of hybrid virtual economies opening more flows between the game world and the real world.⁹⁸ For example, Diablo III created a game-sanctioned marketplace where players could buy and sell virtual weapons and armor for real dollars.⁹⁹

Another “open-flow” facet emerging is the ability to pay for your subscription through gaming. For example, in Wildstar, players are able to purchase C.R.E.D.D. from other players through an in-game marketplace with virtual gold, which in turn can be used to renew a player’s monthly subscription.¹⁰⁰ The only way C.R.E.D.D. enters into the virtual world economy, however, is by players purchasing it with real dollars from the game company.¹⁰¹ That is to say, all C.R.E.D.D. within the in-game economy was at one time purchased by a player from the Wildstar website.¹⁰² Wildstar’s virtual economy is similar to that of World of Warcraft’s, but its use of C.R.E.D.D. is unique in that it effectively stabilizes the exchange rate between Wildstar’s virtual currencies and real world currencies. C.R.E.D.D. is rather fungible within the in-game world—it is a readily available alternative means to renew your subscription. By setting a real dollar value for C.R.E.D.D. and allowing C.R.E.D.D. to be purchased with virtual gold, the exchange rate between real dollars and virtual gold is immediately ascertainable. This, however, only means that valuation within this universe will be simpler, and not that in-game transactions involving solely virtual items should be subject to taxation. Because it is unlikely that virtual currencies from any game economy will ever be “fully functional,”¹⁰³ the most relevant category of taxable transactions is still the sale of virtual goods for real dollars. The remainder of this Part analyzes the substantive tax consequences of the most common transactions within the context of virtual worlds.

B. *The Tax Consequences of Common Transactions*

As the classic case on the definition of income instructs, gross income includes all “accessions to wealth, clearly realized,

⁹⁸ See, e.g., *supra* note 66 and accompanying text.

⁹⁹ See *supra* note 66.

¹⁰⁰ *Business Model*, WILDSTAR, <http://www.wildstar-online.com/uk/game/service/business-model> (last visited Apr. 20, 2015).

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ See Camp, *supra* note 13, at 66.

and over which the taxpayers have complete dominion.”¹⁰⁴ Generally, the taxable income arising from dealings in property¹⁰⁵ is based on the amount of gain recognized from such transactions.¹⁰⁶ Gain is the excess of the total value received from a sale or disposition of property (the “amount realized”) over the taxpayer’s “tax basis” in that property.¹⁰⁷ Loss is defined as the excess of the taxpayer’s basis over the amount realized.¹⁰⁸ It is important to understand that while cash receipts such as salary and wage income are immediately includible in gross income, gain or loss in property will not be realized until a taxable event occurs, such as a sale of the property. Thus, all virtual assets—characters, items, accounts—may carry unrealized gain or loss up until the point of disposition.

In general, a taxpayer’s initial basis in property will be how much she paid for that property.¹⁰⁹ A taxpayer in possession of property that she herself created or gathered, however, will have an initial basis of zero in that property.¹¹⁰ Lederman refers to such items as “self-created items” and “taken items,” respectively.¹¹¹ Within the virtual economy context, Lederman concludes that “loot drops,” for example, resemble “taken” property and will therefore have a zero basis.¹¹² To calculate any player’s taxable income, then, we must first determine how to accurately calculate basis in each of the archetypal transactions.

1. On the Calculation of Basis

¹⁰⁴ *Comm’r v. Glenshaw Glass Co.*, 348 U.S. 426, 431 (1955).

¹⁰⁵ The Internal Revenue Code [hereinafter the Code] states that the transaction must be a “sale or other disposition of property” before computation of gain or loss is triggered. *See* I.R.C. § 1001(a) (2015). All of the transactions discussed in this Part are either sales or dispositions.

¹⁰⁶ The system of taxation in the United States creates a distinction between “realization” and “recognition.” I.R.C. § 1001(a), (c) (2015). “Realized” gain is “recognized,” unless a specific provision in the Code provides otherwise, I.R.C. § 1001(c) (2015), and recognized gain from dealings in property is reflected in “gross income.” I.R.C. § 61(3) (2015).

¹⁰⁷ I.R.C. § 1001(a) (2015).

¹⁰⁸ For the discussion on losses, *see infra* Part II.B.4. The loss amount on any sale or disposition event is the excess of the basis over the amount realized. I.R.C. § 1001(a) (2015).

¹⁰⁹ I.R.C. § 1012(a) (2015). This is known as the “cost basis.”

¹¹⁰ Joseph M. Dodge, *Accessions to Wealth, Realization of Gross Income, and Dominion and Control: Applying the “Claim of Right Doctrine” to Found Objects, Including Record-Setting Baseballs*, 4 FLA. TAX. REV. 685, 691-92 (2000) (footnotes omitted).

¹¹¹ *Id.*

¹¹² Lederman, *supra* note 13, at 1648-50.

The GAO report on the taxation of virtual economies and currencies forecasts that players will have difficulty calculating basis due to the structure of most virtual game worlds.¹¹³ This is not so. There are primarily two types of sales in which players engage—sales of virtual items and sales of game accounts—and their bases in each instance are readily determinable.

As a preliminary matter, the GAO report errs in several of its implicit assumptions. First, the report states that “[i]ncome earned from virtual economy or currency transactions may not be taxable if it is equivalent to that from an occasional online garage sale, meaning occasional income from selling goods for less than their original purchase price.”¹¹⁴ This is almost a non-issue within hybrid economies due to the nature of transactions within those worlds. Using World of Warcraft as an example, there are two general types of items: Bind on Equip items (“BoE”)¹¹⁵ and Bind on Pickup items (“BoP”).¹¹⁶ There are also Bind on Account items (“BoA”), which are BoP items that can be shared between characters on the same account.¹¹⁷ When an item is “bound,” that item cannot be transferred to another player within the virtual world. BoE items are bound once they are equipped to a character whereas BoP items are bound once they are picked up by a character from a defeated foe.¹¹⁸ With only a few exceptions, the rarest items in WoW are all BoP or BoA.¹¹⁹ That is to say, nearly one-hundred percent of valuable virtual items dropped by raid bosses are bound to the character and, consequently, a player’s account once it is picked up. Blizzard has also coded the game in such a way that only players present at the death of the raid boss are capable of

¹¹³ See VIRTUAL ECONOMIES, *supra* note 12, at 13 (“It may be difficult for individuals receiving income from virtual economies to determine their basis for calculating gains.”).

¹¹⁴ *Id.*

¹¹⁵ See *Peerless Draenic Steel Bulwark*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/item/108242> (“Binds when equipped . . .”) (last visited May 3, 2015).

¹¹⁶ See *Arcanite Fishing Pole*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/item/105685> (“Binds when picked up . . .”) (last visited May 3, 2015).

¹¹⁷ See *Bind to Account*, WOWPEDIA, http://wow.gamepedia.com/Bind_to_Account (last visited May 3, 2015).

¹¹⁸ See “BoE”, *MMO and MMORPG Terms Glossary*, MMOS, <http://mmos.com/mmo-terms> (last visited May 3, 2015); “BoP”, *MMO and MMORPG Terms Glossary*, MMOS, <http://mmos.com/mmo-terms> (last visited May 3, 2015).

¹¹⁹ See *generally Items*, WORLD OF WARCRAFT: WARLORDS OF DRAENOR GAME GUIDE, <http://us.battle.net/wow/en/item/?classId=2> (last visited May 3, 2015). Note that the highest-level weapons (items in the first two pages) are either BoP or BoA. See *id.*

receiving the virtual item.¹²⁰ Essentially, there is no way to resell the item without selling the entire account. The report envisions each player making multiple, occasional sales of virtual goods from a single account for real money, but the fact that the rarest virtual items are bound to a player's characters means that the large majority of transactions will involve only a single sale—a sale of that player's account. The report's garage sale analogy thus breaks down.¹²¹

Given that the rarest virtual items are bound to a player's account, it becomes apparent that the GAO report further errs in concluding that basis calculations in the virtual context are inherently more difficult. The most popular MMOs are simply subscription based, with discounts for bulk purchases of game time.¹²² Insofar as a player buys game time to continue using her account, those payments should be added to the basis of the account. Players selling virtual items obtained through playing the game should have no basis in those items,¹²³ and should fully recognize the gain on those sales. Only when players sell their accounts should they be able to include the basis from their subscriptions in their gain calculations. To be clear, most gamers (social, casual, casual-hardcore, and most hardcore gamers) rarely sell their accounts, because their goal is to play the game—if ever, they will only sell their accounts when they decide to cease their interaction with that particular virtual world. Vocational gamers will consistently sell characters to third-party marketplaces or third-party companies, and their calculation for gain will be even more straightforward: they will pay for a subscription, likely purchase no virtual goods for real money, and sell their accounts.

¹²⁰ See *Bind on Pickup*, WOWPEDIA, http://wow.gamepedia.com/Bind_on_Pickup (last visited May 3, 2015) (“Most loot from bosses . . . are Bind on Pickup.”).

¹²¹ The GAO report's contention is more relevant in an open-flow context, but as previously discussed, the only sufficiently popular MMO with an open-flow economy is Second Life, and the LindeX exchange is an effective backstop for final dispositions of accounts. People may sell their goods within Second Life for Linden dollars, but eventually, if the player ever decides to transfer the value out of their account, they will have to pass through the LindeX exchange, which records all such transactions.

¹²² See *Buying and Subscribing to World of Warcraft*, WORLD OF WARCRAFT, <http://us.battle.net/wow/en/shop/game-purchase> (last visited Apr. 20, 2015); *Subscription Costs*, EVE ONLINE, <https://community.eveonline.com/support/knowledge-base/article.aspx?articleId=787> (last visited May 3, 2015); Luke Karmali, *Wildstar Announces Its Business Model*, IGN (Aug. 19, 2013), <http://www.ign.com/articles/2013/08/19/wildstar-announces-its-business-model>.

¹²³ Lederman, *supra* note 13, at 1648-50.

On the point of calculation of basis with respect to subscription fees, Lederman's analysis is accurate,¹²⁴ but I disagree with her ultimate assertion that "license fees should not give rise to basis in a player's account."¹²⁵ It is true that monthly subscription fees are analogous to short-term license fees and need not be capitalized into basis.¹²⁶ However, while those fees need not be added to basis, a taxpayer may nevertheless choose to do so.¹²⁷ The decision to do so turns on whether or not a taxpayer intends to engage with the virtual economy for profit.¹²⁸ If a taxpayer is not intending to profit off of her activities within a given virtual world, the increase in basis should be allocated wholly to the underlying account itself, since allocating basis to virtual items within the account would be impracticable and illogical.¹²⁹ The reason why capitalization is generally undesirable is because a capitalized expense is not immediately deductible as an ordinary and necessary business expense.¹³⁰ This applies with little to no

¹²⁴ *Id.*

¹²⁵ *Id.* at 1649 n.151.

¹²⁶ *See* Treas. Reg. § 1.263(a)-4(f)(8)(Ex. 5) (2015). Subscriptions are essentially licenses sold by a game company to play within a given virtual world. In fact, there is a specific allowance in I.R.C. 263 for licensing fees in the creation of intangible assets. As such, subscription fees should be treated as licensing fees. One may additionally wonder why subscription fees cannot be likened to lessons, tuition, rentals, or similar necessary costs to skill-based activity. The answer to this centers on the target "property" at issue. That is to say, subscription fees increase the basis of an account, which is a virtual asset. With a cost such as tuition, there is no real property in question.

It is important to note, however, that for bulk purchases of subscription time of more than one year, the twelve-month exception may not apply and subscription fees may need to be capitalized into basis. *Id.* § 1.263(a)-4(f) (providing that a taxpayer is not required to capitalize amounts paid for a license "that does not extend beyond the earlier of— (i) 12 months after the first date on which the taxpayer realizes the right or benefit; or (ii) the end of the taxable year following the taxable year in which the payment is made").

¹²⁷ The regulation on point provides that "a taxpayer is *not required* to capitalize" under the twelve-month exception. Treas. Reg. § 1.263(a)-4(f)(1) (emphasis added).

¹²⁸ If a taxpayer plays an MMO for profit or is engaged "in a trade or business," she may be eligible for a deduction under I.R.C. § 212 or § 162, respectively. *See* I.R.C. §§ 162, 212 (2015). If a taxpayer does not seek to profit from her interaction with a virtual world, then her subscription fees are not deductible. *See id.* For the latter taxpayer, increasing her basis in the underlying account would result in a future tax benefit.

¹²⁹ *See* Lederman, *supra* note 13, at 1650.

¹³⁰ *See generally* I.R.C. §§ 162, 263 (2015). It is unclear whether the IRS would allow a deduction for expenses incurred while engaging in activity that is contractually prohibited by an MMO's terms of use agreement. *Cf.* *Comm'r v. Tellier*, 383 U.S. 687, 690-91 (1966) (allowing a taxpayer to

force if a taxpayer does not intend to engage in a “trade or business” or seek to profit from her interaction with a virtual world but simply wishes to play within it.

With respect to the GAO report’s assertion that a taxpayer’s basis is difficult to ascertain in the virtual economy context, the burden of calculating basis and figuring out taxable income is relatively low given the necessary recordkeeping that game companies and third-party marketplaces do. For open-flow economies, using Second Life as an example, the LindeX exchange records all transactions that occur between players.¹³¹ As each player’s account is linked to the exchange, players are able to see how many real dollars they have spent on their Linden dollars.¹³² That amount forms the player’s basis in their account. Upon sale of their account, the taxable gain would be the difference between the basis and the sale amount. If players decide to resell the Linden dollars they purchased, they would use the amount they paid for it as the basis and calculate gain based on their resale value.

For hybrid economies such as World of Warcraft, third-party marketplaces keep records of the transactions between players. Much like any other website where customers purchase items, confirmation emails and similar documents are clear indications of who purchased what for how much and from whom.¹³³ If a person seeks to sell an item in such a hybrid economy, it will most likely already be tied to the account since most worthwhile items are BoP.¹³⁴ Thus, the gain recognized from the sale will be the difference between the basis and the amount of the sale. The basis will constitute all subscription fees and prior purchases of virtual goods.

The calculation of basis is not as prohibitive as the GAO believes. Even if there were areas of ambiguity, issuing guidance would not be particularly difficult: the IRS can provide concrete examples of taxable transactions and basis calculations within the differing regimes of hybrid and open-flow economies.

2. A Player’s Tax Liability

deduct legal fees as an “ordinary and necessary” business expense after being found guilty for criminal activity).

¹³¹ Press Release, Linden Lab, Second Life Opens the LindeX Currency Exchange (Oct. 3, 2005), <http://lindenlab.com/releases/second-life-opens-the-lindex-currency-exchange>.

¹³² *Id.*

¹³³ See *FAQ: Validating Your Order*, IMBUYGOLD, <http://www.imbuygold.com/FAQ.aspx> (“You should have [] received a confirmation email for your order . . .”).

¹³⁴ See *supra* note 120.

As discussed above, when dealing in property, taxable income is calculated by determining the excess of the “amount realized” from a sale or disposition of property over the taxpayer’s basis in that property.¹³⁵ To illustrate the operation of these concepts, let us consider three real-world individuals: a person who buys and resells vintage clothing, a songwriter, and a gold miner. The vintage enthusiast buys a dress at a local thrift shop for \$100 and resells it for \$500. Her basis in the dress is \$100 and her amount realized is \$500, leading to a recognition of \$400 of gain upon the resale of the dress. The songwriter, drawing on her innate musicality and many past musical influences, creates a hauntingly beautiful melody and sells her composition to a singer/entrepreneur for \$1,000 and future royalties at a twenty-five percent rate. Her basis in the song is zero¹³⁶ and her current amount realized is \$1,000 (with future income realized if and when it occurs). She recognizes \$1,000 of gain upon sale of the song. The gold miner, after toiling for months, comes across a modest vein of gold. After extracting all she can, she sells the raw gold to a refinery for \$50,000. Her basis in the raw gold is zero, and upon its sale, she recognizes \$50,000 of gain.

Individual sellers in hybrid virtual economies will, for the most part, resemble the songwriter or the gold miner: they invest time and effort to gather virtual goods for sale, whether they are raw components or polished products. Any *resellers* of virtual goods will be analogous to the vintage enthusiast.

Almost all sales of characters are sales of player accounts: this is simply a result of how most MMOs are structured: characters created on an account are inseparable from that account.¹³⁷ Assuming that the seller did not purchase the

¹³⁵ See I.R.C. § 1001 (2015).

¹³⁶ See *supra* notes 109, 110 and accompanying text.

¹³⁷ World of Warcraft and Wildstar, like most other MMOs, do not provide services for the transfer of characters to another player’s account. See *Character Transfer, Restrictions and Limitations*, BATTLE.NET SUPPORT HOME, <https://us.battle.net/support/en/article/character-transfer> (last visited July 24, 2015) (providing services only for transferring characters between WoW accounts linked to an overarching Blizzard account); *Free Realm Transfer FAQ*, WILDSTAR SUPPORT HOME, <https://support.wildstar-online.com/hc/en-us/articles/203805289-Free-Realm-Transfer-FAQ> (last visited July 24, 2015) (providing services only for transferring characters between different servers). If, hypothetically, a character could be sold separately from a player’s account, the seller would need to allocate basis arising from subscription fees in proportion to the amount of time spent playing that character. For example, if a player has two characters on her account and plays each equally often, the separate sale of one of those characters would be allocated fifty percent of the basis arising from subscription fees paid on that account.

account herself, her basis in the account will equal the subscription fees (if any)¹³⁸ she paid over the lifetime of the account.¹³⁹ The gain recognized, then, will be the amount that the proceeds from her sale exceed her basis. For example, let us say a player, Artemis, tires of a particular MMO and wishes to sell her character on a third-party marketplace. She has paid subscription fees totaling \$250 on her account and sells her account for \$450. The amount realized from the sale exceeds her basis in the account by \$200,¹⁴⁰ and so that is the amount of gain recognized.¹⁴¹

For the sale of virtual gold, the tax result plays out a bit differently. These transactions usually take place in a third-party marketplace, and the gold is subsequently transferred within the game world itself. If the seller gathered the gold herself, she would have zero basis in the virtual currency—a tax position analogous to that of the gold miner. Let us consider a transaction effectuated through a third-party marketplace between Midas, a player who wishes to sell virtual gold, and Pactolus, a player who wishes to buy virtual gold. Midas has accrued a total of 10,000 virtual gold and agrees to sell this amount of gold to Pactolus for \$100. The sale occurs using the third-party marketplace and Midas transfers the gold to Pactolus in-game. Midas has a basis of zero in the virtual gold and recognizes \$100 of gain on the sale.

¹³⁸ The pioneer in subscription-based revenue, Blizzard will likely be the first and last wildly successful company to use the pure form of that model. Many popular MMOs function on a game-time-token model, such as C.R.E.D.D. in Wildstar and PLEX in EVE Online, where game time may be purchased with both real money and in-game virtual currency. *See supra* note 66; *Discover PLEX*, EVE ONLINE, <https://secure.eveonline.com/Plex/WhatIsPlex.aspx> (last visited Mar. 13, 2015). Even World of Warcraft's latest expansion has switched to a modified version of the token model. *See Introducing the WoW Token*, WORLD OF WARCRAFT, <http://us.battle.net/wow/en/blog/18141101/introducing-the-wow-token-3-2-2015> (last visited Mar. 13, 2015).

¹³⁹ It is important to note that only game time purchased with real dollars will increase a taxpayer's basis in her account. Game time purchased with virtual currency (assuming that the virtual currency was not purchased with real dollars) will not result in a basis increase in a taxpayer's account. Under I.R.C. § 1012, the basis of a property is equal to the amount of money that was used to pay for the property. Accordingly, if a user purchased \$X worth of virtual currency or game time, then the basis for the account would be increased by \$X. By contrast, if a user earned the same amount of virtual currency simply by playing the game, the basis for the account would not be increased at all.

¹⁴⁰ For the discussion of basis calculation in the virtual economy context, *see supra* Part II.B.1.

¹⁴¹ If Artemis held the account for more than one year, she would recognize capital gains from selling a capital asset. *See* I.R.C. §§ 1(h), 1221 (2015).

In dealing with sales of virtual goods, the tax result is thus in part dependent on a good's separability from a player's account. Recall the two general types of items in World of Warcraft: Bind on Equip items ("BoE") and Bind on Pickup items ("BoP"). While one can sell a BoE item if one has not equipped it, there is no way to resell a BoP item without selling the entire account. Thus, if a virtual item is bound to a character in an account, the tax result would be the same as that of selling a character. If, however, the virtual item is not bound to a character nor an account, the tax result would be the same as that of selling virtual gold.

Equally noteworthy are common in-game occurrences that *do not* constitute taxable events within a hybrid virtual economy: loot drops and transactions that involve only virtual items. Professor Lederman defines "loot drops" to mean the most valuable virtual items, obtainable only through raiding with organized guilds. She accurately observes that they "require substantial investments of time and effort on the part of players; thus, they are not true windfalls."¹⁴² Rather, they are self-created items that are the product of time and proficiency investments.¹⁴³

Transactions within virtual hybrid economies that only involve virtual items for both sides should also not be taxable. As Lederman argues, "transactions in game worlds such as World of Warcraft should not be taxed unless the player engages in a real-market sale or exchange."¹⁴⁴ This conclusion reaches the correct result because the World of Warcraft Terms of Use (TOU) specifically prohibit real-market sales or exchanges, creating the presumption that gamers within their virtual world will only engage in transactions that consist solely of virtual items. Gamers following the TOU should not be taxed for in-game transactions simply because illicit secondary markets exist in the real world. For hybrid virtual economies intended to function as closed-flow economies, players should not be subject to taxation as long as they transact within the virtual and TOU bounds of the game.

The following two Sections discuss the potential beneficial tax consequences for players that engage in real-market transactions. Specifically, the discussion centers on whether and in what context such players may take deductions or losses with respect to their gameplay and related activities.

3. Playing for Profit: On Deductions

¹⁴² Lederman, *supra* note 13, at 1645-46.

¹⁴³ *Id.* at 1646.

¹⁴⁴ *Id.* at 1620.

There are a number of important tax issues that arise when virtual world activities cross into vocational gaming or otherwise playing the game for the production of real income. Specifically, players may be able to claim deductions or losses upon the occurrence of certain events, thereby lowering taxable income derived from gaming. As a preliminary matter, then, it is important to determine what level of activity qualifies as this sort of transformation.

In the Internal Revenue Code, there are two classic threshold classifications within the realm of profit-seeking activities: those that are “income producing” and those that constitute “carrying on a trade or business.”¹⁴⁵ Profit-seeking activities that do not qualify for the threshold of “carrying on a trade or business” will qualify as “income producing” activities as long as those activities are for the production or collection of income or the management, conservation, or maintenance of property held for the production of income.¹⁴⁶ While the Code does not define what constitutes “carrying on a trade or business,” a United States Supreme Court decision provides guidance.

In *Commissioner v. Groetzinger*, the Court held that “a full-time gambler who makes wagers solely for his own account is engaged in a ‘trade or business.’”¹⁴⁷ In that case, for the taxable year in question, the taxpayer went to the tracks to wager on greyhound races six days a week for forty-eight weeks.¹⁴⁸ During the sixty to eighty hours per week he devoted to gambling, he studied racing forms, programs, and other various materials to increase his rates of success.¹⁴⁹ While engaging in this activity, he held no other profession or type of employment.¹⁵⁰ Though the Court found these facts sufficient to deem his particular actions to be “carrying on a trade or business,” it also determined that those facts could not provide a standard minimum threshold for “carrying on a trade or business.” That determination must be made in each case following consideration of all the facts and circumstances at hand.¹⁵¹ It is clear, however, that a taxpayer must be involved in the activity with “continuity and regularity,” that a taxpayer’s “primary purpose for engaging in the activity must

¹⁴⁵ See I.R.C. § 162 (2015) (“[C]arrying on any trade or business”); I.R.C. § 212 (2015) (“[P]roduction or collection of income”).

¹⁴⁶ I.R.C. § 212(1)-(2) (2015).

¹⁴⁷ 480 U.S. 23, 24, 34 (1987).

¹⁴⁸ *Id.* at 24.

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.* at 36.

for income or profit,” and that a “sporadic activity, a hobby, or an amusement diversion does not qualify.”¹⁵²

Two important tax benefits that arise from engaging in profit-seeking activities are the ability to take deductions for expenses incurred and for losses suffered.¹⁵³ Under § 162 of the Code, a taxpayer is allowed to take a deduction for “all the ordinary and necessary expenses paid or incurred during the taxable year in *carrying on any trade or business*.”¹⁵⁴ If a taxpayer engages in profit-seeking activities, but those activities do not constitute “carrying on a trade or business,” then she may be allowed to take a deduction under § 212 for “all the ordinary and necessary¹⁵⁵ expenses paid or incurred during the taxable year . . . for the *production or collection of income*.”¹⁵⁶ Losses incurred by an individual “carrying on a trade or business” or engaged in “income producing” activities are deductible as well.¹⁵⁷ In general, deductions allowed for expenses under § 162 are preferable to those allowed under § 212 because there are several limitations on the type of deduction arising from the latter category.¹⁵⁸

To illustrate these differences, let us consider three individuals: Artemis, a player who plays within a virtual world for amusement and pleasure; Midas, a player who operates within the same MMO to generate disposable income for his other activities; and Morpheus, a player who essentially lives within that virtual world amassing virtual goods for sale to sustain his needs in the physical world.

Artemis plays a few hours every day, but her current virtual world is not to her liking and she decides to try another. She has paid subscription fees every month, totaling \$250 over the lifetime of her account. She is not allowed a deduction for her subscription fees when they are paid because she is neither

¹⁵² *Id.* at 35.

¹⁵³ *See* I.R.C. §§ 162, 212 (2015).

¹⁵⁴ I.R.C. § 162(a) (2015) (emphasis added).

¹⁵⁵ The “ordinary and necessary” test under I.R.C. § 212 is the same for that of I.R.C. § 162. *See* I.R.C. §§ 162, 212 (2015).

¹⁵⁶ I.R.C. § 212 (2015) (emphasis added).

¹⁵⁷ I.R.C. § 165(c)(1)-(2) (2015).

¹⁵⁸ While deductions allowed under I.R.C. § 162 are above-the-line (applied against gross income), deductions allowed under I.R.C. § 212 are below-the-line (applied against adjusted gross income (“AGI”), which results after applying above-the-line deductions against gross income) because they cannot be applied against gross income according to I.R.C. § 62(a). *See* I.R.C. § 62(a)(1) (2015) (deductions “attributable to a trade or business carried on by the taxpayer” can be applied against gross income); *see also* I.R.C. §§ 162, 212 (2015). This is an important distinction because there are several provisions in the Code that limit below-the-line deductions based on a percentage of your AGI. *See, e.g.*, I.R.C. §§ 67, 68 (2015).

“carrying on a trade or business”¹⁵⁹ nor is she engaging with the virtual world for the “production of income.”¹⁶⁰

Midas enters the virtual world to gather virtual currency for sale when he wants some extra money in between his paychecks. He pays for his subscription three months at a time, at a reduced rate relative to the monthly rate; this year, his subscription fees total \$225. For the current taxable year, Midas amassed 100,000 virtual gold and sold it on a third-party marketplace at various times throughout the year for a total of \$1,000. In addition, he earned \$15,000 in wages this year and had above-the-line deductions unrelated to his virtual activities totaling \$6,000, resulting in an adjusted gross income of \$10,000.¹⁶¹ As Midas engages with the virtual world specifically for the “production of income,” but is likely not “carrying on a trade or business,”¹⁶² he is allowed a below-the-line deduction for his subscription fees.¹⁶³ Assuming he has no other “miscellaneous itemized deductions,”¹⁶⁴ Midas will only be allowed a deduction in the amount of \$25—the excess of his miscellaneous itemized deductions over two percent of his adjusted gross income.¹⁶⁵

Morpheus spends the majority of his time within the virtual world. He enrolls in a yearly subscription plan that renews automatically at a rate of \$150 per year. He is a guild master of a relatively prestigious guild of twenty players (including himself), capable of procuring the rarest virtual items by defeating the most challenging raid bosses. In exchange for their dedication and skill, Morpheus pays for each guild member’s subscription fees. In addition, whenever he manages to sell an asset obtained through raiding, he retains thirty percent of the amount received, distributes fifty-seven percent proportionately among the other guild members (three percent each), and awards a thirteen percent bonus to the most dedicated player for the month (excluding himself). Aside from raiding, Morpheus also raises characters for sale on third-party marketplaces. This year, he received \$200,000 from the sale of virtual items and \$15,000 from the sale of characters. He distributed \$140,000 from the asset sales to the rest of his guild

¹⁵⁹ See *Comm’r v. Groetzinger*, 480 U.S. 23, 24 (1987).

¹⁶⁰ See I.R.C. § 212 (2015).

¹⁶¹ See *supra* note 158.

¹⁶² See *Groetzinger*, 480 U.S. at 24.

¹⁶³ See *supra* note 158; Treas. Reg. § 1.263(a)-4(f) (2015).

¹⁶⁴ See I.R.C. § 67(b) (2015).

¹⁶⁵ In this hypothetical, Midas has \$225 of miscellaneous itemized deductions. Two percent of his AGI equals \$200 (\$10,000 x 2%). Code § 67 limits the deduction to the amount of his subscription fees that exceed two percent of his AGI. See I.R.C. § 67(a) (2015).

and also gave each member \$150 for their yearly subscription, totaling \$3,000 in fees. Taking into account all facts and circumstances, Morpheus is “carrying on a trade or business”¹⁶⁶ and is therefore allowed a full above-the-line deduction¹⁶⁷ for both the distribution of asset sale proceeds to his guild members¹⁶⁸ and all subscription fees.¹⁶⁹ For this taxable year, he has an adjusted gross income of \$72,000.¹⁷⁰

No player fits perfectly within the three types of individuals discussed above, representing the pure casual player, the pure independent vocational gamer, and the hardcore gamer who has decided to monetize his comparative advantages in the virtual realm. However, these categories are useful metrics as players frequently engage in modified versions of these activity patterns.¹⁷¹

4. The Battle of B-R5RB: A Case Study in Losses

The single largest armed conflict in EVE Online (“EVE”) began on January 27th, 2014 and lasted for twenty-two hours.¹⁷² The battle involved two in-game alliances, consisting of over 7,500 players, resulting in the deaths of more than 20 million soldiers, and the destruction of 600 Capital-class ships—75 of which were Titans.¹⁷³ The Titan is the largest ship in the virtual world, requiring several months of real time and around 100 billion ISK (EVE’s virtual currency) to produce.¹⁷⁴ The battle yielded an aggregate loss of over 11 trillion ISK, translating into approximately \$300,000 USD.¹⁷⁵

The ISK to USD exchange rate is readily ascertainable due to the structure of EVE’s subscription system. EVE was among the first MMOs to integrate tokens into their subscription fee structure—a unit of PLEX grants a player thirty days of game

¹⁶⁶ See *Groetzinger*, 480 U.S. at 24.

¹⁶⁷ See *supra* note 158.

¹⁶⁸ See I.R.C. § 162(a)(1) (2015).

¹⁶⁹ See I.R.C. § 162(a) (2015); see also generally Treas. Reg. § 1.263(a)-4(f) (2015).

¹⁷⁰ Morpheus has gross income of \$215,000 and above-the-line deductions totaling \$143,000, resulting in an AGI of \$72,000.

¹⁷¹ See *supra* notes 77-80; *Forum: WoW Accounts Buy Sell Trading*, EPICNPC, <http://www.epicnpc.com/forums/92-WoW-Accounts-Buy-Sell-Trading> (last visited May 3, 2015).

¹⁷² Bo Moore, *Inside the Epic Online Space Battle That Cost Gamers \$300,000*, WIRED, Feb. 8, 2014, <http://www.wired.com/2014/02/eve-online-battle-of-b-r>.

¹⁷³ *Id.*

¹⁷⁴ *Id.*

¹⁷⁵ *Id.*

time.¹⁷⁶ PLEX can be purchased from EVE's website and can be consumed for game time or sold on the in-game exchange to other players for ISK at the prevailing market rate on that server.¹⁷⁷ Fixing the real dollar cost of a unit of PLEX and subsequently allowing PLEX to be purchased with ISK effectively establishes an exchange rate between real dollars and in-game currency.¹⁷⁸

The question is, however, whether any in-game losses can translate into tax benefits. Consider three hypothetical players involved in the Battle of B-R5RB: Rhea, a prolific ship manufacturer specializing in the production and sale of Titans; Kronos, a high-ranking captain in the conflict, possessing a modest personal fleet of warships; and Thamyris, an unlucky observer caught in the crossfire.

Rhea has a day job, but takes her ship-crafting seriously, making it a tidy source of alternate income. When war breaks out, she is approached by several high-profile buyers interested in procuring an aggregate of ten Titans at \$3,000 USD (real-world) each, mediated by a third-party marketplace. The current prevailing average price is \$3,250, so Rhea agrees to supply them on the condition that they must purchase their next twenty Titans from her at the prevailing market price at the time of the future purchases. They agree. Rhea, however, only has eight self-created (zero-basis) Titans on hand and decides to purchase two Titans on the open market at \$3,250 each. Upon sale of these ten Titans, she recognizes \$24,000 of gain¹⁷⁹ and \$500 of loss.¹⁸⁰ Whether she is "carrying on a trade or business" or simply engaged in the "production of income," Rhea is allowed a deduction for her loss on the purchase and resale of the two Titans.¹⁸¹

Kronos is a self-made commander who seeks only to prove himself as a successful military leader in this virtual universe. In the lifetime of his account, he has only made one purchase of PLEX for \$200, all of which he has used for subscription time. He issues orders to a fleet of over twenty Titans, but personally owns five self-created Titans in addition to his sixty self-

¹⁷⁶ *Discover PLEX*, *supra* note 138.

¹⁷⁷ *Flex Your PLEX*, EVE ONLINE, <https://secure.eveonline.com/PLEX/howToUsePlex.aspx> (last visited Mar. 15, 2015).

¹⁷⁸ *See supra* notes 58, 77-80.

¹⁷⁹ Rhea has zero basis in eight of the Titans. Upon sale of the Titans, she realizes and recognizes gain in the full amount received.

¹⁸⁰ Rhea paid \$6,500 for two Titans and resold them at \$6,000. Her basis (\$6500) exceeds the amount realized by \$500. This is thus the amount of loss she recognizes in the sale.

¹⁸¹ I.R.C. § 165(c)(1)-(2) (2015). The nature of the deduction, however, will depend on whether her activities qualify her for treatment under I.R.C. § 162 or I.R.C. § 212. *See Comm'r v. Groetzinger*, 480 U.S. 23, 24 (1987).

created Capital-class warships. The aggregate value of his personal warships total approximately \$25,000. The battle consumes all ships under his command. He sells his account the next day for \$200 on a third-party marketplace.

Kronos would not be allowed a deduction for the destruction of his warships on these facts for several reasons. First, if an individual's losses are not incurred in "carrying on a trade or business" or the "production of income,"¹⁸² he can generally only take deductions for casualty or theft losses.¹⁸³ A casualty is the damage, destruction, or loss of property from a sudden, unexpected, or unusual event,¹⁸⁴ such as losses due to "fire, storm, [or] shipwreck."¹⁸⁵ Because Kronos' involvement in the battle was voluntary, it would most likely not qualify as a "casualty loss." Even if it were to qualify as a casualty, the amount of the casualty loss is defined as the lesser of (1) a taxpayer's basis in the property or (2) the decrease in value as a result of the casualty.¹⁸⁶ In this case, the amount of his casualty loss would be zero, as Kronos had a zero basis in all of his self-created warships.

Thamyris enjoys touring the vast virtual universe, unimpeded by distractions or potential threats. For this purpose, he purchased a Dreadnought on a third-party marketplace for \$200. His subscription fees to date total \$400. He decides his adventure for the day will be to visit B-R5RB, a nice quiet sector of space. Upon arrival, his Dreadnought is mistaken for an enemy ship by several hundred players and is instantly destroyed. Thamyris decides to search for a friendlier virtual world and sells his account on a third-party marketplace for \$100.

Thamyris may be entitled to take a "casualty loss" deduction. On the face of the statute, the definition of casualty

¹⁸² Even if Kronos were engaged in a trade or business or the production of income, it is quite unlikely that losses under these facts would be deductible—the voluntary use of his warships in this manner likely disqualifies their destruction as a casualty, and it is difficult to argue his actions were profit-seeking. See I.R.C. § 165(c) (2015). One could, however, imagine a hypothetical scenario in which a nonzero business loss may be allowed: a taxpayer is engaged in the trade or business of mining and subsequently selling a specific type of precious virtual ore. She buys a slew of in-game refineries on the open market for \$5000, and after a few months, her refineries are destroyed by an allied group of competing miners. The amount of her casualty loss would be her basis in the destroyed property. See *supra* note 158.

¹⁸³ See I.R.C. § 165(c) (2015).

¹⁸⁴ *Nonbusiness Casualty and Theft Losses*, INTERNAL REVENUE SERVICE, <http://www.irs.gov/publications/p17/ch25.html> (last visited Apr. 20, 2015).

¹⁸⁵ I.R.C. § 165(c)(3) (2015).

¹⁸⁶ *Casualty, Disaster, and Theft Losses*, INTERNAL REVENUE SERVICE, <http://www.irs.gov/taxtopics/tc515.html> (last visited Apr. 20, 2015).

losses does not seem to be limited to tangible property.¹⁸⁷ Even if the destruction of his ship were to qualify, he would only be allowed to deduct the amount of loss (aggregated with all other casualty losses) that exceeded ten percent of his adjusted gross income for that taxable year.¹⁸⁸ However, assuming he held his account for more than one year, he would recognize a \$300 capital loss¹⁸⁹ upon sale of his account (\$400 basis, \$100 amount realized). If Thamyris has no capital gains to offset, he could use the \$300 capital loss to offset \$300 of his ordinary income at the end of the taxable year.¹⁹⁰

It is important to understand that basis is a reflection of real monetary investment within an asset—tangible or intangible—and a loss is, by statutory definition, an excess of basis over the amount realized.¹⁹¹ Insofar as a virtual currency has not become “fully functional,”¹⁹² spending virtual dollars will not and should not increase the basis in any virtual asset.

The tax analysis within this Part has been relevant and essential to determining a given player’s taxable income, but it only resolves compliance issues with respect to gamers who wish to comply and voluntarily report their virtual tax consequences. The majority of sellers, however, are the hardcore gamers, the vocational gamers, and third-party companies that specialize in the creation and sale of virtual goods. These parties—the latter two in particular—have an interest in using the anonymity of the Internet to shroud their taxable income. In order to adequately promote compliance within virtual game worlds, the IRS should craft different strategies to address each gamer profile within every virtual economy archetype.

III. Compliance

As the challenges of taxation evolve, so too must the methods of enforcement. By examining the archetypal gamer profiles in the context of taxpayer compliance profiles defined in the compliance literature, we can craft strategies to promote compliance within virtual economies.

¹⁸⁷ See I.R.C. § 165(c)(3) (2015). This set of facts could ostensibly fall under “other casualty” listed in the provision.

¹⁸⁸ See I.R.C. § 165(h)(2)(A) (2015). Each individual casualty loss is also subject to a de minimis requirement. See I.R.C. § 165(h)(1) (2015).

¹⁸⁹ See I.R.C. §§ 1001(a), 1221(a) (2015).

¹⁹⁰ For individual taxpayers, the ability to offset ordinary income is limited to the lesser of (1) \$3000 and (2) the amount of capital losses incurred in the taxable year. See I.R.C. § 1211(b) (2015).

¹⁹¹ See I.R.C. § 1001(a) (2015).

¹⁹² See Camp, *supra* note 13, at 66.

A. *The Literature*

In 1984, the IRS commissioned Yankelvoich, Skelly & White Inc. to conduct a study on taxpayer profiles that divided citizens into five points along a spectrum: strong compliers, the silent majority, rationalizers, scramblers, and the strategic noncompliers.¹⁹³ On the extreme complying side of the spectrum are the strong compliers who are “philosophically opposed to all forms of and rationales for tax cheating.”¹⁹⁴ The “silent majority” is generally opposed to tax cheating, but is not as vocal as the strong compliers about conforming.¹⁹⁵ The “rationalizers” admit to cheating more often than the aforementioned groups and do not really have “a problem with most justifications for cheating.”¹⁹⁶ The “scramblers” evade taxation by not reporting cash and other outside income; they do not attempt to justify their noncompliant behavior, but merely accept it.¹⁹⁷ Finally, the “strategic noncompliers” include “tax protestors and other individuals who refuse to pay taxes and subscribe to a range of rationalizations for cheating.”¹⁹⁸

Elizabeth Branham simplifies these categories into three: “compliant taxpayers,” “marginal taxpayers,” and the “noncompliant taxpayers.”¹⁹⁹ The first category corresponds to the strong compliers. The second category encompasses the three center categories, the members of which cheat to varying degrees “where and when the opportunity arises.”²⁰⁰ The noncompliant taxpayers are those who simply refuse to comply with the tax system.²⁰¹

Gamers that are “strong compliers,” irrespective of their gamer profile, will necessarily comply as long as they have clear guidance explaining what they should do. Thus, this category of players is not problematic. Casual gamers and social gamers are similarly unproblematic because they seldom engage in sales of virtual goods. The most fruitful area for capturing tax revenue is the intersection of “marginal taxpayers” and vocational or hardcore gamers. These types of gamers are not only in the best position to profit from their in-

¹⁹³ Elizabeth Branham, *Closing the Tax Gap: Encouraging Voluntary Compliance Through Mass-Media Publication of High-Profile Tax Issues*, 60 HASTINGS L.J. 1507, 1514 (2009).

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ *Id.* at 1514-15.

¹⁹⁸ *Id.* at 1515.

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *Id.*

game activities, but the anonymity of the Internet shrouds them from detection, creating the ideal environment to evade taxation. The category of players with this particular combination of profiles constitutes the primary focus of any effective compliance strategy.

One modern approach seeks to craft compliance strategies through focusing on the concept of “tax morale.”²⁰² As defined by Margorie E. Kornhauser, “tax morale” is “the collective name for all the non-rational factors and motivations—such as social norms, personal values, and various cognitive processes—that strongly affect an individual’s compliance with laws.”²⁰³ This approach to tax compliance is reminiscent of methods within behavioral economics.²⁰⁴ That is to say, though calculating objective equilibria and logical decision-making in markets was undoubtedly useful, humans are, at times, illogical. Or more accurately, humans place value on things that are not capable of objective valuation.²⁰⁵

Kornhauser’s approach is essentially to analyze how all players within a given problem act and how to satisfy their specific desires. To illustrate the kinds of intangibles that may affect tax compliance, she lists as factors “procedural justice, trust, belief in the legitimacy of the government, reciprocity, altruism, and identification with the group.”²⁰⁶ One concrete example she gives of a successful policy that addresses all of the concerns of individuals within a given problem is that of tradable emission permits.²⁰⁷ The problem in that

²⁰² Marjorie E. Kornhauser, *A Tax Morale Approach to Compliance: Recommendations for the IRS*, 8 FLA. TAX REV. 599, 630 (2007).

²⁰³ *Id.* at 602-03.

²⁰⁴ Behavioral economics is a branch of economics built on the realization that traditional economic thought is based on the flawed assumption that the world is populated solely by “calculating, unemotional maximizers.” Richard M. Thaler & Sendhil Mullainathan, *How Behavioral Economics Differs from Traditional Economics*, LIBRARY ECON. & LIBERTY, <http://www.econlib.org/library/Enc/BehavioralEconomics.html> (last visited May 3, 2015).

²⁰⁵ For example, one of the most famous examples of why behavioral economics is essential is the ultimatum game. Suppose a mother gives her son ten dollars and asks that he split the money any way he wishes between himself and his sister. He can only make one offer to the sister. If she accepts, the ten dollars will be distributed in the agreed upon manner. If she rejects the offer, no one receives any money. The purely logical answer would be for the brother to offer one cent to the sister and for her to accept—both are strictly better off. However, that answer does not account for human spite. In studies conducted across the world, the average split is 60/40 with the larger portion going to the “brother.” See generally Richard H. Thaler, *Anomalies: The Ultimatum Game*, 2 J. ECON. PERSP. 195, 196-97 (1988).

²⁰⁶ Kornhauser, *supra* note 202, at 601-02.

²⁰⁷ *Id.* at 608.

instance would be to ensure a clean environment through limiting and controlling pollution that results from necessary and valuable industrial activities. The three types of individuals she identifies are individualists, hierarchists, and egalitarians/collectivists.²⁰⁸ Kornhauser cites tradable emission permits as an example of a policy that appeals to all types of individuals for different reasons: individualists like it because the “market mechanism appeals to their belief in private enterprise”; hierarchists like it because it “leaves power in the hands of powerful commercial entities”; and egalitarians/collectivists like it because the system “recognizes their goal of improving air pollution and the need to constrain industry.”²⁰⁹

B. *The Strategies*

The approach to crafting policy for addressing taxation of transactions within virtual economies should be informed by both the IRS taxpayer profile report as well as Kornhauser’s understanding of the basic player archetypes. In dealing with “compliant” gamers, it seems that the most straightforward and effective policy is for the IRS to issue guidance that receives public attention.²¹⁰ Insofar as taxpayers want to voluntarily comply with the tax code, they simply need to be given guidance from the proper authority. The current IRS strategy is to have one page on their website that essentially states that some virtual transactions are taxable and links taxpayers to the relevant pages.²¹¹ The GAO report recommended that the IRS issue low-cost guidance,²¹² but it must be issued in such a way that the people most likely to conform to such laws will hear it. It is fairly unlikely that gamers will go to the IRS website and research precisely how they should be taxed when playing in a virtual world.

In order to ensure tax compliance by vocational gamers, or hardcore gamers that attempt to generate income from their gaming activities, a different approach is necessary. In the context of open-flow economies, third-party reporting will be particularly effective. The GAO report notes that third-party reporting is challenging due to the fact that the true identities of the parties to the transaction are difficult to obtain. As the

²⁰⁸ *Id.*

²⁰⁹ *Id.*

²¹⁰ See Branham, *supra* note 193, at 1519-20 (describing the use of mass-media as an effective tool to instill social values and potential norms, most effective on those that wish to comply).

²¹¹ See generally *Tax Consequences of Virtual World Transactions*, *supra* note 11.

²¹² VIRTUAL ECONOMIES, *supra* note 12, at 16-17.

report also notes, “[v]irtual economy or currency transactions may be subject to third-party information reporting to the extent that these transactions involve the use of a third-party payment network to mediate the transaction and the taxpayer meets reporting threshold requirements,”²¹³ The report cites to I.R.C. § 6050W, a statute that most notably applies to third-party payment networks like PayPal.²¹⁴ Under this statute, companies are required to report gross payments received for sellers who receive over \$20,000 in gross payment volume and over two hundred separate payments in a calendar year.²¹⁵

The LindeX exchange provides the option of “cashing out” through PayPal, meaning that Second Life players that choose this option are already subject to third-party reporting requirements.²¹⁶ If a game company seeks to establish a sanctioned platform akin to the LindeX exchange, but does not secure their transactions with PayPal or a similarly accredited third-party payment network subject to I.R.C. § 6050W, the IRS should subject the game company to similar reporting requirements. Where the game is marketed as an open-flow economy, it should be expected that transactions garnering profit will be taxable. Indeed, if players are making hundreds of thousands of real dollars from renting properties in Second Life,²¹⁷ it is not unreasonable that transactions in similar games should be controlled as well. If there is no network in place to guarantee that tax safeguards exist, millions of dollars could potentially pass through untouched by the IRS.

The compliance strategy changes when dealing with hybrid economies. While it may be feasible and reasonable to subject forums like Linden Lab’s LindeX exchange to reporting requirements, this rationale applies with little to no force to

²¹³ *Id.* at 14.

²¹⁴ *New Tax Law for Online Sellers: Everything You Need to Know About IRC Section 6050W*, PAYPAL, https://cms.paypal.com/us/cgi-bin/?cmd=_render-content&content_ID=marketing_us/IRS6050W (last visited Apr. 20, 2015).

²¹⁵ *See* I.R.C. § 6050W(e) (2015).

²¹⁶ *See Is the Linden Dollar a Ticking Time Bomb?*, *supra* note 58 (“You may choose to withdraw your US dollar balance [from your sale of Linden dollars] via PayPal or bank wire.”). Players that do not wish to be subject to the I.R.C. § 6050W reporting requirements may simply request that their US dollar balance be transferred directly into their bank accounts, effectively making compliance with current third-party reporting requirements merely elective.

²¹⁷ Rob Hof, *Second Life’s First Millionaire*, BLOOMBERG BUS., Nov. 26, 2006, http://www.businessweek.com/the_thread/techbeat/archives/2006/11/second_lifes_fi.html.

companies like Blizzard that expressly forbid sales of virtual assets and currencies in their TOU agreement.²¹⁸

In WoW, as in other hybrid economies, the robust business of the sale of virtual goods operates entirely without the blessings of its developers. However, income derived from those sales is definitively subject to taxation.²¹⁹ One of the most efficient ways to deal with these transactions is to require third-party companies and third-party marketplaces that specialize in the sale of virtual items and characters to subject all sellers to withholding. A useful analogy that is already present in the Internal Revenue Code is that of gambling winnings.²²⁰ Income tax from certain kinds of gambling winnings is withheld at a flat rate of twenty-five percent.²²¹ To avoid withholding, the Code states that taxpayers must provide the payor of their winnings with their social security number. Insofar as this infrastructure already exists, it would not be prohibitively expensive for the IRS to subject third-party marketplace owners and third-party companies who are in the business of selling virtual goods to withholding requirements. Many of the businesses that market themselves as sellers of accounts, characters, or virtual items are registered companies in the United States, readily detectable by the Service.²²² The IRS could require all income derived from these sales to be subject to withholding, thereby capturing significant tax revenue that would otherwise be shielded by the anonymity of the Internet.

Another concern created by the rise of the Internet is the taxability and regulation of cross-border transactions. From online retail purchases to the purchase of large multinational

²¹⁸ See *World of Warcraft Terms of Use*, BLIZZARD ENTERTAINMENT, http://us.blizzard.com/en-us/company/legal/wow_tou.html (last updated Aug. 22, 2012).

²¹⁹ If illegal income is subject to taxation, then income from these sales must also be subject to taxation in the Service's view. See *supra* note 26. Also, as Camp notes, "[w]hen a WoW or SL player receives US\$ for 'selling' either a player account or an in-world item on an auction site, the sale produces gross income, regardless of who wins the current legal battles over who has what property rights in virtual items used in-world." Camp, *supra* note 13, at 45.

²²⁰ See *generally Gambling Income and Losses*, INTERNAL REVENUE SERVICE, <http://www.irs.gov/taxtopics/tc419.html> (last updated Mar. 6, 2015).

²²¹ *Tax Withholdings for 2015: Gambling Winnings*, INTERNAL REVENUE SERVICE, http://www.irs.gov/publications/p505/ch01.html-en_US_2015_publink1000194506 (last visited Apr. 20, 2015).

²²² See *Our Business*, IGE, <http://www.ige.com/about.html>; *About Us*, MMOGAH, <https://www.mmogah.com/about-us> (last visited July 30, 2015); *Testimonials*, MOGS, <http://www.mogs.com/?roia=%21hBthvq1BAALW7mM3OTAA-A> (last visited July 30, 2015) ("All Mogs operations are located in the USA.").

corporations, the global economy presents fresh challenges to the development and effective scope of international taxation. The following Section discusses virtual economy transactions in the context of both current and developing international tax discourse.

C. On the Concern of Internationality

It is a truth universally acknowledged that a company incorporated within a country is subject to taxation by that country. The advent of globalization and its instrumentalities created the question of when and to what extent foreign individuals and entities should be taxed by any given country. The transactions discussed in this paper, along with the proliferation of internet giants such as Google and Amazon, pose a further question: to what extent should a foreign, intangible, yet significant profit-seeking presence be subject to tax within a given country?

Specifically, in the virtual economy context, the question is whether and to what extent a foreign company should be subject to taxation when it sells virtual goods to consumers within the United States. The archetypal example is the Chinese gold farming company: incorporated in China, the company hires gamer-workers to gather massive amounts of virtual gold through engaging in repetitive, low-skill tasks and then sells the gold on their website to United States players (or to a large retailer that subsequently resells it to consumers).²²³ The proceeding analysis parses existing and emerging international tax law to determine whether such foreign companies are subject to taxation in a country to which they direct their electronic sales of virtual goods, and if not, whether and how international taxation should evolve to address the growth of virtual and electronic commerce.

1. “Permanent Establishment”

The United States model tax treaty—based on the Organisation for Economic Cooperation and Development (OECD) model tax treaty with respect to sections relevant here—states that the profits of an enterprise of a Contracting State may be taxed by another Contracting State to the extent of profits that are attributable to a *permanent establishment* of the former situated in the latter.²²⁴ The model treaty defines

²²³ See Dibbell, *supra* note 44.

²²⁴ Compare OECD Model Convention with Respect to Taxes on Income and on Capital art. 5, July 15, 2014 [hereinafter OECD Model Tax Convention], <http://www.oecd.org/ctp/treaties/2014-model-tax-convention-articles.pdf>, with United States Model Tax Convention art. 7.1, Nov. 15,

“permanent establishment” as “a fixed place of business through which the business of an enterprise is wholly or partly carried on,”²²⁵ listing several fixed places of business that will qualify as permanent establishments, such as “a place of management[,] a branch[,] an office[, or] a factory.”²²⁶ The model treaty then carves out a few exceptions as not qualifying as permanent establishments even if there is a fixed place of business: “the use of facilities solely for the purpose of storage, display, or delivery of goods or merchandise belonging to the enterprise” and “the maintenance of a stock of goods or merchandise belonging to the enterprise solely for the purpose of processing by another enterprise.”²²⁷ In essence, the model tax treaty delineates two clear lines within “permanent establishment” analysis: if one has a physical structure in which one carries on a portion of one’s trade or business, then a permanent establishment exists; but if the activities performed in one’s fixed place of business are merely facilitative, preparatory, or auxiliary, then there is no permanent establishment for the purposes of taxing profits.²²⁸

The obvious difficulty of adhering to this definition of “permanent establishment” in the modern age is that the Internet is an intangible medium of commerce. In the virtual economy context, a significant portion of virtual gold and of the max-level characters sold on third-party Chinese company websites for use in World of Warcraft’s United States and European servers are gathered and raised by those companies through the employment of Chinese gamers as workers.²²⁹ Under the guidelines set forth by the United States model tax treaty, it seems that as long as the companies operating those websites did not have a physical presence within the United States, they would not be subject to taxation. This is a particularly curious result due to the fact that most MMOs region-lock their servers. Multi-national MMO game-production companies maintain servers in several countries and will disallow transfers of virtual characters and assets across those servers. This is significant because it means third-party Chinese companies necessarily produce the virtual goods that they sell through gameplay on United States servers.²³⁰

2006 [hereinafter US Model Tax Convention], <http://www.irs.gov/pub/irs-trty/model006.pdf>.

²²⁵ US Model Tax Convention, *supra* note 224, art. 5.1.

²²⁶ *Id.* art. 5.2(a)-(d).

²²⁷ *Id.* art. 5.4(a), (c).

²²⁸ *See generally id.* at art. 5.

²²⁹ *See* Dibbell, *supra* note 44.

²³⁰ To be clear, “region-locking” in this context only means that characters created on one country’s server cannot be transferred to another country’s server. Multi-national MMOs usually outsource management of

The Treasury, in fact, issued a report (almost two decades ago) to discuss the impact that electronic commerce would have on tax policy and the machinations of international tax.²³¹ The report recognized that the original conception of taxing a trade or business within the bounds of the United States was formulated with the understanding of commerce as “conducted through identifiable physical locations.”²³² The report further observed that electronic commerce is not bound to any fixed place of business, but rather could traverse national boundaries and thus “dissolve the link between an income-producing activity and specific location.”²³³

The OECD Commentaries’ approach to the question of electronic commerce was to stretch their existing “permanent establishment” framework and apply it to the physical manifestations of the Internet: servers.²³⁴ The commentary on Article 5 of the OECD model tax treaty focuses on whether the use of “computer equipment in a country could constitute a permanent establishment.”²³⁵ The commentary begins by discussing the most salient example in electronic commerce: an enterprise that carries on its trade or business internationally through the use of a website.²³⁶ The commentary draws a clear distinction between an enterprise that conducts business on a website hosted by a server and the enterprise that operates the server; while the latter may have a fixed place of business based on its physical server, the former “does not even have a physical presence at that location since the web site is not tangible,” and thus the enterprise “cannot be considered to have acquired a place of business by virtue of that hosting arrangement.”²³⁷ For the enterprise operating its business

each region to a local production company, resulting in the creation of multiple discrete versions of the same game. See Scott Andrews, *WoW Archivist: WoW in China, An Uncensored History*, ENGADGET (Jan. 17, 2014), <http://www.engadget.com/2014/01/17/wow-archivist-wow-in-china-an-uncensored-history>; Brianna Royce, *The Daily Grind: Should Games Be Region-Locked?*, ENGADGET (Oct. 6, 2011), <http://www.engadget.com/2011/10/06/the-daily-grind-should-games-be-region-locked>.

²³¹ U.S. DEPT. OF THE TREASURY, SELECTED TAX POLICY IMPLICATIONS OF GLOBAL COMMERCE § 7.2.3 (1996) [hereinafter TREASURY REPORT], <http://www.treasury.gov/resource-center/tax-policy/Documents/Internet.pdf>.

²³² *Id.* at § 7.2.3.1.

²³³ *Id.*

²³⁴ See generally *OECD Commentaries on the Articles of the Model Tax Convention, Commentary on Article 5*, OECD, § 42.1-42.10 (2010) [hereinafter *OECD Commentaries*], <http://www.oecd.org/berlin/publikationen/43324465.pdf>.

²³⁵ *Id.* § 42.1.

²³⁶ See *id.* § 42.2-42.3.

²³⁷ *Id.* § 42.3.

through a website hosted on a server to have a permanent establishment, it must “own[] (or lease[]) and operate[] the server on which the web site is stored and used.”²³⁸

The commentary goes on to specifically analyze the treatment of “e-tailers”—electronic retailers who sell products on the Internet—under Article 5.²³⁹ Applying the “preparatory or auxiliary” exception to the permanent establishment rules, an online retailer “is not in the business of operating servers,” meaning that the mere fact that it *operates a server in a given location* “is not enough to conclude that activities being performed at that location are more than preparatory and auxiliary.”²⁴⁰ If the online retailer owns and operates a server used “exclusively for advertising, displaying a catalogue of products, or providing information to potential customers,” that server “will not constitute a permanent establishment.”²⁴¹ However, if the “typical functions related to a sale” occur within that server, such as “the conclusion of the contract with the customer, the processing of the payment, and the delivery of the products are performed *automatically* through the equipment located there,” then the “preparatory or auxiliary” exception will not apply.²⁴²

Before turning to the criticisms of the OECD approach, let us consider the consequences of this regime when applied to a Chinese gold farming company. Company X, incorporated in China, employs a fleet of local gamers to play W, a popular MMO, to gather virtual gold that X plans to sell through its website, “XGold,” located on Chinese servers. Because W’s game production company, B, employs region-locking,²⁴³ if X wishes to sell to a player on a United States server, X’s employees will have to gather gold through activities conducted on that United States server.

There are two points in X’s business structure that may give rise to a permanent establishment in the United States: its sale of virtual gold on XGold and its employees’ gathering of virtual currency for sale on servers located in the United States. With respect to the first activity, there would be no permanent establishment under the OECD Commentaries’ approach. XGold is not hosted on computer equipment owned, leased, or operated by X in the United States, so there would be no permanent establishment. With respect to the second activity, the OECD Commentaries’ approach is ill suited to this

²³⁸ *Id.*

²³⁹ *Id.* § 42.9.

²⁴⁰ *Id.*

²⁴¹ *Id.*

²⁴² *Id.* (emphasis added).

²⁴³ See *supra* note 230.

particular analysis, but may apply through some creative interpretation. B owns and operates computer equipment physically located within the United States—the servers that run W. In exchange for subscription fees, B issues a license to each player, allowing them to play within the virtual world. X undoubtedly procured accounts and pays subscription fees for each of its employees, thereby allowing them to gather virtual gold within W's virtual realm. X's receipt of these licenses can be viewed as a lease of B's servers to X for a specified amount of time, thus establishing a "fixed place of business through which the business of [X] is wholly or partly carried on."²⁴⁴ Under this interpretation, these activities are not merely "preparatory" or "auxiliary" because the gathering of gold is fundamental to X's business. Thus, in this manner, X has a permanent establishment in the United States under the OECD approach because X's employees gather virtual gold on B's servers that are physically located within the United States.

The Treasury had already considered the role of servers in its report prior to the OECD Commentaries and came to a conclusion opposite to the OECD approach.²⁴⁵ Through the Treasury Report's discussion of electronic commerce, it is readily apparent that the Treasury recognized the diminishing role of (and potential drawbacks of focusing on) physical locations and the physical aspects of the Internet in permanent establishment analysis.²⁴⁶ Specifically, the report notes that "the location of a server is irrelevant since it can be accessed by users around the world"²⁴⁷ and that "[i]t is possible [a server maintained by foreign persons] . . . is not a sufficiently significant element in the creation of certain types of income to be taken into account" for purposes of permanent establishment analysis.²⁴⁸ In addition, the report recognizes that if too much emphasis is placed on the physical location of servers, foreign entities and individuals may simply choose either to relocate their servers or to use servers outside of the United States.²⁴⁹ Indeed, the only way to render this tactic

²⁴⁴ OECD Model Tax Convention, *supra* note 224, art. 5.1.

²⁴⁵ See TREASURY REPORT, *supra* note 231, §§ 3.1.2., 7.2.3.1.

²⁴⁶ See *id.* § 7.2.3.1.

²⁴⁷ *Id.* § 3.1.2.

²⁴⁸ *Id.* § 7.2.3.1.

²⁴⁹ *Id.* ("[I]f the existence of a U.S.-based server is taken into account for [purposes of determining whether a U.S. trade or business exists], foreign persons will simply utilize servers located outside the United States since the server's location is irrelevant.").

ineffective would be for a country to construct something akin to the Great Firewall of China.²⁵⁰

One of the primary goals of the electronic commerce section of the report seems to be deciphering “the extent to which electronic commerce simply represents an extension of current means of doing business.”²⁵¹ The Treasury appears to acknowledge the limitations of the original conception of permanent establishments based on physical location and physical presence,²⁵² and hopefully will focus on analyzing substance over form. That is to say, electronic commerce should not be exempt from taxation simply because of its virtual nature. While the theory is relatively straightforward, the logistics of implementing such a commensurate treatment will likely be the crucial difficulty to overcome.

Therefore, it is important to understand the basic rationale behind the existence of the permanent establishment rule and its role in the context of international tax treaties.²⁵³ The Joint Committee on Taxation has stated the practical purpose of the permanent establishment definition:

The permanent establishment concept is one of the basic devices used in income tax treaties to avoid double taxation. Generally, a resident or corporation of one country will not be taxable on his business profits by the other country unless the profits are attributable to a permanent establishment of the resident or corporation in that country. In other words, the permanent establishment concept defines the degree of economic penetration a resident or corporation of one country may make in the other country

²⁵⁰ See Charlie Osborne, *China Reinforces Its ‘Great Firewall’*, CNET, Jan. 30, 2015, <http://www.cnet.com/news/china-reinforces-its-firewall-doubles-down-on-social-media>.

²⁵¹ See TREASURY REPORT, *supra* note 231, § 7.2.3.1.

²⁵² While “[t]he concept of a U.S. trade or business was developed in the context of conventional types of commerce, which generally are conducted through identifiable physical locations[,] . . . electronic commerce doesn’t seem to occur in any physical location but instead takes place in the nebulous world of ‘cyberspace.’” *Id.*

²⁵³ For an in-depth history of the Permanent Establishment Article within United States tax treaties, see J. Ross McDonald, “*Songs of Innocence and Experience*”: *Changes to the Scope and Interpretation of the Permanent Establishment Article in U.S. Income Tax Treaties, 1950-2000*, 63 TAX L. 285 (2010).

without being subject to tax in that country on the business profits arising in that country.²⁵⁴

As this passage suggests, the degree of an enterprise's *economic penetration* into another country is key. Once a company has established enough of an economic presence within a country, it should be subject to taxation. Pursuant to this logic, most tax treaties adopt the OECD approach:²⁵⁵ “profits that are attributable to [a] permanent establishment [within another Contracting State] . . . may be taxed in that other State.”²⁵⁶

On the basis of equity, this approach makes sense: a country should be able to tax its citizens on their business profits, but once those citizens establish a sufficiently significant business presence in another country, that other country should be able to tax profits attributable to that presence. After establishing this core tenet, several questions remain in the context of electronic commerce. First, what would constitute a sufficiently significant business presence? And second, in what ways and to what extent would that definition apply to the virtual context? The answer to the former question lies in the determination of what a permanent establishment should entail—a definition that the OECD is continually refining.²⁵⁷ The international community is currently struggling with the latter question. The OECD Commentaries believe in focusing on the physical attributes of the Internet, servers and computer equipment. The United States, recognizing the OECD's “leadership role in coordinating international dialogue concerning the taxation

²⁵⁴ STAFF OF J. COMM. ON TAX'N, 97TH CONG., EXPLANATION OF PROPOSED INCOME TAX TREATY (AND PROPOSED PROTOCOL) BETWEEN THE UNITED STATES AND THE ARGENTINE REPUBLIC 13 (Comm. Print 1981).

²⁵⁵ See *United States Income Tax Treaties—A to Z*, INTERNAL REVENUE SERVICE, <http://www.irs.gov/Businesses/International-Businesses/United-States-Income-Tax-Treaties---A-to-Z> (last visited Aug. 18, 2015). This is not to say that countries do not have differing conceptions of what a “permanent establishment” or “business profits” should entail—merely that once there is a permanent establishment, business profits (however determined) should only be taxed to the extent those profits are *attributable* to that permanent establishment.

²⁵⁶ *Id.*; OECD Model Tax Convention, *supra* note 224, art. 7.1.

²⁵⁷ See *BEPS Action 7: Preventing the Artificial Avoidance of PE Status*, OECD /G20 BASE EROSION AND PROFIT SHIFTING PROJECT 4 (Jan. 9, 2015), <http://www.oecd.org/tax/treaties/action-7-pe-status-public-discussion-draft.pdf> (“The Action Plan stresses the need to update the treaty definition of permanent establishment (PE) in order to prevent abuses of that threshold.”).

of e-commerce,”²⁵⁸ has opted to wait and see before taking legislative action that would be inconsistent with international trends. In the last few years, an emerging concept grapples with the unique challenges of the digital economy in the international taxation context: the “virtual permanent establishment.”

2. “Virtual Permanent Establishment”

The “virtual permanent establishment” concept has its origin in a case before the Spanish Central Economic-Administrative Court²⁵⁹ involving an Irish member of the Dell Computer group, Dell Products Limited (DPL).²⁶⁰ The Spanish tax authorities in the case argued that DPL had a “virtual permanent establishment in Spain,”²⁶¹ based primarily on two facts: (1) DPL sold goods to consumers in Spain through the use of a website *specifically focused* on the Spanish market; and (2) DPL’s Spanish affiliate, DESA, “employed persons who translated the web pages, reviewed content, and otherwise administered the site.”²⁶² Agreeing with the Spanish tax authorities, the court held that DPL had a virtual permanent establishment within the meaning of the Spain-Ireland Income Tax Treaty “despite the absence of any other actual physical presence of DPL in the country.”²⁶³

In determining the actual amount of profit attributable to DPL’s permanent Spanish establishment, “the court accepted the tax authority’s argument that *all revenue derived from the Spanish market from sales through the website*” should be taxable.²⁶⁴ This result is consistent with the court’s rationale in employing the virtual permanent establishment concept: if the activities of the website were sufficient to create a permanent establishment in Spain, then any revenues generated from the Spanish market should be attributable to that permanent

²⁵⁸ ADVISORY COMMISSION ON ELECTRONIC COMMERCE REPORT TO CONGRESS 6 (2000), available at http://govinfo.library.unt.edu/e-commerce/acec_report.pdf (last visited July 30, 2015).

²⁵⁹ Alistair M. Nevius, *Foreign Tax Collectors Threaten to Ensnare Internet Sellers with “Virtual” Nexus*, CGMA MAG., Sept. 25, 2013, <http://www.cgma.org/Magazine/News/pages/20138804.aspx>.

²⁶⁰ Gary D. Sprague, *Spanish Court Imposes Tax Nexus by Finding a ‘Virtual PE’*, BNA NEWS, Jan. 9, 2013, <http://www.bna.com/spanish-court-imposes-n17179871765>. Contrary to the author’s opinion, I view the creation of the “virtual permanent establishment” as the necessary and natural next step to account for the difficulties posed by the staggering volume of commerce conducted through intangible channels.

²⁶¹ *Id.*

²⁶² *Id.*

²⁶³ *Id.*

²⁶⁴ *Id.* (emphasis added).

establishment. While Spain's approach is an ambitious one, the court's holding seems to be a natural evolution of the permanent establishment concept in response to the rapidly growing digital economy.

Let us reconsider the hypothetical Chinese gold farming company X under the theory of a "virtual permanent establishment." Due to its success in the United States, X has decided to expand its virtual gold selling service to all of North America, the European Union, and South Korea. Through analysis of X's recordkeeping, it is established that through "XGold," X's website, X has gross revenue equaling \$50 million USD this year. The percentage of that revenue derived from sales to players categorized by country is as follows: from North America, forty percent in the United States and ten percent in Canada; from South Korea, fifteen percent; and from the European Union, twenty-five percent in England and ten percent in Spain.²⁶⁵

Using the approach that the Spanish court applied in the DPL case, the analysis would focus on X's sales of gold through its website. While the facts in this hypothetical are slightly different from those in the decision, the same rationales would apply. Recall that B, the game production company that manages W, the MMO, region-locks its servers.²⁶⁶ Because of this, for X to sell to a player on W's North American server, X's employees must gather gold by playing on a North American server. Thus, applying the reasoning employed in the DPL case, company X *by definition* targets each of those markets and countries delineated in the percentage revenue breakdown in the foregoing paragraph. X's employees must play on a country's game server in order to sell the virtual gold they gathered *on* those servers to players from that country.²⁶⁷ Thus, X would have a virtual permanent establishment in each of those countries. Each permanent establishment would then be

²⁶⁵ Determining what revenue was derived from which source is not prohibitive—third-party marketplaces necessarily retain customer payment records in the ordinary course of business. Countries could require their corporate citizens and individuals engaging in substantial digital commerce to annually report from which countries they derived each portion of their online revenue. If this initiative were led by the OECD and subsequently adopted en masse by OECD members, gaming of the permanent establishment rules based on physical location (in the context of digital commerce) would be entirely fruitless.

²⁶⁶ See *supra* note 230 and accompanying text.

²⁶⁷ This assumes that Chinese players play on Chinese servers and American players play on American servers. For the most part, this is true, but this is not always the case. See Royce, *supra* note 230 ("A reader named Sam recently wrote in to Massively with a concern: He's a U.S. expat who moved to South Korea only to find that he cannot log in to his North American *Age of Conan* account . . .").

attributed the percentage of revenue X derived from sales to each respective country. As a result, X would be taxable on forty percent of its total sales by the United States, ten percent by Canada, fifteen percent by South Korea, and so on.

The theory of a virtual permanent establishment gained significant traction when the OECD released the first deliverable in its BEPS Action Plan in September 2014,²⁶⁸ a document specifically dedicated to addressing the challenges of digital commerce.²⁶⁹ The Action Plan directly addresses the most promising proposals submitted to deal with the issues raised by the advent of digital commerce.²⁷⁰ The 2014 Action Plan contains three particular points of interest: first, an analysis of the proposal for an alternative nexus test reminiscent of the approach used by the Spanish court in the DPL case;²⁷¹ second, a proposal suggesting a major paradigm shift in the definition of the permanent establishment;²⁷² and third, a proposal for the creation of a withholding tax on digital transactions.²⁷³

On the “alternative nexus” proposal, “an enterprise engaged in certain ‘fully dematerialised digital activities’ could be deemed to have a taxable presence in another country if it maintained a ‘significant digital presence’ in the economy of that country.”²⁷⁴ In defining a “fully dematerialized digital activity,” the Action Plan lists many potential elements of a facts-and-circumstances test to determine whether an enterprise is engaged in such an activity.²⁷⁵ The elements listed

²⁶⁸ Known as the “base erosion and profit shifting” project, the OECD initiated this effort in light of “tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations . . . resulting in little or no overall corporate tax being paid.” *About BEPS*, OECD, <http://www.oecd.org/tax/beps-about.htm#about> (last visited Mar. 20, 2015).

²⁶⁹ *Addressing the Tax Challenges of the Digital Economy*, OECD/G20 BASE EROSION AND PROFIT SHIFTING PROJECT (Sept. 16, 2014) [hereinafter OECD BEPS Digital Economy Deliverable], available at http://www.keepeek.com/Digital-Asset-Management/oecd/taxation/addressing-the-tax-challenges-of-the-digital-economy_9789264218789-en (analyzing proposals to deal with the challenges of the expanding digital economy).

²⁷⁰ *Id.* § 8.1.

²⁷¹ *Id.* § 8.2.1.2 (defining a “significant digital presence” as remotely signing a “significant number of contracts” for digital goods or services between an enterprise and resident customers of a country).

²⁷² *Id.* § 8.2.1.3 (replacing the existing permanent establishment concept with a “significant presence” test to respond to the expanding digital economy).

²⁷³ *Id.* § 8.2.1.4.

²⁷⁴ *Id.* § 8.2.1.2.

²⁷⁵ *Id.* § 8.2.1.2 tbl. 8.1. The full list of elements are as follows: (1) the “core business of the enterprise relies completely or in a considerable part on digital goods or digital services”; (2) “no physical elements or activities are involved in the actual creation [or delivery] of the goods or services” except

in the proposal identify the marks and badges that commonly accompany the operation of a wholly or largely digital enterprise. This proposal, if adopted, would likely cause foreign third-party sellers of virtual assets and currencies to be taxable by the countries where their customers reside.

The “significant digital presence” requirement harkens back to the original purpose of the permanent establishment concept.²⁷⁶ If the purpose of tax treaties is to determine when an enterprise of one country has achieved sufficient economic penetration into another country such that the profits arising from those activities become taxable by the latter country, then there should be no distinction between a physical presence and a digital presence given the prevalence of commerce of both forms within the modern age. Thus, this component of the analysis echoes the “virtual permanent establishment” theory.²⁷⁷

The OECD deliverable provides several potential scenarios in which an enterprise will have a “significant digital presence” within a country: (1) “a significant number of contracts for the provision of fully dematerialised digital goods or services are remotely signed between the enterprise and a customer that is [a] resident for tax purposes in the country”; (2) “digital goods or services of the enterprise are widely used or consumed in the country”; (3) “substantial payments are made from clients in the country to the enterprise in connection with contractual obligations arising from the provision of digital goods or services as part of the enterprise’s core business”; and (4) “an existing branch of the enterprise in the country offers secondary functions such as marketing and consulting functions targeted at client-residents in the country that are

for “the existence, use, or maintenance of servers and websites or other IT tools and the collection, processing, and commercialisation of location-relevant data”; (3) contracts are generally concluded through the internet or by phone; (4) “payments are made solely through credit cards” or other types of electronic payment methods using “forms or platforms linked or integrated to the relative websites”; (5) websites constitute the sole method of contracting with the enterprise—“no physical stores or agencies exist for the performance of the core activities other than offices located in the parent company or operating company countries”; (6) “all or the vast majority of profits are attributable to the provision of digital goods or services”; (7) “the legal or tax residence and the physical location of the vendor are disregarded by the customer and do not influence his choices”; and (8) “the actual use of the digital good or the performance of the digital service do not require physical presence or the involvement of a physical product other than the use of a computer, mobile devices, or other IT tools.” *See id.*

²⁷⁶ *See* McDonald, *supra* note 253, at 293.

²⁷⁷ *See* Sprague, *supra* note 260.

strongly related to the core business of the enterprise.”²⁷⁸ Scenarios one and four are the precise primary facts that the Spanish court in the DPL case relied on in holding that DPL had a virtual permanent establishment in Spain.²⁷⁹ The idea of “significant digital presence” is potentially the inception of a broader definition of economic presence within a country that is more suited to the development and growth of the digital economy.²⁸⁰

The second major proposal of note suggests that there is no need for an “alternate nexus test” if the fundamental definition of permanent establishment were to be changed to accommodate the digital economy.²⁸¹ As the deliverable notes, physical presence would not be irrelevant, but would serve a diminished role in the analysis.²⁸² The focus would instead be on the “contribution to value of [] closer, more interactive customer relationships,” replacing the existing permanent establishment definition with a “significant presence” test, measured more by consumer contact, and with less emphasis on the physical requirement of the current definition.²⁸³ This would seem to obviate the need to establish numerical thresholds, as the analysis would center not on the quantity of revenue generated, but rather on the nature of the relationship between the enterprise and the end-consumer. While this would be effective in addressing the concerns raised by electronic commerce, OECD members would likely not adopt such a fundamental change, as it may create instability. The proposal itself is currently little more than an idea. Much work must be done before it can be taken under consideration.²⁸⁴

²⁷⁸ OECD BEPS Digital Economy Deliverable, *supra* note 269, § 8.2.1.2, tbl. 8.2.

²⁷⁹ *See* Sprague, *supra* note 260.

²⁸⁰ The deliverable also notes that the definition of the “significant” modifier in this component of the alternative nexus test would eventually have to identify a number of thresholds which might include, but are not limited to: (1) total contracts for digital goods and services concluded remotely; (2) amount of website traffic; and (3) the overall consumption level of the “digital goods and services of the enterprise in the market country.” OECD BEPS Digital Economy Deliverable, *supra* note 269, § 8.2.1. An additional task, then, will be determining what those thresholds are. From a practical standpoint, having higher thresholds allows the international community to deal with the most pressing exemplars of the vast digital economy while maintaining an efficient rate of return on resources expended. As with any numerical bright line, however, there will inevitably be strategic planning to avoid the clearly marked zone of danger.

²⁸¹ *See id.* § 8.2.1.3.

²⁸² *Id.*

²⁸³ *Id.*

²⁸⁴ *See id.*

The final section of note is a “final withholding tax on certain payments made by residents of a country for digital goods or services provided by a foreign provider.”²⁸⁵ To avoid placing the burden of withholding on individuals, the proposal suggests that the withholding be done by “the financial institutions involved with those payments.”²⁸⁶ Not only would this allay the need for constructing thresholds on digital commerce, but it would also be an efficient and familiar method of enforcement.

In the context of virtual economies, if the OECD adopted this third proposal, domestically incorporated third-party marketplaces would be subject to withholding requirements²⁸⁷ while foreign-incorporated marketplaces would have a portion of their revenues withheld by the financial institutions of their domestic consumers.²⁸⁸ The confluence of these two withholding regimes would effectively capture all of the revenues derived from real money transactions related to virtual economies, irrespective of an enterprise’s physical location.²⁸⁹

IV. A New Frontier

While the MMO continues to be a popular genre, a new genre has skyrocketed in popularity within the last few years, transforming the e-sports scene from a creature of relative obscurity into a billion-dollar behemoth that cannot be ignored. This new genre is that of the multiplayer online battle arena (“MOBA”). There are several popular MOBAs—Smite, DOTA 2—but the game that undeniably started the recent trend in this genre’s wild popularity is League of Legends (“LoL”).²⁹⁰ A brief discussion of this trend is useful to highlight evolving issues in the area of virtual economies and the ways in which

²⁸⁵ *Id.* § 8.2.1.4.

²⁸⁶ *Id.*

²⁸⁷ This statement assumes that my proposal to subject third-party marketplaces incorporated in the United States to tax withholding is in force. *See supra* Part III.B.

²⁸⁸ *See* OECD BEPS Digital Economy Deliverable, *supra* note 269, § 8.2.1.4.

²⁸⁹ The rate at which “effectively connected income” is taxed, however, may be lower depending on the tax treaty under consideration. *See Effectively Connected Income (ECI)*, INTERNAL REVENUE SERVICE, [http://www.irs.gov/Individuals/International-Taxpayers/Effectively-Connected-Income-\(ECI\)](http://www.irs.gov/Individuals/International-Taxpayers/Effectively-Connected-Income-(ECI)) (last visited Mar. 20, 2015) (“[ECI] is taxed at the graduated rates or lesser rate[s] under a tax treaty.”).

²⁹⁰ League of Legends (a game functioning on the free-to-play model) grossed \$964 million from micro-transactions in January to September of 2014—beating out World of Warcraft (at only \$728 million) by a comfortable margin. *See* Andy Chalk, *League of Legends Has Made Almost \$1 Billion in Microtransactions*, PCGAMER, Oct. 23, 2014, <http://www.pcgamer.com/league-of-legends-has-made-almost-1-billion-in-microtransactions>.

the type of analysis in this Article might continue to develop as the landscape continues to change.

In terms of raw viewership, the League of Legends Season 3 World Championship was watched by 32 million people with a peak of 8.5 million watching concurrently, commanding a larger viewership than that of the 2013 BCS National Championship, NBA Finals (Game 7), and the sum of the NCAA Final Four and MLB World Series.²⁹¹ In addition to the massive online viewership, the championships for League of Legends have been held in the largest stadiums across the world, including the Staples Center and the Seoul World Cup Stadium, and often sell out their tickets within an hour of their offering.²⁹²

The professional player talent that the League of Legends e-sports scene attracts is also impressive. There are several primary reasons why the talent pool is strong: (1) the LoL championship tournaments boast large prize pools that are sometimes upwards of \$2 million USD;²⁹³ (2) there is a relatively low bar for technical skills in comparison to previous e-sports like Starcraft;²⁹⁴ and (3) the large fan base.²⁹⁵ The fans of these professional gamers are not limited to watching their favorite players during tournaments, as top players typically also stream themselves playing League of Legends daily. The vast majority of these pro-gamers will broadcast their talents through Twitch, a streaming service for gamers that Amazon

²⁹¹ Nick Schwartz, *ESPN's President Says That eSports Are Not 'Real Sports,' and He's Wrong*, FOR THE WIN (Sept. 6, 2014, 3:11 PM), <http://ftw.usatoday.com/2014/09/espn-esports-league-of-legends-dota>.

²⁹² See *One World Championship, 32 Million Viewers*, LEAGUE OF LEGENDS, <http://na.leagueoflegends.com/en/news/esports/esports-editorial/one-world-championship-32-million-viewers> (last visited Mar. 21, 2015); *Worlds 2014 By the Numbers*, RIOT GAMES.COM (Dec. 1, 2014), <http://www.riotgames.com/articles/20141201/1628/worlds-2014-numbers>.

²⁹³ See *Top 100 Largest Overall Prize Pools*, E-SPORTS EARNINGS, http://www.esportsearnings.com/tournaments/largest_overall_prize_pools (last visited Mar. 21, 2015).

²⁹⁴ See Kevin Wong, *StarCraft 2 and the Quest for the Highest APM*, ENGADGET, Oct. 24, 2014, <http://www.engadget.com/2014/10/24/starcraft-2-and-the-quest-for-the-highest-apm>. “APM” stands for “actions-per-minute,” calculated excluding extraneous actions. Professional Starcraft players have a resting APM of around 300, but can achieve around 600 APM (ten actions per second) during intense battles. *Id.* In League of Legends, instead of an army, a player controls a single character and the focus is on team play instead of one-on-one combat. See *Game Modes*, LEAGUE OF LEGENDS GAME INFO, <http://gameinfo.na.leagueoflegends.com/en/game-info/game-modes> (last visited May 3, 2015) (“League of Legends’ flagship, Field of Justice, Summoner’s Rift, remains the battleground of choice for the majority of players. Two teams of five champions battle across three lanes and an expansive jungle . . .”).

²⁹⁵ See *One World Championship, 32 Million Viewers*, *supra* note 292.

recently acquired for over \$1 billion,²⁹⁶ and will also receive donations from fans who contribute in order to support their favorite stars. A top player's revenues come not only from tournament winnings and streaming, but also from a salary provided by gaming franchises, merchandising income, and personal sponsors. Unsurprisingly, the resulting amount can be quite substantial.²⁹⁷

Multiplayer online battle arenas differ greatly in structure from traditional MMOs. While the MMO game structure involves the creation and growth of a character and gathering and accumulating weapons and armor of the highest quality over months of gameplay, MOBAs involve discrete, hour-long matches of five against five. In League of Legends, for example, a typical game would proceed as follows: one queues up for a game and become randomly grouped with four other players to take on five opposing players, all of which have similar skill levels as determined by an algorithm-driven point system (colloquially known as the "ELO" system); one then selects a hero that one has earned on one's account and enters the game. Within the game, one works with teammates to capture objectives and defeat enemy heroes. Finally, when one team's base is destroyed, the game is over. Any experience, equipment, or weapons gained by one's chosen hero do not carry over to the next match because each game is an entirely separate scenario.

League of Legends is free to play. In fact, all of the substantive advantages a player can gain within LoL (a wider selection of heroes to choose from, a fully fleshed-out talent tree that provides tactical advantages in every skirmish, a larger number of preset enhancements one can apply to a chosen champion) are obtainable over time through playing the game. The items available for purchase fall into two major categories: (1) *instant* access to substantive advantages and (2) cosmetic upgrades. Through this business model, League of Legends has generated approximately \$1 billion in revenue in 2014 alone.²⁹⁸

The question is, however, to what extent League of Legends will present a problem within the context of virtual economies if there are no virtual assets or virtual currencies to sell. Where there is a competitive element in a game with a sufficiently large player base, there will always be money to be made. The primary virtual assets for sale in this context are player

²⁹⁶ Nick Wingfield, *What's Twitch? Gamers Know, and Amazon is Spending \$1 Billion on It*, N.Y. TIMES, Aug. 25, 2014, <http://www.nytimes.com/2014/08/26/technology/amazon-nears-a-deal-for-twitch.html>.

²⁹⁷ See Zorine Te, *League of Legends Player Makes Close to \$1M Per Year*, GAMESPOT, Oct. 22, 2013, <http://www.gamespot.com/articles/league-of-legends-player-makes-close-to-1m-per-year/1100-6415722>.

²⁹⁸ See Chalk, *supra* note 290.

accounts that have achieved a certain “ELO” ranking. After a player surpasses certain ranking thresholds, calculated with respect to the rest of the population, their account is marked with an emblem, ranging from bronze to diamond. Sales of “ELO” ranking can occur either through the sale of a highly-ranked account, or through “ELO” boosting, where the buyer pays to have a highly skilled player win games on the buyer’s account until the rank agreed-upon has been reached.

New gaming trends with new virtual economies arise every year. The most popular ones inevitably produce third-party marketplaces, whether or not such transactions violate the TOU agreement set forth by the game company. While the OECD marches on, grappling with similar issues on a global scale, it is essential that the United States establish a domestic regime to answer this growing digital economy. These virtual goods trading markets will remain relevant and will not simply disappear.

CONCLUSION

As the world and governments become more familiar with the Internet and the virtual realm, it is not inconceivable that one day—perhaps in the far, far future—people will need to identify themselves when they log on to the Internet. If that day comes, tracking online sales will be as simple (and as difficult) as tracking sales in the physical world. Until that day, withholding is the most efficient way to accomplish the goal of capturing lost tax revenues from the sale of virtual goods for real dollars in hybrid economies. Within open-flow economies, the most relevant frameworks are already partially subject to third-party reporting requirements through I.R.C. § 6050W.

The virtual realms will only grow. Moreover, the concerns about effective taxation in virtual economies are not limited to MMOs, as the proliferation of the gaming industry has pervaded all walks of life. While only the most devout gamers spend the greater part of their lives online, with each new generation comes increased exposure to the Internet and global communication. Where society evolves, society must also adapt.