
The Columbia

SCIENCE AND TECHNOLOGY LAW REVIEW

www.stlr.org

VIRTUAL ASSETS, REAL TAX: THE CAPITAL GAINS/ORDINARY INCOME DISTINCTION IN VIRTUAL WORLDS

Nell A. Beekman¹

A great deal of economic activity now occurs in virtual worlds, raising questions about the proper taxation of income generated by virtual world activity. This Note focuses on the characterization of such income, that is, whether income earned in virtual worlds should be classified as ordinary income or capital gains. Generally, the character of income is determined by the activity which generated the income. In the context of virtual worlds, the issue is whether character should be determined by the nature of the user's transactions within the world.

As argued below, there is no good conceptual justification for treating economic activity in virtual worlds differently from analogous activity that occurs in the real world. However, applying the capital gains-ordinary income distinction to virtual worlds would not be administratively feasible. Thus, for the reasons set forth in this Note, the best possible tax regime is to classify all income earned in virtual worlds as ordinary income.

¹ J.D. 2010, Columbia University School of Law. I would like to thank Professor Alex Raskolnikov and my colleague Kathryn Kelly for their valuable feedback and guidance.

Cite as <http://www.stlr.org/cite.cgi?volume=11&article=6>

This work is made available under the
[Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](http://creativecommons.org/licenses/by-nc-nd/3.0/)

I. INTRODUCTION

A vast amount of income-generating activity now occurs in virtual worlds,² but it remains unclear whether, and how, income derived from virtual world activity should be taxed. It has become apparent, however, that this question is no longer merely abstract or academic, as its resolution will certainly have real-world consequences. The U.S. government has signaled its interest in the issue,³ and some countries have already implemented or proposed tax regimes for virtual world income.⁴

This Note assumes that income generated from virtual world activity can and will be taxed and focuses on the question of what the character of that income should be.⁵ Under the U.S. tax regime, income is characterized either as ordinary income or capital gains, and the category is determined by the activity that generated the income. Capital gains arise from the sale or exchange of capital assets as defined by § 1221 of the tax code while ordinary income derives from all other activity. The capital-ordinary

² A virtual world is a persistent online environment in which users create and control characters (called “avatars”). The avatars move through the virtual world, interacting with other avatars, and with the virtual world itself. Adam S. Chodorow, *Ability to Pay and the Taxation of Virtual Income*, 75 Tenn. L. Rev. 695, 699 (2008). For a more detailed discussion of virtual worlds, see *infra* Part II. In his 2001 study of one virtual world, EverQuest, economist Edward Castronova found that “[t]he nominal hourly wage is about USD 3.42 per hour, and the labors of the people produce a GNP per capita somewhere between that of Russia and Bulgaria.” Edward Castronova, *Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier* (CESifo, Working Paper No. 618, 2001), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828. A more current estimate places the yearly aggregate value of virtual world transactions at \$2.09 billion. 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, 749 (2008).

³ Nina Olson, Nat’l Taxpayer Advocate, 2008 Annual Report to Congress 213-26 (2008), available at http://www.irs.gov/pub/irs-utl/08_tas_arc_intro_toc_msp.pdf (identifying taxation of virtual worlds as one of the 20 most serious problems encountered by taxpayers and recommending that the I.R.S. “[w]ork with the Office of Chief Counsel and the Treasury Department to issue guidance addressing how taxpayers should report economic activities in virtual worlds”). However, since then, the I.R.S. has taken no action on this issue. Adam Chodorow, *Tracing Basis Through Virtual Spaces*, 95 Cornell L. Rev. 283, 291-92 (2010).

⁴ See Chodorow, *supra* note 3, at 291 (describing efforts in Australia and Sweden to tax virtual world income); Flora Graham, *Slapping a Tax on Playtime*, BBC News, Nov. 28, 2008, <http://news.bbc.co.uk/2/hi/technology/7746094.stm> (last visited June 23, 2009).

⁵ While it may seem premature to discuss the character of income derived from virtual world activity before the question of character has been officially raised, the issue is one that will predictably have to be addressed. See Julian Dibbell, *Play Money: Or How I Quit My Day Job and Made Millions Trading Virtual Loot* 305 (2006) (describing a conversation between the author and an I.R.S. agent in which the agent wonders whether the sale of virtual goods would be analogous to selling a collectible, which is a category of capital asset).

distinction is important because capital gains are generally taxed at a lower rate than ordinary income. This Note questions whether the capital-ordinary distinction should be imported to the virtual world context, that is, whether the nature of the activity that occurs within the virtual world (“in-world” activity) should determine the character of the income generated by that activity.

To some extent, the answer depends on how we conceive of virtual worlds in relation to the real world—whether virtual worlds are games somehow isolated from the real world, or if they are merely another arena in which economic transactions occur that are no more or less real than any other transactions. Ultimately, I will argue that while there is no good conceptual justification for treating virtual world activity differently from real world activity for tax purposes, the capital-ordinary distinction would not be administratively feasible if applied to in-world activity.

The first part of this Note provides background information on the definition of virtual worlds, the different types of virtual worlds, and the economic activities that occur therein. The second part discusses tax law and the capital gains ordinary income distinction as it is currently applied to real world activity. The third part analyzes the application of tax law to virtual worlds.

II. VIRTUAL WORLDS

This Part provides background information on virtual worlds. Part II.1 defines and describes virtual worlds, and Part II.2 discusses the different types of virtual worlds. Finally, Part II.3 provides a brief description of the various types of economic activities that occur in virtual worlds.

A. Definition of Virtual Worlds

The term “virtual worlds” can be unclear because it is not always used in a consistent manner.⁶ As referred to in this Note, “virtual worlds” are simulated graphical environments which have the following characteristics: 1) interactivity—a large number of people can access the program simultaneously and interact with each other and with the world; 2) physicality—the user experiences the world as a “first-person physical environment on their computer screen”; and 3) persistence—when users are not present in the world, the world continues in their absence.⁷

Users in virtual worlds create characters, called “avatars,” through which they interact with the virtual world. The avatars are often highly customizable, although the extent of customization varies from world to world.⁸ Virtual worlds also contain a

⁶ M. Scott Boone, *Ubiquitous Computing, Virtual Worlds, and the Displacement of Property Rights*, 4 I/S: J. L. & Pol’y for Info. Soc’y 91, 109-10 (2008).

⁷ Castronova, *supra* note 2, at 6.

⁸ Boone, *supra* note 6, at 112.

multitude of virtual objects which may be almost anything: a house, clothing, weapons, raw materials such as iron ore, etc.⁹ These objects may be user-created or created and placed in the world by the game designers.¹⁰

B. Types of Virtual Worlds

There are two archetypal forms of virtual worlds, “structured” and “unstructured,”¹¹ and while most worlds fall somewhere in between, they are still ordinarily recognizable as belonging to one of these two categories. Currently, the most popular virtual worlds are structured.¹² A structured world “presents its users with pre-set roles and pre-set challenges and objectives” while an unstructured world “has few rules, no objectives, and no pre-set roles.”¹³

Second Life is currently one of the most popular and well known of the unstructured worlds.¹⁴ The avatars created by users all start out on an equal footing and may engage in any activity which Second Life offers—e.g., socializing with other avatars, wandering through virtual landscapes, building (or buying and selling) virtual items, and so on.¹⁵ While individual users may set goals for themselves, there are no goals inherent to the world and no objective standard for determining which avatars are better or more successful than others.¹⁶ Second Life allows users a great deal of freedom

⁹ *Id.*

¹⁰ *Id.* at 113.

¹¹ This is the terminology used by Bryan T. Camp. Bryan T. Camp, *The Play's the Thing: A Theory of Taxing Virtual Worlds*, 59 *Hastings L.J.* 1, 4 (2007). Leandra Lederman uses the terms “game worlds” and “unscripted worlds.” Leandra Lederman, *Stranger Than Fiction: Taxing Virtual Worlds*, 82 *N.Y.U. L. Rev.* 1620, 1628-30 (2007). These terms refer to the same distinction.

¹² Boone, *supra* note 6, at 111 (“The most successful incarnations of virtual worlds currently are . . . structured worlds.”).

¹³ Camp, *supra* note 11, at 4.

¹⁴ In 2008, users in Second Life were spending more than 20 million dollars in the world each month. Philip Stoup, *The Development and Failure of Social Norms in Second Life*, 58 *Duke L.J.* 311, 342 (2008).

¹⁵ Users of structured worlds are usually called “players” while users of unstructured worlds—Second Life in particular—are usually referred to as “residents.” To simplify matters, I refer to them all as “users.”

¹⁶ Although it is true that, just as in the real world, users are consumers in Second Life, and to some extent an avatar's “status” is connected to the number and quality of its in-world belongings. While this may be a social reality of the world, I would nevertheless argue that the acquisition of virtual items is not a preordained goal of the world.

in creating virtual objects, and the vast majority of the world is user-created.¹⁷

In contrast, World of Warcraft (“WoW”) is a popular structured virtual world in which users choose an avatar of a particular “race” (humans, trolls, orcs, etc.) and particular profession, which comes with certain preset traits, abilities, and limitations.¹⁸ Users go on “quests” for the purposes of gaining skills and experience (this is known as “leveling,” i.e., achieving a higher level) or acquiring treasure.¹⁹ Thus, while the users have a certain amount of freedom in what they do, how they behave, and whom they socialize with, the world itself provides goals and objective measures of accomplishment.²⁰

C. Economic Activities in Virtual Worlds

While most virtual world transactions involve small sums of money, the aggregate value of economic activity in virtual worlds is significant.²¹ There are a variety of economic activities available to users in virtual worlds, though they are not all possible in every world. The activities I discuss here fall into five categories: 1) creation of virtual items, 2) acquisition of virtual world items, 3) buying and selling virtual assets for real world money, 4) exchange of in-world services for virtual world or real world money, and 5) other miscellaneous economic activities.

1. Creation of Virtual World Assets

In Second Life, users can create almost anything they want using “prims” (short for “primitives”) which are the basic building blocks of the world.²² Unlike most virtual worlds, Second Life allows its users to retain intellectual property rights in their creations.²³ In structured worlds, the ability to create new objects tends to be highly

¹⁷ Boone, *supra* note 6, at 112.

¹⁸ Camp, *supra* note 11, at 4.

¹⁹ *Id.* at 4-5.

²⁰ For a more detailed discussion of the differences between structured and unstructured worlds see *id.* at 4-8.

²¹ Erica Naone, *Linden Lab’s CFO Explains How the Economy Works in the Virtual Community*, Tech. Rev., Aug. 14, 2007, <http://www.technologyreview.com/business/19242/page1/>.

²² Camp, *supra* note 11, at 7.

²³ Second Life, Terms of Service, Section 3.2, <http://secondlife.com/corporate/tos.php> (“[Y]ou will retain any and all applicable copyright and other intellectual property rights with respect to any Content you create using the Service, to the extent you have such rights under

constrained. For example, if one wishes to create a potion, there are certain ingredients that must be obtained (by, for example, foraging) and specific steps that must be followed.²⁴ Even though the avatar “makes” the potion, the graphic that represents the potion will be a pre-existing, standard game object created by the game designers.²⁵ Generally, in structured worlds, users are not able to design and build completely new items from scratch as they can in Second Life.²⁶

2. In-World Acquisition of Virtual World Items

There are a number of ways in which users can obtain virtual world items that they did not create themselves. In structured worlds, certain items are made freely available to be “gathered” by avatars, while other more valuable items are acquired only on completion of certain tasks, such as killing a monster—this is commonly referred to as a “loot drop.”²⁷ In all worlds, there are items that can be bought and sold for in-world currency or exchanged for other items, but the ability to sell or otherwise transfer items is often far more limited in structured worlds than in unstructured worlds. For example, in structured worlds, only avatars that have achieved a certain level may hold certain items.²⁸ There are also many items that simply cannot be transferred from one player to another under any circumstances.²⁹ In unstructured worlds, however, there are few limitations on the transfer of virtual objects, and, if there are restrictions, they are usually set by the creator of the object.³⁰

applicable law.”) (last visited June 23, 2009). *Compare* There Member Agreement, Section 2, <http://www.there.com/tos.html> (“As part of your interactions with the There Environment, you may acquire, create, design or modify There Objects, but you agree that you will not gain any ownership interest whatsoever in any There Objects or There Environment, and you hereby assign to Company all of your rights, title and interest in any such There Objects.”) (last visited June 23, 2009).

²⁴ Camp, *supra* note 11, at 10.

²⁵ *Id.* at 5.

²⁶ *Id.*

²⁷ Lederman, *supra* note 11, at 1628.

²⁸ *See, e.g.*, World of Warcraft, Item Basics, <http://www.worldofwarcraft.com/info/items/basics.html> (“Many items have requirements in order to use them. The types of restrictions on items include minimum level, required proficiencies, class restrictions, and reputation requirements.”) (last visited June 23, 2009).

²⁹ In WoW, these items are called “soulbound.” *Id.*

³⁰ Second Life Wiki, Permissions Explained, http://wiki.secondlife.com/wiki/Permissions_Explained (last visited June 23, 2009).

3. Real Money Trading (RMT)

There is a great deal of variation among worlds in terms of what can be bought with virtual world currency and how easily the virtual world currency is exchangeable for real world currency. For example, the Second Life currency, called Lindens, is easily exchangeable for real currency, which means there is no real difference between paying for items with real money and paying for items with Lindens.³¹ If a user wishes to purchase an item in Second Life but her avatar does not have enough Lindens, she can exchange dollars for Lindens to purchase the item. In structured worlds, however, there are generally official restrictions on the exchange of real money for virtual money (and vice versa) as well as restrictions on what can be purchased with virtual world money. Users who play according to the rules of the world and stick to strictly in-world activity cannot acquire certain items or a higher level simply by buying them.³²

These limitations in structured worlds have led to a thriving grey market (called “real money trading”) for virtual world items, accounts, and currency.³³ Because the actions required to level-up are often tedious to perform, some users may prefer to pay for an avatar which has already attained a high level.³⁴ One user may invest the time to create a high-level avatar that possesses valuable items and then sell the account (or certain transferable items from the account, such as a rare sword) to another user. Since this transaction is not permissible in the virtual world, it will occur through specialty online retailers or auction websites, and the virtual asset will be paid for with real world currency.³⁵ Participating in a virtual world solely to acquire virtual assets for later sale, generally through repetitive actions, is known as gold farming.³⁶ Although an individual user working alone could conceivably earn a living as a gold farmer, a significant proportion of gold farming operations employ other methods to farm gold on a larger scale. These methods include the use of “bots” (computer programs which perform the repetitive gold farming actions automatically) or hiring large numbers of workers in other countries, where labor costs are lower, to work as gold farmers.³⁷

³¹ Lederman, *supra* note 11, at 1630.

³² See, e.g., World of Warcraft, Skills FAQ, <http://www.worldofwarcraft.com/info/faq/skills.html> (“In order to increase your skill level in a profession or secondary skill, you must use it.”) (last visited July 5, 2009).

³³ Camp, *supra* note 11, at 12-13.

³⁴ Lederman, *supra* note 11, at 1628-29.

³⁵ *Id.* at 1623.

³⁶ Anant Raut & J. Benjamin Schrader, “Chinese Goldfarmers Must Die:” *Why China Should Worry About the Growth of Sinophobia Online*, 5 Bus. L. Brief (Am. U.) 17, 18 (2008).

³⁷ Julian Dibbell, *The Life of a Chinese Gold Farmer*, N.Y. Times, June 17, 2007, Section 6 (Magazine), at 36, available at <http://www.nytimes.com/2007/06/17/magazine/17lootfarmers-t.html>. See generally Dibbell, *Play Money*, *supra* note 5, at 88-134.

Real money trading is discouraged by most structured virtual worlds and gold farming is expressly forbidden by most Terms of Service/End User License Agreements (TOS/EULAs).³⁸ Administrators of virtual worlds often actively seek out gold farmers and delete their accounts.³⁹ However, this is not universally true and a few structured virtual worlds tolerate or even facilitate real money trading.⁴⁰

4. Exchange of In-world Services for Money

Many users of Second Life make money by creating and selling items, but there are also those who make money through the provision of in-world services, for instance as sex workers, tour guides, or teachers.⁴¹ Payment for services can also occur in structured worlds. For example, an avatar that is unable to cast a particular spell herself may pay another avatar to cast it for her or a user may pay another user to take control of his account and level up for him.⁴²

5. Other Economic Activities

Some virtual worlds provide users with opportunities to invest their virtual world money. For example, users of some virtual worlds have the opportunity to invest in virtual world companies. Second Life has user-created virtual stock exchanges in which users buy and sell shares of Second Life companies.⁴³ Some virtual worlds also contain in-world user-created and user-run banks where avatars may obtain loans or put their virtual world money in interest-bearing accounts.⁴⁴

³⁸ See, e.g., World of Warcraft Terms of Use, Section 2B, <http://www.worldofwarcraft.com/legal/termsofuse.html> (last visited July 5, 2009); EVE Online Terms of Service, Section 10, <http://www.eveonline.com/pnp/terms.asp> (last visited July 5, 2009).

³⁹ Dibbell, *The Life of a Chinese Gold Farmer*, *supra* note 37, at 36.

⁴⁰ *Id.*

⁴¹ See Camp, *supra* note 11, at 11.

⁴² *Id.* at 45.

⁴³ Shannon L. Thompson, *Securities Regulation in a Virtual World*, 16 UCLA Ent. L. Rev. 89, 95 (2009).

⁴⁴ Predictably, these banks, lacking regulation, often defraud their depositors or otherwise run into difficulties. See Amanda J. Penick, *Legal Recourse When Virtual World Banks Pack Up Their Toys and Go Home*, 77 U. Cin. L. Rev. 233, 237-40 (2008) (describing the downfall of Ginko Financial, a Second Life bank); Rob Cox, *A Virtual Bank With Real Woes*, N.Y. Times, June 15, 2009, at B2, available at <http://www.nytimes.com/2009/06/15/business/15views.html> (discussing the problems of Ebank, an EVE Online bank).

III. BASIC TAX LAW

This Part explains basic principles of tax law, specifically, in Part III.1, the definition of gross income and the realization requirement, and, in Part III.2, capital gains and the definition of capital assets. In the present discussion, two sections of the tax code are particularly important: § 61, which defines gross income, and § 1221, which defines capital assets.

A. Income and Realization

Section 61 defines gross income broadly as “all income from whatever source derived.”⁴⁵ The Supreme Court has interpreted this definition as including “undeniable accessions to wealth, clearly realized, and over which the taxpayers have complete dominion.”⁴⁶ There is no requirement that the “accession to wealth” be received in any particular form; even goods that are not easily exchangeable fall within the definition of income.⁴⁷ There is no constitutional or statutory restriction on what Congress can choose to tax, and economic gain derived from any activity (even illegal) is potentially taxable.⁴⁸

While any economic accession to wealth can be taxed, there is also a requirement that the income be “realized.” The realization requirement is effectively a question of timing, i.e., when to tax. When a taxpayer acquires property that increases in value, the wealth of that taxpayer unquestionably increases. However, simply holding appreciated property will typically not result in taxable income until there is a “realization event,” such as sale or exchange of the property for materially different property.⁴⁹ The

⁴⁵ I.R.C. § 61.

⁴⁶ *Comm’r v. Glenshaw Glass Co.*, 348 U.S. 426, 431 (1955).

⁴⁷ Treas. Reg. §1.61-1 (2007) (“Gross income includes income realized in any form, whether in money, property or services. Income may be realized, therefore, in the form of services, meals, accommodations, stock, or other property, as well as in cash.”).

⁴⁸ *Glenshaw Glass*, 348 U.S. at 430-31 (“But Congress applied no limitations as to the source of taxable receipts, nor restrictive labels as to their nature. And the Court has given a liberal construction to this broad phraseology in recognition of the intention of Congress to tax all gains except those specifically exempted.”); *Comm’r v. Tellier*, 383 U.S. 687, 691 (1966) (“[T]he statute does not concern itself with the lawfulness of the income it taxes.”); see also I.R.S. Publication 17 (2009), available at <http://www.irs.gov/pub/irs-pdf/p17.pdf>, p.95 (“If you steal property, you must report its fair market value in your income in the year you steal it unless in the same year, you return it to its rightful owner.”).

⁴⁹ *Cottage Savings Ass’n v. Comm’r*, 499 U.S. 554, 560 (1991). “Materially different” is defined in this case as meaning “legally distinct.” *Id.* at 565. See also Rev. Rul. 90-109 (1990) (holding that there is realization when the policyholder of a life insurance contract exercised an option to change the insured, because this constitutes a “change in the fundamental substance of the original contract”).

realization requirement was initially considered to have a constitutional basis,⁵⁰ but later cases reduced it to matter of administrative convenience.⁵¹

B. Capital Gains and Capital Assets

Characterization of income as capital gain is beneficial to taxpayers because it is taxed at a maximum rate of 15%,⁵² while the highest marginal rate on ordinary income is currently 35%.⁵³ For taxpayers in an income bracket taxed at a marginal rate of 15% or lower, the rate for capital gains will be the same as, or lower than, the ordinary income rate.⁵⁴ In contrast, characterization of a loss as capital, rather than ordinary, results in an unfavorable treatment for the taxpayer. Capital loss in a given year may only be deducted to the extent that the taxpayer has capital gains in that year, or up to \$3000, whichever is lower,⁵⁵ while all ordinary loss is potentially deductible.⁵⁶ Thus, it is most favorable to taxpayers to have their gains characterized as capital and their losses characterized as ordinary.

Capital assets are defined by § 1221, and capital gain (or loss) is gain (or loss) from the sale or exchange of a capital asset.⁵⁷ A capital asset is “property held by the taxpayer (whether or not connected with his trade or business)”⁵⁸ as long as it does not fall under one of the exceptions enumerated in § 1221. Two exceptions are germane to this discussion. The first is “property held by the taxpayer primarily for sale to customers in the ordinary course of his trade or business.”⁵⁹ The second exception is “a copyright, a

⁵⁰ *Eisner v. Macomber*, 252 U.S. 189, 219 (1920).

⁵¹ *Helvering v. Bruun*, 309 U.S. 461, 469 (1940); *Cottage Savings*, 499 U.S. at 565.

⁵² I.R.C. § 1(h). This is actually an oversimplification, as the rules are far more labyrinthine than indicated here, but an elaboration of the complexities is unnecessary for this Note.

⁵³ Rev. Proc. 2007-66, 2007-45 I.R.B. 956-58.

⁵⁴ I.R.C. § 1(h).

⁵⁵ I.R.C. § 1211.

⁵⁶ I.R.C. § 165.

⁵⁷ I.R.C. § 1222. Whether a transaction results in loss or gain is governed by I.R.C. § 1001, but the details need not detain us. Also note that the rate at which capital gain or loss is taxed depends on the holding period of the asset, that is, the length of time the taxpayer has held, or is deemed to have held, the asset, and specifically whether the holding period is more or less than one year. *See, e.g.* I.R.C. §§ 1222-1223. Issues related to holding period are too complex for further discussion here.

⁵⁸ I.R.C. § 1221(a).

⁵⁹ I.R.C. § 1221(a)(1).

literary, musical, or artistic composition, a letter or memorandum, or similar property” when it is held by the taxpayer who created it, or held by a taxpayer who has received the property as a gift from the creator or by exchange with the creator.⁶⁰

The distinction between capital gains and ordinary income is, at least in theory, based on the distinction between income generated by “investment” and income generated by everything else (interest, wages, gambling, etc.).⁶¹ The § 1221(a)(1) exception excludes gain derived from “business” activities, such as the provision of services, as distinguished from gain that results from investment.⁶² In the context of securities trading, § 1221(a)(1) applies to (that is, excludes from capital gains treatment) securities held by a dealer who buys and sells on behalf of his clients and thus derives his income from commissions rather than fluctuations in the market.⁶³ In the context of real estate, § 1221(a)(1) differentiates between those in the “real estate business,” who make their living through the subdivision, improvement, and resale of real estate, whose income is ordinary, and those who invest in real estate, whose income is capital.⁶⁴ The line that separates investment income from all other income is not always clear, and it can be particularly difficult to discern exactly what is covered by the § 1221(a)(1) exception.⁶⁵

The existence of the capital gains preference has long been controversial. It is often criticized as problematic and based on weak policy justifications.⁶⁶ It is

⁶⁰ I.R.C. § 1221(a)(3); Treas. Reg. § 1.1221-1(c) (1960).

⁶¹ Peter Miller, *The “Capital Asset” Concept: A Critique of Capital Gains Taxation: I*, 59 Yale L. J. 837, 838 (1950). But note that this theoretical distinction does not always hold up in practice. For example, a person who buys a dilapidated building, fixes it up, and then sells it for a profit will benefit from capital gains treatment even though the increase in value may be entirely attributable to his labor, and not “investment.” Cf. Chris William Sanchirico, *The Tax Advantage to Paying Private Equity Fund Managers With Profit Shares: What Is It? Why Is It Bad?*, 75 U. Chi. L. Rev. 1071, 1078-79 (2008) (describing a similar “sweat equity” scenario in which a business owner converts labor income to capital gains).

⁶² Miller, *supra* note 61, at 838; *Bielfeldt v. Comm’r*, 231 F.3d 1035, 1037 (7th Cir. 2000) (“The standard distinction between a dealer [whose gain/loss will be ordinary based on the § 1221(a)(1) exception] and a trader [who does not fall under the § 1221(a)(1) exception] is that the dealer’s income is based on the service he provides in the chain of distribution of the goods he buys and resells, rather than on fluctuations in the market value of those goods, while the trader’s income is based not on any service he provides but rather on, precisely, fluctuations in the market value of the securities or other assets that he transacts in.”).

⁶³ *Bielfeldt*, 231 F.3d at 1037.

⁶⁴ *Biedenharn Realty Co. v. United States*, 526 F.2d 409 (5th Cir. 1976).

⁶⁵ *Id.* at 415 (“[T]he nature of the congressional ‘capital asset’ definition and the myriad situations to which we must apply that standard make impossible any easy escape from the task before us. No one set of criteria is applicable to all economic structures.”)

⁶⁶ See, e.g., Noël B. Cunningham & Deborah H. Schenk, *The Case for a Capital Gains*

nevertheless a long-standing and deeply ingrained part of our tax system, and while the capital gains rate has varied a great deal since its inception,⁶⁷ it is unlikely that the preferential treatment of capital gains will be eliminated entirely in the near future.

IV. APPLICATION OF TAX LAW TO VIRTUAL WORLDS

This Part explores potential applications of tax law to income generated by in-world activity, focusing in particular on the capital-ordinary distinction. Part IV.1 discusses issues related to the taxation of income generated in virtual worlds and describes how a hypothetical tax regime that maintains the capital-ordinary distinction would likely operate. Part IV.2 then evaluates whether this hypothetical regime would be desirable.

A. Virtual World Taxation

It seems clear that the definition of income in § 61 is broad enough to cover income generated by in-world activity, at the very least for users who trade virtual assets or currency for real money. Among commentators there is no real disagreement that assets acquired in virtual worlds, once converted into dollars, will constitute taxable income.⁶⁸ At present, most of the debate on the correct tax regime for this income has focused on timing and realization issues, specifically whether users should be taxed on in-world transactions, or if it would be preferable to wait until the moment their virtual property or money is converted into real money (a “cash-out” rule), and whether the answer should depend on the nature of the world.⁶⁹ This is a complex question which has

Preference, 48 Tax L. Rev. 319, 320 (1993) (arguing that “all arguments favoring the preference [are] wanting”); Daniel Halperin, *A Capital Gains Preference is Not Even a Second-Best Solution*, 48 Tax L. Rev. 381, 381 (1993); John W. Lee, *A Critique of Current Congressional Capital Gains Contentions*, 15 Va. Tax Rev. 1, 1 (1995). *But see* Daniel N. Shaviro, *Uneasiness and Capital Gains*, 48 Tax L. Rev. 393, 393 (1993) (arguing in favor of the preference).

⁶⁷ John W. Lee, III, *The Capital Gains “Sieve” and the “Farce” of Progressivity 1921-1986*, 1 Hastings Bus. L.J. 1, 1 (2005) (describing the history of the capital gains preference).

⁶⁸ *See, e.g.*, Camp, *supra* note 11, at 46 (“When US\$ are received in exchange for an in-world item or a promise to transfer an in-world item, the transaction is about as clear a realized accession to wealth as one can imagine. It is a plain vanilla taxable transaction.”); Chodorow, *supra* note 2, at 696-97 (“A consensus exists for the proposition that anyone who ‘cashes out,’ or converts virtual wealth to real-world wealth, should be taxed on their gains.”).

⁶⁹ *See, e.g.*, Lederman, *supra* note 11, at 1625 (arguing that in-world exchanges should never constitute realization events, but that in unstructured “intentionally commodified virtual worlds, such as Second Life” in-world sales for virtual world currency should be taxed, while a pure cash-out rule should apply to structured (“game”) worlds); Camp, *supra* note 11, at 2 (arguing for a cash-out rule for all virtual worlds); Chodorow, *supra* note 2, at 743-45 (arguing that the I.R.S. should designate virtual worlds as “open” or “closed” based on the “world's rules

been thoroughly discussed elsewhere, and this Note does not address it.

Regardless of when the income is taxed, it will be necessary to decide the character of that income, that is, whether it is capital or ordinary. There are three possible regimes: all income generated by in-world activity could be taxed as ordinary income; all income generated in virtual worlds could be taxed as capital gains; or income generated by in-world activity could be taxed as either ordinary income or capital gains based on the nature of activity that produced the income. While the reasons for preferring any one of these regimes to the others are complex, the first two options would be straightforward in application. Therefore, I will only describe the third potential regime and the practical issues that would arise in its implementation.

As a preliminary matter, it is necessary to point out that the question of whether virtual objects can be considered property is highly contested and the subject of much discussion in scholarly literature on virtual worlds.⁷⁰ Since that issue is outside the scope of this Note, I will not rehash the debate here, but merely identify its relevance to the matter at hand. If items “owned” by an avatar in virtual worlds are not property, they cannot be capital assets under § 1221, and thus income derived from their sale or exchange cannot be capital gain.⁷¹ This Note is therefore premised on the assumption that virtual items can be considered property of the user, at least for the purposes of the tax code, though this should not be taken as a normative stance on how the virtual property question should be settled.

If the capital-ordinary distinction is maintained for in-world activity, it is likely that income from in-world activity would in most cases have the same character as income derived from analogous real world activity. Thus, the income of users who exchange in-world services for money would be taxed at an ordinary rate, as would the income of users who have in-world businesses selling virtual goods. A gold farmer who levels-up accounts and sells them would be taxed at an ordinary rate (since the accounts are “property held by the taxpayer primarily for sale to customers in the ordinary course of his trade or business,” therefore falling under the § 1221(a)(1) exception), while a user

regarding the ability to buy and sell virtual assets outside the confines of the virtual space and the extent to which developers enforce those rules,” and that virtual wealth acquired in open worlds would be taxed if the taxpayer earns more than \$600 in a given year); Theodore P. Seto, *When Is a Game Only a Game?: The Taxation of Virtual Worlds*, 77 U. Cin. L. Rev. 1027, 1030 (2009) (arguing that the tax regime that applies to a particular world should depend on the redeemability and exchangeability of its in-world currency); Steven Chung, Note, *Real Taxation of Virtual Commerce*, 28 Va. Tax Rev. 733, 735 (2009) (arguing that the currencies of some virtual worlds should be taxed under the foreign currency rules of the tax code).

⁷⁰ See, e.g., F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 Cal. L. Rev. 1, 29-51 (2004) (describing property in virtual worlds and arguing that there are normative grounds for recognizing property rights in virtual objects); Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. Rev. 1047 (2005) (arguing for recognition of virtual property rights); Lederman, *supra* note 11, at 1631-41 (discussing virtual property issues in connection with taxation issues).

⁷¹ However, note that §1221 is not always the end of the analysis in determining character. For example, taxpayers who enter into certain derivative contracts may get capital gains even when either party to the contract does not hold the underlying asset. See *infra* Part IV.2.a for a more detailed discussion of derivatives.

who plays for several years and simply sells her account because she has tired of the game would be taxed at a capital gains rate. Income from selling virtual world securities held for over a year would be taxed as capital gains, unless the seller is a dealer who buys and sells on behalf of other users. For users who make their money in virtual real estate, the income of those who qualify as developers would be characterized as ordinary, while those who invest in real estate and later sell it would be able to benefit from capital gains treatment.⁷²

However, there is another consideration which is specific to the virtual world context and further complicates the application of the capital-ordinary distinction: under § 1221(a)(3), artistic works created by the taxpayer, or received by the taxpayer as a gift from the creator or in an exchange with the creator, cannot be capital assets. If the capital-ordinary distinction were maintained, this would create a bizarre regime for virtual worlds, in particular those like Second Life in which users can create almost anything they like. Gain from sale of a virtual building created by the user would be taxed as ordinary income while gain from sale of a virtual building bought by the user would be capital gain, assuming it does not fall under any other § 1221 exception. In addition, analyzing whether a virtual world object falls under the § 1221(a)(3) exception requires determining what exactly constitutes an artistic creation in a virtual world, which may be far from obvious. It is unclear, for example, whether a customized avatar could be considered an artistic composition if the user did not create any of the components of the avatar herself.⁷³

⁷² The first Second Life millionaire, Anshe Chung, made her money primarily through virtual real estate development. Rob Hof, *Second Life's First Millionaire*, BusinessWeek.com, Nov. 26, 2006, http://www.businessweek.com/the_thread/techbeat/archives/2006/11/second_lifes_fi.html (last visited July 11, 2009).

⁷³ The regulations provide some guidance on this issue but do not definitively answer it. Treas. Reg. § 1.1221-1(c)(3) (1960) (“For purposes of this paragraph, in general, property is created in whole or in part by the personal efforts of a taxpayer if such taxpayer performs literary, theatrical, musical, artistic, or other creative or productive work which affirmatively contributes to the creation of the property, or if such taxpayer directs and guides others in the performance of such work.”). Since all that is required is that the taxpayer's efforts “affirmatively contribute[],” it is certainly possible that simply assembling an avatar could meet this standard, as long as the taxpayer's actions are considered “creative or productive.”

B. Policy Analysis⁷⁴

A tax policy is generally evaluated based on equity (whether the policy is fair), efficiency (whether it creates deadweight loss), and administrability (how feasible it is on a practical level).⁷⁵ The equity concern can be subdivided into vertical and horizontal equity, with vertical referring to the normative position that those who have greater ability to pay should pay more tax and horizontal equity based on the concept that similarly situated taxpayers should be treated similarly.⁷⁶ I will argue that applying the capital-ordinary distinction to in-world activity is 1) conceptually justified, 2) not clearly more inequitable than any other regime, 3) efficient, but 4) almost certainly impossible due to administrability concerns.

1. Conceptual Argument for Capital-Ordinary Distinction

Conceptually, whether to maintain the capital-ordinary distinction for in-world activity depends on how we understand in-world activity and its relationship to the real world. Taxing all income generated from virtual world activity as ordinary income would be consistent with the “magic circle” vision of virtual worlds, which Camp describes as the idea that, “at an agreed place, time, and in an agreed manner, we can act without consequence to our ‘other’ life; we can separate what happens at the agreed place and time from the rest of our existence.”⁷⁷ Under this theory, all income-generating in-world activity would be placed within the broad category of gaming activity, rendering it unnecessary to differentiate between the various types of activities that occur within the world. A user who makes her money by investing in virtual land or securities and one who makes her money by providing services would both, ultimately, just be playing a game. In-game investing, since it occurs in the magic circle, is therefore not equivalent

⁷⁴ Note that the following discussion focuses on transactions in which the taxpayer realizes a gain rather than a loss. Of course, it is also possible that taxpayers may lose money in virtual worlds, in which case a different set of issues would be raised related to the deductibility of that loss. Without delving too deeply into these issues, the main concern will likely be whether losses incurred in virtual worlds are deductible and, if so, to what extent. Generally, ordinary losses are deductible as long as they were incurred in a trade or business or any transaction entered into for profit. I.R.C. § 165(c). However, there are exceptions; income from gambling, for example, is ordinary, but losses from gambling are only deductible to the extent that they taxpayer had gains from gambling. I.R.C. § 165(d). In contrast, capital losses are not fully deductible. I.R.C. § 1211.

⁷⁵ Lederman, *supra* note 11, at 1658-59.

⁷⁶ *Id.*

⁷⁷ Camp, *supra* note 11, at 60. Camp applies the “magic circle” concept in a different context, and never addresses the question of the capital-ordinary distinction. By using his definition of the term, I am not implying that the “magic circle” argument I discuss in this Note is one that he would endorse.

to real world investing.⁷⁸ The closest analogy would probably be gambling in a casino.⁷⁹ Once a gambler has traded her money for chips, the I.R.S. does not care about each separate transaction she engages in but only how much money she has made or lost in the end.⁸⁰ In contrast, maintaining the distinction between capital gains and ordinary income and applying it to in-world transactions would be consistent with the notion that there is no real difference, from an economic point of view, between virtual world and real world activity. Virtual worlds, in this conception, are simply another setting in which economic transactions occur, but these transactions are not different or special because they occur in virtual worlds.

To illustrate these two theories of economic activity in virtual worlds, imagine two users, A and B (in, say, Second Life), who create two avatars: A creates Mister Moneybags and B creates Mistress Sexysex. User A's goal is to turn Mister Moneybags into a virtual investment tycoon, while User B hopes Mistress Sexysex will become a successful virtual prostitute. Accordingly, Mister Moneybags researches Second Life companies, buys shares on a Second Life stock exchange, holds onto them for a while, and then later sells them if they have appreciated in value. Mistress Sexysex, meanwhile, works on her cybersex skills, spends money upgrading her body and clothing, and tries to build her client base. According to the "magic circle" theory, both A and B are simply playing roles in a game; the users controlling the avatars are not *really*, respectively, an investment tycoon and a prostitute. In other legal contexts, we would not treat their activities as equivalent to their real world analogues, e.g., it would probably be impossible to prosecute User B for prostitution.⁸¹ Both Mister Moneybags and Mistress Sexysex are characters created to play out roles in an unreal world; thus the tax liability of their creators should not be dependent on what role they choose in that unreal world, but simply on their participation in the world.

⁷⁸ See *id.* at 62 ("Just as a virtual spoon is not really a spoon, neither is the market where virtual spoons are traded really a market for goods and services. It's a play-market, the virtual items within it are play-things used to enhance the value of the play, and the virtual currency which is the medium of exchange is play money.").

⁷⁹ See *id.* at 64 (analogizing virtual world assets to casino chips).

⁸⁰ Note, however, that the treatment of gambling activity has not been entirely consistent. In some contexts, there can be no taxation until the chips are exchanged for cash. But for online gambling, credits held in an online account, even if not cashed-out, will be taxed. See Olson, *supra* note 3, at 221 n.49.

⁸¹ In fact, some statutes criminalizing prostitution could, if read literally, conceivably be construed broadly enough to cover User B's conduct. See, e.g., N.Y. Penal Law § 230.00 ("A person is guilty of prostitution when such person engages or agrees or offers to engage in sexual conduct with another person in return for a fee."). However, it is extremely unlikely that User B's actions would fall under the category of "sexual conduct" since that statute is understood to reference the "the common understanding" of "prostitution." *People v. Costello*, 395 N.Y.S.2d 139, 141 (N.Y. Sup. Ct. 1977). Prostitution is commonly understood to require physical contact. However, this does not mean that User B's actions as Mistress Sexysex could not on some level be considered "real." Many people would likely view User B as a kind of sex worker, something akin to a phone sex operator, particularly if she cashes out her virtual world earnings.

While the magic circle may be a useful concept for understanding some aspects of virtual worlds, the above analysis, in my view, is unconvincing. In terms of objective economic reality, there is no discernible boundary between transactions that occur in a virtual world and transactions that occur in the real world. The magic circle argument may seem correct in the example above, but that is largely due to the subjective mindsets of the users who are primarily interested in roleplaying. If, however, User A's end goal is not to roleplay an investment tycoon, or even to participate in a virtual world, but instead to simply make money through investment—if, in other words, he views his participation in Second Life as a wise investment decision rather than a leisure activity—the magic circle conception of virtual worlds starts to come apart. User A becomes primarily an investor, someone who is only using the virtual world as a means to better his real world economic situation, not someone whose principal objective is to engage in role-playing in a virtual world. Although a taxpayer's subjective motivation in undertaking an activity is not irrelevant to a determination of how the resulting income should be characterized, his motivation must be evidenced by objectively observable behavior.⁸² If a taxpayer earns income doing something, it is generally presumed that he intended to earn income.⁸³ If a taxpayer's activities in a virtual world have an economic effect beyond the boundaries of that world, it should not matter whether or not the taxpayer's intent was to make real world money or to pretend to be an investment tycoon; it should be treated like any other economic transaction that occurs in any other setting.

In addition, the tax system is not, in other contexts, concerned with how “real” an asset is in determining the character of income. As an illustration, we can look to the tax treatment of derivatives, specifically forward contracts.⁸⁴ Say shares of Google are currently trading at \$100, and two people, A and B, enter into a two-year forward contract for one share of Google at \$140. Under this contract, A has an obligation to sell to B, and

⁸² See, e.g., *Biedenharn Realty Co. v. United States*, 526 F.2d 409, 416-21 (5th Cir. 1976) (declining to hold that the taxpayer's “investment intent” is always irrelevant in the evaluation of whether property falls under the §1221(a)(1) exception, but setting forth guidelines which rely heavily on objective factors, such as “frequency and substantiality of sales” and “improvements”). See generally *Camp*, *supra* note 11, at 61 n.242 (discussing intent in other areas of tax law).

⁸³ In the context of deductions, the tax code distinguishes between activity engaged in for profit and activity not engaged in for profit (for example, a hobby). I.R.C. § 183(b) (when engaging in an activity not for profit, loss from that activity may be deducted only to offset gain generated by that activity). This is of course a question of the taxpayer's subjective purpose, but there is a presumption that an activity is engaged in for profit, regardless of the taxpayer's actual motives, if his profits from the activity exceed his deductions for three years. I.R.C. § 183(d).

⁸⁴ “A derivative is a bilateral contract or payment exchange agreement whose value is linked to, or derived from, an underlying asset (such as a currency, commodity or stock), reference rate (such as the Treasury Rate, the Federal Funds Rate or LIBOR), or index (such as the S&P 500).” Kimberly D. Krawiec, *More than Just “New Financial Bingo:” A Risk-Based Approach to Understanding Derivatives*, 23 J. Corp. L. 1, 6 (1997). “A forward contract requires one party to buy, and the other to sell, a designated quantity of the underlying at a pre-agreed price on some specified future date.” *Id.* at 9.

B an obligation to buy from A, one share of Google at \$140 in two years. In addition, since this is simply a contract between two parties who can agree to whatever they like, they determine in advance that no shares of Google will actually change hands, and instead the contract will be cash settled. Thus, if Google is trading at \$90 in two years, B (who would have bought at \$140) simply pays A \$50. In addition, neither of them owns, nor at any point acquires, any actual shares of Google. At the end of two years, the contract will be settled, and one party to the contract will have a capital gain, while the other will have a capital loss (unless Google is trading at \$140, in which case neither will have gain nor loss). Even though this forward contract is, in effect, a mere bet on the performance of Google shares, gain or loss derived from termination of a forward contract is treated as gain or loss from the sale of a capital asset if the contract relates to “property which is (or on acquisition would be) a capital asset in the hands of the taxpayer.”⁸⁵ For the purpose of determining character, it does not matter that the two parties have only “pretended” to sell an asset owned by neither of them.⁸⁶

The tax treatment of forward contracts is arguably an inapt analogy in that a share of Google (whether or not actually owned by either party) might be said to truly exist in a way that a share of a virtual company does not, although that is certainly debatable.⁸⁷ However, the comparison becomes more exact if we consider that real world forward contracts could conceivably refer to the stock price of virtual world companies, since the asset underlying a derivative contract can be almost anything.⁸⁸ The two parties to a forward contract based on the price of a virtual world stock need not be virtual world users themselves, and they could cash settle the contract without ever acquiring a share of the virtual world company. This forward contract would be as real as any other forward contract. To determine the character of gain or loss, the inquiry would be straightforward: if a share of a virtual world company were a capital asset, any gain or loss on the contract would be capital. If we compare this real world forward contract, between two parties who do not participate in a virtual world, with a “virtual” forward contract between two users acting through their avatars,⁸⁹ the illogic of taxing these two transactions differently becomes more obvious. Assuming for the moment that a virtual

⁸⁵ I.R.C. § 1234A.

⁸⁶ However, note that the tax treatment of derivatives is highly inconsistent. The rules that apply to forward contracts do not apply to all derivatives, and so a different derivative might be taxed differently, even if it produces the same economic result as the forward contract here. See David M. Schizer, *Balance in the Taxation of Derivative Securities, an Agenda for Reform*, 104 Colum. L. Rev. 1886, 1895-96 (2004).

⁸⁷ See generally Thompson, *supra* note 43 at 95 (discussing whether virtual stocks can be considered securities for the purpose of securities laws).

⁸⁸ Norman Menachem Feder, *Deconstructing Over-The-Counter Derivatives*, 2002 Colum. Bus. L. Rev. 681, 681 (2002) (“Underlyings can be anything that interests markets.”).

⁸⁹ The idea of avatars entering into derivative contracts potentially raises a host of other legal issues, since, among other things, there are restrictions on who can enter into a derivative contract. These issues will not be discussed further here.

world stock is a capital asset, the magic circle concept leads to the conclusion that two people engaging the same economic activity—i.e., betting on the performance of a virtual world company—would be subject to different tax treatment, simply because one is acting in a virtual world, and the other is not. To push this example even further, a virtual world user who actually acquires and sells virtual stock would be taxed at an ordinary rate, while a party to a real world derivative contract based on virtual stock could be taxed at a capital rate without ever acquiring any stock. To many, this would seem an absurd result. The broader point is that there is no clear line between those who are simply playing a game and those who are actually investing, and, from a conceptual point of view, tax law should not attempt to draw such a line.

2. Equity

For a tax to be horizontally equitable, “similarly situated” taxpayers should bear the same tax burden. In the context of virtual worlds, any analysis of horizontal equity will be related to the conceptual argument set forth above because how we conceive of users in virtual worlds determines whom we think of as similarly situated. In the Mister Moneybags and Mistress Sexysex example, it would seem inequitable to tax User A at a lower rate than User B if we see them both as taxpayers who have made money through their participation in Second Life (all virtual world users are similarly situated). In contrast, if all virtual world income is taxed as ordinary income, and we see User A as someone who has made money through investment, it would be unfair to tax him at a higher rate than other investors (all investors are similarly situated). If all virtual world income were taxed as capital gains, this would arguably be unfair to taxpayers who make money from non-investment activity outside of virtual worlds, who would be taxed at a higher rate than taxpayers engaging in equivalent activity in virtual worlds.

The counterargument to the second two examples is that people have a choice of whether or not to participate in virtual worlds, so it would not be unfair to tax User A at an ordinary rate, even if he is an investor, because he could always choose to invest in the real world rather than a virtual world. Similarly, if all virtual world income is taxed as capital gains, the opportunity to join and make money in a virtual world is open to those who want to benefit from the favorable tax rate.

A further horizontal equity issue is raised by the § 1221(a)(3) exception. As discussed above, gain from sale of artistic works created by the taxpayer, or received by the taxpayer as a gift from or in an exchange will be ordinary income. This means that users who sell objects that they create themselves would be taxed at a higher rate than those who buy the same objects. While this is obviously also true of real world artistic creations—gain from a painting sold by the painter will not have the same character as gain from the sale of the same painting by a person who bought it—the difference is that in certain virtual worlds, such as Second Life, almost everything in the world is user-created, meaning that the exception would apply far more broadly than it does in the real world. It is therefore necessary to consider whether it is correct to view a creator who makes virtual world items and one who makes real world art as similarly situated, or whether the in-world differentiation between those who buy assets and those who create them is too absurd to be supported.

The greatest vertical equity concern would arise under a regime that treats all income generated in virtual worlds as capital gains. The argument that people can always choose to make money in virtual worlds seems less convincing given that participation in a virtual world requires a computer powerful enough and an internet connection fast enough to access and run the virtual world, and, in many virtual worlds, the payment of subscription fees. This means that the lower tax rate for non-investment activity would not be available to those who have less, rather than more, ability to pay, which may seem particularly unjust. However, these vertical equity concerns are not unique to the virtual world context, but rather are inherent in the capital gains preference. It is the wealthiest taxpayers who benefit most from the capital gains preference, both because they have the most wealth to invest, and because they are subject to higher ordinary income tax rates.⁹⁰

Given that the existence of the ordinary-capital distinction is arguably inequitable, and given the complexities of applying the tax code to virtual worlds, there does not seem to be a clear answer to the question of which regime would be least inequitable. However, taxing all income as capital gains would likely create the most inequity because it would grant preferential tax treatment to anyone who makes money in a virtual world, which would only be available to those with sufficient resources to participate in a virtual world.

3. Efficiency

In the context of tax policy, efficiency is generally evaluated by an inquiry into how a tax distorts economic behavior; the less distortion it creates, the more efficient the tax.⁹¹ To illustrate this concept, imagine that a special sales tax were suddenly imposed on all crayons. Since the price to consumers would increase, some of those who would normally prefer to buy crayons would substitute another product, such as magic markers or colored pencils. To the extent that the tax has induced consumers to alter their crayon-buying behavior, it is inefficient. In assessing efficiency for the purposes of the current discussion, it is important to note that the tax system as a whole already creates economic distortion, and the existence of the capital gains preference is inefficient in that it creates an incentive to engage in activities that will produce capital gains rather than ordinary income.⁹² The question of how virtual world income should be taxed must be considered in that context; because any tax regime will be distortionary, the least inefficient regime is one that does not add any new distortions. It is therefore useful to compare the likely effects of a tax regime in which the ordinary-capital distinction is maintained in virtual

⁹⁰ Lee, *supra* note 67, at 3.

⁹¹ Eric Zolt, *The Uneasy Case for Uniform Taxation*, 16 Va. Tax Rev. 39, 43 (1996) (“Efficiency could mean and traditionally has meant taxing to minimize the economic distortions that result from any taxes . . .”).

⁹² It is often observed that “[a]ll taxes cause economic distortion.” *Id.* at 45. In fact, the capital gains preference both creates economic distortions and arguably mitigates other distortions created by the tax system. See Marjorie E. Kornhauser, *The Origins of Capital Gains Taxation: What’s Law Got to Do With It?*, 39 Sw. L. J. 869, 869 n.3 (1985).

worlds with one in which all income is characterized as capital and one in which all income is characterized as ordinary.⁹³ In this analysis, I focus on users who participate in virtual worlds primarily to make money because I assume that they will be more sensitive to the tax regime than users who participate in virtual worlds for entertainment. While pleasure-motivated users might alter their behavior in response to economic incentives, their reaction would likely be less significant than profit-motivated users.

If the capital-ordinary distinction is maintained, there will be no new incentive or disincentive for profit-motivated users (or potential users) to participate in virtual worlds. Investors will be taxed as they are for real world transactions, as will those who provide services or have a business selling goods. Their decision to participate in virtual worlds will thus not be based on minimization of tax liability. Any inefficiency that results from the tax incentive for investment arises from the capital gains preference itself and is not a problem particular to virtual worlds. Maintaining the distinction will likely not create any new distortions in economic behavior, and thus it will not make the system as a whole any more inefficient.

If all income is treated as capital gains, the tax regime will create an incentive to do business in virtual worlds, because people earning money from in-world businesses will be taxed at the lower capital gains rate, while people who earn money from real world businesses will continue to be taxed at the higher ordinary rate. Economic distortion results because the decreased tax burden will motivate more people to do business in virtual worlds. In addition to the inefficiency, this may be a concern in that virtual world businesses are, arguably, less socially valuable than real world businesses, and it is especially problematic in encouraging grey market behaviors, such as gold farming, which many consider unsavory or unethical.⁹⁴ Another troubling consequence is that people might move their real world businesses to virtual worlds in order to decrease their tax burden. Lawyers could easily provide legal advice through avatars in a virtual world; under an all-capital regime, this would be an attractive possibility.

If, instead, all income is treated as ordinary income, virtual world investment will become less attractive, because it will be taxed at a higher rate than real world investment. This would also create distortion because those who want to invest in virtual worlds will be less likely to do so. Currently, this would only affect users whose virtual world income could potentially be characterized as capital gains since all other users would already be taxed at the ordinary rate. Because there are no reliable statistics on the number of users who engage in particular in-world activities, it is difficult to know exactly how many users would have an increased tax burden as a result of an all-ordinary

⁹³ Note that another possible way of thinking about this question is by considering how behavior would be distorted by the transition from the current state of affairs, in which the tax regime that applies to virtual worlds is highly uncertain, to a world in which one of these regimes is clearly applied and enforced, but this Note does not address these transitional distortions.

⁹⁴ See Raut & Schrader, *supra* note 36 (describing objections to gold farming); see also Michael Risch, *Virtual Third Parties*, 25 Santa Clara Computer & High Tech. L.J. 415, 417 (2009) (describing a class action suit against an alleged gold farmer whose activities “allegedly depleted available virtual gold and devalued virtual currency for third-party users, causing real world loss of use of the system, lost time spent prospecting virtual resources, and computer speed degradation.”).

regime. However, given that many virtual world activities would fall under the § 1221(a)(1) or (a)(3) exception,⁹⁵ it seems reasonable to assume that, at the moment, only a small proportion of virtual world income could potentially be characterized as capital gains.

However, even if only a small number of current users would be affected, that is not the end of the analysis because an all-ordinary regime could also affect the future economic development of virtual worlds. Although in-world investing might not be common now, it may become more prevalent in the future; an all-ordinary regime may prevent that from happening.

Maintaining the capital-ordinary distinction would therefore be the best regime from an efficiency point of view in that it would create the least distortion. Treating all income as ordinary would, in the short term, likely affect only a relatively small subset of users who are in-world investors, although it may also create distortions in how virtual world economies develop. Treating all income as capital would create the most distortion because it would lower the tax burden of most users and also potentially encourage a large number of people to earn income in virtual worlds.

4. Administrability

Although I maintain that importing the capital-ordinary distinction to virtual world activity is conceptually correct, it would nevertheless be a bad idea because it would lead to vast administrative complexity and be effectively impossible to enforce. Although it may not seem optimal that this one concern should be able to trump all others, the I.R.S. has regularly made decisions based on administrability alone, even when the result is conceptually incorrect.⁹⁶ A tax regime that cannot be carried out in practice is worthless.

It is assumed that some taxpayers will lie if it lowers their tax liability and if they are likely to get away with it.⁹⁷ Therefore, if income from virtual worlds can be ordinary or capital depending on the activity within the world, it is probable that a number of

⁹⁵ See *supra* Part IV.1 (discussing how the capital-ordinary distinction would apply to different virtual world activities).

⁹⁶ One much-discussed example was the decision not to include as income frequent flier miles acquired as a result of taxpayers' business travel, even though they arguably fall within the broad definition of income. The decision was based on political and administrative concerns rather than conceptual accuracy. See Camp, *supra* note 11, at 27-28 (discussing practical reasons underlying the decision not to tax frequent flier miles). For an argument as to why frequent flier miles should be included as income, see Dominic L. Daher, *The Proposed Federal Taxation of Frequent Flier Miles Received From Employers: Good Tax Policy but Bad Politics*, 16 Akron Tax J. 1, 1 (2001).

⁹⁷ See generally Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 Ohio St. L.J. 1453, 1463-65 (2003) (describing an economic model which predicts a rational taxpayer will decide whether to evade tax based on the probability of detection and the penalty for noncompliance).

virtual world users will report ordinary income as capital gains and capital losses as ordinary, because their risk of getting caught is insignificant. While the I.R.S. might audit a few virtual world users who make a great deal of money, it is highly unlikely that a significant proportion of users would ever face scrutiny.⁹⁸ An audit of in-world activity would in all likelihood be extremely burdensome for the I.R.S. In order to establish the accuracy of a taxpayer's declaration, the I.R.S. would have to determine, among other things, whether a virtual world asset is an "artistic composition" and, if so, whether the taxpayer created it himself (and, if not, how he acquired it), whether the taxpayer has a trade or business in selling such assets, and whether, if the sale is of virtual real estate, the taxpayer is more properly classified as a developer of virtual real estate, or an investor in virtual real estate. While the I.R.S. has to make the same determinations about real world transactions, the nature of real world transactions is far more easily ascertainable than the nature of virtual world transactions.

Furthermore, it is unclear exactly how the I.R.S. would audit a taxpayer who derives income from virtual world activity. It might be necessary for the auditors to create their own avatars to track the taxpayer's avatar, but that strategy would be impractical, particularly if the taxpayer has become inactive in that world or has simply stopped using that particular avatar. Another possible solution would be to require the owners of the virtual worlds to track and report virtual transactions, but, given the number of these transactions, that would impose an immense burden that would effectively be impossible to meet.⁹⁹

It would therefore be more administratively convenient to characterize all virtual world income as either ordinary income or capital gains without an inquiry into the nature of the specific activity that produced the income. Given the equity and efficiency concerns discussed above, it would seem that, of these two possibilities, it would be preferable to tax all virtual world income as ordinary income.

V. CONCLUSION

The economic activity occurring in virtual worlds is not confined to those worlds but instead often results in the realization of real world income, raising a host of difficult and perplexing tax issues. Rather than focusing on the question of when wealth accumulated in virtual worlds should be taxed, this Note has started from the assumption that it will be taxed at some point, and then turned to the next logical question: how should the character of this income be determined? I have reached two contradictory conclusions. First, that as a conceptual matter, the capital-ordinary determination should be made the same way it is for real world income, that is, based on the activity which produced the income. Second, that administrative concerns should override any

⁹⁸ See Alex Raskolnikov, *Crime and Punishment in Taxation: Deceit, Deterrence, and the Self-Adjusting Penalty*, 106 Colum. L. Rev. 569, 583-84 (2006) (describing the audit selection formulas, which make it more likely that the I.R.S. will conduct an audit where the "the magnitude of potential audit adjustments" is greater); Lederman, *supra* note 11, at 1660.

⁹⁹ Lederman, *supra* note 11, at 1661.

argument for applying the capital-ordinary distinction to in-world activity.

Considered in the abstract, the question of whether to tax in-world activity in the same way that analogous real world activity is taxed boils down to an inquiry into how we understand the nature of in-world activity. If virtual worlds are considered to be no more than games, and all activity within them a kind of play, it plausibly follows that we should not distinguish between the different forms of play in which users engage. The problem with this argument is that it assumes that participants in virtual worlds are motivated by their desire to play a game, and not by their desire to earn money. That assumption does not reflect reality, since at least some users participate in virtual worlds for profit rather than pleasure. Furthermore, it is illogical to simply assume that a taxpayer who earned income through an activity was not motivated by a desire to earn money. Similarly, any argument that in-world activity should be taxed differently because it is less real than real world activity is problematic. The tax treatment of forward contracts shows that when these contracts make reference to a capital asset, the character of the resulting income is capital even when neither of the parties to the contract actually owned that asset; in other words, it makes no difference whether the underlying transaction was “real” or not. Taxing in-world and real world transactions differently also raises the possibility that exactly the same transaction, with exactly the same economic outcome, might be taxed differently depending on whether the two parties were acting in the real world or in a virtual world.

In addition, other policy considerations also weigh in favor of maintaining the capital-ordinary distinction. Because it would neither create an incentive nor a disincentive to make money in a virtual world, thus causing a minimum of economic distortion, applying the distinction to virtual world activity would likely be the most efficient regime. The equity analysis is less clear, because the existence of the distinction in any context may be inherently inequitable. However, maintaining the distinction would probably not add much inequity to the existing system, and it would certainly be preferable to characterizing all virtual world income as capital gains.

Nevertheless, the conceptually correct result is not necessarily the best regime, because it is necessary to take into account the practical concern of administrability and particularly enforceability. Since it is effectively impossible to accurately determine the nature of the in-world income-generating activity, the I.R.S. would likely have to depend on taxpayer self-reporting. Therefore, allowing a preferential capital gains rate for some in-world transactions would predictably result in a great deal of mischaracterization of ordinary income as capital gains, and capital losses as ordinary losses. In order to avoid this result, the I.R.S. should characterize all virtual world income as ordinary income.